

18,750,000 shares**ERASCA****Common Stock**

This is the initial public offering of shares of common stock of Erasca, Inc. We are offering 18,750,000 shares of our common stock to be sold in this offering. The initial public offering price is \$16.00 per share of common stock.

Prior to this offering, there has been no public market for our common stock. Our common stock has been approved for listing on the Nasdaq Global Select Market under the symbol "ERAS."

We are an "emerging growth company" as defined under the federal securities laws and, as such, have elected to comply with certain reduced public company reporting requirements.

	Per share	Total
Initial public offering price	\$ 16.00	\$ 300,000,000
Underwriting discounts and commissions ⁽¹⁾	\$ 1.12	\$ 21,000,000
Proceeds to Erasca, Inc., before expenses	\$ 14.88	\$ 279,000,000

(1) See "Underwriting" for a description of the compensation payable to the underwriters.

We have granted the underwriters an option for a period of 30 days to purchase up to an additional 2,812,500 shares of common stock.

Investing in our common stock involves a high degree of risk. See "[Risk factors](#)" beginning on page 14.

Neither the Securities and Exchange Commission nor any other state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of common stock to purchasers on July 20, 2021.

J.P. Morgan**Morgan Stanley****BofA Securities****Evercore ISI****Guggenheim Securities**

July 15, 2021

Table of contents

	Page
Prospectus summary	1
Risk factors	14
Special note regarding forward-looking statements	76
Market and industry data	77
Use of proceeds	78
Dividend policy	79
Capitalization	80
Dilution	82
Selected consolidated financial data	84
Management's discussion and analysis of financial condition and results of operations	86
Founder's letter	103
Business	106
Management	203
Executive and director compensation	212
Certain relationships and related person transactions	231
Principal stockholders	234
Description of capital stock	236
Shares eligible for future sale	242
Material United States federal income tax consequences to non-US holders	245
Underwriting	249
Legal matters	263
Experts	263
Where you can find more information	263
Index to consolidated financial statements	F-1

Through and including August 9, 2021 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This delivery is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Neither we nor the underwriters have authorized anyone to provide you with information other than that contained in this prospectus or any free writing prospectus prepared by or on behalf of us or to which we have referred you. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are offering to sell, and seeking offers to buy, common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus or any free writing prospectus is accurate only as of its date, regardless of its time of delivery or of any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside of the United States: we have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside of the United States.

Prospectus summary

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. You should read this entire prospectus carefully, especially the section titled "Risk factors" and our consolidated financial statements and related notes included elsewhere in this prospectus, before making an investment decision. As used in this prospectus, unless the context otherwise requires, references to "we," "us," "our," "the Company" and "Erasca" refer to Erasca, Inc. and its subsidiaries.

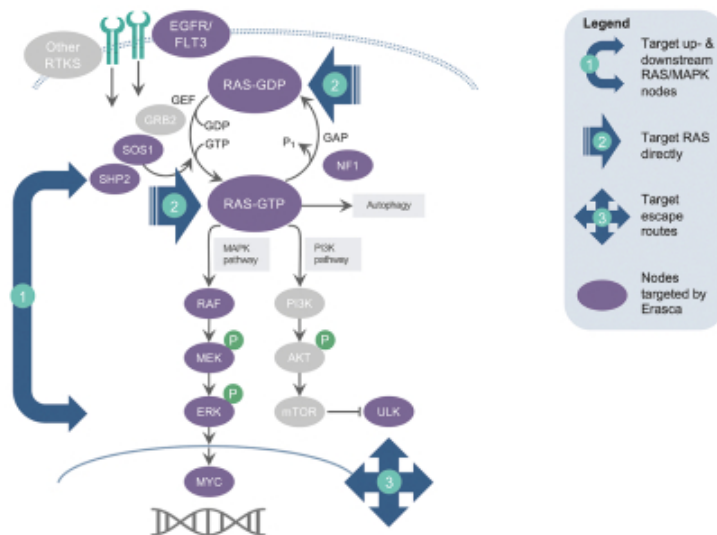
Overview

At Erasca, our name is our mission: to erase cancer.

We are a clinical-stage precision oncology company singularly focused on discovering, developing, and commercializing therapies for patients with RAS/MAPK pathway-driven cancers. Molecular alterations in RAS, the most frequently mutated oncogene, and the MAPK pathway, one of the most frequently altered signaling pathways in cancer, account for approximately 5.5 million new cases of cancer worldwide per year. Our company was co-founded by leading pioneers in precision oncology and RAS targeting to create novel therapies and combination regimens designed to comprehensively shut down the RAS/MAPK pathway for the treatment of cancer. We have assembled what we believe to be the deepest, wholly-owned or controlled RAS/MAPK pathway-focused pipeline in the industry, comprising 11 modality-agnostic programs aligned with our three therapeutic strategies of: (1) targeting key upstream and downstream signaling nodes in the RAS/MAPK pathway; (2) targeting RAS directly; and (3) targeting escape routes that emerge in response to treatment. The target breadth and molecular diversity represented in our pipeline enable us to pursue a systematic, data-driven clinical development effort to identify single agent and combination approaches with the goal of prolonging survival in a wide range of patient populations with high unmet needs.

Our modality-agnostic approach aims to allow us to selectively and potently inhibit or degrade critical signaling nodes with small molecule therapeutics, large molecule therapeutics, and protein degraders. Our purpose-built pipeline includes two clinical-stage programs (ERK and SHP2 inhibitors, which together comprise our first, innovative MAPKlamp), two preclinical-stage programs (CNS-penetrant KRAS G12C and EGFR inhibitors), and seven discovery-stage programs targeting other key oncogenic drivers. We expect to have four product candidates in the clinic within the next six quarters, plus an additional IND filing every 12-18 months over the next five years. We believe our world-class team's capabilities and experience, further guided by our scientific advisory board, which includes the world's leading experts in the RAS/MAPK pathway, uniquely position us to achieve our bold mission of erasing cancer.

Of the approximately 5.5 million new patients diagnosed globally per year with cancers driven by RAS/MAPK pathway molecular alterations, over 90% have limited or no treatment options. While the RAS/MAPK pathway has been well characterized and validated based on multiple compounds approved or in development targeting discrete signaling nodes in the cascade, most of these compounds face resistance and tolerability challenges, highlighting the need for new approaches to target this pathway. We believe that to effectively shut down a pathway that signals as promiscuously as RAS/MAPK, a holistic approach must be taken to target not just individual nodes, but multiple nodes and cooperative mechanisms in parallel. As depicted in the following figure and described below, we are pursuing three therapeutic strategies that may be used in combination with the goal of comprehensively, and perhaps synergistically, shutting down the RAS/MAPK pathway.












- 1. Target upstream and downstream MAPK pathway nodes with single agents and combinations intended to clamp these oncogenic drivers (MAPKlamp).** Our first strategy to erase cancer is a novel MAPKlamp that targets upstream and downstream nodes, initially SHP2 (ERAS-601) and ERK (ERAS-007), respectively, to shut down, or “clamp,” the signaling of various oncogenic drivers, such as receptor tyrosine kinases (RTKs), NF1, RAS, RAF, and MEK alterations, trapped in between any nodes involving this pathway. With our MAPKlamp approach, we hope to induce tumor regression in RAS/MAPK pathway-driven cancers, while also blocking their main escape routes that lead to tumor resistance. We are also discovering and developing single agent and combination approaches to target other upstream nodes that impact the RAS/MAPK pathway such as EGFR (ERAS-801 and ERAS-12), an RTK that represents a key escape route for RAS/MAPK signaling, and SOS1 (ERAS-9), a guanine nucleotide exchange factor that enables RAS to cycle from the inactive GDP state to the active GTP state.
- 2. Target RAS, the midstream MAPK pathway node, directly with single agents and combinations.** We are discovering and developing molecules that have the potential to inhibit RAS in its inactive GDP state (RAS-GDP) as well as its more prevalent active GTP state (RAS-GTP). Utilizing our in-house discovery efforts employing structure-based drug design, we are developing proprietary central nervous system (CNS)-penetrant inhibitors of KRAS G12C (ERAS-1), which is the only RAS isoform and mutation that is more commonly present in the inactive RAS-GDP state. We are also developing proprietary compounds against KRAS G12D (ERAS-4), which is more commonly found in the active RAS-GTP state and is the most prevalent

KRAS mutation. Our approach to targeting other RAS isoforms and mutations that are found more commonly in the RAS-GTP state is based on the foundational discoveries of one of our co-founders, Dr. Kevan Shokat, a world-renowned pioneer of novel therapeutic approaches to targeting key signaling pathways such as RAS/MAPK in cancer.

Dr. Shokat's deep expertise in chemical genetics, a combination of protein engineering and organic synthesis, led to his identification of both a binding pocket termed the "switch II pocket" (S-IIP) on KRAS G12C, a RAS-GDP mutation which was previously considered undruggable, and a compound that could bind to it. This seminal discovery has launched the development of multiple KRAS G12C inhibitors targeting the S-IIP. Dr. Shokat then turned his attention to RAS-GTP mutations which, compared to RAS-GDP mutations, are more challenging to drug and arguably more important, as other RAS isoforms and mutations are present more frequently in the active RAS-GTP state, thereby driving downstream phosphorylation and oncogenic signaling. Dr. Shokat made a breakthrough discovery of a new binding site termed the "switch II groove" (S-IIG), which could be utilized to inhibit the GTP and GDP states of RAS. This landmark discovery allows for the possibility of targeting multiple RAS isoforms (including KRAS, HRAS, and NRAS) and mutations (including G12X, G13X, and Q61X) with small molecule compounds that can potentially bind to the S-IIG. We entered into an exclusive worldwide license agreement with the University of California, San Francisco (UCSF) for Dr. Shokat's work related to RAS-GTP, which guides our ERAS-2/3 programs.

- 3. *Target escape routes enabled by other proteins or pathways to further disrupt RAS/MAPK pathway signaling.*** RAS-driven cancers utilize escape routes, namely cooperative mechanisms, to develop resistance. As an example, RAS-driven cancers can become dependent on autophagy, which becomes constitutively active and represents a potential escape route for metabolically active tumors such as pancreatic ductal adenocarcinoma. By targeting ULK (ERAS-5), a key regulator of autophagy, in combination with our RAS targeting agents, we aim to shut down this potential escape route for RAS-driven cancers. We also are actively pursuing various ways to further disrupt RAS/MAPK pathway signaling by degrading key proteins (ERAS-10). Finally, MYC is a transcription factor and oncogene that is overexpressed in the majority of cancers and a key enabler of RAS/MAPK pathway signaling at the transcriptional level. We are discovering novel approaches to targeting MYC (ERAS-11).

To pursue these therapeutic strategies, we have assembled and are developing what we believe is the deepest pipeline targeting multiple signaling nodes to shut down the RAS/MAPK pathway. We intend to study these agents either alone or in rational combinations across multiple relevant tumor types. The following table summarizes our current, wholly-owned or controlled, modality-agnostic pipeline to eradicate RAS/MAPK pathway-driven cancers.

Program (Target)	Modality	Indication	Discovery	IND-enabling	Phase 1	Phase 2	Phase 3	Erase Cancer Strategy	Worldwide Rights
ERAS-007* / MAPKlamp (ERK, SHP2, others)		Tiss. agnostic RAS/MAPK alt. solid tumors	HERKULES-1 ongoing					1	ERASCA-
		EGFRm & RAS/MAPK altered NSCLC	HERKULES-2 planned					1	ERASCA-
		BRAFm & RAS/MAPK altered CRC	HERKULES-3 planned					1	ERASCA-
		FLT3m & RAS/MAPK altered liquid tumors	HERKULES-4 planned					1	ERASCA-
ERAS-601 (SHP2)		RAS/MAPK altered tumors	FLAGSHIP-1					1	ERASCA-
ERAS-801 (EGFR)		EGFR altered GBM						1	ERASCA-
ERAS-1 (KRAS G12C)		KRASm G12C solid tumors						2	ERASCA-
ERAS-2/3 (RAS-GTP)		RASm solid tumors						2	ERASCA-
ERAS-4 (KRAS G12D)		KRASm G12D solid tumors						2	ERASCA-
ERAS-5 (ULK)		RASm solid tumors						3	ERASCA-
ERAS-10 (RAS/MAPK)		RAS/MAPK altered cancers						1 2 3	ERASCA-
ERAS-12 (EGFR D2/D3)		EGFR & RAS/MAPK altered solid tumors						1	ERASCA-

 = small molecule  = large molecule  = protein degrader

* Phase 1 clinical trial of ERAS-007 evaluating the safety, tolerability, pharmacokinetics (PK), pharmacodynamics (PD), and preliminary anti-tumor activity of ERAS-007 in patients with advanced solid cancers was completed by Asana BioSciences, LLC (Asana). The results of this trial helped inform the design of our clinical development program and doses to be tested for ERAS-007, which we will study in more specific patient populations. Please refer to the detailed results of this trial and the description of our ongoing and planned HERKULES clinical trials beginning on pages 135 and 143 of this prospectus, respectively.

In addition, we have two additional discovery programs, ERAS-9 and ERAS-11, small molecule inhibitor programs targeting SOS1 and MYC, respectively.

Our lead product candidates are ERAS-007 (our oral ERK1/2 inhibitor) and ERAS-601 (our oral SHP2 inhibitor), which together comprise our first MAPKlamp. The extracellular signal-regulated kinases (ERK), ERK1 and ERK2, belong to a family of serine-threonine kinases that regulate cellular signaling, and comprise the most distal node of the RAS/MAPK pathway. ERK proteins propagate signaling for multiple cellular functions involved in cell growth and differentiation, which are often overactivated in RAS/MAPK pathway-driven cancers. We in-licensed ERAS-007 from Asana based in part on preclinical studies that demonstrated the highest potency and longest target residence time of ERK inhibitors of which we are aware. Please see the results of such preclinical studies beginning on page 127 of this prospectus for more information on the relative potency and residence time exhibited in such studies. ERAS-007 has been evaluated as a single agent in a Phase 1 clinical trial in patients with advanced solid tumors completed by Asana. Forty-nine patients were enrolled and administered ERAS-007 once a day (QD) or once weekly (QW). Objective responses have been observed at doses from 120 mg to 250 mg QW in multiple tumor types (melanoma, salivary gland tumor, non-small cell lung cancer [NSCLC], and thyroid cancer) that all harbor alterations (BRAF, HRAS, and NRAS) in the RAS/MAPK pathway, supporting the development of ERAS-007 QW as a monotherapy or combination therapy in diverse, biomarker-selected tumor types. In this trial, ERAS-007 demonstrated a reversible and manageable adverse event profile.

We are pursuing a broad clinical development plan for ERAS-007, which we refer to as our HERKULES series of clinical trials, across multiple tumor types that includes both monotherapy and combinations with approved and investigational agents, such as RTK, SHP2, RAS, and/or RAF inhibitors. The first four HERKULES Phase 1b/2 proof-of-concept (POC) clinical trials will explore both tissue agnostic and tissue specific indications in patients

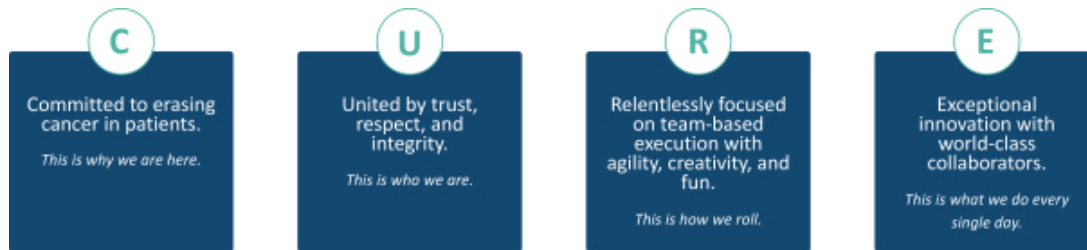
with solid tumors and hematologic malignancies, including NSCLC, colorectal cancer (CRC), and acute myeloid leukemia (AML). In May 2021, we dosed the first patient in HERKULES-1, a Phase 1b/2 clinical trial evaluating ERAS-007 as a single agent and in combination with ERAS-601 (MAPKlamp) in advanced solid tumors. We are planning to dose the first patient in HERKULES-2, a Phase 1b/2 clinical trial for ERAS-007/MAPKlamp in combination with various agents in patients with NSCLC, in the third quarter of 2021. We are planning to dose the first patient in HERKULES-3, a Phase 1b/2 clinical trial for ERAS-007/MAPKlamp in combination with various agents in patients with CRC, in the second half of 2021. Finally, in the first quarter of 2022, we plan to dose the first patient in HERKULES-4, a Phase 1b/2 clinical trial for ERAS-007/MAPKlamp in combination with various agents in patients with hematologic malignancies. While providing POC data, these trials may be expanded to enable potential accelerated approvals in their respective indications.

The second prong of our first MAPKlamp, ERAS-601, is designed to be a potent and selective oral inhibitor of SHP2, a convergent node for upstream RTK signaling and a critical “on/off switch” that activates RAS-GTP signaling. SHP2 also drives tumor cell proliferation and development of resistance. Our SHP2 inhibitor is designed to block oncogenic signal transduction and delay the onset of therapeutic resistance, and thereby serve as a backbone of combination therapy. In the fourth quarter of 2020, we initiated FLAGSHIP-1, a Phase 1 clinical trial for ERAS-601 in patients with advanced solid tumors.

We expect to file an IND for ERAS-3490, the development candidate (DevCan) nominated from our ERAS-1 KRAS G12C inhibitor program with high CNS penetration, in the second half of 2022. We are conducting IND-enabling studies for ERAS-801, our CNS-penetrant EGFR inhibitor, and expect to file an IND for development in refractory glioblastoma multiforme (GBM) in the first quarter of 2022. We are also advancing seven other programs targeting key oncogenic drivers in the RAS/MAPK pathway, which we will need to successfully progress through discovery and IND-enabling activities prior to advancing these programs into clinical development, if at all.

Our core values, team, and social mission

We are a team of experienced drug discoverers, developers, and company builders who are united by our mission to erase cancer and passionate about creating potentially life-saving precision oncology medicines singularly focused on targeting the RAS/MAPK pathway. Our leadership team has broad and deep experience in oncology, including advancing therapeutic candidates from discovery research to clinical development, regulatory approval, and commercialization. Our core values are embodied by our quest for the CURE:



Dr. Jonathan Lim, our Chairman, CEO, and Co-Founder, has pioneered transformative advancements in precision oncology and drug delivery, including leading Ignyta’s trailblazing pursuit of a global tissue agnostic label for ROZLYTREK, which became the first drug in biopharmaceutical history to achieve the unprecedented triple crown of breakthrough designations with BTM (FDA), PRIME (EMA) and Sakigake (PMDA). He has served as

Chairman and/or CEO and founding investor of six biotechnology companies that have collectively achieved global regulatory approval and launch of seven therapeutic products in oncology, immunology, and drug delivery, benefitting thousands of patients worldwide.

Dr. Michael Varney, our Chair of R&D, scientific advisory board (SAB) member, and a member of our board of directors, is a pioneer drug discoverer and biotech leader. His leadership at Agouron resulted in the discovery of multiple currently marketed anti-cancer agents, including XALKORI and INLYTA. As Executive Vice President and Head of Genentech's Research and Early Development (gRED) and a member of the Roche Corporate Executive Committee, he was responsible for all aspects of gRED innovation, drug discovery and development, and built a team-based organization that today contributes to more than 40% of Genentech's development portfolio, including the marketed anti-cancer agents ERIVEDGE and COTELLIC. Under his leadership, gRED teams discovered and developed successful medicines that include VENCLEXTA with AbbVie, the first BCL-2 inhibitor, and POLIVY, an antibody drug conjugate for the treatment of diffuse large B-cell lymphoma (DLBCL).

Dr. Wei Lin, our Chief Medical Officer, was responsible for all development functions and the clinical development of Nektar's pipeline, including advancing bempedalsleukin into multiple registrational trials and achieving US Food and Drug Administration (FDA) breakthrough therapy designation in metastatic melanoma. Prior to Nektar, Dr. Lin was the global development lead in cancer immunotherapy for lung cancer and head and neck cancer at Roche/Genentech. Under his leadership, his team oversaw 10 registrational studies, completed five positive Phase 3 trials, and achieved three US and EU regulatory approvals for TECENTRIQ, including the first advancement in first-line small cell lung cancer in three decades. He was also the site head for oncology product development for Roche China, where his team achieved multiple additional regulatory approvals for AVASTIN, ZELBORAF, and TARCEVA.

Dr. David Chacko, our Chief Financial Officer, joined us initially as Chief Business Officer from Versant Ventures, where he was a Principal with both investing and operating responsibilities. He helped lead investment opportunities across multiple therapeutic areas and advanced several Versant portfolio companies operationally through company formation, fundraising, corporate and business development, and clinical and regulatory activities. His prior roles at Alcon/Novartis, McKinsey, SR One, and Morgan Stanley bring to Erasca deep experience in strategy, finance, fundraising, business development, and operations.

Many members of our leadership team have worked together previously at Ignyta or Roche/Genentech, or have joined us from other leading companies in the biopharmaceutical and life science tools sectors such as Aragon, Illumina, Lilly, Medivation, Merck, Myovant, Neurocrine, Pfizer, Seragon, and Synthorx, and have worked on numerous oncology drugs that have been approved and launched for the benefit of patients.

Dr. Lim founded Erasca with Dr. Kevan Shokat, who sits on our SAB with other RAS/MAPK pathway experts. We are supported by our SAB and R&D advisory board, board of directors, and a leading syndicate of investors which include our founding investors, City Hill Ventures and Cormorant Asset Management, and ARCH Venture Partners, Andreessen Horowitz, Colt Ventures, EDBI, Invus, LifeSci Venture Partners, OrbiMed Healthcare Fund Management, PFM Health Sciences, and Terra Magnum.

At Erasca, while our mission to erase cancer inspires us, we know we can do more to make an even broader contribution to society. To that end, we are pursuing environmental, social, and governance (ESG) initiatives that are aligned with our core mission.

- **Erasca Foundation:** In May 2021, we established the Erasca Foundation, which will be funded by the donation of 1% of our capital stock prior to the closing of this offering. The Erasca Foundation will provide

support such as direct research grants, hardship grants, patient advocacy, patient education in underserved populations, and funding for other initiatives to positively impact society.

- **Inclusive clinical trial participation:** We intend to make clinical trials of our product candidates more accessible to diverse patient populations and plan to partner with others who are like-minded in this regard.
- **Drug access program:** We intend to provide patients with access to the drugs we develop and commercialize, including through compassionate use programs if our products are demonstrated to be safe and efficacious. We also intend to increase access to life-changing drugs in underserved populations if our products become commercially available.

Our corporate strategies to erase cancer

Our mission is to erase cancer by eradicating RAS/MAPK pathway-driven cancers. Our corporate strategies to achieve our mission include:

- Relentlessly focus on patients and society in our mission to erase cancer;
- Develop novel single agent and combination regimens to comprehensively shut down the RAS/MAPK pathway for the treatment of cancer;
- Advance our deep, modality-agnostic, RAS/MAPK pathway-focused pipeline;
- Internally and externally source, on a global basis, potentially disruptive programs targeting RAS/MAPK pathway alterations;
- Lead the next revolution in precision oncology.
- Evaluate opportunities to accelerate development timelines and enhance the commercial potential of our programs in collaboration with third parties.

Summary of risks related to our business

Our ability to execute our business strategy is subject to numerous risks, as more fully described in "Risk factors" immediately following this Prospectus summary. These risks include, among others:

- We have a limited operating history, have incurred significant operating losses since our inception and expect to incur significant losses for the foreseeable future. We may never generate any revenue or become profitable or, if we achieve profitability, we may not be able to sustain it.
- We will require substantial additional capital to finance our operations, and a failure to obtain this necessary capital when needed on acceptable terms, or at all, could force us to delay, limit, reduce or terminate our development programs, commercialization efforts or other operations.
- We are early in our development efforts and are only beginning to test our product candidates in clinical trials. If we are unable to successfully develop and commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.
- Clinical and preclinical development involves a lengthy and expensive process with an uncertain outcome, and the results of preclinical studies and early clinical trials are not necessarily predictive of future results. Our product candidates may not have favorable results in clinical trials, if any, or receive regulatory approval on a timely basis, or at all.

- Any difficulties or delays in the commencement or completion, or termination or suspension, of our current or planned clinical trials could result in increased costs to us, delay or limit our ability to generate revenue and adversely affect our commercial prospects.
- We rely on third parties to conduct many of our preclinical studies and clinical trials and to manufacture our product candidates, and these third parties may not perform satisfactorily.
- We face significant competition, and if our competitors develop technologies or product candidates more rapidly than we do or their technologies are more effective, our business and ability to develop and successfully commercialize products may be adversely affected.
- Our success depends on our ability to protect our intellectual property and our proprietary technologies.

Our corporate and other information

We were originally founded as a Delaware corporation on July 2, 2018. Our principal executive offices are located at 10835 Road to the Cure, Suite 140, San Diego, California 92121, and our telephone number is 858-465-6511. Our website address is www.erasca.com. The information contained in, or accessible through, our website does not constitute part of this prospectus. We have included our website address as an inactive textual reference only.

We use our trademarks in this prospectus as well as trademarks, tradenames and service marks that are the property of other organizations. Solely for convenience, trademarks and tradenames referred to in this prospectus appear without the ® and ™ symbols, but those references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or that the applicable owner will not assert its rights, to these trademarks and tradenames.

Implications of being an emerging growth company and a smaller reporting company

As a company with less than \$1.07 billion in revenue during our last fiscal year, we qualify as an “emerging growth company” as defined in the Jumpstart Our Business Startups Act of 2012 (the JOBS Act). An emerging growth company may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

- being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced “Management’s discussion and analysis of financial condition and results of operations” disclosure;
- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended (Sarbanes-Oxley Act);
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements, unless the US Securities Exchange Commission (SEC) determines the new rules are necessary for protecting the public;
- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

We may take advantage of these provisions until the last day of our fiscal year following the fifth anniversary of the date of the first sale of our common equity securities pursuant to an effective registration statement under the Securities Act of 1933, as amended (the Securities Act), which such fifth anniversary will occur in 2026. However, if certain events occur prior to the end of such five-year period, including if we become a “large accelerated filer” as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended (the Exchange Act), our annual gross revenues exceed \$1.07 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period.

We have elected to take advantage of certain of the reduced disclosure obligations in this prospectus and in the registration statement of which this prospectus is a part and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information in this prospectus and that we provide to our stockholders in the future may be different than what you might receive from other public reporting companies in which you hold equity interests.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. We have elected to avail ourselves of this exemption and, therefore, we will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies. As a result, our consolidated financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

We are also a smaller reporting company as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as our voting and non-voting common stock held by non-affiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than \$100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

The offering

Common stock offered by us	18,750,000 shares.
Option to purchase additional shares	The underwriters have been granted an option to purchase up to 2,812,500 additional shares of common stock from us at any time within 30 days from the date of this prospectus.
Common stock to be outstanding immediately after this offering	116,142,968 shares (or 118,955,468 shares if the underwriters exercise their option to purchase additional shares in full).
Use of proceeds	We currently intend to use the net proceeds of this offering, together with our existing cash, cash equivalents and investments, to fund the research and development of our product candidates and other development programs and for working capital and general corporate purposes. We may also use a portion of the remaining net proceeds and our existing cash, cash equivalents and investments, to in-license, acquire, or invest in complementary businesses, technologies, products or assets; however, we have no current commitments or obligations to do so. See the section titled "Use of proceeds."
Risk factors	See the section titled "Risk factors" and other information included in this prospectus for a discussion of factors you should consider carefully before deciding to invest in our common stock.
Directed share program	At our request, the underwriters have reserved up to 5% of the shares offered by this prospectus for sale at the initial public offering price to certain individuals through a directed share program, including our directors, officers, employees, business associates and related persons. The sales will be made at our direction by J.P. Morgan Securities LLC and its affiliates through a directed share program. The number of shares of our common stock available for sale to the general public in this offering will be reduced to the extent that such persons purchase such reserved shares. Any reserved shares not so purchased will be offered by the underwriters to the general public on the same terms as the other shares of our common stock offered by this prospectus. Any person that participates in this directed share program will be subject to a 180-day lock-up restriction with the representatives and with us with respect to any shares purchased through the directed share program. See the section titled "Underwriting" for additional information.
Nasdaq Global Select Market symbol	"ERAS"

The number of shares of our common stock to be outstanding after this offering set forth above is based on 97,392,968 shares of our common stock outstanding as of March 31, 2021, including 3,254,259 shares subject to forfeiture or our right of repurchase, after giving effect to the automatic conversion of all outstanding shares of

our convertible preferred stock into 71,263,685 shares of our common stock immediately prior to the closing of this offering, and excludes:

- 10,030,681 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2021, with a weighted-average exercise price of \$1.84 per share;
- 3,729,154 shares of common stock issuable upon the exercise of stock options granted after March 31, 2021, with a weighted-average exercise price of \$6.57 per share;
- 15,150,000 shares of common stock reserved for future issuance under our 2021 Incentive Plan (the 2021 Plan), which became effective in connection with this offering (which number does not include any potential evergreen increases pursuant to the terms of the 2021 Plan);
- 1,260,000 shares of common stock reserved for future issuance under our 2021 Employee Stock Purchase Plan (the ESPP), which became effective in connection with this offering (which number does not include any potential evergreen increases pursuant to the terms of the ESPP);
- 944,945 shares of common stock issued to the The Regents of the University of California, San Francisco in May 2021; and
- 1,093,557 shares of common stock issued to the Erasca Foundation on the effective date of the registration statement for this offering.

Unless otherwise indicated, all information contained in this prospectus assumes or gives effect to:

- the filing and effectiveness of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws, each of which will occur immediately prior to the closing of this offering;
- the automatic conversion of all outstanding shares of our convertible preferred stock into 71,263,685 shares of our common stock immediately prior to the closing of this offering;
- a one-for-1.2 reverse stock split of our common stock, which we effected on July 9, 2021;
- no exercise of the outstanding options described above; and
- no exercise by the underwriters of their option to purchase 2,812,500 additional shares of our common stock.

Summary consolidated financial data

The following tables set forth a summary of our historical consolidated financial data as of, and for the periods ended on, the dates indicated. We have derived the summary consolidated statements of operations data for the years ended December 31, 2019 and 2020 from our audited consolidated financial statements included elsewhere in this prospectus. The summary consolidated statements of operations data for the three months ended March 31, 2020 and 2021 and the summary consolidated balance sheet data as of March 31, 2021 have been derived from our unaudited consolidated financial statements included elsewhere in this prospectus and have been prepared on the same basis as the audited consolidated financial statements. In the opinion of management, the unaudited data reflect all adjustments, consisting only of normal recurring adjustments, necessary for the fair statement of the financial information in those statements. You should read these data together with our consolidated financial statements and related notes included elsewhere in this prospectus and the sections titled "Selected consolidated financial data" and "Management's discussion and analysis of financial condition and results of operations." Our historical results for any prior period are not necessarily indicative of our future results, and our results for any interim period are not necessarily indicative of results that may be expected for any full year.

(in thousands, except share and per share data)	Year ended December 31,		Three months ended March 31,	
	2019	2020	2020	2021
			(unaudited)	
Statements of Operations Data:				
Operating expenses:				
Research and development	\$ 9,618	\$ 29,550	\$ 4,554	\$ 12,245
In-process research and development	—	71,745	17,670	3,680
General and administrative	3,676	7,957	1,611	3,682
Total operating expenses	13,294	109,252	23,835	19,607
Loss from operations	(13,294)	(109,252)	(23,835)	(19,607)
Other income (expense), net:				
Interest income	1,303	336	185	30
Other expense	(49)	(102)	(8)	(55)
Change in fair value of preferred stock purchase right liability	—	7,358	—	1,615
Total other income (expense), net	1,254	7,592	177	1,590
Net loss	\$ (12,040)	\$ (101,660)	\$ (23,658)	\$ (18,017)
Net loss per share, basic and diluted ⁽¹⁾	\$ (0.61)	\$ (4.83)	\$ (1.15)	\$ (0.81)
Weighted-average shares of common stock outstanding, basic and diluted ⁽¹⁾	19,826,574	21,037,540	20,631,590	22,233,422
Pro forma net loss per share, basic and diluted (unaudited) ⁽²⁾		\$ (1.59)		\$ (0.22)
Pro forma weighted-average shares of common stock outstanding, basic and diluted (unaudited) ⁽²⁾		68,574,717		90,694,297

(1) See Note 2 to our audited consolidated financial statements included elsewhere in this prospectus for an explanation of the method used to calculate historical net loss per share, basic and diluted, and the weighted-average number of shares of common stock used in the computation of the per share amounts.

[Table of Contents](#)

- (2) Unaudited pro forma net loss per share, basic and diluted, attributable to common stockholders, is calculated giving effect to the conversion of the convertible preferred stock into shares of common stock. Unaudited pro forma net loss per share attributable to common stockholders does not include the shares expected to be sold and related proceeds to be received in this offering. Unaudited pro forma net loss per share attributable to common stockholders for the year ended December 31, 2020 and the three months ended March 31, 2021 was calculated using the weighted-average number of shares of common stock outstanding, including the pro forma effect of the conversion of all outstanding shares of our convertible preferred stock into shares of our common stock, as if such conversion had occurred at the beginning of the period, or their issuance dates, if later, and an adjustment to the net loss in the pro forma basic and diluted net loss per share calculation to remove gains from the remeasurement of the preferred stock purchase right liability.

(in thousands)	As of March 31, 2021		
	Actual	Pro forma ⁽¹⁾	Pro forma as adjusted ⁽²⁾
		(unaudited)	
Balance Sheet Data:			
Cash, cash equivalents and investments	\$ 217,340	\$ 217,340	\$ 493,140
Working capital ⁽³⁾	203,130	203,130	478,930
Total assets	224,628	224,628	500,428
Convertible preferred stock	340,798	—	—
Accumulated deficit	(133,419)	(133,419)	(133,419)
Total stockholders' (deficit) equity	(129,259)	211,539	487,339

- (1) Gives effect to the automatic conversion of all outstanding shares of our convertible preferred stock into an aggregate of 71,263,685 shares of our common stock and the related reclassification of the carrying value of the convertible preferred stock to permanent equity immediately prior to the closing of this offering.
- (2) Gives effect to (i) the pro forma adjustments set forth in footnote (1) above, and (ii) the issuance and sale of 18,750,000 shares of our common stock in this offering at the initial public offering price of \$16.00 per share, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.
- (3) We define working capital as current assets less current liabilities. See our consolidated financial statements included elsewhere in this prospectus for further details regarding our current assets and current liabilities.

Risk factors

Investing in our common stock involves a high degree of risk. You should consider carefully the risks and uncertainties described below, together with all of the other information in this prospectus, including our consolidated financial statements and related notes included elsewhere in this prospectus and the section titled "Management's discussion and analysis of financial condition and results of operations" before making an investment decision. If any of the following risks are realized, our business, financial condition, results of operations and prospects could be materially and adversely affected. In that event, the trading price of our common stock could decline and you could lose part or all of your investment.

Risks related to our limited operating history, financial position and need for additional capital

We have a limited operating history, have incurred significant operating losses since our inception and expect to incur significant losses for the foreseeable future. We may never generate any revenue or become profitable or, if we achieve profitability, we may not be able to sustain it.

We are a clinical-stage biopharmaceutical company with a limited operating history upon which you can evaluate our business and prospects. We commenced operations in 2018, and to date, we have focused primarily on organizing and staffing our company, business planning, raising capital, identifying, acquiring and in-licensing our product candidates, establishing our intellectual property portfolio, conducting research, preclinical studies and clinical trials, establishing arrangements with third parties for the manufacture of our product candidates and related raw materials, and providing general and administrative support for these operations. Our approach to the discovery and development of product candidates based on our scientific approach is unproven, and we do not know whether we will be able to develop or obtain regulatory approval for any products of commercial value. In addition, we only have two product candidates, ERAS-007 and ERAS-601, in early clinical development, and our other product candidates remain in the preclinical or discovery stage. We have not yet completed any later-stage, large-scale or pivotal clinical trials, obtained regulatory approvals, manufactured a commercial-scale product, or arranged for a third party to do so on our behalf, or conducted sales and marketing activities necessary for successful product commercialization. Consequently, any predictions made about our future success or viability may not be as accurate as they could be if we had a history of successfully developing and commercializing biopharmaceutical products.

We have incurred significant operating losses since our inception and expect to incur significant losses for the foreseeable future. We do not have any products approved for sale and have not generated any revenue since our inception. If we are unable to successfully develop and obtain requisite approval for our product candidates, we may never generate any revenue. Our net losses were \$12.0 million and \$101.7 million for the years ended December 31, 2019 and 2020, respectively, and \$18.0 million for the three months ended March 31, 2021. As of March 31, 2021, we had an accumulated deficit of \$133.4 million. Substantially all of our losses have resulted from expenses incurred in connection with our research and development programs and from general and administrative costs associated with our operations. All of our product candidates will require substantial additional development time and resources before we would be able to apply for or receive regulatory approvals and begin generating revenue from product sales. We expect to continue to incur losses for the foreseeable future, and we anticipate these losses will increase substantially as we continue our development of, seek regulatory approval for and potentially commercialize any of our product candidates and seek to identify, assess, acquire, in-license or develop additional product candidates.

To become and remain profitable, we must succeed in developing and eventually commercializing products that generate significant revenue. This will require us to be successful in a range of challenging activities, including

[Table of Contents](#)

completing clinical trials and preclinical studies of our product candidates, discovering, acquiring or in-licensing additional product candidates, obtaining regulatory approval for these product candidates, and manufacturing, marketing, and selling any products for which we may obtain regulatory approval. We are only in the preliminary stages of most of these activities. We may never succeed in these activities and, even if we do, may never generate revenue that is significant enough to achieve profitability. In addition, we have not yet demonstrated an ability to successfully overcome many of the risks and uncertainties frequently encountered by companies in new and rapidly evolving fields, particularly in the biopharmaceutical industry. Because of the numerous risks and uncertainties associated with biopharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to become and remain profitable may have an adverse effect on the value of our company and could impair our ability to raise capital, expand our business, maintain our research and development efforts, diversify our product candidates, or even continue our operations. A decline in the value of our company could also cause you to lose all or part of your investment.

We will require substantial additional capital to finance our operations, and a failure to obtain this necessary capital when needed on acceptable terms, or at all, could force us to delay, limit, reduce or terminate our development programs, commercialization efforts or other operations.

The development of biopharmaceutical product candidates is capital-intensive. Our operations have consumed substantial amounts of cash since inception. We expect our expenses to increase in connection with our ongoing activities, particularly as we conduct our ongoing and planned clinical trials and preclinical studies, and seek regulatory approval for our current product candidates and any future product candidates we may develop or otherwise acquire. In addition, as our product candidates progress through development and toward commercialization, we will need to make milestone payments to the licensors and other third parties from whom we have in-licensed or acquired our product candidates, including ERAS-007 and ERAS-601. If we obtain regulatory approval for any of our product candidates, we also expect to incur significant commercialization expenses related to product manufacturing, marketing, sales, and distribution. Because the outcome of any clinical trial or preclinical study is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of our product candidates. Furthermore, following the completion of this offering, we expect to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. If we are unable to raise capital when needed or on attractive terms, we could be forced to delay, reduce or eliminate our research and development programs or any future commercialization efforts.

Based on our current operating plan, we believe that the net proceeds from this offering, together with our existing cash, cash equivalents and investments, will be sufficient to fund our operations for at least the next 24 months from the date of this prospectus. We have based these estimates on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect. Our operating plans and other demands on our cash resources may change as a result of many factors currently unknown to us, and we may need to seek additional funds sooner than planned, through public or private equity or debt financings or other capital sources, including potential collaborations, licenses and other similar arrangements. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. Attempting to secure additional financing may divert our management from our day-to-day activities, which may adversely affect our ability to develop our product candidates.

[Table of Contents](#)

Our future capital requirements will depend on many factors, including, but not limited to:

- the type, number, scope, progress, expansions, results, costs and timing of discovery, preclinical studies and clinical trials of our product candidates which we are pursuing or may choose to pursue in the future, including the costs of any third-party products used in our combination clinical trials that are not covered by such third party or other sources;
- the costs and timing of manufacturing for our product candidates, including commercial manufacturing if any product candidate is approved;
- the costs, timing and outcome of regulatory review of our product candidates;
- the costs of obtaining, maintaining and enforcing our patents and other intellectual property rights;
- our efforts to enhance operational systems and hire additional personnel to satisfy our obligations as a public company, including enhanced internal controls over financial reporting;
- the costs associated with hiring additional personnel and consultants as our preclinical and clinical activities increase;
- the timing and amount of the milestone or other payments we must make to the licensors and other third parties from whom we have in-licensed our acquired our product candidates;
- the costs and timing of establishing or securing sales and marketing capabilities if any product candidate is approved;
- our ability to achieve sufficient market acceptance, coverage and adequate reimbursement from third-party payors and adequate market share and revenue for any approved products;
- patients' willingness to pay out-of-pocket for any approved products in the absence of coverage and/or adequate reimbursement from third-party payors;
- any delays and cost increases that result from the COVID-19 pandemic;
- the terms and timing of establishing and maintaining collaborations, licenses and other similar arrangements; and
- costs associated with any products or technologies that we may in-license or acquire.

Conducting clinical trials and preclinical studies and identifying potential product candidates is a time-consuming, expensive and uncertain process that takes years to complete, and we may never generate the necessary data or results required to obtain regulatory approval and commercialize our product candidates. In addition, our product candidates, if approved, may not achieve commercial success. Our commercial revenue, if any, will be derived from sales of products that we do not expect to be commercially available for many years, if at all.

Accordingly, we will need to continue to rely on additional financing to achieve our business objectives. Adequate additional financing may not be available to us on acceptable terms, or at all.

Raising additional capital may cause dilution to our stockholders, including purchasers of common stock in this offering, restrict our operations or require us to relinquish rights to our technologies or product candidates.

Until such time, if ever, as we can generate substantial product revenue, we expect to finance our cash needs through equity offerings, debt financings, or other capital sources, including potential collaborations, licenses and other similar arrangements. We do not have any committed external source of funds. To the extent that we

raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a common stockholder. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Such restrictions could adversely impact our ability to conduct our operations and execute our business plan.

If we raise additional funds through future collaborations, licenses and other similar arrangements, we may have to relinquish valuable rights to our future revenue streams, research programs or product candidates, or grant licenses on terms that may not be favorable to us and/or that may reduce the value of our common stock. If we are unable to raise additional funds through equity or debt financings or other arrangements when needed or on terms acceptable to us, we would be required to delay, limit, reduce, or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Risks related to the discovery, development and regulatory approval of our product candidates

We are early in our development efforts and have only two product candidates in clinical development. All of our other development programs are still in the preclinical or discovery stage. If we are unable to successfully develop, obtain regulatory approval and ultimately commercialize any of our current or future product candidates, or experience significant delays in doing so, our business will be materially harmed.

We are early in our development efforts and have only two product candidates, ERAS-007 and ERAS-601, in early clinical development. All of our other programs are still in the preclinical or discovery stage. Our ability to generate product revenue, which we do not expect will occur for many years, if ever, will depend heavily on the successful development and eventual commercialization of our product candidates. The success of our product candidates will depend on several factors, including the following:

- initiation and successful enrollment of clinical trials and timely completion of clinical trials and preclinical studies with favorable results;
- acceptance of investigational new drug applications (INDs) by the FDA, or of similar regulatory submissions by comparable foreign regulatory authorities for the conduct of clinical trials of our product candidates and our proposed design of future clinical trials;
- the frequency and severity of adverse events in clinical trials;
- maintaining and establishing relationships with contract research organizations (CROs) and clinical sites for the clinical development of our product candidates both in the United States and internationally;
- demonstrating the safety, purity, potency and efficacy of our product candidates to the satisfaction of applicable regulatory authorities;
- receipt of marketing approvals from applicable regulatory authorities, including new drug applications (NDAs) and biologics license applications (BLAs) from the FDA and maintaining such approvals;
- making arrangements with our third-party manufacturers for, or establishing, commercial manufacturing capabilities;
- establishing sales, marketing and distribution capabilities and launching commercial sales of our products, if and when approved, whether alone or in collaboration with others;

[Table of Contents](#)

- establishing and maintaining patent and trade secret protection or regulatory exclusivity for our product candidates;
- maintaining an acceptable safety profile of our products following approval, if any; and
- maintaining and growing an organization of people who can develop and commercialize our products and technology.

If we are unable to develop, obtain regulatory approval for, or, if approved, successfully commercialize our product candidates, we may not be able to generate sufficient revenue to continue our business.

Our approach to the discovery and development of product candidates is unproven, and we do not know whether we will be able to develop any products of commercial value, or if competing approaches will limit the commercial value of our product candidates.

The success of our business depends primarily upon our ability to identify, develop and commercialize products based on our scientific approach, which is singularly focused on shutting down the RAS/MAPK pathway, a novel and unproven approach. While we have had favorable preclinical study results for certain of our development programs, we have not yet succeeded and may not succeed in demonstrating efficacy and safety for any product candidates in clinical trials or in obtaining marketing approvals from the FDA or other regulatory authorities or in commercializing such product candidates. Our lead product candidates, ERAS-007 and ERAS-601, are in early clinical development and, as an organization, we have not completed any clinical trials for any of our product candidates. In addition, while we believe our pipeline will yield multiple additional INDs for our development programs in the future, we may not be successful in our discovery efforts, and even if successful, we may not be able to submit INDs and have such INDs accepted to enable us to commence clinical trials on the timelines we expect, if at all. Our research methodology and scientific approach may be unsuccessful in identifying additional product candidates, and any product candidates may be shown to have harmful side effects or may have other characteristics that may necessitate additional clinical testing, or make the product candidates unmarketable or unlikely to receive marketing approval. In particular, using multiple agents to shut down multiple nodes of the RAS/MAPK pathway simultaneously is a novel approach that may have unexpected consequences, including adverse events that preclude successful development and approval of our product candidates. Further, because all of our current product candidates and development programs are based on the RAS/MAPK pathway, adverse developments with respect to one of our programs may have a significant adverse impact on the actual or perceived likelihood of success and value of our other programs.

In addition, the biotechnology and biopharmaceutical industries are characterized by rapidly advancing technologies. Our future success will depend in part on our ability to maintain a competitive position with our scientific approach. If we fail to stay at the forefront of technological change in utilizing our approach to create and develop product candidates, we may be unable to compete effectively. Our competitors may render our approach obsolete, or limit the commercial value of our products or product candidates by advances in existing technological approaches or the development of new or different approaches, potentially eliminating the advantages in our drug discovery process that we believe we derive from our approach. By contrast, adverse developments with respect to other companies that attempt to use a similar approach to our approach may adversely impact the actual or perceived value and potential of our product candidates.

If any of these events occur, we may be forced to abandon our development efforts for a program or programs, which would have a material adverse effect on our business and could potentially cause us to cease operations.

Clinical and preclinical development involves a lengthy and expensive process with an uncertain outcome, and the results of preclinical studies and early clinical trials are not necessarily predictive of future results. Any of our product candidates may not have favorable results in clinical trials, if any, or receive regulatory approval on a timely basis, if at all.

Clinical and preclinical development is expensive and can take many years to complete, and its outcome is inherently uncertain. We cannot guarantee that any clinical trials or preclinical studies will be conducted as planned or completed on schedule, if at all, and failure can occur at any time during the preclinical study or clinical trial process, including due to factors that are beyond our control. Despite promising preclinical or clinical results, any product candidate can unexpectedly fail at any stage of preclinical or clinical development. The historical failure rate for product candidates in our industry is high.

The results from preclinical studies or clinical trials of a product candidate or a competitor's product candidate in the same class may not predict the results of later clinical trials of our product candidate, and interim, topline, or preliminary results of a clinical trial are not necessarily indicative of final results. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy characteristics despite having progressed through preclinical studies and initial clinical trials. For example, while a Phase 1 clinical trial of ERAS-007 was completed prior to our acquisition of this product candidate and while we have conducted preclinical studies of ERAS-601, we do not know whether they or our other potential product candidates will perform in future clinical trials as they have performed in these prior trials and studies. It is not uncommon to observe results in clinical trials that are unexpected based on preclinical studies and early clinical trials, and many product candidates fail in clinical trials despite very promising early results. We are currently conducting IND-enabling preclinical studies for ERAS-801. If unexpected observations or toxicities are observed in these studies, or in future IND-enabling studies for any of our other development programs, such results may delay or prevent the initiation of clinical trials for such development programs. Moreover, preclinical and clinical data may be susceptible to varying interpretations and analyses. A number of companies in the biopharmaceutical and biotechnology industries have suffered significant setbacks in clinical development even after achieving promising results in earlier studies.

For the foregoing reasons, we cannot be certain that our ongoing and planned clinical trials and preclinical studies will be successful. Any safety concerns observed in any one of our clinical trials in our targeted indications could limit the prospects for regulatory approval of our product candidates in those and other indications, which could have a material adverse effect on our business, financial condition and results of operations.

Any difficulties or delays in the commencement or completion, or termination or suspension, of our current or planned clinical trials could result in increased costs to us, delay or limit our ability to generate revenue and adversely affect our commercial prospects.

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct extensive clinical studies to demonstrate the safety, purity, potency and efficacy of the product candidates in humans. Before we can initiate clinical trials for our preclinical product candidates, we must submit the results of preclinical studies to the FDA or comparable foreign regulatory authorities along with other information, including information about product candidate chemistry, manufacturing and controls and our proposed clinical trial protocol, as part of an IND application or similar regulatory submission. The FDA or comparable foreign regulatory authorities may require us to conduct additional preclinical studies for any product candidate before it allows us to initiate clinical trials under any IND or similar regulatory submission, which may lead to delays and increase the costs of our preclinical development programs. Moreover, even if these trials begin, issues may arise that could cause regulatory authorities to suspend or terminate such clinical trials. Any delays in the commencement or completion of our ongoing and planned clinical trials for our current and any future product candidate could significantly affect our product development timelines and product development costs.

[Table of Contents](#)

We do not know whether our planned trials will begin on time or be completed on schedule, if at all. The commencement and completion of clinical trials can be delayed for a number of reasons, including delays related to:

- inability to generate sufficient preclinical, toxicology, or other in vivo or in vitro data to support the initiation or continuation of clinical trial;
- obtaining regulatory authorizations to commence a trial or reaching a consensus with regulatory authorities on trial design;
- the FDA or comparable foreign regulatory authorities disagreeing as to the design or implementation of our clinical studies;
- any failure or delay in reaching an agreement with CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- delays in identifying, recruiting and training suitable clinical investigators;
- obtaining approval from one or more institutional review boards (IRBs) at clinical trial sites;
- IRBs refusing to approve, suspending or terminating the trial at an investigational site, precluding enrollment of additional subjects, or withdrawing their approval of the trial;
- changes to the clinical trial protocol;
- clinical sites deviating from the trial protocol or dropping out of a trial;
- failure by us or our CROs to perform in accordance with good clinical practice (GCP) requirements or applicable regulatory guidelines in other countries;
- manufacturing sufficient quantities of product candidate or obtaining sufficient quantities of combination therapies for use in clinical trials;
- subjects failing to enroll or remain in our trials at the rate we expect, or failing to return for post-treatment follow-up, including subjects failing to remain in our trials due to movement restrictions, health reasons or otherwise resulting from the COVID-19 pandemic;
- patients choosing alternative treatments for the indications for which we are developing our product candidates, or participating in competing clinical trials;
- lack of adequate funding to continue the clinical trials or costs being greater than we anticipate;
- subjects experiencing severe or unexpected drug-related adverse effects;
- occurrence of serious adverse events in trials of the same class of agents conducted by other companies;
- selection of clinical endpoints that require prolonged periods of clinical observation or analysis of the resulting data;
- transfer of manufacturing processes to larger-scale facilities operated by a contract manufacturing organization (CMO), delays or failure by our CMOs or us to make any necessary changes to such manufacturing process, or failure of our CMOs to product clinical trial materials in accordance with current good manufacturing (cGMP) regulations or other applicable requirements; and
- third parties being unwilling or unable to satisfy their contractual obligations to us in a timely manner.

In addition, disruptions caused by the COVID-19 pandemic may increase the likelihood that we encounter such difficulties or delays in initiating, enrolling, conducting or completing our planned and ongoing clinical trials.

[Table of Contents](#)

Clinical trials must be conducted in accordance with the FDA and other applicable regulatory authorities' legal requirements, regulations or guidelines, and are subject to oversight by these governmental agencies and Ethics Committees or IRBs at the medical institutions where the clinical trials are conducted. We could also encounter delays if a clinical trial is suspended or terminated by us, by the IRBs of the institutions in which such trials are being conducted, by a Data Safety Monitoring Board for such trial or by the FDA or comparable foreign regulatory authorities. Such authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or comparable foreign regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial. In addition, changes in regulatory requirements and policies may occur, and we may need to amend clinical trial protocols to comply with these changes. Amendments may require us to resubmit our clinical trial protocols to IRBs for reexamination, which may impact the costs, timing or successful completion of a clinical trial.

Further, our conduct of clinical trials in foreign countries presents additional risks that may delay completion of our clinical trials. These risks include the failure of enrolled patients in foreign countries to adhere to clinical protocol as a result of differences in healthcare services or cultural customs, managing additional administrative burdens associated with foreign regulatory schemes, as well as political and economic risks relevant to such foreign countries.

Moreover, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and receive compensation in connection with such services. Under certain circumstances, we may be required to report some of these relationships to the FDA or comparable foreign regulatory authorities. The FDA or comparable foreign regulatory authority may conclude that a financial relationship between us and a principal investigator has created a conflict of interest or otherwise affected interpretation of the study. The FDA or comparable foreign regulatory authority may therefore question the integrity of the data generated at the applicable clinical trial site and the utility of the clinical trial itself may be jeopardized. This could result in a delay in approval, or rejection, of our marketing applications by the FDA or comparable foreign regulatory authority, as the case may be, and may ultimately lead to the denial of marketing approval of one or more of our product candidates.

In addition, many of the factors that cause, or lead to, the termination or suspension of, or a delay in the commencement or completion of, clinical trials may also ultimately lead to the denial of regulatory approval of a product candidate. We may make formulation or manufacturing changes to our product candidates, in which case we may need to conduct additional preclinical studies to bridge our modified product candidates to earlier versions. Any delays to our clinical trials that occur as a result could shorten any period during which we may have the exclusive right to commercialize our product candidates and our competitors may be able to bring products to market before we do, and the commercial viability of our product candidates could be significantly reduced. Any of these occurrences may harm our business, financial condition and prospects significantly.

We may find it difficult to enroll patients in our clinical trials. If we encounter difficulties enrolling subjects in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

We may not be able to initiate or continue clinical trials for our product candidates if we are unable to identify and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or similar regulatory authorities outside the United States. Subject enrollment, a significant factor in the timeline of clinical trials, is affected by many factors including the size and characteristics of the patient population, the proximity of patients to clinical sites, the eligibility and exclusion criteria for the trial, the design of the clinical trial, the risk that enrolled patients will not complete a clinical trial, our ability to recruit clinical trial

investigators with the appropriate competencies and experience, competing clinical trials and clinicians' and patients' perceptions as to the potential advantages and risks of the product candidate being studied in relation to other available therapies, including any new products that may be approved for the indications we are investigating as well as any product candidates under development. We will be required to identify and enroll a sufficient number of subjects for each of our clinical trials. Potential subjects for any planned clinical trials may not be adequately diagnosed or identified with the diseases which we are targeting or may not meet the entry criteria for such trials. In particular, because certain of our product candidates are focused on patients with specific molecular alterations within the RAS/MAPK pathway, our ability to enroll eligible patients may be limited or may result in slower enrollment than we anticipate. We also may encounter difficulties in identifying and enrolling patients with a stage of disease appropriate for our planned clinical trials and monitoring such patients adequately during and after treatment. Additionally, other pharmaceutical companies targeting these same types of cancer are recruiting clinical trial patients from these patient populations, which may make it more difficult to fully enroll our clinical trials. We may not be able to initiate or continue clinical trials if we are unable to locate a sufficient number of eligible subjects to participate in the clinical trials required by the FDA or comparable foreign regulatory authorities. In addition, the process of finding and diagnosing patients may prove costly. The timing of our clinical trials depends, in part, on the speed at which we can recruit patients to participate in our trials, as well as completion of required follow-up periods. The eligibility criteria of our clinical trials, once established, will further limit the pool of available trial participants. If patients are unwilling to participate in our trials for any reason, including the existence of concurrent clinical trials for similar patient populations, the availability of approved therapies or as a result of the COVID-19 pandemic, or we otherwise have difficulty enrolling a sufficient number of patients, the timeline for recruiting subjects, conducting studies and obtaining regulatory approval of our product candidates may be delayed. Additionally, because our clinical trials are in patients with relapsed/refractory cancer, the patients are typically in the late stages of their disease and may experience disease progression independent from our product candidates, making them unevaluable for purposes of the clinical trial and requiring additional patient enrollment. Our inability to enroll a sufficient number of subjects for any of our future clinical trials would result in significant delays or may require us to abandon one or more clinical trials altogether. In addition, we expect to rely on CROs and clinical trial sites to ensure proper and timely conduct of our future clinical trials and, while we have entered into agreements governing their services, we have limited influence over their actual performance. We cannot assure you that our assumptions used in determining expected clinical trial timelines are correct or that we will not experience delays in enrollment, which would result in the delay of completion of such trials beyond our expected timelines.

Use of our product candidates could be associated with side effects, adverse events or other properties or safety risks, which could delay or preclude approval, cause us to suspend or discontinue clinical trials, abandon a product candidate, limit the commercial profile of an approved label or result in other significant negative consequences that could severely harm our business, prospects, operating results and financial condition.

As is the case with oncology drugs generally, it is likely that there may be side effects and adverse events associated with our product candidates' use. Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics. Undesirable side effects caused by our product candidates when used alone or in combination with other approved or investigational drugs or biologics could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label, or lead to the delay or denial of regulatory approval by the FDA or comparable foreign regulatory authorities. The drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

Moreover, if our product candidates are associated with undesirable side effects in clinical trials or have characteristics that are unexpected, we may elect to abandon their development or limit their development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective, which may limit the commercial expectations for the product candidate if approved. For example, ophthalmic toxicities have been observed during treatment with MEK-targeted agents and also occur with ERK inhibitors, and reversible retinopathy is a well-known MEK/ERK class effect. Skin toxicities have also been noted as a class effect of inhibitors of RAF, MEK, and ERK. Both skin and ophthalmic treatment-related adverse events were observed in the completed Phase 1 trial of ERAS-007, consistent with these class effects. Gastrointestinal toxicities are associated with the use of MEK/ERK inhibitors and SHP2 inhibitors, whereas hematological toxicities are more commonly associated with SHP2 inhibitors. Furthermore, skin and gastrointestinal side effects represent overlapping toxicities of ERK inhibitors and SHP2 inhibitors with EGFR inhibitors and BRAF inhibitors. In our FLAGSHIP-1 trial, as of June 1, 2021, ERAS-601 had one dose-limiting toxicity of grade 3 thrombocytopenia observed at the highest once-daily dose tested to date, and a total of four serious adverse events were observed, three of which were attributed to ERAS-601 (two grade 3 hypertension and one grade 3 diarrhea) and one of which was unrelated to study drug (grade 3 bladder infection). Therefore, unacceptable enhancement of certain toxicities may be seen when our product candidates are combined with standard of care therapies, or when they are used as single agents. We may also be required to modify our development and clinical trial plans based on findings in our ongoing clinical trials. Many compounds that initially showed promise in early-stage testing for treating cancer have later been found to cause side effects that prevented further development of the compound. In addition, regulatory authorities may draw different conclusions or require additional testing to confirm these determinations.

It is possible that as we test our product candidates in larger, longer and more extensive clinical trials, including with different dosing regimens, or as the use of these product candidates becomes more widespread if they receive regulatory approval, illnesses, injuries, discomforts and other adverse events that were observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials, may be reported by subjects. If such side effects become known later in development or upon approval, if any, such findings may harm our business, financial condition and prospects significantly.

In addition, we plan to study our product candidates in combination with other therapies, including those that are also known to act on the RAS/MAPK pathway, which may exacerbate adverse events associated with such product candidates. Patients treated with our product candidates may also be undergoing surgical, radiation and chemotherapy treatments, which can cause side effects or adverse events that are unrelated to our product candidates but may still impact the success of our clinical trials. The inclusion of critically ill patients in our clinical trials may result in deaths or other adverse medical events due to other therapies or medications that such patients may be using or due to the gravity of such patients' illnesses. For example, it is expected that some of the patients enrolled in our clinical trials will die or experience major clinical events either during the course of our clinical trials or after participating in such trials, which has occurred in the past.

In addition, if one or more of our product candidates receives marketing approval, and we or others later identify undesirable side effects caused by such product, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw, suspend or limit approvals of such product, or seek an injunction against its manufacture or distribution;
- we may be required to recall a product or change the way such product is administered to patients;
- regulatory authorities may require additional warnings on the label, such as a "black box" warning or a contraindication;
- we may be required to implement a Risk Evaluation and Mitigation Strategy (REMS) or create a medication guide outlining the risks of such side effects for distribution to patients;

[Table of Contents](#)

- we may be required to change the way a product is distributed or administered, conduct additional clinical trials or change the labeling of a product or be required to conduct additional post-marketing studies or surveillance;
- we could be sued and held liable for harm caused to patients;
- sales of the product may decrease significantly or the product could become less competitive; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and could significantly harm our business, results of operations and prospects.

As an organization, we have never completed any clinical trials and may be unable to do so for any of our product candidates.

We are early in our development efforts for our product candidates, have never completed any clinical trials and we will need to successfully complete our Phase 1 clinical trials and later-stage and pivotal clinical trials in order to obtain FDA or comparable foreign regulatory approval to market our product candidates. Carrying out later-stage clinical trials and the submission of a successful NDA or BLA is a complicated process. A Phase 1 clinical trial for ERAS-007 was completed prior to our acquisition of this product candidate, and we are currently conducting our first Phase 1 clinical trial for ERAS-601 and we plan to conduct multiple Phase 1b/2 trials for ERAS-007. We are only beginning to conduct clinical trials for our product candidates, and we have limited experience as a company in preparing, submitting and prosecuting regulatory filings and have not previously submitted an NDA, BLA or other comparable foreign regulatory submission for any product candidate. We are also conducting and plan to conduct a number of clinical trials for multiple product candidates in parallel over the next several years, which may be a difficult process to manage with our limited resources and which may divert the attention of management. In addition, we have had limited interactions with the FDA and cannot be certain how many additional clinical trials of our product candidates will be required or how such trials should be designed. Consequently, we may be unable to successfully and efficiently execute and complete necessary clinical trials in a way that leads to regulatory submission and approval of any of our product candidates. We may require more time and incur greater costs than our competitors and may not succeed in obtaining regulatory approvals of product candidates that we develop. Failure to commence or complete, or delays in, our planned clinical trials could prevent us from or delay us in submitting NDAs and BLAs for and commercializing our product candidates.

We intend to develop our product candidates in combination with other therapies, which exposes us to additional risks.

We intend to develop our current and any future product candidates for use in combination with one or more currently approved cancer therapies. Even if any product candidate we develop was to receive marketing approval or be commercialized for use in combination with other existing therapies, we would continue to bear the risks that the FDA or similar foreign regulatory authorities could revoke approval of the therapy used in combination with our product candidate or that safety, efficacy, manufacturing or supply issues could arise with these existing therapies. Combination therapies are commonly used for the treatment of cancer, and we would be subject to similar risks if we develop any of our product candidates for use in combination with other drugs or biologics or for indications other than cancer. Developing combination therapies using approved therapeutics, as we plan to do for our product candidates, also exposes us to additional clinical risks, such as the requirement that we demonstrate the safety and efficacy of each active component of any combination regimen we may develop.

[Table of Contents](#)

In addition, we are also evaluating the combination of ERAS-007 and ERAS-601 with each other, and may also evaluate our product candidates in combination with one or more other cancer therapies that have not yet been approved for marketing by the FDA or similar foreign regulatory authorities. We may not be able to market and sell any product candidate we develop in combination with any such unapproved cancer therapies that do not ultimately obtain marketing approval.

If the FDA or similar foreign regulatory authorities do not approve these other combination agents or revoke their approval of, or if safety, efficacy, manufacturing, or supply issues arise with the drugs or biologics we choose to evaluate in combination with our product candidates, we may be unable to obtain approval of or market our product candidates for combination therapy regimens.

Additionally, if the third-party providers of therapies or therapies in development used in combination with our product candidates are unable to produce sufficient quantities for clinical trials or for commercialization of our product candidates, or if the cost of combination therapies are prohibitive, our development and commercialization efforts would be impaired, which would have an adverse effect on our business, financial condition, results of operations and growth prospects.

Because we have a number of product candidates and development programs in our pipeline, we may expend our limited resources to pursue a particular product candidate and fail to capitalize on product candidates or indications that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we focus on specific product candidates, development programs and indications. We are also conducting and plan to conduct several clinical trials for multiple product candidates in parallel over the next several years, which may make our decision as to which product candidates to focus on more difficult. As a result, we may forgo or delay pursuit of opportunities with other product candidates that could have had greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable product candidates. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaborations, licenses and other similar arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate.

Additionally, we may pursue additional in-licenses or acquisitions of development-stage assets or programs, which entails additional risk to us. Identifying, selecting and acquiring promising product candidates requires substantial technical, financial and human resources expertise. Efforts to do so may not result in the actual acquisition or license of a particular product candidate, potentially resulting in a diversion of our management's time and the expenditure of our resources with no resulting benefit. For example, if we are unable to identify programs that ultimately result in approved products, we may spend material amounts of our capital and other resources evaluating, acquiring and developing products that ultimately do not provide a return on our investment.

We may not be able to obtain or maintain orphan designations for any of our product candidates, and we may be unable to maintain the benefits associated with orphan drug designation, including the potential for market exclusivity.

We may seek orphan designation for some of our product candidates; however, we may never receive such designations. Under the Orphan Drug Act of 1983, the FDA may designate a product as an orphan product candidate if it is intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals in the United States, or a patient population of greater than 200,000

individuals in the United States, but for which there is no reasonable expectation that the cost of developing the drug or biologic will be recovered from sales in the United States. Orphan drug designation must be requested before submitting an NDA or BLA.

In the United States, orphan designation entitles a party to financial incentives such as opportunities for grant funding toward clinical trial costs, tax advantages and user-fee waivers. In addition, if a product candidate that has orphan designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications, including an NDA or BLA, to market the same product for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or where the manufacturer is unable to assure sufficient product quantity.

Even if we obtain orphan drug exclusivity for a product, such exclusivity may not effectively protect the product from competition because different drugs and biologics can be approved for the same condition. Even after an orphan drug or biologic is approved, the FDA or comparable foreign regulatory authority can subsequently approve the same drug or biologic for the same condition if such regulatory authority concludes that the later drug or biologic is clinically superior because it is shown to be safer, more effective or makes a major contribution to patient care. Orphan drug exclusivity may also be lost if the FDA later determines that the initial request for designation was materially defective, or if the sponsor seeks approval for an indication broader than the designated indication. In addition, orphan drug exclusivity does not prevent the FDA from approving competing drugs or biologics for the same or similar indication containing a different active ingredient. In addition, if a subsequent drug or biologic is approved for marketing for the same or a similar indication as any of our product candidates that receive marketing approval, we may face increased competition and lose market share regardless of orphan drug exclusivity. Orphan designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process.

We are currently conducting and may in the future conduct certain of our clinical trials for our product candidates outside of the United States. However, the FDA and other foreign equivalents may not accept data from such trials, in which case our development plans will be delayed, which could materially harm our business.

We are currently conducting and may in the future conduct one or more of our clinical trials for our product candidates outside the United States. Although the FDA may accept data from clinical trials conducted outside the United States, acceptance of this data is subject to certain conditions imposed by the FDA. Where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will not approve the application on the basis of foreign data alone unless those data are applicable to the US population and US medical practice; the studies were performed by clinical investigators of recognized competence; and the data are considered valid without the need for an on-site inspection by the FDA or, if the FDA considers such an inspection to be necessary, the FDA is able to validate the data through an on-site inspection or other appropriate means. For studies that are conducted only at sites outside of the United States and not subject to an IND, the FDA requires the clinical trial to have been conducted in accordance with GCPs, and the FDA must be able to validate the data from the clinical trial through an on-site inspection if it deems such inspection necessary. For such studies not subject to an IND, the FDA generally does not provide advance comment on the clinical protocols for the studies, and therefore there is an additional potential risk that the FDA could determine that the study design or protocol for a non-US clinical trial was inadequate, which could require us to conduct additional clinical trials. There can be no assurance the FDA will accept data from clinical trials conducted outside of the United States. If the FDA does not accept data from our clinical trials of our product candidates, it would likely result in the need for additional clinical trials, which would be costly and time-consuming and delay or permanently halt our development of our product candidates.

[Table of Contents](#)

Conducting clinical trials outside the United States also exposes us to additional risks, including risks associated with:

- additional foreign regulatory requirements;
- foreign exchange fluctuations;
- compliance with foreign manufacturing, customs, shipment and storage requirements;
- inconsistent standards for reporting and evaluating clinical data and adverse events;
- cultural differences in medical practice and clinical research; and
- diminished protection of intellectual property in some countries.

Interim, topline and preliminary data from our clinical trials and preclinical studies that we announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publicly disclose interim, top-line, or preliminary data from our clinical trials and preclinical studies, which is based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a full analyses of all data related to the particular trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the interim, top-line, or preliminary results that we report may differ from future results of the same trials, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Top-line data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, top-line data should be viewed with caution until the final data are available. We may also disclose interim data from our clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Adverse differences between interim, top-line, or preliminary data and final data could significantly harm our business prospects.

Further, others, including regulatory agencies, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and our business in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure, and any information we determine not to disclose may ultimately be deemed significant with respect to future decisions, conclusions, views, activities or otherwise regarding a particular drug, product candidate or our business. If the interim, top-line, or preliminary data that we report differ from actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for and commercialize our product candidates, our business, operating results, prospects or financial condition may be harmed.

We may attempt to secure approval from the FDA or comparable foreign regulatory authorities through the use of accelerated approval pathways. If we are unable to obtain such approval, we may be required to conduct additional clinical trials beyond those that we contemplate, which could increase the expense of obtaining, and delay the receipt of, necessary marketing approvals. Even if we receive accelerated approval from the FDA, if our confirmatory trials do not verify clinical benefit, or if we do not comply with rigorous post-marketing requirements, the FDA may seek to withdraw accelerated approval.

We may in the future seek an accelerated approval for our one or more of our product candidates. Under the accelerated approval program, the FDA may grant accelerated approval to a product candidate designed to treat a serious or life-threatening condition that provides meaningful therapeutic benefit over available therapies upon a determination that the product candidate has an effect on a surrogate endpoint or intermediate clinical endpoint that is reasonably likely to predict clinical benefit. The FDA considers a clinical benefit to be a positive therapeutic effect that is clinically meaningful in the context of a given disease, such as irreversible morbidity or mortality. For the purposes of accelerated approval, a surrogate endpoint is a marker, such as a laboratory measurement, radiographic image, physical sign, or other measure that is thought to predict clinical benefit, but is not itself a measure of clinical benefit. An intermediate clinical endpoint is a clinical endpoint that can be measured earlier than an effect on irreversible morbidity or mortality that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit. The accelerated approval pathway may be used in cases in which the advantage of a new drug or biologic over available therapy may not be a direct therapeutic advantage, but is a clinically important improvement from a patient and public health perspective. If granted, accelerated approval is usually contingent on the sponsor's agreement to conduct, in a diligent manner, additional post-approval confirmatory studies to verify and describe the drug's clinical benefit. If such post-approval studies fail to confirm the drug or biologic's clinical benefit or are not completed in a timely manner, the FDA may withdraw its approval of the drug or biologic.

Prior to seeking accelerated approval for any of our product candidates, we intend to seek feedback from the FDA and will otherwise evaluate our ability to seek and receive accelerated approval. There can be no assurance that after our evaluation of the feedback and other factors we will decide to pursue or submit an NDA or BLA for accelerated approval or any other form of expedited development, review or approval. Similarly, there can be no assurance that after subsequent FDA feedback we will continue to pursue or apply for accelerated approval or any other form of expedited development, review or approval program, even if we initially decide to do so. Furthermore, if we decide to submit an application for accelerated approval or receive an expedited regulatory designation (e.g., breakthrough therapy designation) for our product candidates, there can be no assurance that such submission or application will be accepted or that any expedited development, review or approval will be granted on a timely basis, or at all. The FDA or other comparable foreign regulatory authorities could also require us to conduct further studies prior to considering our application or granting approval of any type. A failure to obtain accelerated approval or any other form of expedited development, review or approval for our product candidate would result in a longer time period to commercialization of such product candidate, if any, could increase the cost of development of such product candidate and could harm our competitive position in the marketplace.

Disruptions at the FDA and other government agencies caused by funding shortages or global health concerns could hinder their ability to hire, retain or deploy key leadership and other personnel, or otherwise prevent new or modified products from being developed, approved or commercialized in a timely manner or at all, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, statutory, regulatory and policy changes, the FDA's ability to hire and retain key personnel and accept the payment of user fees, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the agency have fluctuated in recent years. In

addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable. Disruptions at the FDA and other agencies may also slow the time necessary for new drugs and biologics or modifications to approved drugs and biologics to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, over the last several years, including for 35 days beginning on December 22, 2018, the US government has shut down several times and certain regulatory agencies, such as the FDA, have had to furlough critical FDA employees and stop critical activities.

Separately, in response to the COVID-19 pandemic, on March 10, 2020 the FDA announced its intention to postpone most inspections of foreign manufacturing facilities and products, and on March 18, 2020 the FDA temporarily postponed routine surveillance inspections of domestic manufacturing facilities. Subsequently, on July 10, 2020, the FDA announced its intention to resume certain on-site inspections of domestic manufacturing facilities subject to a risk-based prioritization system. The FDA intends to use this risk-based assessment system to identify the categories of regulatory activity that can occur within a given geographic area, ranging from mission critical inspections to resumption of all regulatory activities. Regulatory authorities outside the United States may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic. If a prolonged government shutdown occurs, or if global health concerns continue to prevent the FDA or other regulatory authorities from conducting their regular inspections, reviews or other regulatory activities, it could significantly impact the ability of the FDA or other regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

If we are required by the FDA to obtain approval of a companion diagnostic test in connection with approval of any of our product candidates, and we do not obtain or face delays in obtaining FDA approval of a diagnostic device, we will not be able to commercialize such product candidate and our ability to generate revenue will be materially impaired.

If safe and effective use of any of our product candidates depends on an *in vitro* diagnostic that is not otherwise commercially available, then the FDA generally may require approval or clearance of that diagnostic, known as a companion diagnostic, at the same time that the FDA approves our product candidates, if at all. According to FDA guidance, if the FDA determines that a companion diagnostic device is essential to the safe and effective use of a novel therapeutic product or indication, the FDA generally will not approve the therapeutic product or new therapeutic product indication if the companion diagnostic is not also approved or cleared for that indication. If a satisfactory companion diagnostic is not commercially available, we may be required to develop or obtain one that would be subject to regulatory approval requirements. The process of obtaining or creating such diagnostics is time-consuming and costly.

Companion diagnostics are developed in conjunction with clinical programs for the associated product and are subject to regulation as medical devices by the FDA and comparable regulatory authorities, and, to date, the FDA has required premarket approval of all companion diagnostics for cancer therapies. The approval of a companion diagnostic as part of the therapeutic product's labeling limits the use of the therapeutic product to only those patients who express the specific genetic alteration that the companion diagnostic was developed to detect.

If the FDA or a comparable regulatory authority requires approval of a companion diagnostic for any of our product candidates, whether before or after such candidate obtains marketing approval, if ever, we, and/or future collaborators, may encounter difficulties in developing and obtaining approval for such companion diagnostic. Any delay or failure by us or third-party collaborators to develop or obtain regulatory approval of a companion diagnostic could delay or prevent approval or continued marketing of such product candidate. We may also experience delays in developing a sustainable, reproducible and scalable manufacturing process for the companion diagnostic or in transferring that process to commercial partners or negotiating insurance

reimbursement plans, all of which may prevent us from completing our clinical trials or commercializing our product candidate, if approved, on a timely or profitable basis, if at all.

Risks related to our reliance on third parties

We rely on third parties to conduct our clinical trials and preclinical studies. If these third parties do not successfully carry out their contractual duties, comply with applicable regulatory requirements or meet expected deadlines, our development programs and our ability to seek or obtain regulatory approval for or commercialize our product candidates may be delayed.

We are dependent on third parties to conduct our clinical trials and preclinical studies. Specifically, we have used and relied on, and intend to continue to use and rely on, medical institutions, clinical investigators, CROs and consultants to conduct our preclinical studies and clinical trials in accordance with our clinical protocols and regulatory requirements. These CROs, investigators and other third parties play a significant role in the conduct and timing of these trials and subsequent collection and analysis of data. While we have and will have agreements governing the activities of our third-party contractors, we have limited influence over their actual performance. Nevertheless, we are responsible for ensuring that each of our clinical trials is conducted in accordance with the applicable protocol and legal, regulatory and scientific standards, and our reliance on our CROs and other third parties does not relieve us of our regulatory responsibilities. We and our CROs are required to comply with GCP requirements, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for all of our product candidates in clinical development. Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators and trial sites. If we or any of our CROs or trial sites fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable, and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. In addition, our clinical trials must be conducted with products produced under cGMP regulations. Our failure to comply with these regulations may require us to repeat clinical trials, which would delay the regulatory approval process.

There is no guarantee that any of our CROs, investigators or other third parties will devote adequate time and resources to such trials or studies or perform as contractually required. If any of these third parties fail to meet expected deadlines, adhere to our clinical protocols or meet regulatory requirements, or otherwise performs in a substandard manner, our clinical trials may be extended, delayed or terminated. In addition, many of the third parties with whom we contract may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other development activities that could harm our competitive position. In addition, principal investigators for our clinical trials are expected to serve as scientific advisors or consultants to us from time to time and may receive cash or equity compensation in connection with such services. If these relationships and any related compensation result in perceived or actual conflicts of interest, or the FDA concludes that the financial relationship may have affected the interpretation of the study, the integrity of the data generated at the applicable clinical trial site may be questioned and the utility of the clinical trial itself may be jeopardized, which could result in the delay or rejection by the FDA of any NDA or BLA we submit. Any such delay or rejection could prevent us from commercializing our product candidates.

Our CROs have the right to terminate their agreements with us in the event of an uncured material breach. In addition, some of our CROs have an ability to terminate their respective agreements with us if it can be reasonably demonstrated that the safety of the subjects participating in our clinical trials warrants such termination, if we make a general assignment for the benefit of our creditors or if we are liquidated. If any of our relationships with these third parties terminate, we may not be able to enter into arrangements with alternative third parties on commercially reasonable terms or at all. Switching or adding additional CROs,

investigators and other third parties involves additional cost and requires our management's time and focus. In addition, there is a natural transition period when a new CRO commences work. As a result, delays occur, which can materially impact our ability to meet our desired clinical development timelines. Though we carefully manage our relationships with our CROs, investigators and other third parties, there can be no assurance that we will not encounter challenges or delays in the future or that these delays or challenges will not have a material adverse impact on our business, financial condition and prospects.

We rely on third parties for the manufacture of our product candidates for clinical and preclinical development and expect to continue to do so for the foreseeable future. This reliance on third parties increases the risk that we will not have sufficient quantities of our product candidates or products or such quantities at an acceptable cost, which could delay, prevent or impair our development or commercialization efforts.

We do not own or operate manufacturing facilities and have no plans to develop our own clinical or commercial-scale manufacturing capabilities. We rely, and expect to continue to rely, on third parties for the manufacture of our product candidates and related raw materials for clinical and preclinical development, as well as for commercial manufacture if any of our product candidates receive marketing approval. The facilities used by third-party manufacturers to manufacture our product candidates must be approved by the FDA and any comparable foreign regulatory authority pursuant to inspections that will be conducted after we submit an NDA or BLA to the FDA or any comparable submission to a foreign regulatory authority. We do not control the manufacturing process of, and are completely dependent on, third-party manufacturers for compliance with cGMP requirements for manufacture of products. If these third-party manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or any comparable foreign regulatory authority, they will not be able to secure and/or maintain regulatory approval for their manufacturing facilities. In addition, we have no control over the ability of third-party manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or any comparable foreign regulatory authority does not approve these facilities for the manufacture of our product candidates or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market our product candidates, if approved. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our products.

Our or a third party's failure to execute on our manufacturing requirements on commercially reasonable terms and in compliance with cGMP or other regulatory requirements could adversely affect our business in a number of ways, including:

- an inability to initiate clinical trials of our product candidates under development;
- delay in submitting regulatory applications, or receiving marketing approvals, for our product candidates;
- additional inspections by regulatory authorities of third-party manufacturing facilities or our manufacturing facilities;
- requirements to cease development or to recall batches of our product candidates; and
- in the event of approval to market and commercialize our product candidates, an inability to meet commercial demands for our product candidates or any other future product candidates.

In addition, we do not have any long-term commitments or supply agreements with our third-party manufacturers. We may be unable to establish any supply agreements with our third-party manufacturers or to

[Table of Contents](#)

do so on acceptable terms, which increases the risk of timely obtaining sufficient quantities of our product candidates or such quantities at an acceptable cost. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- failure of third-party manufacturers to comply with regulatory requirements and maintain quality assurance;
- breach of the manufacturing agreement by the third party;
- failure to manufacture our product according to our specifications;
- failure to manufacture our product according to our schedule or at all;
- misappropriation of our proprietary information, including our trade secrets and know-how; and
- termination or nonrenewal of the agreement by the third party at a time that is costly or inconvenient for us.

Our product candidates and any products that we may develop may compete with other product candidates and products for access to manufacturing facilities. There are a limited number of manufacturers that operate under cGMP regulations and that might be capable of manufacturing for us, in particular due to the high potency of our product candidates.

Any performance failure on the part of our existing or future manufacturers could delay clinical development or marketing approval, and any related remedial measures may be costly or time-consuming to implement. We do not currently have arrangements in place for redundant supply or a second source for all required raw materials used in the manufacture of our product candidates. If our existing or future third-party manufacturers cannot perform as agreed, we may be required to replace such manufacturers and we may be unable to replace them on a timely basis or at all. In particular, any replacement of our manufacturers could require significant effort and expertise because there may be a limited number of qualified replacements. In some cases, the technical skills or technology required to manufacture our product candidates may be unique or proprietary to the original manufacturer and we may have difficulty transferring such skills or technology to another third-party and a feasible alternative may not exist. In addition, certain of our product candidates and our own proprietary methods have never been produced or implemented outside of our company, and we may therefore experience delays to our development programs if and when we attempt to establish new third-party manufacturing arrangements for these product candidates or methods.

Our current and anticipated future dependence upon others for the manufacture of our product candidates or products may adversely affect our future profit margins and our ability to commercialize any products that receive marketing approval on a timely and competitive basis.

Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed.

Because we currently rely on third parties to manufacture our product candidates and to perform quality testing, we must, at times, share our proprietary technology and confidential information, including trade secrets, with them. We seek to protect our proprietary technology, in part, by entering into confidentiality agreements, and, if applicable, material transfer agreements, collaborative research agreements, consulting agreements or other similar agreements with our collaborators, advisors, employees and consultants prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information. Despite the contractual provisions employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are intentionally or inadvertently incorporated into the technology of others or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets and despite our efforts to protect our trade secrets, a competitor's discovery of our proprietary technology and confidential information or other

unauthorized use or disclosure would impair our competitive position and may have a material adverse effect on our business, financial condition, results of operations and prospects.

We may seek to enter into collaborations, licenses and other similar arrangements and may not be successful in doing so, and even if we are, we may relinquish valuable rights and may not realize the benefits of such relationships.

We may seek to enter into collaborations, joint ventures, licenses and other similar arrangements for the development or commercialization of our product candidates, due to capital costs required to develop or commercialize the product candidate or manufacturing constraints. For example, we are collaborating with Emerge Life Sciences PTE, LTD. (ELS) on large molecule capabilities. Such collaborative discovery efforts may not yield additional development or product candidates for our pipeline. We may not be successful in our efforts to establish or maintain such collaborations for our product candidates because our research and development pipeline may be insufficient, our product candidates may be deemed to be at too early of a stage of development for collaborative effort or third parties may not view our product candidates as having the requisite potential to demonstrate safety and efficacy or significant commercial opportunity. In addition, we face significant competition in seeking appropriate strategic partners, and the negotiation process can be time-consuming and complex. We may have to relinquish valuable rights to our future revenue streams, research programs or product candidates, or grant licenses on terms that may not be favorable to us, as part of any such arrangement, and such arrangements may restrict us from entering into additional agreements with other potential collaborators. We cannot be certain that, following a collaboration, license or strategic transaction, we will achieve an economic benefit that justifies such transaction.

Even if we are successful in our efforts to establish such collaborations, the terms that we agree upon may not be favorable to us, and we may not be able to maintain such collaborations if, for example, the development or approval of a product candidate is delayed, the safety of a product candidate is questioned or the sales of an approved product candidate are unsatisfactory.

In addition, any potential future collaborations may be terminable by our strategic partners, and we may not be able to adequately protect our rights under these agreements. Furthermore, strategic partners may negotiate for certain rights to control decisions regarding the development and commercialization of our product candidates, if approved, and may not conduct those activities in the same manner as we do. Any termination of collaborations we enter into in the future, or any delay in entering into collaborations related to our product candidates, could delay the development and commercialization of our product candidates and reduce their competitiveness if they reach the market, which could have a material adverse effect on our business, financial condition and results of operations.

Risks related to commercialization of our product candidates

Even if we receive regulatory approval for any product candidate, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense.

Any regulatory approvals that we may receive for our product candidates will require the submission of reports to regulatory authorities and surveillance to monitor the safety and efficacy of the product, may contain significant limitations related to use restrictions for specified age groups, warnings, precautions or contraindications, and may include burdensome post-approval study or risk management requirements. For example, the FDA may require a REMS as a condition of approval of our product candidates, which could include requirements for a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or a comparable foreign regulatory authority approves our product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion, import,

[Table of Contents](#)

export and recordkeeping for our products will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMP and GCP requirements for any clinical trials that we conduct post-approval. Manufacturers of approved products and their facilities are subject to continual review and periodic, unannounced inspections by the FDA and other regulatory authorities for compliance with cGMP regulations and standards. Later discovery of previously unknown problems with our products, including adverse events of unanticipated severity or frequency, or with our third-party manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of our products, withdrawal of the product from the market or voluntary or mandatory product recalls;
- restrictions on product distribution or use, or requirements to conduct post-marketing studies or clinical trials;
- fines, restitutions, disgorgement of profits or revenue, warning letters, untitled letters or holds on clinical trials;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us or suspension or revocation of approvals;
- product seizure or detention, or refusal to permit the import or export of our products; and
- injunctions or the imposition of civil or criminal penalties.

The occurrence of any event or penalty described above may inhibit our ability to commercialize our product candidates and generate revenue and could require us to expend significant time and resources in response and could generate negative publicity.

The FDA's and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. For example, the results of the 2020 US Presidential Election may impact our business and industry. Namely, the Trump administration took several executive actions, including the issuance of a number of Executive Orders, that could impose significant burdens on, or otherwise materially delay, the FDA's ability to engage in routine oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. It is difficult to predict whether or how these orders will be implemented, or whether they will be rescinded and replaced under the Biden administration. The policies and priorities of a new administration are unknown and could materially impact the regulations governing our product candidates. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may be subject to enforcement action and we may not achieve or sustain profitability.

The FDA and other regulatory agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses.

If any of our product candidates are approved and we are found to have improperly promoted off-label uses of those products, we may become subject to significant liability. The FDA and other regulatory agencies strictly regulate the promotional claims that may be made about prescription products, such as our product candidates, if approved. In particular, a product may not be promoted for uses that are not approved by the FDA or such other regulatory agencies as reflected in the product's approved labeling. If we receive marketing approval for a product candidate, physicians may nevertheless prescribe it to their patients in a manner that is inconsistent with the approved label. If we are found to have promoted such off-label uses, we may become

subject to significant liability. The US federal government has levied large civil and criminal fines against companies for alleged improper promotion of off-label use and has enjoined several companies from engaging in off-label promotion. The FDA has also requested that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed. If we cannot successfully manage the promotion of our product candidates, if approved, we could become subject to significant liability, which would materially adversely affect our business and financial condition.

Our product candidates for which we intend to seek approval as biologic products may face competition sooner than anticipated.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively, the ACA) includes a subtitle called the Biologics Price Competition and Innovation Act of 2009 (BPCIA), which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a highly similar or “biosimilar” product may not be submitted to the FDA until four years following the date that the reference product was first approved by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first approved. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing the sponsor’s own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of their product. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty. We believe that any of our product candidates approved as a biological product under a BLA should qualify for the 12-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our product candidates to be reference products for competing products, potentially creating the opportunity for competition sooner than anticipated.

The commercial success of our product candidates will depend upon the degree of market acceptance of such product candidates by physicians, patients, healthcare payors and others in the medical community.

Our product candidates may not be commercially successful. Even if any of our product candidates receive regulatory approval, they may not gain market acceptance among physicians, patients, healthcare payors or the medical community. The commercial success of any of our current or future product candidates will depend significantly on the broad adoption and use of the resulting product by physicians and patients for approved indications. The degree of market acceptance of our products will depend on a number of factors, including:

- demonstration of clinical efficacy and safety compared to other more-established products;
- the indications for which our product candidates are approved;
- the limitation of our targeted patient population and other limitations or warnings contained in any FDA-approved labeling;
- acceptance of a new drug for the relevant indication by healthcare providers and their patients;
- the pricing and cost-effectiveness of our products, as well as the cost of treatment with our products in relation to alternative treatments and therapies;
- our ability to obtain and maintain sufficient third-party coverage and adequate reimbursement from government healthcare programs, including Medicare and Medicaid, private health insurers and other third-party payors;

[Table of Contents](#)

- the willingness of patients to pay all, or a portion of, out-of-pocket costs associated with our products in the absence of sufficient third-party coverage and adequate reimbursement;
- any restrictions on the use of our products, and the prevalence and severity of any adverse effects;
- potential product liability claims;
- the timing of market introduction of our products as well as competitive drugs;
- the effectiveness of our or any of our current or potential future collaborators' sales and marketing strategies; and
- unfavorable publicity relating to the product.

If any product candidate is approved but does not achieve an adequate level of acceptance by physicians, hospitals, healthcare payors or patients, we may not generate sufficient revenue from that product and may not become or remain profitable. Our efforts to educate the medical community and third-party payors regarding the benefits of our products may require significant resources and may never be successful.

The successful commercialization of our product candidates, if approved, will depend in part on the extent to which governmental authorities and health insurers establish coverage, adequate reimbursement levels and favorable pricing policies. Failure to obtain or maintain coverage and adequate reimbursement for our products could limit our ability to market those products and decrease our ability to generate revenue.

The availability of coverage and the adequacy of reimbursement by governmental healthcare programs such as Medicare and Medicaid, private health insurers and other third-party payors are essential for most patients to be able to afford prescription medications such as our product candidates, if approved. Our ability to achieve coverage and acceptable levels of reimbursement for our products by third-party payors will have an effect on our ability to successfully commercialize those products. Accordingly, we will need to successfully implement a coverage and reimbursement strategy for any approved product candidate. Even if we obtain coverage for a given product by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. For products administered under the supervision of a physician, obtaining coverage and adequate reimbursement may be particularly difficult because of the higher prices often associated with such drugs. Additionally, separate reimbursement for the product itself or the treatment or procedure in which the product is used may not be available, which may impact physician utilization. We cannot be sure that coverage and reimbursement in the United States, the European Union or elsewhere will be available for any product that we may develop, and any reimbursement that may become available may be decreased or eliminated in the future.

Third-party payors increasingly are challenging prices charged for biopharmaceutical products and services, and many third-party payors may refuse to provide coverage and reimbursement for particular drugs when an equivalent generic drug or a less expensive therapy is available. It is possible that a third-party payor may consider our products as substitutable and only offer to reimburse patients for the less expensive product. Even if we are successful in demonstrating improved efficacy or improved convenience of administration with our products, pricing of existing drugs may limit the amount we will be able to charge for our products. These payors may deny or revoke the reimbursement status of a given product or establish prices for new or existing marketed products at levels that are too low to enable us to realize an appropriate return on our investment in product development. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize our products and may not be able to obtain a satisfactory financial return on products that we may develop. In addition, in the event that we develop companion diagnostic tests for use with our products, once approved, such companion diagnostic tests will require coverage and reimbursement separate and apart from the coverage and reimbursement for their companion pharmaceutical or biological

products. Similar challenges to obtaining coverage and reimbursement applicable to pharmaceutical or biological products will apply to companion diagnostics tests.

There is significant uncertainty related to third-party payor coverage and reimbursement of newly approved products. In the United States, third-party payors, including private and governmental payors, such as the Medicare and Medicaid programs, play an important role in determining the extent to which new drugs will be covered. Some third-party payors may require pre-approval of coverage for new or innovative devices or drug therapies before they will reimburse healthcare providers who use such therapies. It is difficult to predict at this time what third-party payors will decide with respect to the coverage and reimbursement for our products.

Obtaining and maintaining reimbursement status is time-consuming, costly and uncertain. The Medicare and Medicaid programs increasingly are used as models for how private payors and other governmental payors develop their coverage and reimbursement policies for drugs. However, no uniform policy for coverage and reimbursement for products exists among third-party payors in the United States. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. Furthermore, rules and regulations regarding reimbursement change frequently, in some cases at short notice, and we believe that changes in these rules and regulations are likely.

Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost-containment initiatives in Europe and other countries has and will continue to put pressure on the pricing and usage of our products. In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. Other countries allow companies to fix their own prices for medical products but monitor and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our products. Accordingly, in markets outside the United States, the reimbursement for our products may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenue and profits.

Moreover, increasing efforts by governmental and third-party payors in the United States and abroad to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for newly approved products and, as a result, they may not cover or provide adequate payment for our products. We expect to experience pricing pressures in connection with the sale of any of our products due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs and surgical procedures and other treatments, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products.

We face significant competition from entities that have developed or may develop product candidates for cancer, including companies developing novel treatments and technology platforms. If our competitors develop technologies or product candidates more rapidly than we do or their technologies are more effective, our business and our ability to develop and successfully commercialize products may be adversely affected.

The biotechnology and biopharmaceutical industries are characterized by rapid advancing technologies, intense competition and a strong emphasis on proprietary and novel products and product candidates. Our competitors have developed, are developing or may develop products, product candidates and processes competitive with our product candidates. Any product candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future. We believe that a significant number of products are currently under development, and may become commercially available in the future,

for the treatment of indications for which we may attempt to develop product candidates. In particular, there is intense competition in the oncology field. Our competitors include larger and better funded pharmaceutical, biopharmaceutical, biotechnological and therapeutics companies. Moreover, we may also compete with universities and other research institutions who may be active in oncology research and could be in direct competition with us. We also compete with these organizations to recruit management, scientists and clinical development personnel, which could negatively affect our level of expertise and our ability to execute our business plan. We will also face competition in establishing clinical trial sites, enrolling subjects for clinical trials and in identifying and in-licensing new product candidates. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

If any of our product candidates are approved, they will compete with small molecule therapies, biologics, cell-based therapies and traditional chemotherapy, either approved or under development, which are intended to treat the same indications that we are targeting or may target, including through approaches that may prove to be more effective, have fewer side effects, be less costly to manufacture, be more convenient to administer or have other advantages over our product candidates. In addition to competing with other therapies targeting similar indications, there are numerous other companies and academic institutions focused on similar targets as our product candidates and/or different scientific approaches to treating the same indications. We face competition from such companies in seeking any future potential collaborations to partner our product candidates, as well as potentially competing commercially for any approved products.

Specifically, there are also a number of pharmaceutical companies with product candidates in development that target the nodes involving the RAS/MAPK pathway. These include, among others, Amgen, AstraZeneca, Black Diamond Therapeutics, BioMed Valley Discoveries, Boehringer Ingelheim, Deciphera Pharmaceuticals, Eli Lilly, Jacobio Pharmaceuticals (in collaboration with AbbVie), Janssen, Merck, Mirati Therapeutics, Navire Pharma (a subsidiary of BridgeBio), Novartis, Pfizer, Relay Therapeutics (in collaboration with Genentech), Revolution Medicines, Roche/Genentech, Sanofi, and Schrödinger (in collaboration with Bristol Myers Squibb).

Many of our competitors have significantly greater financial, technical, manufacturing, marketing, sales and supply resources or experience than we do. If we successfully obtain approval for any product candidate, we will face competition based on many different factors, including the safety and effectiveness of our products, the ease with which our products can be administered and the extent to which patients accept relatively new routes of administration, the timing and scope of regulatory approvals for these products, the availability and cost of manufacturing, marketing and sales capabilities, price, reimbursement coverage and patent position. Competing products could present superior treatment alternatives, including by being more effective, safer, more convenient, less expensive or marketed and sold more effectively than any products we may develop. Competitive products approaches may make any products we develop obsolete or noncompetitive before we recover the expense of developing and commercializing our product candidates. If we are unable to compete effectively, our opportunity to generate revenue from the sale of our products we may develop, if approved, could be adversely affected.

The market opportunities for our product candidates may be limited to patients who are ineligible for or have failed prior treatments and may be small or different from our estimates.

Cancer therapies are defined by lines of therapy as well as by treatment-naïve or previously-treated status. Often the initial approval for a new therapy is in later lines and subsequent approval in an earlier line may not be feasible. When cancer is detected early enough, first line therapy is sometimes adequate to cure the cancer or prolong life without a cure. Whenever first line therapy, including targeted therapy, immunotherapy, chemotherapy, hormone therapy, surgery or a combination of these, proves unsuccessful, second line therapy may be administered. Second line therapies often consist of additional chemotherapy, radiation, antibody

drugs, tumor targeted small molecules or a combination of these. Third line therapies can include bone marrow transplantation, antibody and small molecule targeted therapies, more invasive forms of surgery and new technologies. In markets with approved therapies, there is no guarantee that our product candidates, even if approved, would be approved for second line or first line therapy. This could limit our potential market opportunity. In addition, we may have to conduct additional clinical trials prior to gaining approval for second line or first line therapy.

Our projections of both the number of people who have the cancers we are targeting, as well as the subset of people with these cancers in a position to receive later stage therapy and who have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including the scientific literature, publicly available clinical molecular reports, patient foundations or market research, and may prove to be incorrect. Further, new trials or information may change the estimated incidence or prevalence of these cancers. The number of patients in the United States and other major markets and elsewhere may turn out to be lower than expected, patients may not be otherwise amenable to treatment with our products or new patients may become increasingly difficult to identify or gain access to, all of which would adversely affect our results of operations and our business. Further, even if we obtain significant market share for our product candidates, because some of our potential target populations are very small, we may never achieve profitability despite obtaining such significant market share.

We currently have no marketing and sales organization and have no experience as a company in commercializing products, and we may have to invest significant resources to develop these capabilities. If we are unable to establish marketing and sales capabilities or enter into agreements with third parties to market and sell our products, we may not be able to generate product revenue.

We have no internal sales, marketing or distribution capabilities, nor have we commercialized a product. If any of our product candidates ultimately receives regulatory approval, we must build a marketing and sales organization with technical expertise and supporting distribution capabilities to commercialize each such product in major markets, which will be expensive and time-consuming, or collaborate with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. We have no prior experience as a company in the marketing, sale and distribution of biopharmaceutical products and there are significant risks involved in building and managing a sales organization, including our ability to hire, retain and incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel and effectively manage a geographically dispersed sales and marketing team. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of these products. We may not be able to enter into collaborations or hire consultants or external service providers to assist us in sales, marketing and distribution functions on acceptable financial terms, or at all. In addition, our product revenue and our profitability, if any, may be lower if we rely on third parties for these functions than if we were to market, sell and distribute any products that we develop ourselves. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively. If we are not successful in commercializing our products, either on our own or through arrangements with one or more third parties, we may not be able to generate any future product revenue and we would incur significant additional losses.

Our future growth may depend, in part, on our ability to operate in foreign markets, where we would be subject to additional regulatory burdens and other risks and uncertainties.

Our future growth may depend, in part, on our ability to develop and commercialize our product candidates in foreign markets. We are not permitted to market or promote any of our product candidates before we receive

[Table of Contents](#)

regulatory approval from applicable regulatory authorities in foreign markets, and we may never receive such regulatory approvals for any of our product candidates. To obtain separate regulatory approval in many other countries we must comply with numerous and varying regulatory requirements regarding safety and efficacy and governing, among other things, clinical trials, commercial sales, pricing and distribution of our product candidates. If we obtain regulatory approval of our product candidates and ultimately commercialize our products in foreign markets, we would be subject to additional risks and uncertainties, including:

- different regulatory requirements for approval of drugs in foreign countries;
- reduced protection for intellectual property rights;
- the existence of additional third-party patent rights of potential relevance to our business;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- foreign reimbursement, pricing and insurance regimes;
- workforce uncertainty in countries where labor unrest is common;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geopolitical actions, including war and terrorism, or natural disasters including earthquakes, typhoons, floods and fires.

Risks related to our business operations and industry

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or any guidance we may provide.

Our quarterly and annual operating results may fluctuate significantly, which makes it difficult for us to predict our future operating results. These fluctuations may occur due to a variety of factors, many of which are outside of our control, including, but not limited to:

- the timing and cost of, and level of investment in, research, development, regulatory approval and commercialization activities relating to our product candidates, which may change from time to time;
- the timing and success or failure of preclinical studies or clinical trials for our product candidates or competing product candidates, or any other change in the competitive landscape of our industry, including consolidation among our competitors or partners;
- coverage and reimbursement policies with respect to our product candidates, if approved, and potential future drugs that compete with our products;
- the cost of manufacturing our product candidates, which may vary depending on the quantity of production and the terms of our agreements with third-party manufacturers;
- expenditures that we will or may incur to acquire, develop or commercialize additional product candidates and technologies or other assets;

[Table of Contents](#)

- the level of demand for any approved products, which may vary significantly and be difficult to predict; and
- future accounting pronouncements or changes in our accounting policies;

The cumulative effects of these factors could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance.

This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any forecasts we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated revenue or earnings guidance we may provide.

Our success is dependent on our ability to attract and retain highly qualified management and other clinical and scientific personnel.

Our success depends in part on our continued ability to attract, retain, manage, and motivate highly qualified management, clinical, and scientific personnel, and we face significant competition for experienced personnel. We are highly dependent upon our senior management, as well as our senior scientists and other members of our management team. The loss of services of any of these individuals could delay or prevent the successful development of our product pipeline, initiation, or completion of our clinical trials and preclinical studies or the commercialization of our product candidates. Although we have executed employment agreements or offer letters with each member of our senior management team, these agreements are terminable at will with or without notice and, therefore, we may not be able to retain their services as expected. We do not currently maintain “key person” life insurance on the lives of our executives or any of our employees. This lack of insurance means that we may not have adequate compensation for the loss of the services of these individuals.

We will need to expand and effectively manage our managerial, operational, financial, and other resources in order to successfully pursue our clinical development and commercialization efforts. We may not be successful in maintaining our unique company culture and continuing to attract or retain qualified management, clinical, and scientific personnel in the future due to the intense competition for qualified personnel among biopharmaceutical, biotechnology, and other businesses, particularly in the San Diego area. Our industry has experienced a high rate of turnover of management personnel in recent years. If we are not able to attract, integrate, retain, and motivate necessary personnel to accomplish our business objectives, we may experience constraints that will significantly impede the achievement of our development objectives, our ability to raise additional capital, and our ability to implement our business strategy.

We may encounter difficulties in managing our growth and expanding our operations successfully.

We have substantially increased our organization from 30 employees as of December 31, 2019 to 102 employees as of June 30, 2021. As we continue development and pursue the potential commercialization of our product candidates, as well as function as a public company, we will need to expand our financial, development, regulatory, manufacturing, marketing and sales capabilities or contract with third parties to provide these capabilities for us. As our operations expand, we expect that we will need to manage additional relationships with various strategic partners, suppliers and other third parties. Our future financial performance and our ability to develop and commercialize our product candidates and to compete effectively will depend, in part, on our ability to manage any future growth effectively.

We are subject to various US federal, state and foreign healthcare laws and regulations, which could increase compliance costs, and our failure to comply with these laws and regulations could harm our reputation, subject us to significant fines and liability or otherwise adversely affect our business.

Our business operations and current and future arrangements with investigators, healthcare professionals, consultants, third-party payors, patient organizations and customers expose us to broadly applicable foreign, federal and state fraud and abuse and other healthcare laws and regulations. These laws may constrain the business or financial arrangements and relationships through which we conduct our operations, including how we research, market, sell and distribute any products for which we obtain marketing approval. Such laws include:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, offering, receiving or providing any remuneration (including any kickback, bribe or certain rebates), directly or indirectly, overtly or covertly, in cash or in kind, in return for, either the referral of an individual or the purchase, lease, or order, or arranging for or recommending the purchase, lease, or order of any good, facility, item or service, for which payment may be made, in whole or in part, under a federal healthcare program such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the federal Anti-Kickback Statute or specific intent to violate it in order to have committed a violation;
- the federal false claims laws, including the civil False Claims Act, and civil monetary penalties laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, to the federal government, claims for payment or approval that are false or fraudulent, knowingly making, using or causing to be made or used, a false record or statement material to a false or fraudulent claim, or from knowingly making or causing to be made a false statement to avoid, decrease or conceal an obligation to pay money to the federal government. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the civil False Claims Act;
- the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), which imposes criminal and civil liability for, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement, in connection with the delivery of, or payment for, healthcare benefits, items or services. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- the federal Physician Payments Sunshine Act, which requires certain manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to the Centers for Medicare & Medicaid Services (CMS), information related to payments and other "transfers of value" made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as ownership and investment interests held by such healthcare professionals and their immediate family members. Beginning in 2022, applicable manufacturers also will be required to report such information regarding payments and transfers of value provided during the previous year to physician assistants, nurse practitioners, clinical nurse specialists, certified nurse anesthetists and certified nurse-midwives; and
- analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers; some state laws require biotechnology companies to comply with the biotechnology industry's voluntary compliance guidelines and the relevant

compliance guidance promulgated by the federal government and may require certain biotechnology companies to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures; some state laws that require biotechnology companies to report information on the pricing of certain drug products; and some state and local laws require the registration or pharmaceutical sales representatives.

Efforts to ensure that our current and future business arrangements with third parties will comply with applicable healthcare laws and regulations will involve ongoing substantial costs. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant penalties, including civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government funded healthcare programs, including Medicare and Medicaid, integrity oversight and reporting obligations, contractual damages, reputational harm, diminished profits and future earnings and the curtailment or restructuring of our operations. Defending against any such actions can be costly, time-consuming and may require significant financial and personnel resources. Therefore, even if we are successful in defending against any such actions that may be brought against us, our business may be impaired. Further, if any of the physicians or other healthcare providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to significant criminal, civil or administrative sanctions, including exclusions from government funded healthcare program.

Recently enacted legislation, future legislation and healthcare reform measures may increase the difficulty and cost for us to obtain marketing approval for and commercialize our product candidates and may affect the prices we may set.

In the United States and some foreign jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes to the healthcare system, including cost-containment measures that may reduce or limit coverage and reimbursement for newly approved drugs and affect our ability to profitably sell any product candidates for which we obtain marketing approval. In particular, there have been and continue to be a number of initiatives at the US federal and state levels that seek to reduce healthcare costs and improve the quality of healthcare.

For example, in March 2010, the ACA was enacted in the United States. Among the provisions of the ACA of importance to our potential product candidates, the ACA: established an annual, nondeductible fee on any entity that manufactures or imports specified branded prescription drugs and biologic agents; extended manufacturers' Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations; expands eligibility criteria for Medicaid programs; expanded the entities eligible for discounts under the Public Health Service pharmaceutical pricing program; increased the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program; creates a new Medicare Part D coverage gap discount program; established a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in and conduct comparative clinical effectiveness research, along with funding for such research; and established a Center for Medicare and Medicaid Innovation at CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending.

There have been executive, judicial and Congressional challenges to certain aspects of the ACA. On June 17, 2021, the US Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. Prior to the Supreme Court's decision, President Biden issued an executive order to initiate a special enrollment period for purposes of obtaining health insurance coverage through the ACA marketplace, which began on February 15, 2021 and will remain open through August 15, 2021. The executive order also instructed certain governmental agencies to review and

[Table of Contents](#)

reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is unclear how the healthcare reform measures of the Biden administration or other efforts, if any, to challenge, repeal or replace the ACA will impact the ACA or our business.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. On August 2, 2011, the Budget Control Act of 2011 was signed into law, which, among other things, resulted in reductions to Medicare payments to providers of 2% per fiscal year, which went into effect on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2030 unless additional Congressional action is taken. However, COVID-19 relief legislation suspended these Medicare sequester reductions from May 1, 2020 through December 31, 2021. On January 2, 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, reduced Medicare payments to several providers, including hospitals, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Further, there has been heightened governmental scrutiny in the United States of pharmaceutical pricing practices in light of the rising cost of prescription drugs. Such scrutiny has resulted in several recent congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for products. At the federal level, the Trump administration used several means to propose or implement drug pricing reform, including through federal budget proposals, executive orders and policy initiatives. It is unclear whether the Biden administration will work to reverse these measures or pursue similar policy initiatives. Further, it is possible that additional governmental action is taken in response to the COVID-19 pandemic.

At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. Legally mandated price controls on payment amounts by third-party payors or other restrictions could harm our business, results of operations, financial condition and prospects. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other healthcare programs. This could reduce the ultimate demand for our product candidates, if approved, or put pressure on our product pricing, which could negatively affect our business, results of operations, financial condition and prospects.

We expect that the ACA, these new laws and other healthcare reform measures that may be adopted in the future may result in additional reductions in Medicare and other healthcare funding, more rigorous coverage criteria, new payment methodologies and additional downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our product candidates, if approved.

If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our products.

We face an inherent risk of product liability as a result of the clinical trials of our product candidates and will face an even greater risk if we commercialize our product candidates. For example, we may be sued if our

[Table of Contents](#)

product candidates allegedly cause injury or are found to be otherwise unsuitable during product testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product candidate, negligence, strict liability and a breach of warranties. Claims may be brought against us by clinical trial participants, patients or others using, administering or selling products that may be approved in the future. Claims could also be asserted under state consumer protection acts.

If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit or cease the commercialization of our products. Even a successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our products;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- costs to defend the related litigation;
- a diversion of our management's time and our resources;
- substantial monetary awards to trial participants or patients;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- significant negative financial impact;
- the inability to commercialize our product candidates; and
- a decline in our stock price.

We currently hold approximately \$10 million in product liability insurance coverage in the aggregate. We may need to increase our insurance coverage as we expand our clinical trials or if we commence commercialization of our product candidates. Insurance coverage is increasingly expensive. Our inability to obtain and retain sufficient product liability insurance at an acceptable cost to protect against potential product liability claims could prevent or inhibit the commercialization of our product candidates. Although we will maintain such insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies will also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. We may have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts.

Our insurance policies are expensive and only protect us from some business risks, which will leave us exposed to significant uninsured liabilities.

We do not carry insurance for all categories of risk that our business may encounter. Some of the policies we currently maintain include property, general liability, employment benefits liability, business automobile, workers' compensation, products liability, malicious invasion of our electronic systems, clinical trials, and directors' and officers' employment practices and fiduciary liability insurance. We do not know, however, if we will be able to maintain insurance with adequate levels of coverage. No assurance can be given that an insurance carrier will not seek to cancel or deny coverage after a claim has occurred. Any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our financial position and results of operations.

We and any of our potential future collaborators will be required to report to regulatory authorities if any of our approved products cause or contribute to adverse medical events, and any failure to do so would result in sanctions that would materially harm our business.

If we or any of our potential future collaborators are successful in commercializing our products, the FDA and foreign regulatory authorities would require that we and such collaborators report certain information about adverse medical events if those products may have caused or contributed to those adverse events. The timing of our obligation to report would be triggered by the date we become aware of the adverse event as well as the nature of the event. We and any of our potential future collaborators or CROs may fail to report adverse events within the prescribed timeframe. If we or any of our potential future collaborators or CROs fail to comply with such reporting obligations, the FDA or a foreign regulatory authority could take action, including criminal prosecution, the imposition of civil monetary penalties, seizure of our products or delay in approval or clearance of future products.

Our internal computer systems, or those of any of our CROs, manufacturers, other contractors or consultants or current or potential future collaborators, may fail or suffer security breaches, which could result in a material disruption of our product development programs, harm our reputation, significant fines, penalties and liability and loss of customers or sales.

In the ordinary course of business, we collect, store, transmit and otherwise process large amounts of data including, without limitation, proprietary business information and personal information. Despite the implementation of security measures, our information technology systems (including infrastructure) and those of our current and any future CROs and other contractors, consultants, third-party service providers and collaborators are vulnerable to damage from computer viruses, cybersecurity threats (such as denial-of-service attacks, ransomware, supply chain attacks, cyber-attacks or cyber-intrusions over the Internet, hacking, phishing and other social engineering attacks), unauthorized access or use, natural disasters, terrorism, war and telecommunication and electrical failures. Our systems are also subject to compromise from internal threats, such as theft, misuse, unauthorized access or other improper or accidental actions by employees, vendors and other third parties with otherwise legitimate access to our systems. Third parties may also attempt to fraudulently induce our employees and contractors into disclosing sensitive information such as usernames, passwords or other information, or otherwise compromise the security of our electronic systems, networks, and/or physical facilities in order to gain access to our data. Additionally, due to the COVID-19 pandemic, our employees are temporarily working remotely, which may pose additional data security risks.

Given the unpredictability of the timing, nature and scope of information technology disruptions, there can be no assurance that any security procedures and controls that we or our third-party partners and service providers have implemented will be sufficient to prevent cyber-attacks from occurring. The latency of a compromise is often measured in months, but could be years, and we may not be able to detect a compromise in a timely manner. New techniques may not be identified until they are launched against a target, and we may be unable to anticipate these techniques or detect an incident, assess its severity or impact, react or appropriately respond in a timely manner or implement adequate preventative measures, resulting in potential data loss or other damage to our information technology systems.

If a security breach were to occur and cause interruptions in our operations or result in the unauthorized disclosure of or access to personally identifiable information or individually identifiable health information (potentially violating certain privacy laws), it could result in a material disruption of our development programs and our business operations, whether due to a loss of our trade secrets or other similar disruptions. Some of the federal, state and foreign government requirements include obligations of companies to notify individuals of security breaches involving particular personally identifiable information, which could result from breaches experienced by us or by our vendors, contractors, or organizations with which we have formed strategic relationships.

Any security breach or other incident, whether actual or perceived, could impact our reputation, cause us to incur significant costs, including legal expenses, harm customer confidence, hurt our expansion into new markets, cause us to incur remediation costs, or cause us to lose existing customers. For example, the loss of clinical trial data from clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. We also rely on third parties to manufacture our product candidates, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any actual or perceived disruption or security breach affects our systems (or those of our third-party collaborators, service providers, contractors or consultants) or were to result in a loss of or accidental, unlawful or unauthorized access to, use of, release of, or other processing of personally identifiable information, or damage to, our data or applications, or inappropriate disclosure of confidential or proprietary information, we could incur liability, the further development and commercialization of our product candidates could be delayed, and we could be subject to significant fines, penalties or liabilities for any noncompliance with certain privacy and security laws. For further discussion on the potential liability related to the violation of these laws, see “—Risks related to our intellectual property—We and our service providers may be subject to a variety of privacy and data security laws and contractual obligations, which could increase compliance costs and our failure to comply with them could subject us to potentially significant fines or penalties, harm our reputation and otherwise harm our business.”

Our business is subject to risks arising from COVID-19 and other epidemic diseases.

The COVID-19 worldwide pandemic has presented substantial public health and economic challenges and is affecting our employees, patients, physicians and other healthcare providers, communities and business operations, as well as the US and global economies and financial markets. International and US governmental authorities in impacted regions are taking actions in an effort to slow the spread of COVID-19, including issuing varying forms of “stay-at-home” orders, and restricting business functions outside of one’s home. In response, our administrative employees have worked remotely and we have limited the number of staff in our research and development laboratories. To date we have not experienced material disruptions in our business operations. However, while it is not possible at this time to estimate the impact that COVID-19 could have on our business in the future, particularly as we advance our product candidates through clinical development, the continued spread of COVID-19 and the measures taken by the governmental authorities, and any future epidemic disease outbreaks, could: disrupt the supply chain and the manufacture or shipment of drug substances and finished drug products for our product candidates for use in our research, preclinical studies and clinical trials; delay, limit or prevent our employees and CROs from continuing research and development activities; impede our clinical trial initiation and recruitment and the ability of patients to continue in clinical trials, including the risk that participants enrolled in our clinical trials will contract COVID-19 or other epidemic disease while the clinical trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events; impede testing, monitoring, data collection and analysis and other related activities; any of which could delay our preclinical studies and clinical trials and increase our development costs, and have a material adverse effect on our business, financial condition and results of operations. The COVID-19 pandemic and any future epidemic disease outbreak could also potentially further affect the business of the FDA, EMA or other regulatory authorities, which could result in delays in meetings related to planned clinical trials. The COVID-19 pandemic and mitigation measures have had and may continue to have, and any future epidemic disease outbreak may have, an adverse impact on global economic conditions which could have an adverse effect on our business and financial condition, including impairing our ability to raise capital when needed. The extent to which the COVID-19 pandemic impacts our results will depend on future developments that are highly uncertain and cannot be predicted, including new information that may emerge concerning the severity of the virus and the actions to contain its impact.

Our business could be affected by litigation, government investigations and enforcement actions.

We currently operate in a number of jurisdictions in a highly regulated industry and we could be subject to litigation, government investigation and enforcement actions on a variety of matters in the United States or foreign jurisdictions, including, without limitation, intellectual property, regulatory, product liability, environmental, whistleblower, false claims, privacy, anti-kickback, anti-bribery, securities, commercial, employment and other claims and legal proceedings which may arise from conducting our business. Any determination that our operations or activities are not in compliance with existing laws or regulations could result in the imposition of fines, civil and criminal penalties, equitable remedies, including disgorgement, injunctive relief and/or other sanctions against us, and remediation of any such findings could have an adverse effect on our business operations.

Legal proceedings, government investigations and enforcement actions can be expensive and time-consuming. An adverse outcome resulting from any such proceeding, investigations or enforcement actions could result in significant damages awards, fines, penalties, exclusion from the federal healthcare programs, healthcare debarment, injunctive relief, product recalls, reputational damage and modifications of our business practices, which could have a material adverse effect on our business and results of operations.

Our employees and independent contractors, including principal investigators, CROs, consultants and vendors, may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk that our employees and independent contractors, including principal investigators, CROs, consultants and vendors may engage in misconduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to us that violate: (i) the laws and regulations of the FDA and other similar regulatory requirements, including those laws that require the reporting of true, complete and accurate information to such authorities, (ii) manufacturing standards, including cGMP requirements, (iii) federal and state data privacy, security, fraud and abuse and other healthcare laws and regulations in the United States and abroad or (iv) laws that require the true, complete and accurate reporting of financial information or data. Activities subject to these laws also involve the improper use or misrepresentation of information obtained in the course of clinical trials, the creation of fraudulent data in our preclinical studies or clinical trials or illegal misappropriation of drug product, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. In addition, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and financial results, including, without limitation, the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, disgorgements, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, imprisonment, contractual damages, reputational harm, diminished profits and future earnings, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

We may engage in strategic transactions that could impact our liquidity, increase our expenses and present significant distractions to our management.

From time to time, we may consider strategic transactions, such as acquisitions of companies, asset purchases and out-licensing or in-licensing of intellectual property, products or technologies, similar to our approach in which we in-licensed and acquired certain of our current product candidates and development programs. Additional potential transactions that we may consider in the future include a variety of business arrangements, including spin-offs, strategic partnerships, joint ventures, restructurings, divestitures, business combinations and investments. Any future transactions could increase our near and long-term expenditures, result in potentially dilutive issuances of our equity securities, including our common stock, or the incurrence of debt, contingent liabilities, amortization expenses or acquired in-process research and development expenses, any of which could affect our financial condition, liquidity and results of operations. Future acquisitions may also require us to obtain additional financing, which may not be available on favorable terms or at all. These transactions may never be successful and may require significant time and attention of our management. In addition, the integration of any business that we may acquire in the future may disrupt our existing business and may be a complex, risky and costly endeavor for which we may never realize the full benefits of the acquisition. Accordingly, although there can be no assurance that we will undertake or successfully complete any additional transactions of the nature described above, any additional transactions that we do complete could have a material adverse effect on our business, results of operations, financial condition and prospects.

Our ability to use net operating loss carryforwards and other tax attributes may be limited in connection with this offering or other ownership changes.

We have incurred substantial losses during our history, do not expect to become profitable in the near future and may never achieve profitability. To the extent that we continue to generate taxable losses, unused losses will carry forward to offset future taxable income, if any, until such unused losses expire (if at all). As of December 31, 2020, we had federal, California and other state net operating loss (NOL) carryforwards of \$49.1 million, \$13.0 million and \$2.4 million, respectively.

Under the legislation enacted in 2017, informally titled the Tax Cuts and Jobs Act (Tax Act), federal NOL carryforwards arising in tax years beginning after December 31, 2017, may be carried forward indefinitely, but the deductibility of such federal NOLs in tax year in tax years beginning after December 31, 2020, is limited. Under the Coronavirus Aid, Relief and Economic Security Act (CARES Act), federal NOL carryforwards arising in tax years beginning after December 31, 2017 and before January 1, 2021 may be carried back to each of the five tax years preceding the tax year of such loss. It is uncertain if and to what extent various states will conform to the Tax Act or the CARES Act. In addition, our NOL carryforwards are subject to review and possible adjustment by the IRS and state tax authorities. Under Section 382 of the Internal Revenue Code of 1986, as amended (the Code), our federal NOL carryforwards may become subject to an annual limitation in the event of certain cumulative changes in the ownership of our company. An "ownership change" pursuant to Section 382 of the Code generally occurs if one or more stockholders or groups of stockholders who own at least 5% of a company's stock increase their ownership by more than 50 percentage points over their lowest ownership percentage within a rolling three-year period. Similar rules may apply under state tax laws. We have not yet formally determined the amount of the cumulative change in our ownership resulting from this offering or other transactions, or any resulting limitations on our ability to utilize our NOL carryforwards and other tax attributes. However, we believe that our ability to utilize our NOL carryforwards and other tax attributes to offset future taxable income or tax liabilities is likely to be limited as a result of ownership changes, including potential changes in connection with this offering. If we earn taxable income, such limitations could result in increased future income tax liability to us and our future cash flows could be adversely affected. We have recorded a full valuation allowance related to our NOL carryforwards and other deferred tax assets due to the uncertainty of the ultimate realization of the future benefits of those assets.

Investors' expectations of our performance relating to environmental, social and governance factors may impose additional costs and expose us to new risks.

There is an increasing focus from certain investors, employees and other stakeholders concerning corporate responsibility, specifically related to environmental, social and governance factors. Some investors may use these factors to guide their investment strategies and, in some cases, may choose not to invest in us if they believe our policies relating to corporate responsibility are inadequate, including if they believe our policies relating to the Erasca Foundation are inadequate. Third-party providers of corporate responsibility ratings and reports on companies have increased to meet growing investor demand for measurement of corporate responsibility performance. The criteria by which companies' corporate responsibility practices are assessed may change, which could result in greater expectations of us and cause us to undertake costly initiatives to satisfy such new criteria. If we elect not to or are unable to satisfy such new criteria, investors may conclude that our policies with respect to corporate responsibility are inadequate. We may face reputational damage in the event that our corporate responsibility procedures or standards do not meet the standards set by various constituencies.

Furthermore, if our competitors' corporate responsibility performance is perceived to be greater than ours, potential or current investors may elect to invest with our competitors instead. In addition, in the event that we communicate certain initiatives and goals regarding environmental, social and governance matters, including with respect to the initiatives and goals we established as part of the Erasca Foundation, we could fail, or be perceived to fail, in our achievement of such initiatives or goals, or we could be criticized for the scope of such initiatives or goals. If we fail to satisfy the expectations of investors, employees and other stakeholders or our initiatives are not executed as planned, our reputation and financial results could be materially and adversely affected.

Risks related to our intellectual property

If we are unable to obtain and maintain patent protection for our product candidates, or if the scope of the patent protection obtained is not sufficiently broad, our competitors could develop and commercialize products similar or identical to ours, and our ability to successfully commercialize our product candidates may be adversely affected.

Our success depends in large part on our ability to obtain and maintain patent protection and trade secret protection with respect to our therapeutic programs, proprietary technologies, and their uses. We seek to protect our proprietary position, in part, by filing patent applications in the United States and abroad relating to our product candidates. We also seek to protect our proprietary position by acquiring or in-licensing relevant issued patents or pending applications from third parties. If we are unable to obtain or maintain patent protection with respect to our product candidates, our business, financial condition, results of operations and prospects could be materially harmed.

Changes in either the patent laws or their interpretation in the United States and other jurisdictions may diminish our ability to protect our intellectual property, obtain, maintain and enforce our intellectual property rights and, more generally, could affect the value of our intellectual property or narrow the scope of our protection. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any issued patents will provide sufficient protection against competitors or other third parties.

The patent prosecution process is expensive, time-consuming, and complex, and we may not be able to file, prosecute, maintain, enforce, or license all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and

development output in time to obtain patent protection. Although we enter into non-disclosure and confidentiality agreements with parties who have access to confidential or patentable aspects of our research and development output, such as our employees, third-party collaborators, CROs, contract manufacturers, consultants, advisors and other third parties, any of these parties may breach the agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection. In addition, our ability to obtain and maintain valid and enforceable patents depends on whether the differences between our inventions and the prior art allow our inventions to be patentable in light of the prior art. Furthermore, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot be certain that we or our licensors were the first to invent the inventions claimed in any of our owned or licensed patents or pending patent applications, or that we or our licensors were the first to file for patent protection of such inventions.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal and factual questions and has been the subject of much litigation in recent years. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our owned and in-licensed patent applications may not result in patents being issued which protect our therapeutic programs and other proprietary technologies we may develop or which effectively prevent others from commercializing competitive technologies and products.

Moreover, the claim coverage in a patent application can be significantly reduced before the patent is granted. Even if our owned and in-licensed patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors or other third parties from competing with us or otherwise provide us with any competitive advantage. Any patents issuing from our owned and in-licensed patent applications may be challenged, narrowed, circumvented or invalidated by third parties. Consequently, we do not know whether our therapeutic programs and other proprietary technology will be protectable or remain protected by valid and enforceable patents. Even if a patent is granted, our competitors or other third parties may be able to circumvent the patent by developing similar or alternative technologies or products in a non-infringing manner which could materially adversely affect our business, financial condition, results of operations and prospects. In addition, given the amount of time required for the development, testing and regulatory review of our therapeutic programs and eventual product candidates, patents protecting the product candidates might expire before or shortly after such product candidates are commercialized. As a result, our intellectual property may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

The issuance of a patent is not conclusive as to its inventorship, scope, validity, or enforceability and our owned and in-licensed patents may be challenged in the courts or patent offices in the United States and abroad. We may be subject to a third-party pre-issuance submission of prior art to the US Patent and Trademark Office (USPTO) or become involved in opposition, derivation, revocation, reexamination, post-grant and inter partes review, or other similar proceedings challenging our patent rights. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate or render unenforceable, our patent rights, allow third parties to commercialize our therapeutic programs and other proprietary technologies we may develop and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. Such proceedings also may result in substantial cost and require significant time from our scientists and management, even if the eventual outcome is favorable to us.

Moreover, some of our owned and in-licensed patent rights are, and may in the future be, co-owned with third parties. If we are unable to obtain an exclusive license to any such third-party co-owners' interest in such patent rights, such co-owners may be able to license their rights to other third parties, including our

competitors, and our competitors could market competing products and technology. In addition, we may need the cooperation of any such co-owners of such patent rights in order to enforce such patent rights against third parties, and such cooperation may not be provided to us. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

Furthermore, our owned and in-licensed patent rights may be subject to a reservation of rights by one or more third parties. For example, the research resulting in certain of our patent rights and technology was funded in part by the US government. As a result, the government may have certain rights, or march-in rights, to such patent rights and technology. When new technologies are developed with government funding, the government generally obtains certain rights in any resulting patents, including a non-exclusive license authorizing the government to use the invention for non-commercial purposes. These rights may permit the government to disclose our confidential information to third parties and to exercise march-in rights to use or allow third parties to use our licensed technology. The government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the government-funded technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations, or to give preference to US industry. In addition, our rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the United States. Any exercise by the government of such rights could harm our competitive position, business, financial condition, results of operations and prospects.

We may not be able to protect our intellectual property and proprietary rights throughout the world.

Filing, prosecuting and defending patents on our product candidates in all countries throughout the world would be prohibitively expensive, and the laws of foreign countries may not protect our intellectual property rights to the same extent as the laws of the United States. Consequently, we may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our intellectual property in and into the United States or other jurisdictions. Competitors may use our intellectual property in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection but enforcement is not as strong as that in the United States. These products may compete with our products, and our owned and in-licensed patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets and other intellectual property protection, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement of our owned and in-licensed patents or marketing of competing products in violation of our intellectual property and proprietary rights generally. In addition, some jurisdictions, such as Europe, Japan and China, may have a higher standard for patentability than in the United States, including, for example, the requirement of claims having literal support in the original patent filing and the limitation on using supporting data that is not in the original patent filing. Under those heightened patentability requirements, we may not be able to obtain sufficient patent protection in certain jurisdictions even though the same or similar patent protection can be secured in the United States and other jurisdictions.

Proceedings to enforce our intellectual property and proprietary rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our owned and in-licensed patents at risk of being invalidated or interpreted narrowly, could put our owned and in-licensed patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, and the damages or other remedies awarded, if any, may

not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property and proprietary rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop.

Many countries have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties. In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we are forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position may be impaired, and our business, financial condition, results of operations and prospects may be adversely affected.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by government patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

The USPTO and various non-US government agencies require compliance with several procedural, documentary, fee payment and other similar provisions during the patent application process. In some circumstances, we are dependent on our licensors to take the necessary action to comply with these requirements with respect to our licensed intellectual property. For example, periodic maintenance fees, renewal fees, annuity fees, and various other government fees on patents and applications will be due to be paid to the USPTO and various government patent agencies outside of the United States over the lifetime of our owned or licensed patents and applications. In certain circumstances, we rely on our licensing partners to pay these fees due to US and non-US patent agencies. In some cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. There are situations, however, in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in a partial or complete loss of patent rights in the relevant jurisdiction. In such an event, potential competitors might be able to enter the market with similar or identical products or technology, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

The USPTO and various non-US government agencies require compliance with certain foreign filing requirements during the patent application process. For example, in some countries, including the US, China, India and some European countries, a foreign filing license is required before certain patent applications are filed. The foreign filing license requirements vary by country and depend on various factors including where the inventive activity occurred, citizenship status of the inventors, the residency of the inventors and the invention owner, the place of business for the invention owner and the nature of the subject matter to be disclosed (e.g., items related to national security or national defense). In some cases, a foreign filing license may be obtained retroactively in accordance with the applicable rules. There are situations, however, in which non-compliance can result in abandonment of a pending patent application or can be grounds for revoking or invalidating an issued patent, resulting in the loss of patent rights in the relevant jurisdiction. In such an event, potential competitors might be able to enter the relevant markets with similar or identical products or technology, which could have a material adverse effect on our business, financial condition, results of operations, and prospects. We are also dependent on our licensors to take the necessary actions to comply with these requirements with respect to our licensed intellectual property. The Indian patent application covering ERAS-007 as composition of matter was filed without obtaining a foreign filing license from the Indian Patent Office. As such, any patent issuing from the pending patent application in India may be vulnerable to revocation by the Indian Patent Office or invalidity or unenforceability attacks by third parties.

The COVID-19 pandemic may impair our and our licensors' ability to comply with these procedural, document submission, fee payment, and other requirements imposed by government patent agencies, which may materially and adversely affect our ability to obtain or maintain patent protection for our products and product candidates.

Changes in US patent law could diminish the value of patents in general, thereby impairing our ability to protect our products.

Changes in either the patent laws or interpretation of the patent laws in the United States could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. Assuming that other requirements for patentability are met, prior to March 2013, in the United States, the first to invent the claimed invention was entitled to the patent, while outside the United States, the first to file a patent application was entitled to the patent. After March 2013, under the Leahy-Smith America Invents Act (the America Invents Act) enacted in September 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. A third party that files a patent application in the USPTO after March 2013, but before us or our licensors could therefore be awarded a patent covering an invention of ours or our licensors even if we or our licensors had made the invention before it was made by such third party. This will require us to be cognizant going forward of the time from invention to filing of a patent application. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we or our licensors were the first to either (i) file any patent application related to our therapeutic programs and other proprietary technologies we may develop or (ii) invent any of the inventions claimed in our patent applications.

The America Invents Act also includes a number of significant changes that affect the way patent applications will be prosecuted and also may affect patent litigation. These include allowing third party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by USPTO administered post-grant proceedings, including post-grant review, inter partes review and derivation proceedings. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our owned and in-licensed patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. Therefore, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our owned and in-licensed patent applications and the enforcement or defense of patents issuing from those patent applications, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

In addition, the patent positions of companies in the development and commercialization of biologics and pharmaceuticals are particularly uncertain. Recent US Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. This combination of events has created uncertainty with respect to the validity and enforceability of patents, once obtained. Depending on future actions by the US Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could have a material adverse effect on our existing patent portfolio and our ability to protect and enforce our intellectual property in the future.

Issued patents covering our product candidates could be found invalid or unenforceable if challenged in court or before administrative bodies in the United States or abroad.

If we initiated legal proceedings against a third party to enforce a patent covering our product candidates, the defendant could counterclaim that such patent is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity

challenge could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, non-enablement lack of sufficient written description or obviousness-type double patenting. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. Third parties may raise claims challenging the validity or enforceability of a patent before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post-grant review, inter partes review, derivation proceedings, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in the revocation of, cancellation of or amendment to our owned and in-licensed patents in such a way that they no longer cover our product candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we or our licensing partners and the patent examiner were unaware during prosecution. If a third party were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates. Such a loss of patent protection would have a material adverse impact on our business, financial condition, results of operations and prospects.

Patent terms may be inadequate to protect our competitive position on products and product candidates for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest US non-provisional or international patent application filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent has expired, we may be vulnerable to competition from competitive products, including generics or biosimilars. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such product candidates might expire before or shortly after such product candidates are commercialized. As a result, our owned and in-licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

If we do not obtain patent term extension for our product candidates, our business may be materially harmed.

Depending upon the timing, duration and specifics of any FDA marketing approval of any of our product candidates, one or more of our owned and in-licensed issued US patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Action of 1984 (Hatch-Waxman Amendments). The Hatch-Waxman Amendments permit a patent term extension (PTE) of up to five years as compensation for patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, only one patent may be extended and only those claims covering the approved drug, a method for using it or a method for manufacturing it may be extended. Similar patent term restoration provisions to compensate for commercialization delay caused by regulatory review are also available in certain foreign jurisdictions, such as in Europe under Supplemental Protection Certificate (SPC). However, we may not be granted an extension because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents, or otherwise failing to satisfy applicable requirements. Moreover, the applicable time period or the scope of patent protection afforded could be less than we request. If we are unable to obtain patent term extension or term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our business, financial condition, results of operations and prospects could be materially harmed).

We may be subject to claims challenging the inventorship of our patents and other intellectual property.

We may be subject to claims that former employees, collaborators or other third parties have an interest in our patent rights, trade secrets, or other intellectual property as an inventor or co-inventor. For example, we may have inventorship disputes arise from conflicting obligations of consultants or others who are involved in developing our therapeutic programs and other proprietary technologies we may develop. Litigation may be necessary to defend against these and other claims challenging inventorship or our patent rights, trade secrets or other intellectual property. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to our therapeutic programs and other proprietary technologies we may develop. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to our management and other employees. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to seeking patent protection for our product candidates, we also rely on trade secrets and confidentiality agreements to protect our unpatented know-how, technology, and other proprietary information and to maintain our competitive position. We seek to protect these trade secrets and other proprietary technology, in part, by entering into non-disclosure and confidentiality agreements with parties who have access to them, such as our employees, third-party collaborators, CROs, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. We cannot guarantee that we have entered into such agreements with each party that may have or have had access to our trade secrets or proprietary technology and processes. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third party, we would have no right to prevent them from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor or other third party, our competitive position would be materially and adversely harmed.

We may be subject to claims that third parties have an ownership interest in our trade secrets. For example, we may have disputes arise from conflicting obligations of our employees, consultants or others who are involved in developing our product candidate. Litigation may be necessary to defend against these and other claims challenging ownership of our trade secrets. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable trade secret rights, such as exclusive ownership of, or right to use, trade secrets that are important to our therapeutic programs and other proprietary technologies we may develop. Such an outcome could have a material adverse effect on our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to our management and other employees. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may be subject to claims that our employees, consultants or advisors have wrongfully used or disclosed alleged trade secrets of their current or former employers or claims asserting ownership of what we regard as our own intellectual property.

Some of our employees, consultants and advisors are currently or were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants and advisors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these individuals have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such individual's current or former employer. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to our management.

In addition, while it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who, in fact, conceives or develops intellectual property that we regard as our own. The assignment of intellectual property rights may not be self-executing, or the assignment agreements may be breached, and we may be forced to bring claims against third parties, or defend claims that they may bring against us, to determine the ownership of what we regard as our intellectual property. Such claims could have a material adverse effect on our business, financial condition, results of operations and prospects.

We may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration of a third-party patent, which might adversely affect our ability to develop and market our products and product candidates.

We cannot guarantee that any of our patent searches or analyses, including the identification of relevant patents, the scope of patent claims or the expiration of relevant patents, are complete or thorough, nor can we be certain that we have identified each and every third-party patent and pending patent application in the United States and abroad that is relevant to or necessary for the commercialization of our current and future products and product candidates in any jurisdiction. The scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending patent application may be incorrect, which may negatively impact our ability to market our products. We may incorrectly determine that our products or product candidates are not covered by a third-party patent or may incorrectly predict whether a third party's pending patent application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, and our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our products. Any of the foregoing could have a material adverse effect on our business, financial condition, results of operations and prospects.

Third-party claims of intellectual property infringement, misappropriation or other violations against us or our collaborators may prevent or delay the development and commercialization of our product candidates.

Our commercial success depends in part on our ability to avoid infringing, misappropriating and otherwise violating the patents and other intellectual property rights of third parties. There is a substantial amount of complex litigation involving patents and other intellectual property rights in the biotechnology and pharmaceutical industries, as well as administrative proceedings for challenging patents, including interference, derivation and reexamination proceedings before the USPTO or oppositions and other comparable

proceedings in foreign jurisdictions. As discussed above, recently, due to changes in US law referred to as patent reform, new procedures including inter partes review and post-grant review have also been implemented. As stated above, this reform adds uncertainty to the possibility of challenge to our owned and in-licensed patents in the future.

Numerous US and foreign issued patents and pending patent applications owned by third parties exist in the fields in which we are commercializing or plan to commercialize our therapeutic and diagnostic programs and in which we are developing other proprietary technologies. As the biotechnology and pharmaceutical industries expand and more patents are issued, and as we gain greater visibility and market exposure as a public company, the risk that our therapeutic and diagnostic programs and commercializing activities may give rise to claims of infringement of the patent rights of others increases. We cannot assure you that our therapeutic programs and other proprietary technologies we may develop will not infringe existing or future patents owned by third parties. We may not be aware of patents that have already been issued and that a third party, including a competitor in the fields in which we are developing our therapeutic programs, might assert as infringed by us. It is also possible that patents owned by third parties of which we are aware, but which we do not believe we infringe or that we believe we have valid defenses to any claims of patent infringement, could be found to be infringed by us. It is not unusual that corresponding patents issued in different countries have different scopes of coverage, such that in one country a third-party patent does not pose a material risk, but in another country, the corresponding third-party patent may pose a material risk to our products or product candidates. As such, we monitor third-party patents in the relevant pharmaceutical markets. In addition, because patent applications can take many years to issue, there may be currently pending patent applications that may later result in issued patents that we may infringe.

In the event that any third-party claims that we infringe their patents or that we are otherwise employing their proprietary technology without authorization and initiates litigation against us, even if we believe such claims are without merit, a court of competent jurisdiction could hold that such patents are valid, enforceable and infringed by us. Defense of infringement claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of management and other employee resources from our business, and may impact our reputation. In the event of a successful claim of infringement against us, we may be enjoined from further developing or commercializing the infringing products or technologies. In addition, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, obtain one or more licenses from third parties, pay royalties and/or redesign our infringing products or technologies, which may be impossible or require substantial time and monetary expenditure. Such licenses may not be available on commercially reasonable terms or at all. Even if we are able to obtain a license, the license would likely obligate us to pay license fees or royalties or both, and the rights granted to us might be nonexclusive, which could result in our competitors gaining access to the same intellectual property. If we are unable to obtain a necessary license to a third-party patent on commercially reasonable terms, we may be unable to commercialize the infringing products or technologies or such commercialization efforts may be significantly delayed, which could in turn significantly harm our business. In addition, we may in the future pursue patent challenges with respect to third-party patents, including as a defense against the foregoing infringement claims. The outcome of such challenges is unpredictable.

Even if resolved in our favor, the foregoing proceedings could be very expensive, particularly for a company of our size, and time-consuming. Such proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to conduct such proceedings adequately. Some of our competitors may be able to sustain the costs of litigation or administrative proceedings more effectively than we can because of greater financial resources. Such legal proceedings may also absorb significant time of our technical and management personnel and distract them from their normal responsibilities. Uncertainties

resulting from such proceedings could impair our ability to compete in the marketplace. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. The occurrence of any of the foregoing could have a material adverse effect on our business, financial condition or results of operations.

We may become involved in lawsuits to protect or enforce our owned and in-licensed patents and other intellectual property rights, which could be expensive, time-consuming and unsuccessful.

Third parties, such as a competitor, may infringe our patent rights. In an infringement proceeding, a court may decide that a patent owned by us is invalid or unenforceable or may refuse to stop the other party from using the invention at issue on the grounds that the patent does not cover the technology in question. In addition, our patent rights may become involved in inventorship, priority or validity disputes. To counter or defend against such claims can be expensive and time-consuming. An adverse result in any litigation proceeding could put our patent rights at risk of being invalidated or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses and could distract our personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments, and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. We may not have sufficient financial or other resources to conduct such litigation or proceedings adequately. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources and more mature and developed intellectual property portfolios. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. During trademark registration proceedings, we may receive rejections of our applications by the USPTO or in other foreign jurisdictions. Although we are given an opportunity to respond to such rejections, we may be unable to overcome them. In addition, in the USPTO and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, which may not survive such proceedings. Moreover, any name we have proposed to use with our product candidate in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. Similar requirements exist in Europe. The FDA typically conducts a review of proposed product names, including an evaluation of potential for confusion with other product names. If the FDA or an equivalent administrative body in a foreign jurisdiction objects to any of our proposed proprietary product names, we may be required to expend significant additional resources in an effort to identify a suitable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA. Furthermore, in many countries, owning and maintaining a trademark registration may not provide an adequate defense against a subsequent infringement claim asserted by the owner of a senior trademark.

We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors or other third parties may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade names, domain name or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our business, financial condition, results of operations and prospects.

Intellectual property rights do not necessarily address all potential threats.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain our competitive advantage. For example:

- others may be able to make products that are similar to our product candidates or utilize similar technology but that are not covered by the claims of the patents that we license or may own;
- we or our licensors or collaborators might not have been the first to make the inventions covered by our current or future patent applications;
- we or our licensors or collaborators might not have been the first to file patent applications covering our inventions;
- others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- it is possible that the pending and future patent applications we own or in-license will not lead to issued patents;
- issued patents that we own or in-license may be held invalid or unenforceable, including as a result of legal challenges by our competitors or other third parties;
- our competitors or other third parties might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- we may not develop additional proprietary technologies that are patentable;
- we may fail to identify potential patentable subject matter and/or may fail to file on it;
- the patents of others may harm our business; and
- we may choose not to file for patent protection in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent application covering such intellectual property.

Should any of the foregoing occur, it could adversely affect our business, financial condition, results of operations and prospects.

We partially depend on intellectual property licensed from third parties, and our licensors may not always act in our best interest. If we fail to comply with our obligations under our intellectual property licenses, if the licenses are terminated or if disputes regarding these licenses arise, we could lose significant rights that are important to our business.

We are dependent, in part, on patents, know-how and proprietary technology licensed from others. We are a party to a number of license agreements under which we are granted rights to intellectual property that are important to our business and we may enter into additional license agreements in the future. Our existing license agreements impose, and we expect that any future license agreements where we in-license intellectual property, will impose on us, various development, regulatory and/or commercial diligence obligations, payment of milestones and/or royalties and other obligations. If we fail to comply with our obligations under these agreements, or we are subject to bankruptcy-related proceedings, the licensor may have the right to terminate the license, in which event we would not be able to develop or market products covered by the license.

If we or our licensors fail to adequately protect our licensed intellectual property, our ability to commercialize product candidates could suffer. We do not have complete control over the maintenance, prosecution and litigation of our in-licensed patents and patent applications and may have limited control over future intellectual property that may be in-licensed. For example, we cannot be certain that activities such as the maintenance and prosecution by our licensors have been or will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights. It is possible that our licensors' infringement proceedings or defense activities may be less vigorous than had we conducted them ourselves or may not be conducted in accordance with our best interests.

In addition, the agreements under which we license intellectual property or technology from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant patents, know-how and proprietary technology, or increase what we believe to be our financial or other obligations under the relevant agreement. Disputes that may arise between us and our licensors regarding intellectual property subject to a license agreement could include disputes regarding:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- whether and the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- our right to sublicense patent and other rights to third parties under collaborative development relationships;
- our diligence obligations with respect to the use of the licensed technology in relation to our development and commercialization of our product candidates and what activities satisfy those diligence obligations; and
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners.

If disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on reasonable terms, we may be unable to successfully develop and commercialize the affected technology or product candidates. As a result, any termination of or disputes over our intellectual property licenses could result in the loss of our ability to develop and commercialize our product candidates, or we could lose other significant rights, any of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

For example, our agreements with certain of our third-party research partners provide that improvements developed in the course of our relationship may be owned solely by either us or our third-party research

partner, or jointly between us and the third party. If we determine that rights to such improvements owned solely by a research partner or other third party with whom we collaborate are necessary to commercialize our product candidates or maintain our competitive advantage, we may need to obtain a license from such third party in order to use the improvements and continue developing, manufacturing or marketing our product candidates. We may not be able to obtain such a license on an exclusive basis, on commercially reasonable terms, or at all, which could prevent us from commercializing our product candidates or allow our competitors or others the chance to access technology that is important to our business. We also may need the cooperation of any co-owners of our intellectual property in order to enforce such intellectual property against third parties, and such cooperation may not be provided to us.

We may not be successful in obtaining or maintaining necessary rights to product components and processes for our development pipeline through acquisitions and in-licenses.

The growth of our business may depend in part on our ability to acquire, in-license or use third-party proprietary rights. For example, our product candidates may require specific formulations to work effectively and efficiently, we may develop product candidates containing our compounds and pre-existing pharmaceutical compounds, or we may be required by the FDA or comparable foreign regulatory authorities to provide a companion diagnostic test or tests with our product candidates, any of which could require us to obtain rights to use intellectual property held by third parties. In addition, with respect to any patents we may co-own with third parties, we may require licenses to such co-owner's interest to such patents. We may be unable to acquire or in-license any compositions, methods of use, processes or other third-party intellectual property rights from third parties that we identify as necessary or important to our business operations. In addition, we may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all. Were that to happen, we may need to cease use of the compositions or methods covered by those third-party intellectual property rights, and may need to seek to develop alternative approaches that do not infringe on those intellectual property rights, which may entail additional costs and development delays, even if we were able to develop such alternatives, which may not be feasible. Even if we are able to obtain a license, it may be non-exclusive, which means that our competitors may also receive access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to develop or license replacement technology.

Additionally, we sometimes collaborate with academic institutions to accelerate our preclinical research or development under written agreements with these institutions. In certain cases, these institutions provide us with an option to negotiate a license to any of the institution's rights in technology resulting from the collaboration. Even if we hold such an option, we may be unable to negotiate a license from the institution within the specified timeframe or under terms that are acceptable to us. If we are unable to do so, the institution may offer the intellectual property rights to others, potentially blocking our ability to pursue our program.

The licensing and acquisition of third-party intellectual property rights is a competitive area, and companies that may be more established or have greater resources than we do may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive in order to commercialize our product candidates. More established companies may have a competitive advantage over us due to their size, cash resources and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. There can be no assurance that we will be able to successfully complete these types of negotiations and ultimately acquire the rights to the intellectual property surrounding the additional product candidates that we may seek to develop or market. If we are unable to successfully obtain rights to required third-party intellectual property or to maintain the existing intellectual property rights we have, we may have to abandon development of certain programs and our business financial condition, results of operations and prospects could suffer.

We and our service providers may be subject to a variety of privacy and data security laws and contractual obligations, which could increase compliance costs and our failure to comply with them could subject us to potentially significant fines or penalties, harm our reputation and otherwise harm our business.

We maintain a large quantity of sensitive information, including confidential business and patient health information in connection with our preclinical studies, and are subject to laws and regulations governing the privacy and security of such information. The global data protection landscape is rapidly evolving, and we may be affected by or subject to new, amended or existing laws and regulations in the future, including as our operations continue to expand or if we operate in foreign jurisdictions. These laws and regulations may be subject to differing interpretations, which adds to the complexity of processing personal information. Guidance on implementation and compliance practices are often updated or otherwise revised.

In the United States, there are numerous federal and state privacy and data security laws and regulations governing the collection, use, disclosure and protection of personal information, including federal and state health information privacy laws, federal and state security breach notification laws and federal and state consumer protection laws. Each of these laws is subject to varying interpretations and constantly evolving. By way of example, HIPAA imposes privacy and security requirements and breach reporting obligations with respect to individually identifiable health information upon “covered entities” (health plans, health care clearinghouses and certain health care providers), and their respective business associates and subcontractors, individuals or entities that create, receive, maintain or transmit protected health information in connection with providing a service for or on behalf of a covered entity, as well as their covered subcontractors. HIPAA mandates the reporting of certain breaches of health information to the US Department of Health and Human Services (HHS), affected individuals and if the breach is large enough, the media. Entities that are found to be in violation of HIPAA as the result of a breach of unsecured protected health information, a complaint about privacy practices or an audit by HHS, may be subject to significant civil, criminal and administrative fines and penalties and/or additional reporting and oversight obligations if required to enter into a resolution agreement and corrective action plan with HHS to settle allegations of HIPAA non-compliance. Even when HIPAA does not apply, according to the US Federal Trade Commission (FTC), failing to take appropriate steps to keep consumers' personal information secure may constitute unfair acts or practices in or affecting commerce in violation of Section 5(a) of the Federal Trade Commission Act. The FTC expects a company's data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business and the cost of available tools to improve security and reduce vulnerabilities.

In addition, certain state laws govern the privacy and security of health-related and other personal information in certain circumstances, some of which are more stringent than HIPAA and many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. By way of example, the California Consumer Privacy Act (CCPA), which went into effect on January 1, 2020, gives California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. The CCPA provides for civil penalties for violations, as well as a private right of action for data breaches that is expected to increase data breach litigation. The CCPA has been amended from time to time, and it is possible that further amendments will be enacted, but even in its current form it remains unclear how various provisions of the CCPA will be interpreted and enforced. The CCPA may increase our compliance costs and potential liability. Further, California voters recently approved the California Privacy Rights Act of 2020 (CPRA) that goes into effect on January 1, 2023. It is expected that the CPRA would, among other things, give California residents the ability to limit the use of their sensitive personal information, provide for penalties for CPRA violations concerning California residents under the age of 16, and establish a new California Privacy Protection Agency to implement and enforce the law. Some observers have noted that the CCPA and the CPRA could mark the beginning of a

trend toward more stringent privacy legislation in the United States, which could increase our potential liability and adversely affect our business.

In Europe, Regulation 2016/676, known as the General Data Protection Regulation (GDPR), went into effect in May 2018. The GDPR governs the collection, use, disclosure, transfer or other processing of personal data of individuals within the European Economic Area (EEA). Among other things, the GDPR requires the establishment of a lawful basis for the processing of data, imposes requirements relating to the consent of the individuals to whom the personal data relates, including detailed notices for clinical trial subjects and investigators, as well as requirements regarding the security of personal data and notification of data processing obligations to the competent national data processing authorities. In addition, the GDPR increases the scrutiny of transfers of personal data from clinical trial sites located in the EEA to the United States and other jurisdictions that the European Commission does not recognize as having “adequate” data protection laws. The GDPR imposes substantial fines for breaches and violations (up to the greater of €20 million or 4% of consolidated annual worldwide gross revenue). The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies and obtain compensation for damages resulting from violations of the GDPR.

Recent legal developments in Europe have created complexity and uncertainty regarding transfers of personal data from the EEA to the United States. For example, on July 16, 2020, the Court of Justice of the European Union (CJEU) invalidated the EU-US Privacy Shield Framework (Privacy Shield) under which personal data could be transferred from the EEA to United States entities that had self-certified under the Privacy Shield scheme. While the CJEU upheld the adequacy of the standard contractual clauses (a standard form of contract approved by the European Commission as an adequate personal data transfer mechanism, and potential alternative to the Privacy Shield), it made clear that reliance on them alone may not necessarily be sufficient in all circumstances. Use of the standard contractual clauses must now be assessed on a case-by-case basis taking into account the legal regime applicable in the destination country, in particular applicable surveillance laws and rights of individuals and additional measures and/or contractual provisions may need to be put in place, however, the nature of these additional measures is currently uncertain. In addition, the European Commission recently proposed updates to the standard contractual clauses. Such developments may cause us to have to make further expenditures, limit our ability to process personal data, change internal business processes or otherwise affect or restrict sales and operations.

Further, the exit of the United Kingdom (UK) from the EU, often referred to as Brexit, has created uncertainty with regard to data protection regulation in the UK. Specifically, the UK exited the EU on January 1, 2020, subject to a transition period that ended December 31, 2020. Under the post-Brexit Trade and Cooperation Agreement between the EU and the UK, the UK and EU have agreed that transfers of personal data to the UK from EEA Member States will not be treated as ‘restricted transfers’ to a non-EEA country for a period of up to four months from January 1, 2021, plus a potential further two months extension (the Extended Adequacy Assessment Period). Although the current maximum duration of the Extended Adequacy Assessment Period is six months, it may end sooner, for example, in the event that the European Commission adopts an adequacy decision in respect of the UK, or the UK amends the UK GDPR and/or makes certain changes regarding data transfers under the UK GDPR/Data Protection Act 2018 without the consent of the EU (unless those amendments or decisions are made simply to keep relevant UK laws aligned with the EU’s data protection regime). If the European Commission does not adopt an ‘adequacy decision’ in respect of the UK prior to the expiry of the Extended Adequacy Assessment Period, from that point onwards the UK will be an ‘inadequate third country’ under the GDPR and transfers of personal data from the EEA to the UK will require a ‘transfer mechanism’ such as the Standard Contractual Clauses.

In many jurisdictions, enforcement actions and consequences for noncompliance are rising. In the United States, these include enforcement actions in response to rules and regulations promulgated under the

[Table of Contents](#)

authority of federal agencies and state attorneys general and legislatures and consumer protection agencies. In addition, privacy advocates and industry groups have regularly proposed, and may propose in the future, self-regulatory standards that may legally or contractually apply to us. If we fail to follow these security standards, even if no personal information is compromised, we may incur significant fines or experience a significant increase in costs. Many state legislatures have adopted legislation that regulates how businesses operate online, including measures relating to privacy, data security and data breaches. Laws in all 50 US states and the District of Columbia require businesses to provide notice to affected consumers whose unencrypted personal information has been disclosed as a result of a data breach. These laws are not consistent, and compliance in the event of a widespread data breach is difficult and may be costly. We also may be required to notify regulators, credit reporting agencies or other counterparties of a security breach. Such notifications are costly, and the disclosures or the failure to comply such requirements, could lead to material adverse effects, including without limitation, negative publicity, a loss of consumer confidence or security measures or breach of contract claims.

Compliance with US and international data protection laws and regulations could require us to take on more onerous obligations in our contracts, restrict our ability to collect, use and disclose data, update our data privacy and security policies and procedures, or in some cases, impact our ability to operate in certain jurisdictions. Failure by us or our collaborators and service providers to comply with US and international data protection laws and regulations could result in government enforcement actions (which could include civil or criminal penalties), private litigation and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects about whom we or our potential collaborators obtain information, as well as the providers who share this information with us, may contractually limit our ability to use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws, or breached our contractual obligations, even if we are not found liable, could be expensive and time-consuming to defend, could result in adverse publicity and could have a material adverse effect on our business, financial condition, results of operations and prospects.

We cannot assure you that our third-party partners and service providers with access to our customers', suppliers' and employees' personally identifiable and other sensitive or confidential information in relation to which we are responsible will not breach contractual obligations imposed by us or violate privacy and data security laws, or that they will not experience security breaches or attempts thereof, which could have a corresponding effect on our business, including putting us in breach of our obligations under the privacy and data security laws, which could in turn adversely affect our business, results of operations and financial condition. We cannot assure you that our contractual measures and our own privacy- and security-related safeguards will protect us from the risks associated with the third-party processing, storage and transmission of such information.

Risks related to this offering and ownership of our common stock

There has been no public market for our common stock and an active, liquid and orderly market for our common stock may not develop, and you may not be able to resell your common stock at or above the public offering price.

Prior to this offering, there has been no public market for our common stock. Although our common stock has been approved for listing on the Nasdaq Global Market (Nasdaq), an active trading market for our common stock may never develop or be sustained following this offering. We and the representatives of the underwriters determined the initial public offering price of our common stock through negotiations and the negotiated price may not be indicative of the market price of our common stock after this offering. This price will not

[Table of Contents](#)

necessarily reflect the price at which investors in the market will be willing to buy and sell our shares following this offering. In addition, an active trading market may not develop following the consummation of this offering or, if it is developed, may not be sustained. The lack of an active market may impair your ability to sell your shares at the time you wish to sell them or at a price that you consider reasonable. An inactive market may also impair our ability to raise capital by selling shares and may impair our ability to acquire other businesses or technologies using our shares as consideration, which, in turn, could materially adversely affect our business.

The trading price of the shares of our common stock could be highly volatile, and purchasers of our common stock could incur substantial losses.

Our stock price is likely to be volatile. The stock market in general and the market for stock of biopharmaceutical companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their common stock at or above the initial public offering price. The market price for our common stock may be influenced by those factors discussed in this "Risk factors" section and many others, including:

- results of our clinical trials and preclinical studies, and the results of trials of our competitors or those of other companies in our market sector;
- our ability to enroll subjects in our future clinical trials;
- regulatory approval of our product candidates, or limitations to specific label indications or patient populations for its use, or changes or delays in the regulatory review process;
- regulatory or legal developments in the United States and other countries;
- changes in the structure of healthcare payment systems;
- the success or failure of our efforts to develop, acquire or license additional product candidates;
- innovations, clinical trial results, product approvals and other developments regarding our competitors;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- manufacturing, supply or distribution delays or shortages;
- any changes to our relationship with any manufacturers, suppliers, collaborators or other strategic partners;
- achievement of expected product sales and profitability;
- variations in our financial results or those of companies that are perceived to be similar to us, or fluctuations in the valuation of such other companies;
- market conditions in the biopharmaceutical sector and issuance of securities analysts' reports or recommendations;
- trading volume of our common stock;
- an inability to obtain additional funding;
- sales of our stock by us, our insiders and our other stockholders;
- the impact of any natural disasters or public health emergencies, such as the COVID-19 pandemic;
- general economic, industry and market conditions other events or factors, many of which are beyond our control;

[Table of Contents](#)

- additions or departures of key personnel;
- intellectual property, product liability or other litigation against us;
- actual or anticipated changes in estimates as to financial results, development timelines, or recommendations by securities analysts;
- expiration of market stand-off or lock-up agreements;
- changes in our capital structure, such as future issuances of securities and the incurrence of additional debt; and
- changes in accounting standards, policies, guidelines, interpretations or principles.

In addition, in the past, stockholders have initiated class action lawsuits against biopharmaceutical companies following periods of volatility in the market prices of these companies' stock. Such litigation, if instituted against us, could cause us to incur substantial costs and divert our management's attention and resources, which could have a material adverse effect on our business, financial condition and results of operations.

We may allocate the net proceeds from this offering in ways that you and other stockholders may not approve.

Our management will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in "Use of proceeds." Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. Our management might not apply our net proceeds in ways that ultimately increase the value of your investment, and the failure by our management to apply these funds effectively could harm our business. Pending their use, we may invest the net proceeds from this offering in short- and intermediate-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the US government. These investments may not yield a favorable return to our stockholders. If we do not invest or apply the net proceeds from this offering in ways that enhance stockholder value, we may fail to achieve expected results, which could cause our stock price to decline.

You will suffer immediate and substantial dilution in the net tangible book value of the common stock you purchase.

The initial public offering price of our common stock is substantially higher than the pro forma as adjusted net tangible book value per share of our outstanding common stock immediately after the completion of this offering. Purchasers of common stock in this offering will experience immediate dilution of approximately \$11.80 per share, based upon the initial public offering price of \$16.00 per share. In the past, we issued options to acquire common stock at prices significantly below the initial public offering price. To the extent these outstanding options are ultimately exercised, investors purchasing common stock in this offering will sustain further dilution. For a further description of the dilution that you will experience immediately after this offering, see "Dilution."

After this offering, our executive officers, directors and principal stockholders, if they choose to act together, will continue to have the ability to significantly influence all matters submitted to stockholders for approval.

Following the completion of this offering, our executive officers, directors and greater than 5% stockholders, in the aggregate, will own approximately 53% of our outstanding common stock (assuming no exercise of the underwriters' option to purchase additional shares and no exercise of outstanding options and no purchases of shares in this offering or the directed share program by any of this group). As a result, such persons, acting together, will have the ability to significantly influence all matters submitted to our board of directors or stockholders for approval, including the appointment of our management, the election and removal of directors

[Table of Contents](#)

and approval of any significant transaction, as well as our management and business affairs. This concentration of ownership may have the effect of delaying, deferring or preventing a change in control, impeding a merger, consolidation, takeover or other business combination involving us, or discouraging a potential acquiror from making a tender offer or otherwise attempting to obtain control of our business, even if such a transaction would benefit other stockholders.

We do not currently intend to pay dividends on our common stock, and, consequently, your ability to achieve a return on your investment will depend on appreciation, if any, in the price of our common stock.

We have never declared or paid any cash dividend on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. In addition, any future debt agreements may preclude us from paying dividends. Any return to stockholders will therefore be limited to the appreciation of their stock. There is no guarantee that shares of our common stock will appreciate in value or even maintain the price at which stockholders have purchased their shares.

Sales of a substantial number of shares of our common stock by our existing stockholders in the public market could cause our stock price to fall.

Sales of a substantial number of shares of our common stock in the public market or the perception that these sales might occur could significantly reduce the market price of our common stock and impair our ability to raise adequate capital through the sale of additional equity securities.

Based on shares of common stock outstanding as of March 31, 2021, upon the closing of this offering, we will have outstanding a total of 116,142,968 shares of common stock, assuming no exercise of the underwriters' option to purchase additional shares and no exercise of outstanding options. Of these shares, only the 18,750,000 shares of common stock sold in this offering by us, plus any shares sold upon exercise of the underwriters' option to purchase additional shares, will be freely tradable, without restriction, in the public market immediately following this offering, unless they are purchased by one of our affiliates.

Our directors and executive officers and holders of substantially all of our outstanding securities have entered into lock-up agreements with the underwriters pursuant to which they may not, with limited exceptions, for a period of 180 days from the date of this prospectus, offer, sell or otherwise transfer or dispose of any of our securities, without the prior written consent of J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC and BofA Securities, Inc. The underwriters may permit our officers, directors and other securityholders who are subject to the lock-up agreements to sell shares prior to the expiration of the lock-up agreements at any time in their sole discretion. See "Underwriting." Sales of these shares, or perceptions that they will be sold, could cause the trading price of our common stock to decline. After the lock-up agreements expire, up to an additional 97,392,968 shares of common stock will be eligible for sale in the public market, of which 43,601,238 shares are held by directors, executive officers and other affiliates and will be subject to volume limitations under Rule 144 under the Securities Act.

In addition, as of March 31, 2021, 10,030,681 shares of common stock that are subject to outstanding options under our employee benefit plans will become eligible for sale in the public market to the extent permitted by the provisions of various vesting schedules, the lock-up agreements and Rule 144 and Rule 701 under the Securities Act. If these additional shares of common stock are sold, or if it is perceived that they will be sold, in the public market, the trading price of our common stock could decline.

After this offering, the holders of 71,263,685 shares of our outstanding common stock, or approximately 61.4% of our total outstanding common stock based on shares outstanding as of March 31, 2021, will be entitled to rights with respect to the registration of their shares under the Securities Act, subject to vesting and the 180-day

lock-up agreements described above. See “Description of capital stock—Registration rights.” Registration of these shares under the Securities Act would result in the shares becoming freely tradable without restriction under the Securities Act, except for shares held by affiliates, as defined in Rule 144 under the Securities Act. Any sales of securities by these stockholders could have a material adverse effect on the trading price of our common stock.

We are an emerging growth company and a smaller reporting company, and the reduced disclosure requirements applicable to emerging growth companies and smaller reporting companies may make our common stock less attractive to investors.

We are an emerging growth company, as defined in the Jumpstart Our Business Startups Act (JOBS ACT), and may remain an emerging growth company until the last day of the fiscal year following the fifth anniversary of the completion of this offering. However, if certain events occur prior to the end of such five-year period, including if we become a large accelerated filer, as defined under the Exchange Act, our annual gross revenue exceed \$1.07 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced “Management’s discussion and analysis of financial condition and results of operations” disclosure;
- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements, unless the SEC determines the new rules are necessary for protecting the public;
- reduced disclosure obligations regarding executive compensation; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

We have taken advantage of reduced reporting burdens in this prospectus. In particular, in this prospectus, we have provided only two years of audited consolidated financial statements and have not included all of the executive compensation related information that would be required if we were not an emerging growth company. We cannot predict whether investors will find our common stock less attractive if we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be reduced or more volatile. In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of these accounting standards until they would otherwise apply to private companies. We have elected to avail ourselves of this exemption and, therefore, we will not be subject to the same new or revised accounting standards as other public companies that are not emerging growth companies.

We are also a smaller reporting company as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of

certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as (i) our voting and non-voting common stock held by non-affiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter, or (ii) our annual revenue is less than \$100.0 million during the most recently completed fiscal year and the market value of our voting and non-voting common stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

Provisions in our charter documents and under Delaware law could discourage a takeover that stockholders may consider favorable and may lead to entrenchment of management.

Our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect immediately prior to the consummation of this offering will contain provisions that could significantly reduce the value of our shares to a potential acquiror or delay or prevent changes in control or changes in our management without the consent of our board of directors. The provisions in our charter documents will include the following:

- a classified board of directors with three-year staggered terms, which may delay the ability of stockholders to change the membership of a majority of our board of directors;
- no cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;
- the exclusive right of our board of directors, unless the board of directors grants such right to the stockholders, to elect a director to fill a vacancy created by the expansion of the board of directors or the resignation, death or removal of a director, which prevents stockholders from being able to fill vacancies on our board of directors;
- the required approval of at least 66-2/3% of the shares entitled to vote to remove a director for cause, and the prohibition on removal of directors without cause;
- the ability of our board of directors to authorize the issuance of shares of preferred stock and to determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval, which could be used to significantly dilute the ownership of a hostile acquiror;
- the ability of our board of directors to alter our amended and restated bylaws without obtaining stockholder approval;
- the required approval of at least 66-2/3% of the shares entitled to vote to adopt, amend or repeal our amended and restated bylaws or repeal the provisions of our amended and restated certificate of incorporation regarding the election and removal of directors;
- a prohibition on stockholder action by written consent, which forces stockholder action to be taken at an annual or special meeting of our stockholders;
- an exclusive forum provision providing that the Court of Chancery of the State of Delaware will be the exclusive forum for certain actions and proceedings;
- the requirement that a special meeting of stockholders may be called only by the board of directors, which may delay the ability of our stockholders to force consideration of a proposal or to take action, including the removal of directors; and
- advance notice procedures that stockholders must comply with in order to nominate candidates to our board of directors or to propose matters to be acted upon at a stockholders' meeting, which may discourage or

deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of us.

We are also subject to the anti-takeover provisions contained in Section 203 of the Delaware General Corporation Law. Under Section 203, a corporation may not, in general, engage in a business combination with any holder of 15% or more of its capital stock unless the holder has held the stock for three years or, among other exceptions, the board of directors has approved the transaction.

Our current amended and restated certificate of incorporation provides, and our amended and restated certificate of incorporation will provide, that the Court of Chancery of the State of Delaware will be the exclusive forum for substantially all disputes between us and our stockholders and that the federal district courts shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees or the underwriters or any offering giving rise to such claim.

Our current amended and restated certificate of incorporation provides, and our amended and restated certificate of incorporation that will be in effect immediately prior to the consummation of this offering will provide, that the Court of Chancery of the State of Delaware is the exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a breach of fiduciary duty, any action asserting a claim against us arising pursuant to the Delaware General Corporation Law, our amended and restated certificate of incorporation or our amended and restated bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine, provided that this provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act. Furthermore, our amended and restated certificate of incorporation will also provide that unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act, including all causes of action asserted against any defendant named in such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering. These choice of forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees, which may discourage such lawsuits against us and our directors, officers and other employees and result in increased costs for investors to bring a claim. By agreeing to this provision, however, stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder. Furthermore, the enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable. If a court were to find the choice of forum provisions in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could adversely affect our business and financial condition.

Participation in this offering by our existing stockholders and/or their affiliated entities may reduce the public float for our common stock.

To the extent certain of our existing stockholders and their affiliated entities participate in this offering, such purchases would reduce the non-affiliate public float of our shares, meaning the number of shares of our common stock that are not held by officers, directors and controlling stockholders. A reduction in the public float could reduce the number of shares that are available to be traded at any given time, thereby adversely impacting the liquidity of our common stock and depressing the price at which you may be able to sell shares of common stock purchased in this offering.

General risk factors

We will incur significant increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. We will be subject to the reporting requirements of the Exchange Act, which will require, among other things, that we file with the SEC annual, quarterly and current reports with respect to our business and financial condition. In addition, Sarbanes-Oxley, as well as rules subsequently adopted by the SEC and Nasdaq to implement provisions of Sarbanes-Oxley, impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Further, pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the SEC has adopted additional rules and regulations in these areas, such as mandatory “say on pay” voting requirements that will apply to us when we cease to be an emerging growth company. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate.

We expect the rules and regulations applicable to public companies to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. If these requirements divert the attention of our management and personnel from other business concerns, they could have a material adverse effect on our business, financial condition and results of operations. The increased costs will decrease our net income or increase our net loss, and may require us to reduce costs in other areas of our business or increase the prices of our products or services. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to incur substantial costs to maintain the same or similar coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

We are subject to US and certain foreign export and import controls, sanctions, embargoes, anti-corruption laws and anti-money laundering laws and regulations. We could face criminal liability and other serious consequences for violations, which could harm our business.

We are subject to export control and import laws and regulations, including the US Export Administration Regulations, US Customs regulations, and various economic and trade sanctions regulations administered by the US Treasury Department’s Office of Foreign Assets Controls, and anti-corruption and anti-money laundering laws and regulations, including the US Foreign Corrupt Practices Act of 1977, as amended, the US domestic bribery statute contained in 18 U.S.C. § 201, the US Travel Act, the USA PATRIOT Act and other state and national anti-bribery and anti-money laundering laws in the countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, CROs, contractors and other collaborators and partners from authorizing, promising, offering, providing, soliciting or receiving, directly or indirectly, improper payments or anything else of value to or from recipients in the public or private sector. We may engage third parties for clinical trials outside of the United States, to sell our products abroad once we enter a commercialization phase, and/or to obtain necessary permits, licenses, patent registrations and other regulatory approvals. We have direct or indirect interactions with officials and employees of government agencies or government-affiliated hospitals, universities and other organizations. We can be held liable for the corrupt or other illegal activities of our employees, agents, CROs, contractors and other collaborators and partners, even if we do not explicitly authorize or have actual knowledge of such activities.

[Table of Contents](#)

We are also subject to other US laws and regulations governing export controls, as well as economic sanctions and embargoes on certain countries and persons.

Any violations of the laws and regulations described above may result in substantial civil and criminal fines and penalties, imprisonment, the loss of export or import privileges, debarment, tax reassessments, breach of contract and fraud litigation, reputational harm and other consequences.

We and any of our third-party manufacturers or suppliers may use potent chemical agents and hazardous materials, and any claims relating to improper handling, storage or disposal of these materials could be time-consuming or costly.

We and any of our third-party manufacturers or suppliers and current or potential future collaborators will use biological materials, potent chemical agents and may use hazardous materials, including chemicals and biological agents and compounds that could be dangerous to human health and safety of the environment. Our operations and the operations of our third-party manufacturers and suppliers also produce hazardous waste products. Federal, state and local laws and regulations govern the use, generation, manufacture, storage, handling and disposal of these materials and wastes. Compliance with applicable environmental laws and regulations may be expensive, and current or future environmental laws and regulations may impair our product development efforts. In addition, we cannot eliminate the risk of accidental injury or contamination from these materials or wastes. We do not carry specific biological or hazardous waste insurance coverage, and our property, casualty and general liability insurance policies specifically exclude coverage for damages and fines arising from biological or hazardous waste exposure or contamination. In the event of contamination or injury, we could be held liable for damages or be penalized with fines in an amount exceeding our resources, and our clinical trials or regulatory approvals could be suspended. Although we maintain workers' compensation insurance for certain costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials or other work-related injuries, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for toxic tort claims that may be asserted against us in connection with our storage or disposal of biologic, hazardous or radioactive materials.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations, which have tended to become more stringent over time. These current or future laws and regulations may impair our research, development or production efforts. Failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions or liabilities, which could materially adversely affect our business, financial condition, results of operations and prospects.

Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses.

Our operations could be subject to earthquakes, power shortages, telecommunications failures, water shortages, floods, hurricanes, typhoons, fires, extreme weather conditions, medical epidemics and other natural or manmade disasters or business interruptions, for which we are predominantly self-insured. We rely on third-party manufacturers to produce our product candidates. Our ability to obtain clinical supplies of our product candidates could be disrupted if the operations of these suppliers were affected by a man-made or natural disaster or other business interruption. In addition, our corporate headquarters is located in San Diego, California near major earthquake faults and fire zones, and the ultimate impact on us of being located near major earthquake faults and fire zones and being consolidated in a certain geographical area is unknown. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses.

Unstable market and economic conditions may have serious adverse consequences on our business, financial condition and stock price.

From time to time, the global credit and financial markets have experienced extreme volatility and disruptions, including severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates and uncertainty about economic stability. There can be no assurance that future deterioration in credit and financial markets and confidence in economic conditions will not occur. Our general business strategy may be adversely affected by any such economic downturn, volatile business environment or continued unpredictable and unstable market conditions. If the current equity and credit markets deteriorate, it may make any necessary debt or equity financing more difficult, more costly and more dilutive. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and stock price and could require us to delay or abandon clinical development plans. In addition, there is a risk that one or more of our current service providers, manufacturers and other partners may not survive an economic downturn, which could directly affect our ability to attain our operating goals on schedule and on budget.

Changes in US tax law may materially adversely affect our financial condition, results of operations and cash flows.

Changes in laws and policy relating to taxes may have an adverse effect on our financial condition, results of operations and cash flows. For example, the Tax Act significantly changed the US federal income taxation of US corporations. The Tax Act remains unclear in various respects and has been, and may continue to be, the subject of amendments and technical corrections, as well as interpretations and implementing regulations by the Treasury and Internal Revenue Service (IRS), which have lessened or increased certain adverse impacts of the Tax Act and may continue to do so in the future. In addition, it is unclear how these US federal income tax changes will affect state and local taxation, which often uses federal taxable income as a starting point for computing state and local tax liabilities. On March 27, 2020, the CARES Act was signed into law to address the COVID-19 crisis. The CARES Act is an approximately \$2 trillion emergency economic stimulus package that includes numerous US federal income tax provisions, including the modification of: (i) NOL rules (as discussed above), (ii) the alternative minimum tax refund, and (iii) business interest deduction limitations under Section 163(j) of the Code. We continue to work with our tax advisors and auditors to determine the full impact the Tax Act and the CARES Act will have on us. We urge our investors to consult with their legal and tax advisors with respect to any changes in tax law and the potential tax consequences of investing in our common stock.

If securities or industry analysts do not publish research or reports or publish unfavorable research or reports about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us, our business, our market or our competitors. We do not currently have and may never obtain research coverage by securities and industry analysts. If no securities or industry analysts commence coverage of our company, the trading price for our stock would be negatively impacted. In the event we obtain securities or industry analyst coverage, if one or more of the analysts who covers us downgrades our stock, our stock price would likely decline. If one or more of these analysts ceases to cover us or fails to regularly publish reports on us, interest in our stock could decrease, which could cause our stock price or trading volume to decline.

If we fail to maintain proper and effective internal control over financial reporting, our ability to produce accurate and timely financial statements could be impaired, investors may lose confidence in our financial reporting and the trading price of our common stock may decline.

Pursuant to Section 404 of Sarbanes-Oxley, our management will be required to report upon the effectiveness of our internal control over financial reporting beginning with the annual report for our fiscal year ending

[Table of Contents](#)

December 31, 2022. When we lose our status as an “emerging growth company” and reach an accelerated filer threshold, our independent registered public accounting firm will be required to attest to the effectiveness of our internal control over financial reporting. The rules governing the standards that must be met for our management to assess our internal control over financial reporting are complex and require significant documentation, testing and possible remediation. To comply with the requirements of being a reporting company under the Exchange Act, we may need to upgrade our information technology systems; implement additional financial and management controls, reporting systems and procedures; and hire additional accounting and finance staff. If we or, if required, our auditors are unable to conclude that our internal control over financial reporting is effective, investors may lose confidence in our financial reporting and the trading price of our common stock may decline.

We cannot assure you that there will not be material weaknesses or significant deficiencies in our internal control over financial reporting in the future. Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition, results of operations or cash flows. If we are unable to conclude that our internal control over financial reporting is effective, or if our independent registered public accounting firm determines we have a material weakness or significant deficiency in our internal control over financial reporting once that firm begins its Section 404 reviews, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by Nasdaq, the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal control over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Upon the closing of this offering, we will become subject to the periodic reporting requirements of the Exchange Act. We designed our disclosure controls and procedures to reasonably assure that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the facts that judgments in decision-making can be faulty and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

We could be subject to securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biotechnology and biopharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of our management's attention and resources, which could harm our business.

Special note regarding forward-looking statements

This prospectus contains forward-looking statements. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations and financial position, business strategy, research and development plans, the anticipated timing, costs, design and conduct of our ongoing and planned preclinical studies and planned clinical trials for our product candidates, the timing and likelihood of regulatory filings and approvals for our product candidates, our ability to commercialize our product candidates, if approved, the impact of the COVID-19 pandemic on our business, the pricing and reimbursement of our product candidates, if approved, the potential to develop future product candidates, the potential benefits of strategic collaborations and our intent to enter into any strategic arrangements, the timing and likelihood of success, plans and objectives of management for future operations, and future results of anticipated product development efforts, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “may,” “will,” “should,” “expect,” “plan,” “anticipate,” “could,” “intend,” “target,” “project,” “contemplates,” “believes,” “estimates,” “predicts,” “potential” or “continue” or the negative of these terms or other similar expressions. The forward-looking statements in this prospectus are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this prospectus and are subject to a number of risks, uncertainties and assumptions described under the sections titled “Risk factors” and “Management’s discussion and analysis of financial condition and results of operations” and elsewhere in this prospectus. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. Except as required by applicable law, we undertake no obligation to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise. You should, however, review the factors and risks we describe in the reports we will file from time to time with the SEC after the date of this prospectus. See the section titled “Where you can find more information.”

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and you are cautioned not to rely unduly upon them.

Market and industry data

We obtained the industry, market and competitive position data used throughout this prospectus from our own internal estimates and research, as well as from independent market research, industry and general publications and surveys, governmental agencies and publicly available information in addition to research, surveys and studies conducted by third parties. Internal estimates are derived from publicly available information released by industry analysts and third-party sources, our internal research and our industry experience, and are based on assumptions made by us based on such data and our knowledge of our industry and market, which we believe to be reasonable. In some cases, we do not expressly refer to the sources from which this data is derived. In that regard, when we refer to one or more sources of this type of data in any paragraph, you should assume that other data of this type appearing in the same paragraph is derived from the same sources, unless otherwise expressly stated or the context otherwise requires. In addition, while we believe the industry, market and competitive position data included in this prospectus is reliable and based on reasonable assumptions, such data involve risks and uncertainties and are subject to change based on various factors, including those discussed in the section titled "Risk factors." These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties or by us.

Use of proceeds

We estimate that the net proceeds to us from this offering will be approximately \$275.8 million (or approximately \$317.7 million if the underwriters exercise in full their option to purchase additional shares), based on the initial public offering price of \$16.00 per share, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to obtain additional capital to support our operations, to create a public market for our common stock and to facilitate our future access to the public equity markets. We currently intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and investments, as follows:

- approximately \$90.0 million to \$100.0 million to fund the clinical development of ERAS-007 in our Phase 1b/2 HERKULES series of clinical trials, including through data readout(s) for one or multiple of such HERKULES trials;
- approximately \$45.0 million to \$50.0 million to fund the clinical development of ERAS-601, including through a data readout for the FLAGSHP-1 Phase 1 trial;
- approximately \$75.0 million to \$90.0 million to fund the ongoing discovery and development of our other current RAS/MAPK pathway-focused pipeline programs, including to advance one or multiple product candidate(s) into the clinic; and
- the remainder for working capital and general corporate purposes.

We may also use a portion of the remaining net proceeds and our existing cash, cash equivalents and investments to in-license, acquire, or invest in complementary businesses, technologies, products or assets. However, we have no current commitments or obligations to do so.

We believe, based on our current operating plan, that the net proceeds from this offering together with our existing cash, cash equivalents and investments, will be sufficient to fund our operations for at least the next 24 months from the date of this prospectus. We have based these estimates on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect. The net proceeds from this offering, together with our existing cash, cash equivalents and investments, will not be sufficient to fund any of our product candidates through regulatory approval, and we anticipate needing to raise additional capital to complete the development of and commercialize our product candidates. Our expected use of proceeds from this offering described above represents our current intentions based on our present plans and business condition. We cannot predict with certainty all of the particular uses of the net proceeds from this offering or the actual amounts that we will spend on the uses set forth above. The net proceeds from this offering, together with our cash, cash equivalents and investments, will not be sufficient for us to fund all of our product candidates through regulatory approval, and we will need to raise additional capital to complete the development and commercialization of each of our product candidates.

The amounts and timing of our actual expenditures will depend on numerous factors, including the time and cost necessary to conduct our ongoing and planned preclinical studies and planned clinical trials, the results of such studies and trials, and other factors described in the section titled "Risk factors," as well as the amount of cash used in our operations and any unforeseen cash needs. Therefore, our actual expenditures may differ materially from the estimates described above. We may find it necessary or advisable to use the net proceeds for other purposes, and we will have broad discretion in the application of the net proceeds.

Pending the uses described above, we plan to invest the net proceeds from this offering in short- and intermediate-term, investment grade interest-bearing instruments.

Dividend policy

We have never declared or paid any cash dividends on our capital stock. We intend to retain future earnings, if any, to finance the operation of our business and do not anticipate paying any cash dividends in the foreseeable future. Any future determination related to dividend policy will be made at the discretion of our board of directors after considering our financial condition, results of operations, capital requirements, business prospects and other factors the board of directors deems relevant, and subject to the restrictions contained in any future financing instruments.

Capitalization

The following table sets forth our cash, cash equivalents and investments and capitalization as of March 31, 2021:

- on an actual basis;
- on a pro forma basis to reflect (i) the automatic conversion of all outstanding shares of our convertible preferred stock into 71,263,685 shares of our common stock and the related reclassification of the carrying value of the convertible preferred stock to permanent equity immediately prior to the closing of this offering and (ii) the filing and effectiveness of our amended and restated certificate of incorporation immediately prior to the closing of this offering; and
- on a pro forma as adjusted basis to give further effect to our issuance and sale of 18,750,000 shares of our common stock in this offering at the initial public offering price of \$16.00 per share, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this information in conjunction with our consolidated financial statements and related notes included in this prospectus and the section titled "Management's discussion and analysis of financial condition and results of operations" and other financial information contained in this prospectus.

(in thousands, except share and par value data)	As of March 31, 2021		
	Actual	Pro forma (unaudited)	Pro forma as adjusted
Cash, cash equivalents and investments	\$ 217,340	\$ 217,340	\$ 493,140
Convertible preferred stock, \$0.0001 par value; 97,622,409 shares authorized, 85,516,454 shares issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted	340,798	—	—
Stockholders' (deficit) equity:			
Preferred stock, \$0.0001 par value; no shares authorized, issued and outstanding, actual; 80,000,000 shares authorized and no shares issued and outstanding, pro forma and pro forma as adjusted	—	—	—
Common stock, \$0.0001 par value; 156,000,000 shares authorized, 26,129,283 shares issued and 22,875,024 outstanding, excluding 3,254,259 shares subject to forfeiture or a right of repurchase, actual; 156,000,000 shares authorized, 97,392,968 shares issued and 94,138,709 outstanding, excluding 3,254,259 shares subject to forfeiture or a right of repurchase, pro forma; 800,000,000 shares authorized, 116,142,968 shares issued and 112,888,709 shares outstanding, excluding 3,254,259 shares subject to forfeiture or a right of repurchase, pro forma as adjusted	3	10	12
Additional paid-in capital	4,156	344,947	620,745
Accumulated other comprehensive income	1	1	1
Accumulated deficit	(133,419)	(133,419)	(133,419)
Total stockholders' (deficit) equity	(129,259)	211,539	487,339
Total capitalization	\$ 211,539	\$ 211,539	\$ 487,339

If the underwriters' option to purchase additional shares is exercised in full, our pro forma as adjusted cash, cash equivalents and investments, additional paid-in capital, total stockholders' (deficit) equity, and total capitalization as of March 31, 2021, would be \$535.0 million, \$662.6 million, \$529.2 million, and \$529.2 million, respectively.

[Table of Contents](#)

The number of shares of our common stock issued and outstanding, pro forma and pro forma as adjusted, in the table above is based on 97,392,968 shares of our common stock outstanding as of March 31, 2021, including 3,254,259 shares subject to forfeiture or our right of repurchase, after giving effect to the automatic conversion of all outstanding shares of our convertible preferred stock into 71,263,685 shares of our common stock immediately prior to the closing of this offering, and excludes:

- 10,030,681 shares of common stock issuable upon the exercise of outstanding stock options as of March 31, 2021, with a weighted-average exercise price of \$1.84 per share;
- 3,729,154 shares of common stock issuable upon the exercise of stock options granted after March 31, 2021, with a weighted-average exercise price of \$6.57 per share;
- 15,150,000 shares of common stock reserved for future issuance under the 2021 Plan, which became effective in connection with this offering (which number does not include any potential evergreen increases pursuant to the terms of the 2021 Plan);
- 1,260,000 shares of common stock reserved for future issuance under the ESPP, which became effective in connection with this offering (which number does not include any potential evergreen increases pursuant to the terms of the ESPP);
- 944,945 shares of common stock issued to the The Regents of the University of California, San Francisco in May 2021; and
- 1,093,557 shares of common stock issued to the Erasca Foundation on the effective date of the registration statement for this offering.

Dilution

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the initial public offering price per share and the pro forma as adjusted net tangible book value per share of our common stock after this offering.

As of March 31, 2021, our historical net tangible book value (deficit) was \$(129.3) million, or \$(4.95) per share of our common stock, based on 26,129,283 shares of our common stock issued and outstanding as of such date, including 3,254,259 shares subject to forfeiture or our right of repurchase as of such date. Our historical net tangible book value per share represents total tangible assets less total liabilities and convertible preferred stock, divided by the number of shares of common stock outstanding at March 31, 2021.

On a pro forma basis, after giving effect to the automatic conversion of all outstanding shares of our convertible preferred stock into 71,263,685 shares of our common stock and the related reclassification of the carrying value of the convertible preferred stock to permanent equity immediately prior to the closing of this offering, our pro forma net tangible book value as of March 31, 2021 would have been approximately \$211.5 million, or approximately \$2.17 per share of our common stock.

After giving further effect to the sale of 18,750,000 shares of common stock in this offering at the initial public offering price of \$16.00 per share, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of March 31, 2021 would have been approximately \$487.3 million, or approximately \$4.20 per share. This amount represents an immediate increase in pro forma net tangible book value of approximately \$2.02 per share to our existing stockholders and an immediate dilution in pro forma net tangible book value of approximately \$11.80 per share to new investors purchasing shares of common stock in this offering.

Dilution per share to new investors is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the initial public offering price per share paid by new investors. The following table illustrates this dilution (without giving effect to any exercise by the underwriters of their option to purchase additional shares):

Initial public offering price per share	\$16.00
Historical net tangible book value (deficit) per share as of March 31, 2021	\$(4.95)
Pro forma increase in historical net tangible book value per share as of March 31, 2021 attributable to the pro forma adjustments described above	7.12
Pro forma net tangible book value per share as of March 31, 2021	2.17
Increase in pro forma net tangible book value per share attributable to new investors participating in this offering	2.02
Pro forma as adjusted net tangible book value per share after this offering	4.20
Dilution per share to new investors participating in this offering	\$11.80

If the underwriters exercise their option to purchase additional shares of our common stock in full in this offering, the pro forma as adjusted net tangible book value after the offering would be approximately \$4.45 per share, the increase in pro forma as adjusted net tangible book value per share to existing stockholders would be approximately \$0.25 per share and the dilution per share to new investors would be \$11.55 per share.

The following table summarizes on the pro forma as adjusted basis described above, as of March 31, 2021, the differences between the number of shares purchased from us, the total consideration paid to us in cash and the average price per share paid by existing stockholders for shares issued prior to this offering and the price to be

[Table of Contents](#)

paid by new investors in this offering. The calculations below are based on the initial public offering price of \$16.00 per share, before deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

	Shares purchased		Total consideration		Weighted-average price per share
	Number	Percent	Amount	Percent	
Existing stockholders before this offering ⁽¹⁾	97,392,968	83.9%	\$324,577,421	52.0%	\$ 3.33
New investors participating in this offering	18,750,000	16.1%	300,000,000	48.0%	\$ 16.00
Total	116,142,968	100.0%	\$624,577,421	100.0%	

(1) The presentation in this table regarding ownership by existing stockholders does not give effect to any purchases that existing stockholders may make through our directed share program or otherwise purchase in this offering.

If the underwriters exercise their option to purchase additional shares of our common stock in full:

- the percentage of shares of common stock held by existing stockholders before this offering will decrease to approximately 81.9% of the total number of shares of our common stock outstanding after this offering; and
- the number of shares held by new investors participating in this offering will increase to 21,562,500, or approximately 18.1% of the total number of shares of our common stock outstanding after this offering.

The foregoing tables and calculations above (other than the historical net tangible book value calculations) are based on 97,392,968 shares of our common stock outstanding as of March 31, 2021, including 3,254,259 shares subject to forfeiture or our right of repurchase, after giving effect to the automatic conversion of all outstanding shares of our convertible preferred stock into 71,263,685 shares of our common stock immediately prior to the closing of this offering, and exclude:

- 10,030,681 shares of common stock issuable upon the exercise of outstanding stock options as of March 31, 2021, with a weighted-average exercise price of \$1.84 per share;
- 3,729,154 shares of common stock issuable upon the exercise of stock options granted after March 31, 2021, with a weighted-average exercise price of \$6.57 per share;
- 15,150,000 shares of common stock reserved for future issuance under the 2021 Plan, which became effective in connection with this offering (which number does not include any potential evergreen increases pursuant to the terms of the 2021 Plan);
- 1,260,000 shares of common stock reserved for future issuance under the ESPP, which became effective in connection with this offering (which number does not include any potential evergreen increases pursuant to the terms of the ESPP);
- 944,945 shares of common stock issued to the The Regents of the University of California, San Francisco in May 2021; and
- 1,093,557 shares of common stock issued to the Erasca Foundation on the effective date of the registration statement for this offering.

To the extent any outstanding options or other rights are exercised, or we issue additional equity or convertible securities in the future, there will be further dilution to new investors.

Selected consolidated financial data

The following tables set forth our selected historical consolidated financial data as of, and for the periods ended on, the dates indicated. We have derived the selected consolidated statements of operations data for the years ended December 31, 2019 and 2020 and the selected consolidated balance sheet data as of December 31, 2019 and 2020 from our audited consolidated financial statements included elsewhere in this prospectus. We have derived the selected consolidated statements of operations data for the three months ended March 31, 2020 and 2021 and the selected consolidated balance sheet data as of March 31, 2021 from our unaudited consolidated financial statements included elsewhere in this prospectus. Our unaudited consolidated financial statements have been prepared on a basis consistent with our audited consolidated financial statements included elsewhere in this prospectus and, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, necessary to fairly state our results of operations for the three months ended March 31, 2020 and 2021 and our financial position as of March 31, 2021. You should read these data together with our consolidated financial statements and related notes included elsewhere in this prospectus and the section titled "Management's discussion and analysis of financial condition and results of operations." Our historical results for any prior period are not necessarily indicative of our future results, and our results for any interim period are not necessarily indicative of results that should be expected for any full year.

(in thousands, except share and per share data)	Year ended December 31,		Three months ended March 31,	
	2019	2020	2020	2021
	(unaudited)			
Statements of operations data:				
Operating expenses:				
Research and development	\$ 9,618	\$ 29,550	\$ 4,554	\$ 12,245
In-process research and development	—	71,745	17,670	3,680
General and administrative	3,676	7,957	1,611	3,682
Total operating expenses	13,294	109,252	23,835	19,607
Loss from operations	(13,294)	(109,252)	(23,835)	(19,607)
Other income (expense), net:				
Interest income	1,303	336	185	30
Other expense	(49)	(102)	(8)	(55)
Change in fair value of preferred stock purchase right liability	—	7,358	—	1,615
Total other income (expense), net	1,254	7,592	177	1,590
Net loss	\$ (12,040)	\$ (101,660)	\$ (23,658)	\$ (18,017)
Net loss per share, basic and diluted ⁽¹⁾	\$ (0.61)	\$ (4.83)	\$ (1.15)	\$ (0.81)
Weighted-average shares of common stock outstanding, basic and diluted ⁽¹⁾	19,826,574	21,037,540	20,631,590	22,233,422
Pro forma net loss per share, basic and diluted (unaudited) ⁽²⁾		\$ (1.59)		\$ (0.22)
Pro forma weighted-average shares of common stock outstanding, basic and diluted (unaudited) ⁽²⁾		68,574,717		90,694,297

(1) See Note 2 to our consolidated financial statements included elsewhere in this prospectus for an explanation of the method used to calculate historical net loss per share, basic and diluted, and the weighted-average number of shares of common stock used in the computation of the per share amounts.

[Table of Contents](#)

- (2) Unaudited pro forma net loss per share, basic and diluted, attributable to common stockholders, is calculated giving effect to the conversion of the convertible preferred stock into shares of common stock. Unaudited pro forma net loss per share attributable to common stockholders does not include the shares expected to be sold and related proceeds to be received in this offering. Unaudited pro forma net loss per share attributable to common stockholders for the year ended December 31, 2020 and the three months ended March 31, 2021 was calculated using the weighted-average number of shares of common stock outstanding, including the pro forma effect of the conversion of all outstanding shares of our convertible preferred stock into shares of our common stock, as if such conversion had occurred at the beginning of the period, or their issuance dates, if later, and an adjustment to the net loss in the pro forma basic and diluted net loss per share calculation to remove gains from the remeasurement of the preferred stock purchase right liability.

(in thousands)	As of December 31,		As of March 31,
	2019	2020	2021
			(unaudited)
Balance Sheet Data:			
Cash, cash equivalents and investments	\$ 50,369	\$ 118,701	\$ 217,340
Working capital ⁽¹⁾	48,371	106,310	203,130
Total assets	55,512	124,825	224,628
Convertible preferred stock	63,403	221,405	340,798
Accumulated deficit	(13,742)	(115,402)	(133,419)
Total stockholders' deficit	(13,604)	(113,984)	(129,259)

- (1) We define working capital as current assets less current liabilities. See our consolidated financial statements included elsewhere in this prospectus for further details regarding our current assets and current liabilities.

Management's discussion and analysis of financial condition and results of operations

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and related notes included elsewhere in this prospectus. Some of the information contained in this discussion and analysis are set forth elsewhere in this prospectus, including information with respect to our plans and strategy for our business and related financing, and includes forward-looking statements that involve risks and uncertainties. As a result of many factors, including those factors set forth in the section titled "Risk factors," our actual results could differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis. See also the section titled "Special note regarding forward-looking statements."

Overview

We are a clinical-stage precision oncology company singularly focused on discovering, developing, and commercializing therapies for patients with RAS/MAPK pathway-driven cancers. Molecular alterations in RAS, the most frequently mutated oncogene, and the MAPK pathway, one of the most frequently altered signaling pathways in cancer, account for approximately 5.5 million new cases of cancer worldwide per year. Our company was co-founded by leading pioneers in precision oncology and RAS targeting to create novel therapies and combination regimens designed to comprehensively shut down the RAS/MAPK pathway for the treatment of cancer. We have assembled what we believe to be the deepest, wholly-owned or controlled RAS/MAPK pathway-focused pipeline in the industry, comprising 11 modality-agnostic programs aligned with our three therapeutic strategies of: (1) targeting key upstream and downstream signaling nodes in the RAS/MAPK pathway; (2) targeting RAS directly; and (3) targeting escape routes that emerge in response to treatment. The target breadth and molecular diversity represented in our pipeline enable us to pursue a systematic, data-driven clinical development effort to identify single agent and combination approaches with the goal of prolonging survival in a wide range of patient populations with high unmet needs.

Our modality-agnostic approach aims to allow us to selectively and potently inhibit or degrade critical signaling nodes with small molecule therapeutics, large molecule therapeutics, and protein degraders. Our purpose-built pipeline includes two clinical-stage programs (ERK and SHP2 inhibitors, which together comprise our first, innovative MAPKlamp), two preclinical-stage programs (CNS-penetrant KRAS G12C and EGFR inhibitors), and seven discovery-stage programs targeting other key oncogenic drivers. We expect to have four product candidates in the clinic within the next six quarters, plus an additional IND filing every 12-18 months over the next five years. We believe our world-class team's capabilities and experience, further guided by our scientific advisory board, which includes the world's leading experts in the RAS/MAPK pathway, uniquely position us to achieve our bold mission of erasing cancer.

We do not own or operate, and currently have no plans to establish, any manufacturing facilities. We rely, and expect to continue to rely, on third parties for the manufacture of our product candidates for preclinical and clinical testing, as well as for commercial manufacture if any of our product candidates obtain marketing approval. We are working with our current manufacturers to ensure that we will be able to scale up our manufacturing capabilities to support our clinical plans. We are also in the process of locating and qualifying additional manufacturers to build redundancies into our supply chain. In addition, we rely on third parties to package, label, store, and distribute our product candidates, and we intend to rely on third parties for our commercial products if marketing approval is obtained. We believe that this strategy allows us to maintain a more efficient infrastructure by eliminating the need for us to invest in our own manufacturing facilities, equipment, and personnel while also enabling us to focus our expertise and resources on the design and development of our product candidates.

[Table of Contents](#)

Since our inception in 2018, we have devoted substantially all of our resources to organizing and staffing our company, business planning, raising capital, identifying, acquiring, and in-licensing our product candidates, establishing our intellectual property portfolio, conducting research, preclinical studies and clinical trials, establishing arrangements with third parties for the manufacture of our product candidates and related raw materials, and providing general and administrative support for these operations. We do not have any products approved for sale and have not generated any revenue. As of March 31, 2021, we have raised a total of \$320.4 million to fund our operations, comprised primarily of gross proceeds from the sale and issuance of convertible preferred stock. As of December 31, 2020 and March 31, 2021, we had cash, cash equivalents and investments of \$118.7 million, and \$217.3 million which included net proceeds of \$119.4 million received in January 2021 from the sale of shares of our Series B-2 convertible preferred stock, respectively.

We have incurred significant operating losses since inception. Our net losses were \$12.0 million and \$101.7 million for the years ended December 31, 2019 and 2020, respectively, and \$23.7 million and \$18.0 million for the three months ended March 31, 2020 and 2021, respectively. As of December 31, 2020 and March 31, 2021, we had an accumulated deficit of \$115.4 million and \$133.4 million, respectively. We expect our expenses and operating losses will increase substantially for the foreseeable future, particularly if and as we conduct our ongoing and planned clinical trials and preclinical studies; continue our research and development activities; utilize third parties to manufacture our product candidates and related raw materials; hire additional personnel; acquire, in-license, or develop additional product candidates; expand and protect our intellectual property; and incur additional costs associated with being a public company. If we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing, and distribution. In addition, as our product candidates progress through development and toward commercialization, we will need to make milestone payments to the licensors and other third parties from whom we have in-licensed or acquired our product candidates. Our net losses may fluctuate significantly from quarter-to-quarter and year-to-year, depending on the timing of our clinical trials and preclinical studies and our expenditures on other research and development activities.

Based upon our current operating plans, we believe that the estimated net proceeds from this offering, together with our existing cash, cash equivalents and investments, will be sufficient to fund our operations for at least the next 24 months from the date of this prospectus. We do not expect to generate any revenues from product sales until we successfully complete development and obtain regulatory approval for one or more of our product candidates, which we expect will take a number of years and may never occur. Accordingly, until such time as we can generate significant revenue from sales of our product candidates, if ever, we expect to finance our cash needs through equity offerings, debt financings or other capital sources, including potential collaborations, licenses, and other similar arrangements. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. Our failure to raise capital or enter into such other arrangements when needed would have a negative impact on our financial condition and could force us to delay, limit, reduce, or terminate our research and development programs or other operations, or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

The COVID-19 worldwide pandemic has presented substantial public health and economic challenges and is affecting our employees, patients, physicians and other healthcare providers, communities and business operations, as well as the US and global economies and financial markets. To date, we have not experienced material disruptions in our business operations. However, while it is not possible at this time to estimate the impact that COVID-19 could have on our business in the future, particularly as we advance our product candidates through clinical development, the continued spread of COVID-19 and the measures taken by the governmental authorities, and any future epidemic disease outbreaks, could: disrupt the supply chain and the manufacture or shipment of drug substances and finished drug products for our product candidates for use in

our research, preclinical studies and clinical trials; delay, limit or prevent our employees and CROs from continuing research and development activities; impede our clinical trial initiation and recruitment and the ability of patients to continue in clinical trials, including the risk that participants enrolled in our clinical trials will contract COVID-19 or other epidemic disease while the clinical trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events; impede testing, monitoring, data collection and analysis and other related activities; any of which could delay our preclinical studies and clinical trials and increase our development costs, and have a material adverse effect on our business, financial condition and results of operations. The extent to which the COVID-19 pandemic impacts our results will depend on future developments that are highly uncertain and cannot be predicted, including new information that may emerge concerning the severity of the virus and the actions to contain its impact.

Our acquisition and license agreements

In November 2020, we entered into an Agreement and Plan of Merger and an Amended and Restated License Agreement (the Asana Agreements), pursuant to which we acquired an exclusive, worldwide license to certain intellectual property rights relating to inhibitors of ERK1 and ERK2 owned or controlled by Asana BioSciences, LLC (Asana) to develop and commercialize ERAS-007 and certain other related compounds for all applications.

Under the Asana Agreements, we made an upfront payment of \$20 million and issued 4,000,000 shares of our Series B-2 convertible preferred stock at a price of \$7.50 per share to Asana. We are obligated to make future milestone payments of up to \$90 million upon the achievement of various development and regulatory milestones and to issue 3,888,889 shares of common stock upon the achievement of a development milestone. We are not obligated to pay royalties on the net sales of ERAS-007.

We have entered into additional in-license and acquisition agreements pursuant to which we in-licensed or acquired certain intellectual property rights related to our product candidates and development programs, including license agreements with NiKang Therapeutics, Inc. (NiKang) and Katmai Pharmaceuticals, Inc. (Katmai) under which we were granted certain intellectual property rights related to ERAS-601 and ERAS-801, respectively, and an asset purchase agreement with Emerge Life Sciences, Pte. Ltd. (ELS) under which we acquired certain intellectual property rights related to ERAS-12.

For additional information regarding the Asana Agreements as well as these additional agreements, see the section titled “Business—Our acquisition and license agreements.”

Components of results of operations

Revenue

We do not expect to generate any revenue from the sale of products unless and until such time that our product candidates have advanced through clinical development and regulatory approval, if ever. If we fail to complete preclinical and clinical development of product candidates or obtain regulatory approval for them, our ability to generate future revenues, and our results of operations and financial position would be adversely affected.

Operating expenses

Research and development

Research and development expenses consist of external and internal costs associated with our research and development activities, including our discovery and research efforts and the preclinical and clinical

[Table of Contents](#)

development of our product candidates. Research and development costs are expensed as incurred. Our research and development expenses include:

- external costs, including expenses incurred under arrangements with third parties, such as CROs, contract manufacturers, consultants and our scientific advisors; and
- internal costs, including:
 - employee-related expenses, including salaries, benefits, and stock-based compensation for those individuals involved in research and development efforts;
 - the costs of laboratory supplies and acquiring, developing and manufacturing preclinical study materials; and
 - facilities and depreciation, which include direct and allocated expenses for rent of facilities and depreciation of equipment.

The following table summarizes our research and development expenses incurred for the following periods (in thousands):

	Year ended December 31,		Three months ended March 31,	
	2019	2020	2020	2021
			(unaudited)	
ERAS-007 ⁽¹⁾	\$ —	\$ 17	\$ —	\$ 2,344
ERAS-601	258	9,876	718	3,152
Other discovery and preclinical programs	9,360	19,657	3,836	6,749
Total research and development expenses	\$ 9,618	\$ 29,550	\$ 4,554	\$ 12,245

(1) ERAS-007 was acquired in November 2020.

We expect our research and development expenses to increase substantially for the foreseeable future as we continue to conduct our ongoing research and development activities, conduct clinical trials and advance our preclinical research programs toward clinical development, particularly as more of our product candidates move into later stages of development which typically cost more. The process of conducting clinical trials and preclinical studies necessary to obtain regulatory approval is costly and time-consuming. We may never succeed in achieving marketing approval for any of our product candidates.

The timelines and costs with research and development activities are uncertain, can vary significantly for each product candidate and program and are difficult to predict. We anticipate we will make determinations as to which product candidates and programs to pursue and how much funding to direct to each product candidate and program on an ongoing basis in response to preclinical and clinical results, regulatory developments, ongoing assessments as to each product candidate's and program's commercial potential, and our ability to enter into collaborations, to the extent we determine the resources or expertise of a collaborator would be beneficial for a given product candidate or program. We will need to raise substantial additional capital in the future. In addition, we cannot forecast which product candidates and programs may be subject to future collaborations, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our development plans and capital requirements.

Our development costs may vary significantly based on factors such as:

- the number and scope of preclinical and IND-enabling studies and clinical trials;
- per patient trial costs;
- the number of trials required for approval;

Table of Contents

- the number of sites included in the trials;
- the countries in which the trials are conducted;
- the length of time required to enroll eligible patients;
- the number of patients that participate in the trials;
- the number of doses that patients receive;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring requested by regulatory agencies;
- the duration of patient participation in the trials and follow-up;
- the cost and timing of manufacturing our product candidates;
- the phase of development of our product candidates;
- the efficacy and safety profile of our product candidates;
- the timing, receipt and terms of any approvals from applicable regulatory authorities;
- maintaining a continued acceptable safety profile of our products candidates following approval, if any;
- significant and changing government regulation and regulatory guidance;
- the impact of any interruptions to our operations or to those of the third parties with whom we work due to the ongoing COVID-19 pandemic; and
- the extent to which we establish additional collaboration, license or other arrangements.

In-process research and development

In-process research and development expenses include rights acquired as part of asset acquisitions or in-licenses to develop and commercialize product candidates. Upfront payments that relate to the acquisition of a new drug compound, as well as pre-commercial milestone payments, are immediately expensed as in-process research and development in the period in which they are incurred, provided that the new drug compound did not also include processes or activities that would constitute a "business" as defined under US generally accepted accounting principles (US GAAP), the drug has not achieved regulatory approval for marketing and, absent obtaining such approval, has no established alternative future use.

In-process research and development expenses consist primarily of a \$20.0 million upfront payment and issuance of 4,000,000 shares of our Series B-2 convertible preferred stock at a price of \$7.50 per share to Asana, a \$5.0 million upfront payment and \$11.0 million in development milestones to NiKang, a \$5.7 million upfront payment to Katmai, and a \$2.0 million upfront payment and issuance of 500,000 shares of our common stock at a price of \$3.36 per share to ELS.

General and administrative

General and administrative expenses consist primarily of employee-related expenses, including salaries, benefits and stock-based compensation, for employees in our finance, accounting, legal, information technology, business development and support functions. Other general and administrative expenses include

[Table of Contents](#)

allocated facility and depreciation related costs not otherwise included in research and development expenses and professional fees for auditing, tax, intellectual property and legal services. Costs related to filing and pursuing patent applications are recognized as general and administrative expenses as incurred since recoverability of such expenditures is uncertain.

We expect our general and administrative expenses will increase substantially for the foreseeable future as we continue to increase our general and administrative headcount to support our continued research and development activities and, if any product candidates receive marketing approval, commercialization activities, as well as to support our operations generally. We also expect to incur increased costs associated with operating as a public company. These increased costs will likely include increased expenses related to audit, legal, regulatory and tax services associated with maintaining compliance with exchange listing and SEC requirements, director and officer insurance premiums and investor relations costs associated with operating as a public company.

Other income (expense), net

Interest income

Interest income consists primarily of interest earned on our cash, cash equivalents and investments.

Change in fair value of preferred stock purchase right liability

Our issuance of shares of our Series B-1 convertible preferred stock in April and August 2020 potentially obligated us to issue 13,175,191 shares of our Series B-2 convertible preferred stock at a price of \$7.50 per share in an additional closing to certain purchasers of our Series B-1 convertible preferred stock, upon the achievement of certain milestones set forth in the Series B financing purchase agreement. We determined our obligation to issue these shares of Series B-2 convertible preferred stock represented a freestanding financial instrument that required liability accounting. This freestanding preferred stock purchase right liability for the Series B-2 convertible preferred stock was recorded at fair value upon issuance and was subsequently remeasured to fair value at each reporting date. Changes in the fair value of the preferred stock purchase right liability were recognized in the consolidated statements of operations and comprehensive loss until the obligation for the Series B-2 shares was fulfilled upon the Series B-2 issuance in January 2021.

Results of operations

Comparison of the three months ended March 31, 2020 and 2021

The following table summarizes our results of operations for the three months ended March 31, 2020 and 2021 (in thousands):

	Three months ended March 31,		
	2020	2021 (unaudited)	Change
Operating expenses:			
Research and development	\$ 4,554	\$ 12,245	\$ 7,691
In-process research and development	17,670	3,680	(13,990)
General and administrative	1,611	3,682	2,071
Total operating expenses	23,835	19,607	(4,228)
Loss from operations	(23,835)	(19,607)	4,228
Other income (expense), net	177	1,590	1,413
Net loss	\$ (23,658)	\$ (18,017)	\$ 5,641

Research and development expenses

Research and development expenses were \$4.6 million for the three months ended March 31, 2020 compared to \$12.2 million for the three months ended March 31, 2021. The increase of \$7.7 million was primarily driven by a \$3.0 million increase in outsourced services and consulting, a \$2.7 million increase in personnel costs due to increased headcount to support increased development activities, and a \$1.8 million increase in expenses incurred in connection with clinical trials and preclinical studies.

In-process research and development expenses

In-process research and development expenses were \$17.7 million for the three months ended March 31, 2020, compared to \$3.7 million for the three months ended March 31, 2021. In-process research and development expenses for the three months ended March 31, 2020 related to a \$5.0 million upfront payment and a \$7.0 million milestone payment in connection with the in-license agreement with NiKang and a \$5.7 million upfront payment in connection with the in-license agreement with Katmai. In-process research and development expenses for the three months ended March 31, 2021 related to a \$2.0 million upfront payment and issuance of 500,000 shares of our common stock at a price of \$3.36 per share or a total fair value of \$1.7 million in connection with the ELS asset acquisition.

General and administrative expenses

General and administrative expenses were \$1.6 million for the three months ended March 31, 2020 compared to \$3.7 million for the three months ended March 31, 2021. The increase of \$2.1 million was primarily driven by increases of \$1.3 million in personnel costs and \$0.3 million in legal costs.

Other income (expense), net

Other income (expense), net was \$0.2 million for the three months ended March 31, 2020 compared to \$1.6 million for the three months ended March 31, 2021. The increase of \$1.4 million was primarily related to the change in fair value of the preferred stock purchase right liability of \$1.6 million, partially offset by a decrease of \$0.2 million related to interest and accretion income earned on our cash, cash equivalents and investments in 2021.

Comparison of the years ended December 31, 2019 and 2020

The following table summarizes our results of operations for the years ended December 31, 2019 and 2020 (in thousands):

	Year ended December 31,		
	2019	2020	Change
Operating expenses:			
Research and development	\$ 9,618	\$ 29,550	\$ 19,932
In-process research and development	—	71,745	71,745
General and administrative	3,676	7,957	4,281
Total operating expenses	13,294	109,252	95,958
Loss from operations	(13,294)	(109,252)	(95,958)
Other income (expense), net	1,254	7,592	6,338
Net loss	\$(12,040)	\$(101,660)	\$(89,620)

Research and development expenses

Research and development expenses were \$9.6 million for the year ended December 31, 2019 compared to \$29.6 million for the year ended December 31, 2020. The increase of \$19.9 million was primarily driven by a \$7.9 million increase in expenses incurred in connection with clinical trials and preclinical studies, a \$7.2 million increase in outsourced services and consulting, and a \$4.3 million increase in personnel costs due to increased headcount to support increased development activities.

In-process research and development expenses

In-process research and development expenses were \$71.7 million for the year ended December 31, 2020, primarily related to the Asana asset acquisition and the in-license agreements with NiKang and Katmai. There were no in-process research and development expenses for the year ended December 31, 2019.

General and administrative expenses

General and administrative expenses were \$3.7 million for the year ended December 31, 2019 compared to \$8.0 million for the year ended December 31, 2020. The increase of \$4.3 million in 2020 was primarily driven by increases of \$3.0 million in personnel costs and \$0.9 million in legal costs.

Other income (expense), net

Other income (expense), net was \$1.3 million for the year ended December 31, 2019 compared to \$7.6 million for the year ended December 31, 2020. The increase of \$6.3 million was primarily related to the change in fair value of the preferred stock purchase right liability of \$7.4 million, partially offset by a decrease of \$1.0 million related to interest and accretion income earned on our cash, cash equivalents and short-term investments in 2020.

Liquidity and capital resources

Sources of liquidity

From our inception through March 31, 2021, we have received aggregate gross proceeds of \$320.4 million from the sale of shares of our convertible preferred stock.

Future capital requirements

As of December 31, 2020 and March 31, 2021, we had cash, cash equivalents and investments of \$118.7 million, and \$217.3 million which included net proceeds of \$119.4 million received in January 2021 from the sale of shares of our Series B-2 convertible preferred stock, respectively. Based upon our current operating plans, we believe that the estimated net proceeds from this offering, together with our existing cash, cash equivalents and investments, will be sufficient to fund our operations for at least the next 24 months from the date of this prospectus. However, our forecast of the period of time through which our financial resources will be adequate to support our operations is a forward-looking statement that involves risks and uncertainties, and actual results could vary materially. We have based this estimate on assumptions that may prove to be wrong, and we could deplete our capital resources sooner than we expect. Additionally, the process of conducting preclinical studies and testing product candidates in clinical trials is costly, and the timing of progress and expenses in these studies and trials is uncertain.

Our future capital requirements are difficult to forecast and will depend on many factors, including but not limited to:

- the type, number, scope, progress, expansions, results, costs and timing of discovery, preclinical studies and clinical trials of our product candidates which we are pursuing or may choose to pursue in the future, including the costs of any third-party products used in our combination clinical trials that are not covered by such third party or other sources;
- the costs and timing of manufacturing for our product candidates, including commercial manufacturing if any product candidate is approved;
- the costs, timing and outcome of regulatory review of our product candidates;
- the costs of obtaining, maintaining and enforcing our patents and other intellectual property rights;
- our efforts to enhance operational systems and hire additional personnel to satisfy our obligations as a public company, including enhanced internal controls over financial reporting;
- the costs associated with hiring additional personnel and consultants as our preclinical and clinical activities increase;
- the timing and amount of the milestone or other payments we must make to the licensors and other third parties from whom we have in-licensed or acquired our product candidates or technologies;
- the costs and timing of establishing or securing sales and marketing capabilities if any product candidate is approved;
- our ability to achieve sufficient market acceptance, coverage and adequate reimbursement from third-party payors and adequate market share and revenue for any approved products;
- patients' willingness to pay out-of-pocket for any approved products in the absence of coverage and/or adequate reimbursement from third-party payors;

[Table of Contents](#)

- any delays and cost increases that result from the COVID-19 pandemic;
- the terms and timing of establishing and maintaining collaborations, licenses and other similar arrangements; and
- costs associated with any products or technologies that we may in-license or acquire.

We have no other committed sources of capital. Until we can generate a sufficient amount of product revenue to finance our cash requirements, if ever, we expect to finance our future cash needs primarily through equity offerings, debt financings or other capital sources, including potential collaborations, licenses and other similar arrangements. However, we may be unable to raise additional funds or enter into such other arrangements when needed on favorable terms or at all. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be or could be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through other collaborations or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our research and development programs or other operations, or grant rights to develop and market product candidates to third parties that we would otherwise prefer to develop and market ourselves.

Cash flows

The following table shows a summary of our cash flows for the periods presented (in thousands):

	<u>Year ended December 31,</u>		<u>Three months ended March 31,</u>	
	<u>2019</u>	<u>2020</u>	<u>2020</u>	<u>2021</u>
			<i>(unaudited)</i>	
Net cash (used in) provided by:				
Operating activities	\$ (10,378)	\$ (32,686)	\$ (5,610)	\$ (15,666)
Investing activities	(20,887)	(71,202)	992	(162)
Financing activities	16,865	139,993	490	120,537
Net (decrease) increase in cash, cash equivalents and restricted cash	\$ (14,400)	\$ 36,105	\$ (4,128)	\$ 104,709

Operating activities

Cash used in operating activities was \$5.6 million during the three months ended March 31, 2020, primarily resulting from a net loss of \$23.7 million, partially reduced by in-process research and development expenses of \$17.7 million, which is reflected in noncash and investing activities, changes in operating assets and liabilities of \$0.2 million, stock-based compensation of \$0.1 million and depreciation expense of \$0.1 million. Net cash provided by changes in operating assets and liabilities consisted primarily of increases in accrued expenses and other liabilities of \$0.5 million, partially offset by a decrease in accounts payable of \$0.3 million.

Cash used in operating activities was \$15.7 million during the three months ended March 31, 2021, primarily resulting from a net loss of \$18.0 million, partially reduced by in-process research and development expenses of \$3.7 million, which is reflected in noncash and investing activities, stock-based compensation expense of \$0.8 million and

[Table of Contents](#)

depreciation expense of \$0.1 million, partially offset by a \$1.6 million change in fair value of the preferred stock purchase right liability and changes in operating assets and liabilities of \$0.7 million. Net cash used in changes in operating assets and liabilities consisted primarily of an increase in prepaid expenses and other assets of \$1.2 million, partially offset by increases in accrued expenses and other liabilities of \$0.5 million.

Cash used in operating activities was \$10.4 million during the year ended December 31, 2019, primarily resulting from a net loss of \$12.0 million, partially reduced by changes in operating assets and liabilities of \$1.7 million. Net cash provided by changes in operating assets and liabilities consisted primarily of increases in accounts payable, accrued expenses and other liabilities of \$1.8 million, partially offset by a \$0.1 million increase in prepaid expenses and other assets.

Cash used in operating activities was \$32.7 million during the year ended December 31, 2020, primarily resulting from a net loss of \$101.7 million, partially reduced by in-process research and development expenses of \$71.7 million, which is reflected in noncash and investing activities, changes in operating assets and liabilities of \$3.3 million, stock-based compensation expense of \$0.8 million and depreciation expense of \$0.5 million, partially offset by a \$7.4 million change in fair value of the preferred stock purchase right liability. Net cash provided by changes in operating assets and liabilities consisted primarily of increases in accrued expenses and other liabilities of \$4.6 million, partially offset by an increase in prepaid expenses and other assets of \$0.9 million and a decrease in accounts payable of \$0.4 million.

Investing activities

Net cash provided by investing activities was \$1.0 million during the three months ended March 31, 2020 as compared to cash used in investing activities of \$0.2 million during the three months ended March 31, 2021. The increase in cash used in investing activities of \$1.2 million was primarily the result of additional purchases of \$22.0 million of investments, partially offset by an increase of \$20.4 million in maturities of investments and a \$0.4 million decrease in purchases of property and equipment.

Net cash used in investing activities was \$20.9 million during the year ended December 31, 2019 as compared to \$71.2 million during the year ended December 31, 2020. The increase of \$50.3 million was primarily the result of additional purchases of \$40.3 million of short-term investments, the upfront payment of \$20.0 million in connection with the Asana asset acquisition, the upfront and milestone payments of \$12.0 million in connection with the in-licensing deal with NiKang, the upfront payment of \$5.7 million in connection with the in-licensing deal with Katmai and the additional purchases of \$0.4 million of property and equipment, partially offset by an increase of \$28.1 million in maturities of short-term investments.

Financing activities

Net cash provided by financing activities was \$0.5 million during the three months ended March 31, 2020 as compared to \$120.5 million during the three months ended March 31, 2021. During the three months ended March 31, 2020, we received \$0.5 million from the exercise of stock options. During the three months ended March 31, 2021, we received \$119.4 million from the sale of shares of our Series B-2 convertible preferred stock, net of issuance costs, and \$1.1 million from the exercise of stock options.

Net cash provided by financing activities was \$16.9 million during the year ended December 31, 2019 as compared to \$140.0 million during the year ended December 31, 2020. During 2019, we received \$16.9 million from the sale of shares of our Series A convertible preferred stock, net of issuance costs. During 2020, we received \$137.0 million from the sale of shares of our Series B-1 convertible preferred stock, net of issuance costs, and \$3.0 million from the exercise of stock options, net of repurchases.

Contractual obligations and commitments

The following table summarizes our contractual obligations and commitments at December 31, 2020 (in thousands):

	Payments due by period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
Operating lease obligations ⁽¹⁾	\$42,855	\$ 1,073	\$ 5,752	\$ 8,442	\$ 27,588
Total	\$42,855	\$ 1,073	\$ 5,752	\$ 8,442	\$ 27,588

(1) Represents monthly payments under our operating lease obligations which relate to our corporate headquarters in San Diego, California, and an equipment lease. We lease approximately 16,153 square feet of office and laboratory space under an operating lease that expires in May 2024. Additionally, in September 2020, we entered into a lease agreement for approximately 59,407 square feet of office and laboratory space which has a target commencement date of August 2021 (the 2020 Lease). Monthly rent payments begin in January 2023 for nine years related to this lease.

In March 2021, we entered into the first amendment to the 2020 Lease to expand the rented premises by 18,421 square feet for additional consideration of \$96,000 per month with payments beginning in January 2023.

We enter into contracts in the normal course of business for contract research services, contract manufacturing services, professional services and other services and products for operating purposes. These contracts generally provide for termination after a notice period, and, therefore, are cancelable contracts and not included in the table above.

The table above does not include any additional potential development and sales milestone payments and royalty payments we may be required to make under license and acquisition agreements we have entered into pursuant to which we have in-licensed and acquired certain intellectual property. See the section titled "Business—Our acquisition and license agreements" for additional information. The timing of when these additional payments will actually be made is uncertain as the payments are contingent upon the completion of future activities.

Off-balance sheet arrangements

We did not have during any of the periods presented, and do not currently have, any off-balance sheet arrangements as defined under rules and regulations of the SEC.

Critical accounting policies and estimates

This management discussion and analysis of financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with US GAAP. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses. On an ongoing basis, we evaluate these estimates and judgments. We base our estimates on historical experience and on various assumptions that we believe to be reasonable under the circumstances. These estimates and assumptions form the basis for making judgments about the carrying values of assets and liabilities and the recording of revenue and expenses that are not readily apparent from other sources. Actual results may differ materially from these estimates.

While our significant accounting policies are described in more detail in Note 2 to our consolidated financial statements included elsewhere in this prospectus, we believe that the following accounting policies are the most critical to understanding and evaluating our historical and future performance.

Accrued research and development expenses

We are required to make estimates of our accrued expenses resulting from our obligations under contracts with CROs, manufacturers, vendors and consultants, in connection with conducting research and development activities. The financial terms of these contracts vary from contract to contract and may result in payment flows that do not match the periods over which materials or services are provided under such contracts. We reflect research and development expenses in our consolidated financial statements by matching those expenses with the period in which services and efforts are expended.

We account for these expenses by reviewing open contracts and purchase orders, communicating with our personnel to identify services that have been performed on our behalf and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of the actual cost. We make estimates of our accrued expenses as of each balance sheet date based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. The significant estimates in our accrued research and development expenses include the costs incurred for services performed by our vendors in connection with research and development activities for which we have not yet been invoiced.

We base our expenses related to research and development activities on our estimates of the services received and efforts expended pursuant to quotes and contracts with vendors that conduct research and development on our behalf. There may be instances in which payments made to our vendors will exceed the level of services provided and result in a prepayment of the research and development expense. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the accrual or prepaid expense accordingly. Advance payments for goods and services that will be used in future research and development activities are expensed when the activity has been performed or when the goods have been received rather than when the payment is made.

Although we do not expect our estimates to be materially different from amounts actually incurred, if our estimates of the status and timing of services performed differ from the actual status and timing of services performed, it could result in us reporting amounts that are too high or too low in any particular period. To date, there have been no material differences between our estimates of such expenses and the amounts actually incurred.

Stock-based compensation

Stock-based compensation expense represents the cost of the grant date fair value of equity awards recognized over the requisite service period of the awards (usually the vesting period) on a straight-line basis. We estimate the fair value of stock option awards using the Black-Scholes option pricing model and recognize forfeitures as they occur.

The Black-Scholes option pricing model requires the use of subjective assumptions, including the risk-free interest rate, the expected stock price volatility, the expected term of stock options, the expected dividend yield and the fair value of the underlying common stock on the date of grant. Changes in these assumptions can materially affect the fair value and ultimately how much stock-based compensation expense is recognized. These inputs are subjective and generally require judgment to develop. See Note 10 to our consolidated financial statements included elsewhere in this prospectus for information concerning certain of the specific assumptions we used in applying the Black-Scholes option pricing model to determine the estimated fair value of our stock options granted in the years ended December 31, 2019 and 2020 and the three months ended March 31, 2020 and 2021.

[Table of Contents](#)

Stock-based compensation totaled approximately \$0.1 million and \$0.8 million for the years ended December 31, 2019 and 2020 and \$0.1 million and \$0.8 million for the three months ended March 31, 2020 and 2021, respectively. As of December 31, 2020, the unrecognized stock-based compensation expense related to stock options was \$5.2 million, which is expected to be recognized as expense over a weighted-average period of approximately 3.56 years. As of March 31, 2021, the unrecognized stock-based compensation expense related to stock options was \$13.9 million, which is expected to be recognized as expense over a weighted-average period of approximately 3.66 years.

The intrinsic value of all outstanding stock options as of June 30, 2021 was approximately \$173.7 million, based on the initial public offering price of \$16.00 per share, of which approximately \$30.5 million related to vested and exercisable options and approximately \$143.2 million related to unvested options.

Historically for all periods prior to this offering, since there has been no public market for our common stock, we have been required to estimate the fair value of the common stock underlying our equity awards when performing fair value calculations. The fair value of the common stock underlying our equity awards was determined on each grant date by our board of directors, taking into account input from management and independent third-party valuation analyses. All options to purchase shares of our common stock are intended to be granted with an exercise price per share no less than the fair value per share of our common stock underlying those options on the date of grant, based on the information known to us on the date of grant. In the absence of a public trading market for our common stock, on each grant date we develop an estimate of the fair value of our common stock in order to determine an exercise price for the option grants. Our determinations of the fair value of our common stock were made using methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants Accounting and Valuation Guide: *Valuation of Privately Held Company Equity Securities Issued as Compensation* (the Practice Aid).

Our board of directors considered various objective and subjective factors, along with input from management, to determine the fair value of our common stock, including:

- valuations of our common stock performed with the assistance of independent third-party valuation specialists;
- our stage of development and business strategy, including the status of research and development efforts of our product candidates, and the material risks related to our business and industry;
- our business conditions and projections;
- our results of operations and financial position, including our levels of available capital resources;
- the valuation of publicly traded companies in the life sciences and biotechnology sectors, as well as recently completed mergers and acquisitions of peer companies;
- the lack of marketability of our common stock as a private company;
- the prices of our convertible preferred stock sold to investors in arm's length transactions and the rights, preferences and privileges of our convertible preferred stock relative to those of our common stock;
- the likelihood of achieving a liquidity event for the holders of our common stock, such as an initial public offering or a sale of our company, given prevailing market conditions;

[Table of Contents](#)

- trends and developments in our industry;
- the hiring of key personnel and the experience of management; and
- external market conditions affecting the life sciences and biotechnology industry sectors.

The Practice Aid prescribes several valuation approaches for setting the value of an enterprise, such as the cost, income and market approaches, and various methodologies for allocating the value of an enterprise to its common stock. The cost approach establishes the value of an enterprise based on the cost of reproducing or replacing the property less depreciation and functional or economic obsolescence, if present. The income approach establishes the value of an enterprise based on the present value of future cash flows that are reasonably reflective of our future operations, discounting to the present value with an appropriate risk adjusted discount rate or capitalization rate. The market approach is based on the assumption that the value of an asset is equal to the value of a substitute asset with the same characteristics. Each valuation methodology was considered in our valuations.

In determining a fair value for our common stock, we estimated the enterprise value of our business using either the market approach or the back-solve method. The back-solve method assigns an implied enterprise value based on the most recent round of funding or investment and allows for the incorporation of the implied future benefits and risks of the investment decision assigned by an outside investor. In accordance with the Practice Aid, we considered the various methods for allocating the enterprise value across our classes and series of capital stock to determine the fair value of our common stock at each valuation date.

We only granted restricted stock awards prior to January 2019. For options granted in 2019, we concluded that the Option Pricing Method (OPM) was the most appropriate approach for allocating the enterprise value based on our stage of development and other relevant factors. Under the OPM, shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The values of the preferred and common stock are inferred by analyzing these options.

For options granted from January 2020 to October 2020, we concluded that a hybrid method computing the probability-weighted value across varying scenarios between OPM, Current Value Method (CVM) and Initial Public Offering (IPO) was the most appropriate for the valuation of our common stock based on our stage of development and other relevant factors. Under the CVM, the enterprise value is calculated based on an assumed forced asset sale at a future date and the corresponding allocation of proceeds based on the rights and preferences of each class of equity. The IPO scenario reflects an exit or liquidity event by means of a sale of stock by the Company to the public.

For options granted after October 2020, we concluded that a hybrid method of the OPM and IPO scenarios was the most appropriate for the valuation of our common stock based on our stage of development and other relevant factors. The valuations assigned a relative weighting to each of the scenarios, based on the likelihood that we would be able to successfully advance our development programs to the next development stage with our current capital resources and the likelihood of an IPO.

There are significant judgments and estimates inherent in the determination of the fair value of our common stock. These judgments and estimates include assumptions regarding our future operating performance, the time to complete an initial public offering or other liquidity event and the determination of the appropriate valuation methods. If we had made different assumptions, our stock-based compensation expense, net loss and net loss per common share could have been significantly different.

Following the completion of this offering, the fair value of our common stock will be based on the closing price as reported on the date of grant on the primary stock exchange on which our common stock is traded.

Net operating loss and research and development carryforwards and other income tax information

As of December 31, 2020, we had federal, California and other state NOL carryforwards of \$49.1 million, \$13.0 million and \$2.4 million, respectively. The federal NOL carryforwards will carryforward indefinitely and can offset up to 80% of future taxable income in each year. The state NOL carryforwards will begin to expire in 2038, unless previously utilized.

As of December 31, 2020, we also had federal and state research credit carryforwards of \$0.3 million and \$0.7 million, respectively. The federal research and development tax credit carryforwards expire beginning in 2038 unless previously utilized, and the state research and development tax credit carryforwards do not expire and can be carried forward indefinitely until utilized. We have not completed a Section 382 study to assess whether an ownership change has occurred or whether there have been multiple ownership changes since our formation due to the complexity and cost associated with such a study and the fact that there may be additional such ownership changes in the future. Pursuant to Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, annual use of our NOL and research and development tax credit carryforwards may be limited in the event a cumulative change in ownership of more than 50% occurs within a three-year period.

Recently adopted accounting pronouncements

See Note 2 to our consolidated financial statements included elsewhere in this prospectus for recently adopted accounting pronouncements.

Quantitative and qualitative disclosures about market risk

Interest rate risk

We are exposed to market risk related to changes in interest rates of our investment portfolio of cash equivalents, short-term investments and long-term investments. As of March 31, 2021, our cash equivalents, short-term investments and long-term investments consisted of money market funds, US treasury and government securities, corporate debt securities, commercial paper and supranational debt securities. As of December 31, 2019 and 2020, our cash equivalents and short-term investments consisted of money market funds, commercial paper, corporate debt securities, and US Treasury securities. Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of US interest rates. The fair value of our marketable securities is subject to change as a result of potential changes in market interest rates, including changes resulting from the impact of the COVID-19 pandemic. Due to the nature of our cash equivalents and investments, we believe an immediate hypothetical 10% change in interest rates would not have had a material effect on our results of operations during the periods presented.

Foreign currency exchange risk

We are exposed to market risk related to changes in foreign currency exchange rates. We contract with vendors that are located outside the United States and certain invoices are denominated in foreign currencies. We are subject to fluctuations in foreign currency rates in connection with these arrangements. To date, these fluctuations have not been significant and we have not had a formal hedging program with respect to foreign currency. We believe an immediate hypothetical 10% change in exchange rates would not have had a material effect on our results of operations during the periods presented.

Effects of inflation

Inflation generally affects us by increasing our cost of labor and research and development contract costs. We believe inflation has not had a material effect on our results of operations during the periods presented.

Emerging growth company and smaller reporting company status

As an emerging growth company under the JOBS Act, we can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption from new or revised accounting standards and, therefore, our consolidated financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates. We also intend to rely on other exemptions provided by the JOBS Act, including without limitation, not being required to comply with the auditor attestation requirements of Section 404(b) of Sarbanes-Oxley.

We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year following the fifth anniversary of the consummation of this offering; (ii) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.07 billion; (iii) the last day of the fiscal year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock held by non-affiliates exceeded \$700.0 million as of the last business day of the second fiscal quarter of such year; or (iv) the date on which we have issued more than \$1.0 billion in nonconvertible debt securities during the prior three-year period.

We are also a smaller reporting company as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as our voting and non-voting common stock held by non-affiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than \$100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

Founder's letter

*To Erase cancer:
Our mission fuels our journey
To bring patients hope.*

At Erasca, our name *is* our mission: to erase cancer. It begins with our passion and compassion for patients with cancer and their loved ones who motivate us to do our best work. It extends to our social mission that calls us to do more with the resources we've been blessed with to be a beacon of hope.

We are forging our own path while also standing on the shoulders of giants, drawing best practices from others within our industry and even beyond. We craft novel therapies for patients with cancer. We wield cutting-edge development strategies forged by precision oncology. We recruit top talent and foster an inclusive, innovative culture to drive talent density and engagement. We set bold, dynamic goals.

We also draw inspiration from nature itself. In 1960, a mathematician-turned-meteorologist at MIT named Edward Lorenz built a computer model to predict the weather. As is often the case with "eureka" moments in science, Lorenz was surprised to find two weather patterns originating from nearly the exact same starting point later diverged into seemingly random chaos. He concluded that infinitesimally small differences in initial conditions could lead to vastly variable outcomes—a phenomenon he referred to as "sensitive dependence on initial conditions" that planted the seed for a new science.¹

Initial conditions

The earliest seed for our company was planted on February 6, 2018. During my downtime that evening while on a business trip in London, I read about a novel strategy to drug the active state of RAS, the most frequently mutated oncogene in human cancer, based on the work of Dr. Kevan Shokat, a world-renowned biochemist who in 2013 had discovered an innovative approach to drug the inactive state of RAS. I recognized the potentially far-reaching implications of this new approach and couldn't wait to turn this idea into reality through a new start-up. The name "Erasca" came to mind immediately: Its mission would be to Eradicate RAS-driven Cancer and to ERASE Cancer more broadly. Erasca's name is a portmanteau that incorporates these dual meanings. That night, I registered the erasca.com URL from my hotel room.

The day after I left Roche/Genentech, Kevan and I co-founded Erasca on July 2, 2018 around this disruptive idea to target the active state of RAS. We commenced operations in October 2018, launching with a dedicated team of a dozen alumni from Ignyta, Genentech, and Wellspring. Each "Erascal," as we call ourselves, brought a distinct spike of expertise to the company—and this has been the case with every new Erascal who has joined us since.

Lorenz's phenomenon is also known as the "butterfly effect," a more familiar concept which captures the idea that a small change can have much larger downstream consequences—like how the metaphorical flutter of a butterfly's wings can become amplified into a raging storm on the other side of the world. With our initial conditions set, our hope is that a single idea—like the one that emerged that evening in London—can initiate a cascade of advances that can become amplified into saving millions of people from cancer in the future.

¹ Lorenz EN, Deterministic Nonperiodic Flow, *Journal of the Atmospheric Sciences*, Vol 20, pages 130–141, March 1, 1963.

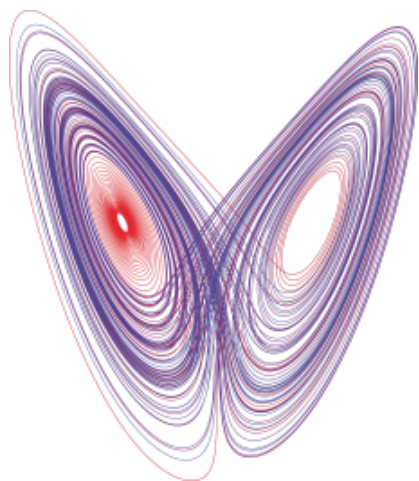
The butterfly effect

Erasca embarked on a journey to create new product candidates based on differentiated approaches to shut down RAS-driven cancers. We realized early on that RAS is a wily target that may evade direct inhibition via multiple mechanisms—both in-pathway and beyond. To combat this, we built a pipeline of our own research programs complemented by a parallel corporate development strategy to in-license or acquire assets with the goal of comprehensively shutting down the RAS/MAPK pathway with single agents and rational combinations.

Our efforts are rooted in a deep understanding of the biology of the RAS/MAPK pathway and are focused on finding the right molecules in a modality-agnostic manner rather than relying on a single, platform-specific approach. Since commencing operations, we have advanced six internal discovery programs and entered into five acquisition and licensing agreements between February 2020 and March 2021 to assemble our current modality-agnostic pipeline of 11 distinct programs singularly focused on silencing this signaling cascade. Our broad pipeline allows us to target not just individual signaling nodes in the RAS/MAPK pathway, but multiple nodes and cooperative mechanisms in concert.

I never imagined that this pipeline could have emerged from a single idea seeded on February 6, 2018. But with the thoughtful addition of each new Erascal, each new advisor, each new collaborator, and each new program initiated or licensed that collectively made the whole much greater than the sum of its parts—along with a robust ecosystem of fellow sojourners publishing each new paper or reporting promising new data—a novel pattern was beginning to form. One can only wonder at the kinds of downstream effects a pipeline of this breadth could have on the lives of patients suffering from cancer.

Embedded in his weather model, where others saw only chaos, Lorenz saw order masquerading as randomness. By using math to describe the non-linear phenomena he observed in nature, he was able to create pictures from the data. The pictures that emerged were beautiful patterns—each a unique, wondrous trajectory in its own right, based on changing the inputs of the initial conditions. Each picture, called a “Lorenz attractor,” displayed infinite complexity. It always stayed within certain invisible boundaries, but never repeated itself. The pattern that forms is a wondrous, almost magical shape—like a butterfly emerging from its chrysalis after a period of formation—or like a new company emerging with a clear mission to make a difference in the treatment of cancer.



*The **Lorenz attractor**, first derived from a simple weather model, has become a classic icon of nonlinear dynamics that symbolizes order within chaos (Credit: Dschwen. Licensed under Creative Commons Attribution 2.5 Generic license [<https://creativecommons.org/licenses/by/2.5/legalcode>]. All other material in this prospectus not contributed by Dschwen).*

A wondrous trajectory

Our vision is to one day erase cancer² in at least 100,000 patients annually as a leading global oncology company. We aim to fulfill this by targeting RAS, the most frequently mutated oncogene in human cancer, and the MAPK pathway, one of the most frequently altered signaling pathways in cancer. Approximately 5.5 million patients worldwide per year are diagnosed with RAS/MAPK pathway alterations that drive the growth and proliferation of their cancer. By shutting down the RAS/MAPK pathway with combinations of medicines within Erasca's pipeline as well as with partners' agents, we hope to markedly improve patients' lives and move closer to achieving Erasca's bold mission and vision.

The path to achieving our mission to erase cancer is anything but linear. The journey will be long, and it won't be easy. Despite the challenges that lie ahead, we have a sense of urgency because patients with cancer are waiting. Since our inception, we have expanded our pipeline within a rapid timeframe and are currently in a heady growth phase to continue advancing this pipeline. Conducting an IPO of consequence to raise the capital we need to advance our mission on behalf of patients is a watershed event in the life of our company. Reaching this milestone is a testament to the tremendous efforts of many who have supported Erasca, and we owe a debt of gratitude to patients with cancer and their families, our employees, our board of directors, our scientific and R&D advisory boards, our academic and industry collaborators, and our shareholders.

Beyond our immediate mission, we know we can do more to make an even broader contribution to society. Accordingly, in May 2021, we established the Erasca Foundation, which will be funded by the donation of 1% of our capital stock prior to the closing of this offering. The foundation will support and fund cancer research, education, and other initiatives.

We hope that a bold new pattern will emerge from our commitment to patients and society, while keeping our promises to our stakeholders. The Lorenz attractor reveals fine structures hidden within disorderly streams of data. The result of its initial conditions is a system that never exactly repeats itself, travelling in a unique trajectory that never intersects itself. What we hope to create is a company that has never been seen before because there is no model to mimic for pioneers who seek to traverse uncharted paths.

It is Erasca. Uniquely beautiful and unprecedented. We hope you will join us on the wondrous journey ahead.

*Envision a day
When millions of people can
Wipe cancer away.*

Jonathan E. Lim, M.D.

² Defined by number of patients who are alive and free of cancer or free from cancer progression 2 years after starting treatment on an Erasca regimen, as measured by disease-free survival in the adjuvant setting and progression-free survival in the metastatic setting.

Business

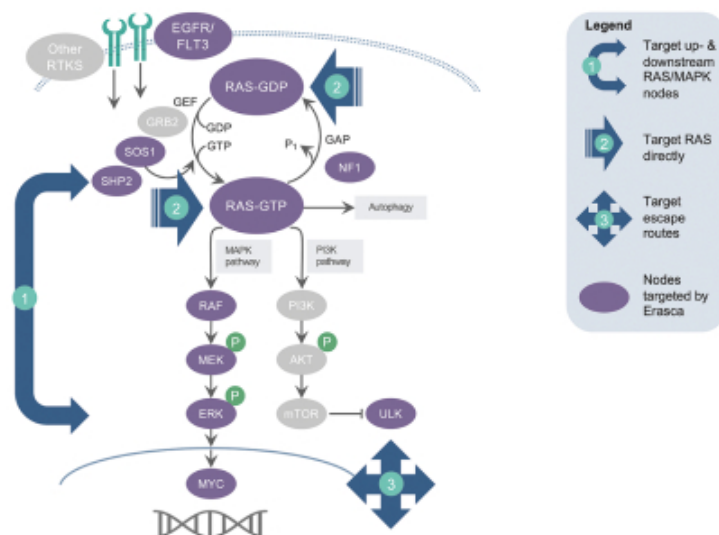
Overview

At Erasca, our name is our mission: to erase cancer.

We are a clinical-stage precision oncology company singularly focused on discovering, developing, and commercializing therapies for patients with RAS/MAPK pathway-driven cancers. Molecular alterations in RAS, the most frequently mutated oncogene, and the MAPK pathway, one of the most frequently altered signaling pathways in cancer, account for approximately 5.5 million new cases of cancer worldwide per year. Our company was co-founded by leading pioneers in precision oncology and RAS targeting to create novel therapies and combination regimens designed to comprehensively shut down the RAS/MAPK pathway for the treatment of cancer. We have assembled what we believe to be the deepest, wholly-owned or controlled RAS/MAPK pathway-focused pipeline in the industry, comprising 11 modality-agnostic programs aligned with our three therapeutic strategies of: (1) targeting key upstream and downstream signaling nodes in the RAS/MAPK pathway; (2) targeting RAS directly; and (3) targeting escape routes that emerge in response to treatment. The target breadth and molecular diversity represented in our pipeline enable us to pursue a systematic, data-driven clinical development effort to identify single agent and combination approaches with the goal of prolonging survival in a wide range of patient populations with high unmet needs.

Our modality-agnostic approach aims to allow us to selectively and potently inhibit or degrade critical signaling nodes with small molecule therapeutics, large molecule therapeutics, and protein degraders. Our purpose-built pipeline includes two clinical-stage programs (ERK and SHP2 inhibitors, which together comprise our first, innovative MAPKlamp), two preclinical-stage programs (CNS-penetrant KRAS G12C and EGFR inhibitors), and seven discovery-stage programs targeting other key oncogenic drivers. We expect to have four product candidates in the clinic within the next six quarters, plus an additional IND filing every 12-18 months over the next five years. We believe our world-class team's capabilities and experience, further guided by our scientific advisory board, which includes the world's leading experts in the RAS/MAPK pathway, uniquely position us to achieve our bold mission of erasing cancer.

Of the approximately 5.5 million new patients diagnosed globally per year with cancers driven by RAS/MAPK pathway molecular alterations, over 90% have limited or no treatment options. While the RAS/MAPK pathway has been well characterized and validated based on multiple compounds approved or in development targeting discrete signaling nodes in the cascade, most of these compounds face resistance and tolerability challenges, highlighting the need for new approaches to target this pathway. We believe that to effectively shut down a pathway that signals as promiscuously as RAS/MAPK, a holistic approach must be taken to target not just individual nodes, but multiple nodes and cooperative mechanisms in parallel. As depicted in the following figure and described below, we are pursuing three therapeutic strategies that may be used in combination with the goal of comprehensively, and perhaps synergistically, shutting down the RAS/MAPK pathway.












- 1. Target upstream and downstream MAPK pathway nodes with single agents and combinations intended to clamp these oncogenic drivers (MAPKlamp).** Our first strategy to erase cancer is a novel MAPKlamp that targets upstream and downstream nodes, initially SHP2 (ERAS-601) and ERK (ERAS-007), respectively, to shut down, or “clamp,” the signaling of various oncogenic drivers, such as receptor tyrosine kinases (RTKs), NF1, RAS, RAF, and MEK alterations, trapped in between any nodes involving this pathway. With our MAPKlamp approach, we hope to induce tumor regression in RAS/MAPK pathway-driven cancers, while also blocking their main escape routes that lead to tumor resistance. We are also discovering and developing single agent and combination approaches to target other upstream nodes that impact the RAS/MAPK pathway such as EGFR (ERAS-801 and ERAS-12), an RTK that represents a key escape route for RAS/MAPK signaling, and SOS1 (ERAS-9), a guanine nucleotide exchange factor that enables RAS to cycle from the inactive GDP state to the active GTP state.
- 2. Target RAS, the midstream MAPK pathway node, directly with single agents and combinations.** We are discovering and developing molecules that have the potential to inhibit RAS in its inactive GDP state (RAS-GDP) as well as its more prevalent active GTP state (RAS-GTP). Utilizing our in-house discovery efforts employing structure-based drug design, we are developing proprietary central nervous system (CNS)-penetrant inhibitors of KRAS G12C (ERAS-1), which is the only RAS isoform and mutation that is more commonly present in the inactive RAS-GDP state. We are also developing proprietary compounds against KRAS G12D (ERAS-4), which is more commonly found in the active RAS-GTP state and is the most prevalent KRAS mutation. Our approach to targeting other RAS isoforms and mutations that are found more commonly in the RAS-GTP state is based on the foundational discoveries of one of our co-founders, Dr. Kevan Shokat, a world-renowned pioneer of novel therapeutic approaches to targeting key signaling pathways such as RAS/MAPK in cancer.

Table of Contents

Dr. Shokat's deep expertise in chemical genetics, a combination of protein engineering and organic synthesis, led to his identification of both a binding pocket termed the "switch II pocket" (S-IIP) on KRAS G12C, a RAS-GDP mutation which was previously considered undruggable, and a compound that could bind to it. This seminal discovery has launched the development of multiple KRAS G12C inhibitors targeting the S-IIP. Dr. Shokat then turned his attention to RAS-GTP mutations which, compared to RAS-GDP mutations, are more challenging to drug and arguably more important, as other RAS isoforms and mutations are present more frequently in the active RAS-GTP state, thereby driving downstream phosphorylation and oncogenic signaling. Dr. Shokat made a breakthrough discovery of a new binding site termed the "switch II groove" (S-IIG), which could be utilized to inhibit the GTP and GDP states of RAS. This landmark discovery allows for the possibility of targeting multiple RAS isoforms (including KRAS, HRAS, and NRAS) and mutations (including G12X, G13X, and Q61X) with small molecule compounds that can potentially bind to the S-IIG. We entered into an exclusive worldwide license agreement with UCSF for Dr. Shokat's work related to RAS-GTP, which guides our ERAS-2/3 programs.

- 3. Target escape routes enabled by other proteins or pathways to further disrupt RAS/MAPK pathway signaling.** RAS-driven cancers utilize escape routes, namely cooperative mechanisms, to develop resistance. As an example, RAS-driven cancers can become dependent on autophagy, which becomes constitutively active and represents a potential escape route for metabolically active tumors such as pancreatic ductal adenocarcinoma. By targeting ULK (ERAS-5), a key regulator of autophagy, in combination with our RAS targeting agents, we aim to shut down this potential escape route for RAS-driven cancers. We also are actively pursuing various ways to further disrupt RAS/MAPK pathway signaling by degrading key proteins (ERAS-10). Finally, MYC is a transcription factor and oncogene that is overexpressed in the majority of cancers and a key enabler of RAS/MAPK pathway signaling at the transcriptional level. We are discovering novel approaches to targeting MYC (ERAS-11).

To pursue these therapeutic strategies, we have assembled and are developing what we believe is the deepest pipeline targeting multiple signaling nodes to shut down the RAS/MAPK pathway. We intend to study these agents either alone or in rational combinations across multiple relevant tumor types. The following table summarizes our current, wholly-owned or controlled, modality-agnostic pipeline to eradicate RAS/MAPK pathway-driven cancers.

Program (Target)	Modality	Indication	Discovery	IND-enabling	Phase 1	Phase 2	Phase 3	Erase Cancer Strategy	Worldwide Rights
ERAS-007*/ MAPKlamp (ERK, SHP2, others)		Tiss. agnostic RAS/MAPK alt. solid tumors	HERKULES-1 ongoing					1	ERASCA-
		EGFRm & RAS/MAPK altered NSCLC	HERKULES-2 planned					1	ERASCA-
		BRAFm & RAS/MAPK altered CRC	HERKULES-3 planned					1	ERASCA-
		FLT3m & RAS/MAPK altered liquid tumors	HERKULES-4 planned					1	ERASCA-
ERAS-601 (SHP2)		RAS/MAPK altered tumors	FLAGSHP-1					1	ERASCA-
ERAS-801 (EGFR)		EGFR altered GBM						1	ERASCA-
ERAS-1 (KRAS G12C)		KRASm G12C solid tumors						2	ERASCA-
ERAS-2/3 (RAS-GTP)		RASm solid tumors						2	ERASCA-
ERAS-4 (KRAS G12D)		KRASm G12D solid tumors						2	ERASCA-
ERAS-5 (ULK)		RASm solid tumors						3	ERASCA-
ERAS-10 (RAS/MAPK)		RAS/MAPK altered cancers						1 2 3	ERASCA-
ERAS-12 (EGFR D2/D3)		EGFR & RAS/MAPK altered solid tumors						1	ERASCA-

 = small molecule  = large molecule  = protein degrader

* Phase 1 clinical trial of ERAS-007 evaluating the safety, tolerability, pharmacokinetics (PK), pharmacodynamics (PD), and preliminary anti-tumor activity of ERAS-007 in patients with advanced solid cancers was completed by Asana BioSciences, LLC (Asana). The results of this trial helped inform the design of our clinical development program and doses to be tested for ERAS-007, which we will study in more specific patient populations. Please refer to the detailed results of this trial and the description of our ongoing and planned HERKULES clinical trials beginning on pages 135 and 143 of this prospectus, respectively.

[Table of Contents](#)

In addition, we have two additional discovery programs, ERAS-9 and ERAS-11, small molecule inhibitor programs targeting SOS1 and MYC, respectively.

Our lead product candidates are ERAS-007 (our oral ERK1/2 inhibitor) and ERAS-601 (our oral SHP2 inhibitor), which together comprise our first MAPKlamp. The extracellular signal-regulated kinases (ERK), ERK1 and ERK2, belong to a family of serine-threonine kinases that regulate cellular signaling, and comprise the most distal node of the RAS/MAPK pathway. ERK proteins propagate signaling for multiple cellular functions involved in cell growth and differentiation, which are often overactivated in RAS/MAPK pathway-driven cancers. We in-licensed ERAS-007 from Asana based in part on preclinical studies that demonstrated the highest potency and longest target residence time of ERK inhibitors of which we are aware. Please see the results of such preclinical studies beginning on page 127 of this prospectus for more information on the relative potency and residence time exhibited in such studies. ERAS-007 has been evaluated as a single agent in a Phase 1 clinical trial in patients with advanced solid tumors completed by Asana. Forty-nine patients were enrolled and administered ERAS-007 once a day (QD) or once weekly (QW). Objective responses have been observed at doses from 120 mg to 250 mg QW in multiple tumor types (melanoma, salivary gland tumor, non-small cell lung cancer [NSCLC], and thyroid cancer) that all harbor alterations (BRAF, HRAS, and NRAS) in the RAS/MAPK pathway, supporting the development of ERAS-007 QW as a monotherapy or combination therapy in diverse, biomarker-selected tumor types. In this trial, ERAS-007 demonstrated a reversible and manageable adverse event profile.

We are pursuing a broad clinical development plan for ERAS-007, which we refer to as our HERKULES series of clinical trials, across multiple tumor types that will include both monotherapy and combinations with approved and investigational agents, such as RTK, SHP2, RAS, and/or RAF inhibitors. The first four HERKULES Phase 1b/2 proof-of-concept (POC) clinical trials will explore both tissue agnostic and tissue specific indications in patients with solid tumors and hematologic malignancies, including NSCLC, colorectal cancer (CRC), and acute myeloid leukemia (AML). In May 2021, we dosed the first patient in HERKULES-1, a Phase 1b/2 clinical trial evaluating ERAS-007 as a single agent and in combination with ERAS-601 (MAPKlamp) in advanced solid tumors. We expect to dose the first patient in HERKULES-2, a Phase 1b/2 clinical trial for ERAS-007/MAPKlamp in combination with various agents in patients with NSCLC, in the third quarter of 2021. We expect to dose the first patient in HERKULES-3, a Phase 1b/2 clinical trial for ERAS-007/MAPKlamp in combination with various agents in patients with CRC, in the second half of 2021. Finally, in the first quarter of 2022, we expect to dose the first patient in HERKULES-4, a Phase 1b/2 clinical trial for ERAS-007/MAPKlamp in combination with various agents in patients with hematologic malignancies. While providing POC data, these trials may be expanded to enable potential accelerated approvals in their respective indications.

The second prong of our first MAPKlamp, ERAS-601, is designed to be a potent and selective oral inhibitor of SHP2, a convergent node for upstream RTK signaling and a critical “on/off switch” that activates RAS-GTP signaling. SHP2 also drives tumor cell proliferation and development of resistance. Our SHP2 inhibitor is designed to block oncogenic signal transduction and delay the onset of therapeutic resistance, and thereby serve as a backbone of combination therapy. In the fourth quarter of 2020, we initiated FLAGSHP-1, a Phase 1 clinical trial for ERAS-601 in patients with advanced solid tumors.

We expect to file an IND for ERAS-3490, the development candidate (DevCan) nominated from our ERAS-1 KRAS G12C inhibitor program with high CNS penetration, in the second half of 2022. We are conducting IND-enabling studies for ERAS-801, our CNS-penetrant EGFR inhibitor, and expect to file an IND for development in refractory glioblastoma multiforme (GBM) in the first quarter of 2022. We are also advancing seven other programs targeting key oncogenic drivers in the RAS/MAPK pathway, which we will need to successfully progress through discovery and IND-enabling activities prior to advancing these programs into clinical development, if at all.

Our core values, team, and social mission

We are a team of experienced drug discoverers, developers, and company builders who are united by our mission to erase cancer and passionate about creating potentially life-saving precision oncology medicines singularly focused on targeting the RAS/MAPK pathway. Our leadership team has broad and deep experience in oncology, including advancing therapeutic candidates from discovery research to clinical development, regulatory approval, and commercialization. Our core values are embodied by our quest for the CURE:



Dr. Jonathan Lim, our Chairman, CEO, and Co-Founder, has pioneered transformative advancements in precision oncology and drug delivery, including leading Ignyta's trailblazing pursuit of a global tissue agnostic label for ROZLYTREK, which became the first drug in biopharmaceutical history to achieve the unprecedented triple crown of breakthrough designations with BTDF (FDA), PRIME (EMA) and Sakigake (PMDA). He has served as Chairman and/or CEO and founding investor of six biotechnology companies that have collectively achieved global regulatory approval and launch of seven therapeutic products in oncology, immunology, and drug delivery, benefiting thousands of patients worldwide.

Dr. Michael Varney, our Chair of R&D, SAB member, and a member of our board of directors, is a pioneer drug discoverer and biotech leader. His leadership at Agouron resulted in the discovery of multiple currently marketed anti-cancer agents, including XALKORI and INLYTA. As Executive Vice President and Head of Genentech's Research and Early Development (gRED) and a member of the Roche Corporate Executive Committee, he was responsible for all aspects of gRED innovation, drug discovery and development, and built a team-based organization that today contributes to more than 40% of Genentech's development portfolio, including the marketed anti-cancer agents ERIVEDGE and COTELLIC. Under his leadership, gRED teams discovered and developed successful medicines that include VENCLEXTA with AbbVie, the first BCL-2 inhibitor, and POLIVY, an antibody drug conjugate for the treatment of diffuse large B-cell lymphoma (DLBCL).

Dr. Wei Lin, our Chief Medical Officer, was responsible for all development functions and the clinical development of Nektar's pipeline, including advancing bempedaldesleukin into multiple registrational trials and achieving FDA breakthrough therapy designation in metastatic melanoma. Prior to Nektar, Dr. Lin was the global development lead in cancer immunotherapy for lung cancer and head and neck cancer at Roche/Genentech. Under his leadership, his team oversaw 10 registrational studies, completed five positive Phase 3 trials, and achieved three US and EU regulatory approvals for TECENTRIQ, including the first advancement in first-line small cell lung cancer in three decades. He was also the site head for oncology product development for Roche China, where his team achieved multiple additional regulatory approvals for AVASTIN, ZELBORAF, and TARCEVA.

Dr. David Chacko, our Chief Financial Officer, joined us initially as Chief Business Officer from Versant Ventures, where he was a Principal with both investing and operating responsibilities. He helped lead investment opportunities across multiple therapeutic areas and advanced several Versant portfolio companies

[Table of Contents](#)

operationally through company formation, fundraising, corporate and business development, and clinical and regulatory activities. His prior roles at Alcon/Novartis, McKinsey, SR One, and Morgan Stanley bring to Erasca deep experience in strategy, finance, fundraising, business development, and operations.

Many members of our leadership team have worked together previously at Ignyta or Roche/Genentech, or have joined us from other leading companies in the biopharmaceutical and life science tools sectors such as Aragon, Illumina, Lilly, Medivation, Merck, Myovant, Neurocrine, Pfizer, Seragon, and Synthorx, and have worked on numerous oncology drugs that have been approved and launched for the benefit of patients.

Dr. Lim founded Erasca with Dr. Kevan Shokat (Professor and Chair of the Department of Cellular and Molecular Pharmacology at UCSF; Professor of Chemistry at the University of California, Berkeley; and an investigator at the Howard Hughes Medical Institute), who sits on our SAB with other RAS/MAPK pathway experts:

- Dr. Stephen Blacklow is a world expert in SHP2 who helped pioneer development of the first SHP2 inhibitor with Novartis, and is the Gustavus Adolphus Pfeiffer Professor of Biological Chemistry and Molecular Pharmacology, Biological Chemistry and Molecular Pharmacology at Harvard Medical School; a Professor of Pathology at the Brigham And Women's Hospital; a Professor of Cancer Biology at the Dana-Farber Cancer Institute; and the Chair of the Department of Biological Chemistry and Molecular Pharmacology at Harvard Medical School.
- Dr. Karen Cichowski is a world expert in RAS/MAPK pathway signaling, including elucidating how deregulated cell signaling drives tumorigenesis in nervous system, lung, prostate, and breast cancers, combining translational mouse modeling techniques with basic biochemical and cell biological studies, and in identifying novel combination therapies to shut down aberrant RAS/MAPK pathway signaling. She is Professor of Medicine at Harvard Medical School and Professor of Medicine/Genetics at Brigham and Women's Hospital.
- Dr. Ryan Corcoran is a gastrointestinal oncologist with a primary interest in translational oncology research who focuses on targeted therapies directed against mutations commonly found in human cancers, such as BRAF and KRAS mutations. He also is a world expert in ERK, having studied nearly every ERK inhibitor that has been or is being developed in the field. He is also the Director of the Gastrointestinal Cancer Center Program; the Scientific Director of the Termeer Center for Targeted Therapy at Massachusetts General Hospital Cancer Center; and an Associate Professor of Medicine at Harvard Medical School.
- Dr. George Demetri is a world expert in targeted oncology therapies who pioneered the development of GLEEVEC that helped launch the revolution in precision oncology. He is the Director of the Center for Sarcoma and Bone Oncology at the Dana-Farber Cancer Institute; the Director of the Ludwig Center at the Dana-Farber/Harvard Cancer Center; and Executive Director for Clinical and Translational Research at the Ludwig Institute for Cancer Research.
- Dr. Michael Varney is a pioneer drug discoverer and biotech leader and the former Executive Vice President and Head of Genentech's Research and Early Development (gRED) and a former member of the Roche Corporate Executive Committee.
- Dr. Pablo Viciana-Rodriguez is a world expert in the RAS/MAPK pathway whose major focus is the function of the SHOC2 phosphatase complex as a unique regulatory node required for efficient RAS/MAPK pathway activation in the context of diseases such as cancer and RASopathies. He has served as the group leader at the UCL Cancer Institute since 2008 and is a former postdoctoral researcher in Dr. Frank McCormick's lab at the University of California, San Francisco.

[Table of Contents](#)

We are also supported by a leading syndicate of investors which include our founding investors, City Hill Ventures and Cormorant Asset Management, and ARCH Venture Partners, Andreessen Horowitz, Colt Ventures, EDBI, Invus, LifeSci Venture Partners, OrbiMed Healthcare Fund Management, PFM Health Sciences, and Terra Magnum.

At Erasca, while our mission to erase cancer inspires us, we know we can do more to make an even broader contribution to society. To that end, we are pursuing environmental, social, and governance (ESG) initiatives that are aligned with our core mission.

- **Erasca Foundation:** In May 2021, we established the Erasca Foundation, which will be funded by the donation of 1% of our capital stock prior to the closing of this offering. The Erasca Foundation will provide support such as direct research grants, hardship grants, patient advocacy, patient education in underserved populations, and funding for other initiatives to positively impact society.
- **Inclusive clinical trial participation:** We intend to make clinical trials of our product candidates more accessible to diverse patient populations and plan to partner with others who are like-minded in this regard.
- **Drug access program:** We intend to provide patients with access to the drugs we develop and commercialize, including through compassionate use programs if our products are demonstrated to be safe and efficacious. We also intend to increase access to life-changing drugs in underserved populations if our products become commercially available.

Our corporate strategies to erase cancer

Our mission is to erase cancer by eradicating RAS/MAPK pathway-driven cancers. Our corporate strategies to achieve our mission include:

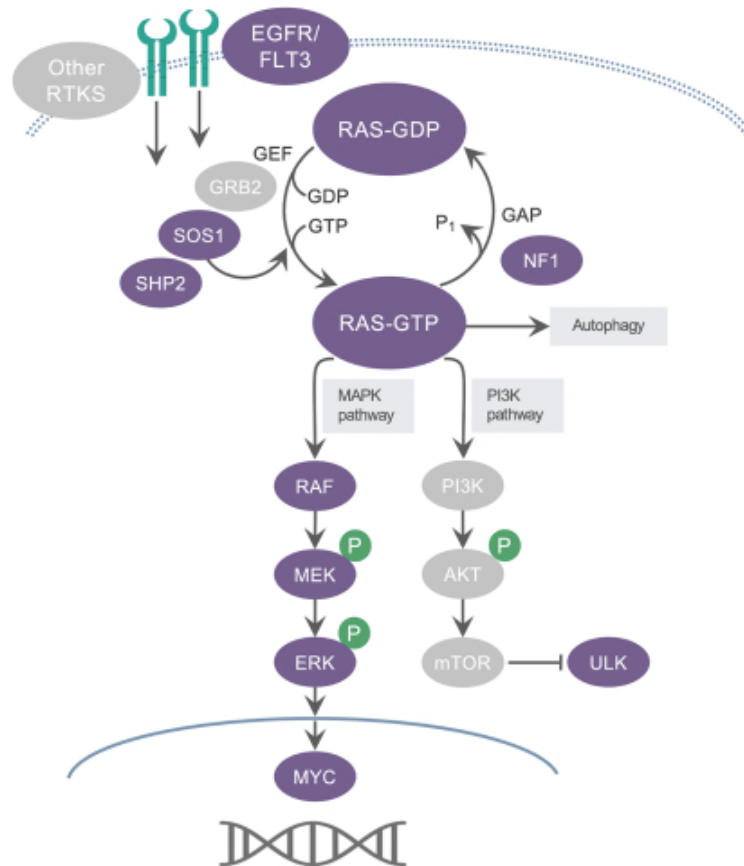
- **Relentlessly focus on patients and society in our mission to erase cancer.** There are approximately 5.5 million new patients diagnosed globally per year with cancers driven by RAS/MAPK pathway alterations, over 90% of whom have limited or no treatment options. We are a team of experienced drug discoverers, developers, and company builders who are united by our mission to erase cancer and passionate about creating potentially life-saving precision oncology medicines. In addition, we are pursuing ESG initiatives that are aligned with our core mission.
- **Develop novel single agent and combination regimens to comprehensively shut down the RAS/MAPK pathway for the treatment of cancer.** We are pursuing three therapeutic strategies that may be used in combination to comprehensively, and perhaps synergistically, shut down the RAS/MAPK pathway: (1) target upstream and downstream MAPK pathway nodes with single agents and combinations intended to clamp these oncogenic drivers (MAPKlamp); (2) target RAS directly with single agents and combinations; and (3) target escape routes enabled by other proteins or pathways to further disrupt RAS/MAPK pathway signaling. Our strategic focus on the RAS/MAPK pathway allows us to comprehensively target every critical node in the pathway that could drive cancer signaling.
- **Advance our deep, modality-agnostic RAS/MAPK pathway-focused pipeline.** We believe our internally and externally sourced RAS/MAPK pathway-focused pipeline, comprising 11 targeted therapy programs, is the deepest in the industry. Our modality-agnostic approach aims to selectively and potently inhibit or degrade critical RAS/MAPK signaling nodes with small molecule therapeutics, large molecule therapeutics, and protein degraders. ERAS-007 (our ERK inhibitor) and ERAS-601 (our SHP2 inhibitor) are currently being studied in clinical trials. We expect to have four product candidates in the clinic within the next six quarters, plus an additional IND filing every 12-18 months over the next five years. Given the high unmet need of the patients we seek to treat, we will evaluate the potential for expedited development and review pathways.

- ***Internally and externally source, on a global basis, potentially disruptive programs targeting RAS/MAPK pathway alterations.*** We have built a productive and efficient internal discovery engine. Our world-class structural biology team generates more than 100 protein structures annually and we use computational biology and computational chemistry to accelerate our discovery activities. While we have strong internal capabilities, we also believe that innovation is a collective, global endeavor and a single platform is unlikely to discover all the best ideas and approaches. We therefore plan to continue to pursue synergistic, in-pathway opportunities, regardless of origin, that meet our high scientific bar. Our extensive network and relationships provide us preferential—and at times exclusive—access to certain assets of interest.
- ***Lead the next revolution in precision oncology.*** The first wave of precision oncology included tyrosine kinase inhibitors such as ROZLYTREK, approved for select tumors that harbor ROS1 or NTRK fusions. While these initial development efforts focused on specific disease-causing alterations in areas of high unmet need, these patient populations were modest in size. We believe that to effectively shut down a pathway that signals as promiscuously as RAS/MAPK and that encompasses a range of alterations, a holistic approach must be taken to target not just specific individual mutations, but multiple alterations and cooperative mechanisms in parallel. We are pursuing tissue agnostic and tissue specific labels with dynamically designed biomarker-based basket and umbrella studies, respectively, as well as master protocols, in order to quickly demonstrate clinical proof-of-concept in a variety of tumor types for both single agent and combination approaches.
- ***Evaluate opportunities to accelerate development timelines and enhance the commercial potential of our programs in collaboration with third parties.*** We own or control worldwide development and commercialization rights to our entire pipeline of 11 targeted therapy programs. This provides us with the flexibility to explore combinations of our agents with each other, other investigational agents, and/or standard of care therapies. We intend to continue evaluating opportunities to work with partners that meaningfully enhance our capabilities with respect to the development and commercialization of our product candidates. In addition, we intend to commercialize our product candidates in the United States and possibly Europe, where as many as 1.8 million patients are diagnosed annually with RAS/MAPK pathway alterations. We intend to explore partnerships in selected geographies to maximize the worldwide commercial potential of our programs.

Our singular focus on the RAS/MAPK pathway

Background

The RAS/MAPK pathway is one of the most frequently altered signaling pathways in cancer. Molecular alterations in key signaling nodes within the RAS/MAPK pathway have been shown to drive cell proliferation across a wide range of tumor types. As described further below, our wholly-owned or controlled pipeline targets all of the key signaling nodes colored in purple, either directly or indirectly as single agents and in combination in order to prolong survival in a wide range of patient populations.



EGFR/FLT3

EGFR and FLT3 are RTKs, which are proteins that are embedded in the cell membrane and relay growth signals from the outside environment to the cell's internal machinery. At rest, these proteins reside on the cell membrane as inactive monomers. Growth factors secreted by nearby cells bind to specific RTKs, such as growth factor EGF binding to EGFR and FL binding to FLT3, and cause these RTKs to dimerize. Dimerized RTKs activate one another through transphosphorylation of their intracellular regions. Intracellular proteins, such as adapter proteins, bind to these phosphorylated regions and propagate the pro-growth signals within the cell via one or more signaling pathways. Cells express a variety of RTKs so that environmental cues can be relayed to specific cell populations in specific contexts. EGFR mediates pro-growth signaling in skin and in the ducts and outer surfaces of many organs. FLT3 predominantly mediates pro-growth signaling in immature blood cells.

Overactive RTK signaling can result in uncontrolled cell growth and survival that transforms normal cells into cancer cells.

SHP2

SHP2 is a protein tyrosine phosphatase and a key positive regulator of the growth signals from the RTK growth factor receptors to the intracellular signaling pathways (including RAS/MAPK and PI3K) that promote growth and survival of normal cells and cancer cells. As such, SHP2 is a convergent node for upstream RTK signaling: activated SHP2 upregulates (“turns up”) the positive signals and downregulates (“turns down”) the negative signals in the signaling cascades. SHP2 also serves as a central node in relaying the growth and survival signals from RTKs such as EGFR and FLT3 to RAS/MAPK and other intracellular pathways. SHP2 is an attractive target because SHP2 inhibition ubiquitously blocks the growth signals from multiple RTKs, preventing cancer cells from bypassing the blockade on a specific RTK (e.g., EGFR inhibitor) through activation of other RTK growth factor receptors (e.g., MET).

SOS1

SOS1, or Son of Sevenless-1, is a protein that is recruited to RTK complexes and, in turn, recruits and activates members of the RAS protein family. SOS1 activates RAS proteins by acting as a guanine nucleotide exchange factor (GEF), which facilitates the exchange of the RAS-bound nucleotide from guanine diphosphate (GDP) to guanine triphosphate (GTP). When GDP is exchanged for GTP, RAS adopts an active conformation that enables it to bind and activate downstream effector proteins, such as the RAF family, which ultimately results in RAS/MAPK pathway activation.

NF1

NF1, or neurofibromin, is a protein that accelerates the transition of RAS proteins from the active RAS-GTP state to the inactive RAS-GDP state. NF1 is classified as a GTPase activating protein (GAP) because it boosts the ability of RAS to hydrolyze bound GTP to GDP. Although RAS can autonomously hydrolyze GTP, it is dependent on GAPs such as NF1 to rapidly cycle it from the active state to the inactive state and thereby prevent overactive signaling. If NF1 is inactivated due to a mutation (NF1 loss-of-function mutation), RAS proteins may spend more time in the active RAS-GTP state. This can result in hyperactive RAS/MAPK pathway activation that drives aberrant cell growth and ultimately tumorigenesis. This is observed in patients affected by a genetic disorder caused by somatic mutations in the NF1 gene called neurofibromatosis type 1. NF1 loss-of-function mutations are observed in a variety of cancers, including melanoma and CRC, where they activate RAS/MAPK signaling alone or in conjunction with other RAS/MAPK pathway activating mutations.

RAS

RAS proteins are ubiquitously expressed GTPase proteins. The RAS protein family consists of KRAS, NRAS, and HRAS proteins and acts as the entry node in the MAPK signaling pathway. KRAS is the most abundantly expressed RAS protein followed by NRAS and then HRAS. RAS proteins act as signaling transducers since they are recruited to activated RTK complexes where they are converted into an active conformation (RAS-GTP) that enables them to activate downstream effector proteins, such as RAF proteins. The activation state of a RAS protein is dictated by the phosphorylation state of the bound guanosine: RAS adopts an inactive RAS-GDP conformation when bound to GDP and an active RAS-GTP conformation when bound to GTP. Conversion of RAS into an active conformation is mediated by binding to co-factor proteins, e.g., SOS1, and these co-factor proteins enable the exchange of the RAS-bound nucleotide from GDP to GTP. In the active state, RAS-GTP

proteins interact with multiple effector proteins to propagate cell signaling through multiple pathways. For example, activated RAS-GTP proteins interact with RAF proteins to activate MAPK signaling, and PI3K proteins to activate PI3K pathway signaling. RAS can transition from the active state into the inactive state by hydrolyzing its bound nucleotide from GTP to GDP either intrinsically or catalyzed through interactions with co-factor proteins, such as NF1. RAS proteins are the most frequently mutated oncoproteins in cancer. These mutations occur at hotspots, such as amino acid residues 12, 13, and 61, and these hotspot mutations impair RAS's ability to hydrolyze GTP to GDP. As a result, mutant RAS-GTP remains in the active state for prolonged periods of time resulting in hyperactive stimulation of the RAS/MAPK and other pathways.

RAF

RAF proteins are ubiquitously expressed serine-threonine kinases that are a part of the RAS/MAPK pathway and whose activity is regulated by RAS proteins. The RAF protein family consists of ARAF, BRAF, and CRAF (RAF1). In the absence of activated RAS-GTP, RAF proteins assume an autoinhibited conformation in complex with downstream effector proteins, MEK1 and MEK2. RAF proteins can homodimerize (e.g., BRAF-BRAF dimers) or heterodimerize (e.g., CRAF-BRAF dimers). When RAF proteins bind to activated RAS-GTP, they adopt an active conformation that results in activation of their kinase domains. The activated kinase domains then phosphorylate complexed MEK proteins, activating those proteins and releasing them from the RAF-MEK complex. Activated MEK then signals further down the RAS/MAPK pathway. Mutations in RAF proteins, especially in BRAF, have been observed in many cancers, such as melanoma, CRC, NSCLC, and thyroid cancer. For example, the BRAF V600E mutation (a class I BRAF mutation) is frequently observed in melanoma and this mutation enables BRAF to constitutively activate MEK as a monomer. Approved BRAF inhibitors for class I mutations include vemurafenib, dabrafenib, and encorafenib. Class II BRAF mutations enable BRAF to constitutively dimerize and activate MEK. Class III BRAF mutations impair the ability of the mutant BRAF protein to phosphorylate MEK, but class III mutant BRAF proteins can aberrantly dimerize with wildtype RAF proteins and enable their dimerized wildtype RAF partners to activate MEK. To our knowledge, there are no approved inhibitors of BRAF Class II or Class III mutations. A number of inhibitors targeting BRAF Class II and Class III mutations, as well as pan-RAF inhibitors designed to disrupt wild type RAF signaling, are in development; however, to our knowledge, none have received regulatory approval.

MEK

MEK1 and MEK2 proteins are ubiquitously expressed serine-threonine kinases that are activated by RAF-mediated phosphorylation and signal downstream by activating ERK proteins. MEK1 and MEK2 proteins form complexes with RAF proteins in the inactive state and are recruited as a unit to activated RAS-GTP. RAS-GTP then activates the RAF-MEK complex by binding to RAF, which then activates MEK via phosphorylation and releases from the RAF-MEK complex. Activated MEK then selectively phosphorylates ERK1 and ERK2 proteins, which are the most distal nodes of the RAS/MAPK pathway. Currently approved MEK inhibitors, such as trametinib, binimetinib, cobimetinib, and selumetinib, allosterically bind MEK proteins and inhibit MEK activation, either as free proteins alone or in complex with RAF. The inhibition of RAS/MAPK signaling by MEK inhibitors can result in an upregulation of signaling upstream of MEK due to negative feedback loops within the RAS/MAPK pathway. This increased signaling pressure can overwhelm MEK inhibitors and result in reactivation of MAPK signaling. Most MEK inhibitors are approved in combination with a BRAF inhibitor partially due to their vulnerability of being overwhelmed by the reactivation of MAPK signaling. In this combination, BRAF inhibitors attenuate upstream signaling pressure on MEK inhibitors, and MEK inhibitors further limit downstream MAPK signaling not inhibited by the BRAF inhibitor.

ERK

The extracellular signal-regulated kinases (ERK), ERK1 and ERK2, are ubiquitous serine-threonine kinases that regulate cellular signaling in both physiological and pathological states and comprise the most distal node of the RAS/MAPK pathway. Once activated by MEK, ERK proteins phosphorylate thousands of downstream proteins, propagating RAS/MAPK signaling across multiple cellular functions. In contrast to currently approved allosteric MEK inhibitors, ERK inhibitors in development are ATP-competitive and as a result, their potency is robust against the activated state of ERK. Based on this property, ERK inhibitors potentially can overcome drug resistance mechanisms that involve reactivation of RAS/MAPK pathway signaling, such as a rebound of RAS/MAPK signaling resulting from the alleviation of negative feedback or an upstream RAS/MAPK pathway protein adopting an acquired resistance mutation.

ULK

Autophagy is a metabolic process that cells use to break down and recycle cellular components. This process enables cells to renew cellular components whose functions are impaired due to age or malfunction. Autophagy also serves as a survival mechanism in nutrient deprived conditions, enabling the cell to continue to synthesize critical cellular components. RAS-driven tumor cells reconfigure many of their metabolic processes, including autophagy, to better fuel their growth and survival. Autophagy can act as a resistance mechanism to RAS/MAPK pathway inhibitors by becoming constitutively active and enabling the cell to survive metabolic stresses induced by the inhibition of RAS/MAPK pathway signaling. ULK1 and ULK2 are serine-threonine kinases that control the initiation of autophagy, thereby acting as gatekeepers of autophagy. Combining a RAS/MAPK pathway inhibitor with an ULK1 and/or ULK2 inhibitor can potentially inhibit tumor growth by blocking upregulation of autophagy, a potential escape route or adaptive resistance mechanism to the RAS/MAPK pathway inhibitor.

MYC

The MYC protein (also known as c-MYC) is a transcription factor that regulates the transcription of hundreds of genes that are associated with cell growth. Transcription factors guide the cellular machinery to transcribe specific genes in the nucleus and those transcribed genes are then translated into proteins in the cytoplasm. Transcription factors are regulated by multiple signaling pathways, including RAS/MAPK, and they integrate this signaling information to transcribe genes in a context-dependent manner. Dimerization is required for MYC transcription factor activity and MYC's most frequent dimerization partner is MAX. The activity of the MYC-MAX complex is largely driven by the concentration of MYC protein in the nucleus but other factors, such as the phosphorylation status of MYC, also regulate MYC activity. Given MYC's critical role in regulating genes that drive cell growth, MYC function is dysregulated in 40% of cancers and MYC overexpression is the most frequent form of MYC dysregulation. MYC's role as a transcription factor and not an enzyme has made the development of inhibitors targeting the MYC protein challenging. We believe inhibiting the transcription of MYC and/or MYC-agonists, such as MAX, offers a promising alternative therapeutic approach to reduce MYC activity in tumors where the traditional direct targeting of the MYC protein has failed. MYC and RAS are two of the most commonly dysregulated genes in human cancer and are also downstream effectors for a range of other oncogenic mutations in a variety of tumor types. MYC and RAS also frequently cooperate with each other in tumor development, heightening the urgency of targeting these two pivotal oncogenes.

Our approach is focused on comprehensively silencing the RAS/MAPK pathway by targeting these key signaling nodes, from upstream RTKs to downstream nuclear transcription factors, which have been shown to drive cell proliferation across a wide range of tumor types.

Patient lives at stake annually with RAS/MAPK pathway alterations

At Erasca, we are on a bold mission to erase cancer. The journey will be long, and it won't be easy. But patients with cancer are waiting, and we are eager to make new therapies available as soon as possible. Our mission will involve delivering new therapies to patients in markets where there are limited or no approved therapies, which are referred to as "blue oceans" (adapted from *Blue Ocean Strategy* by Chan Kim & Renée Mauborgne), as well as markets where there are already approved or soon to be approved product offerings, or "red oceans." Of the approximately 5.5 million new patients diagnosed globally per year with cancers driven by RAS/MAPK pathway alterations, over 90% (approximately 5 million patients) are in blue oceans with limited or no treatment options. In the United States and Europe, there are over 1.8 million patients per annum who could be treated with the therapies we are seeking to develop and commercialize. In other parts of the world, we intend to explore partnerships in selected geographies to maximize the worldwide commercial potential of our programs.

New cases estimated worldwide per annum (thousands; numbers may not add up due to rounding)

Alterations	GBM	HNSCC	NSCLC	CRC	Melanoma	PDAC	Other solid tumors	AML	US	EU	ROW	Global
EGFR*FLT3	125	513	184	338	-	-	-	61	82	222	917	1,220
NF1	25	58	98	35	33	1.9	434	3.2	75	159	453	687
KRAS G12C	-	2.8	240	57	-	5.0	45	0.1	36	82	232	350
Other KRAS	0.5	14.1	252	703	1.6	420	527	4.7	179	470	1,273	1,922
NRAS	0.5	8.4	11.7	72	71	1.0	116	13.8	42	82	170	295
HRAS	0.2	45	7.8	0.4	3.0	0.2	57	-	11	24	80	114
BRAF V600E/K	2	1.9	23	130	93	1.4	158	0.4	56	113	242	411
Other BRAF	0.5	4.7	33	24	9.7	0.8	87	0.2	18	39	103	160
MEK	0.2	1.9	11.7	8.8	4.6	0.2	22	-	5	11	33	50
Co-occurring activating MAPK pathway alterations**	1.4	10.3	62	59	37	7.1	84	3.0	33	69	162	264
US	12	29	93	110	77	51	153	11	536			
EU	34	76	194	385	116	124	324	18		1,271		
Rest of World	109	555	635	931	60	264	1,053	57			3,664	
Global	155	660	923	1,426	253	438	1,530	86				5,472

* Post-Osimertinib resistant population shown for EGFR in NSCLC except for SCLC transformation
 ** Co-occurring activating MAPK pathway alterations exclude EGFR overexpression
 Source: IGCDB database (2020), ECIS database (2020), GLOBOCAN database (2020), The AACR Project GENIE Consortium version 8.1 (2020), TCGA Research Network. <https://www.cancer.gov/toga>, Teye JW et al. (2018) PMID: 2833827, Brenner DR et al. (2013) PMID: 24120142, Chen J et al. (2020) PMID: 32019520, and Osimertinib GT. et al. (2020) PMID: 33123752

Blue ocean opportunities Red ocean opportunities

Our therapeutic strategies for shutting down the RAS/MAPK pathway

We believe that to effectively shut down a pathway that signals as promiscuously as RAS/MAPK, a holistic approach must be taken to target not just single nodes, but multiple nodes and cooperative mechanisms in parallel. We believe our internally and externally sourced RAS/MAPK pathway-focused pipeline, comprising 11 targeted therapy programs, is the deepest in the industry. The target breadth and molecular diversity represented in our pipeline enable us to pursue a systematic, data-driven clinical development effort to identify single agent and combination approaches that aim to prolong survival in a wide range of patient populations with unmet needs. We are pursuing three therapeutic strategies that may be used in combination with the goal of comprehensively, and perhaps synergistically, shutting down the RAS/MAPK pathway:



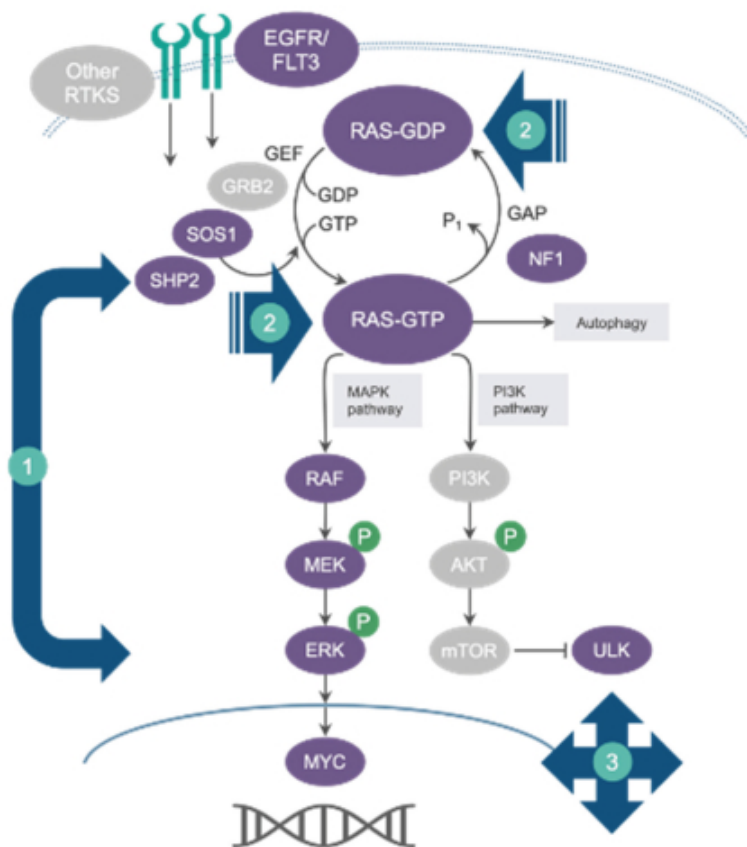
- 1. Target upstream and downstream MAPK pathway nodes with single agents and combinations intended to clamp these oncogenic drivers (MAPKlamp).** Our first therapeutic strategy to erase cancer is a novel MAPKlamp that targets upstream and downstream nodes, initially SHP2 and ERK, respectively, to shut down, or clamp, the signaling of various oncogenic drivers such as RTKs, NF1, RAS, RAF, and MEK alterations trapped in between any nodes involving this pathway. With our MAPKlamp approach, we aim to induce tumor regression in RAS/MAPK pathway-driven cancers, while also blocking their main escape routes that lead to tumor resistance. We are also discovering and developing single agent and combination approaches to target other upstream nodes that impact the RAS/MAPK pathway such as EGFR, an RTK that represents a key escape route for RAS/MAPK pathway signaling, and SOS1, a GEF that enables RAS to cycle from the inactive GDP state to the active GTP state.
- 2. Target RAS, the midstream MAPK pathway node, directly with single agents and combinations.** Our second therapeutic strategy to erase cancer is to target RAS directly by discovering and developing molecules that have the potential to inhibit RAS-GDP, as well as the more prevalent RAS-GTP. Utilizing our in-house discovery efforts employing structure-based drug/degrader design (SBDD), we are developing a CNS-penetrant inhibitor of KRAS G12C, which is the only RAS isoform and mutation that is more commonly present in the inactive RAS-GDP state. We are also employing SBDD to develop proprietary compounds against KRAS G12D, which is more commonly found in the active RAS-GTP state and is the most prevalent KRAS mutation. Our approach to targeting other RAS isoforms and mutations that are found more commonly in the RAS-GTP state is based on the foundational discoveries of one of our co-founders, Dr. Kevan Shokat, a world-renowned pioneer of novel therapeutic approaches to targeting key signaling pathways such as RAS/MAPK in cancer.

Dr. Shokat's deep expertise in chemical genetics, a combination of protein engineering and organic synthesis, led to his identification of both the S-IIP binding pocket on KRAS G12C, a RAS-GDP mutation which was previously considered "undruggable," and a compound that could bind to it. This seminal

discovery has launched the development of multiple KRAS G12C inhibitors targeting the S-IIP. Dr. Shokat then turned his attention to RAS-GTP mutations which, compared to RAS-GDP mutations, are more challenging to drug and arguably more important, as other RAS isoforms and mutations are present more frequently in the active RAS-GTP state, thereby driving downstream phosphorylation and oncogenic signaling. Dr. Shokat made a breakthrough discovery of a new binding site termed the “switch II groove” (S-IIIG), which could be utilized to inhibit the GTP and GDP states of RAS. This landmark discovery allows for the possibility of targeting multiple RAS isoforms (including KRAS, HRAS, and NRAS) and mutations (including G12X, G13X, and Q61X) with small molecule compounds that can potentially bind to the S-IIIG.

- 3. *Target escape routes enabled by other proteins or pathways to further disrupt RAS/MAPK pathway signaling.*** Our third therapeutic strategy to erase cancer is to target other pathways and mechanisms that cooperate with RAS/MAPK pathway signaling. For example, RAS-driven cancers can become dependent on autophagy, which becomes constitutively active and represents a potential escape route for metabolically active tumors such as pancreatic ductal adenocarcinoma. By targeting ULK, a key regulator of autophagy, in combination with our RAS targeting agents, we aim to shut down this potential escape route for RAS-driven cancers. We also are actively pursuing various ways to further disrupt RAS/MAPK signaling by degrading key proteins. Finally, MYC is a transcription factor and oncogene that is overexpressed in the majority of human cancers, contributing to at least 40% of tumors and is a key enabler of RAS/MAPK pathway signaling at the transcriptional level. We are discovering novel approaches to targeting MYC.

Our strategic focus on the RAS/MAPK pathway allows us to comprehensively target every critical node in the pathway that could drive signaling. As shown in the figure below, our wholly-owned or controlled pipeline targets, either directly or indirectly, each of the signaling nodes colored in purple.



Our innovation model

Due to the magnitude of the challenge of erasing cancer, we are combining our robust internal discovery and development capabilities with a global in-licensing and acquisition strategy to assemble the industry's deepest, modality-agnostic RAS/MAPK pathway-focused pipeline. We believe these complementary approaches to innovation provide us with important optionality, both therapeutically and strategically, as we endeavor to bring forth the next generation of potentially differentiated targeted therapies for RAS/MAPK pathway-driven cancers.

Internal discovery and development

We have built a productive and efficient internal discovery engine at the heart of which lies SBDD, a key tool for the discovery of novel small molecule therapeutics and protein degraders by elucidating the three-dimensional structure of the potential drug molecule or degrader bound to the target protein of interest, allowing scientists to better understand and iterate on the structure-activity relationship of their hit and lead compounds or degraders. Three of our senior scientists were early pioneers in the use of SBDD while at Agouron Pharmaceuticals (now Pfizer), the first biotechnology company to use protein structure to inform medicinal

[Table of Contents](#)

chemistry for drug discovery: Dr. Dave Matthews, the scientific founder of Agouron, is our Senior Crystallography Advisor; Dr. Michael Varney, one of the original employees at Agouron who built the team that developed SBDD, is our Chair of R&D, SAB member, and a member of our board of directors; and Dr. Ping Chen, our Senior Director of Crystallography, was a member of Dr. Matthews' structural biology team at Agouron, and joined us from Pfizer to lead our internal structural biology efforts which generates more than 100 protein structures annually to guide our discovery research.

We use computational biology and computational chemistry to accelerate our discovery activities. We have standardized how we characterize our compounds across in vitro/vivo activity, drug distribution, metabolism, and PK, structural, and secondary pharmacology assays, and centralized the storage of these data for automated analyses. These data are continuously reviewed by our scientific teams, and promising trends, including unpredicted ones that arise serendipitously, are prioritized for future exploration.

We supplement our medicinal chemistry efforts with DNA encoded library (DEL) screens to identify novel chemical matter with promising activity against targets of interest. These "hits" give us starting points for our early-stage drug discovery programs, and also provide opportunities to diversify molecular designs for later-stage discovery programs. DEL screens interrogate the binding of billions of compounds against our targets and increase the likelihood that we will discover a fragment that we can eventually transform into a potent therapy.

Based on our previous collective experiences at Ignyta, Roche/Genentech, Pfizer, and elsewhere, our team has extensive precision oncology expertise with dynamic clinical trial designs such as adaptive trials, biomarker-based basket and umbrella studies, and master protocols. We will continue to leverage this experience, in collaboration with industry and academic partners, in order to quickly demonstrate clinical proof-of-concept in a variety of tumor types for both single agent and combination approaches.

External sources of innovation

We believe innovation in cancer therapy is a collective, global endeavor unlikely to emerge from a single company or a single platform. There are exciting product candidates, technologies, and approaches in development worldwide, and our innovation model gives us the flexibility to supplement our internal efforts with externally sourced assets through collaboration, in-license, or acquisition. We also established Erasca Ventures, LLC, our wholly-owned subsidiary, in March 2021 to potentially make equity investments in early-stage biotechnology companies that are aligned with our mission and strategy. To date, we have in-licensed or acquired novel therapies from multiple geographic regions, including our clinical-stage, oral ERK1/2 inhibitor, ERAS-007, which we acquired from Asana.

We leverage our extensive network of preferred relationships with our Scientific and Research & Development Advisory Boards, as well as leading institutional investors, investment banks, academic institutions, and biopharmaceutical companies that keep us apprised of assets of strategic interest. We pursue the best science in the world, regardless of its origin, and will continue to evaluate additional opportunities to strengthen and diversify our pipeline through academic and biopharmaceutical collaborations, in-licenses, acquisitions, and strategic investments that meet our high scientific bar and can help us advance our mission to erase cancer.

Modality-agnostic pipeline

Cancer is a complex, heterogeneous disease that is unlikely to succumb to a one-size-fits-all approach. We believe shutting down the RAS/MAPK pathway in cancer requires a systematic, data-driven approach to development, part of which involves choosing the most appropriate technology for the target of interest, or what we call a modality-agnostic approach. We therefore seek to understand the biology of the target of

[Table of Contents](#)










interest first, and then choose the therapeutic modality best suited to optimally inhibit or degrade that target. We are currently utilizing several modalities to target the RAS/MAPK pathway, including small molecule therapeutics, large molecule therapeutics, and protein degraders.

For example, our collaboration with ELS has given us access to world-class large molecule capabilities. Our collaboration with ELS gives us access to cutting-edge biologics technology that adds, for example, ERAS-12 (a bispecific antibody against EGFR D2/D3) to our armamentarium against oncogenic RAS/MAPK pathway signaling.

We are developing protein degraders in addition to our internal small molecule discovery capabilities, including proteolysis targeting chimeras (PROTACs), as a complementary strategy to modulate RAS/MAPK pathway proteins of interest. PROTAC-mediated degradation is a viable option for attenuating oncogenic RAS/MAPK pathway levels and downstream signaling in cancer cells, by utilizing the body’s own natural disposal system to remove oncogenic proteins selectively and efficiently.

Our pipeline

We have assembled what we believe is the deepest, wholly-owned or controlled RAS/MAPK pathway-focused pipeline in the industry, comprising 11 modality-agnostic programs aligned with our three therapeutic strategies of: (1) targeting key upstream and downstream signaling nodes in the RAS/MAPK pathway; (2) targeting RAS directly; and (3) targeting escape routes that emerge in response to treatment. The table below summarizes our current pipeline. We have exclusive worldwide development and commercial rights for all of our programs.

Program (Target)	Modality	Indication	Discovery	IND-enabling	Phase 1	Phase 2	Phase 3	Erase Cancer Strategy	Worldwide Rights
ERAS-007* (MAPK1amp) (ERK, SHP2, others)		Tiss. agnostic RAS/MAPK alt. solid tumors	HERKULES-1 ongoing					1	ERASCA-
		EGFRm & RAS/MAPK altered NSCLC	HERKULES-2 planned					1	ERASCA-
		BRAFm & RAS/MAPK altered CRC	HERKULES-3 planned					1	ERASCA-
		FLT3m & RAS/MAPK altered liquid tumors	HERKULES-4 planned					1	ERASCA-
ERAS-601 (SHP2)		RAS/MAPK altered tumors	FLAGSHIP-1					1	ERASCA-
ERAS-801 (EGFR)		EGFR altered GBM						1	ERASCA-
ERAS-1 (KRAS G12C)		KRASm G12C solid tumors						2	ERASCA-
ERAS-2/3 (RAS-GTP)		RASm solid tumors						2	ERASCA-
ERAS-4 (KRAS G12D)		KRASm G12D solid tumors						2	ERASCA-
ERAS-5 (ULK)		RASm solid tumors						3	ERASCA-
ERAS-10 (RAS/MAPK)		RAS/MAPK altered cancers						1 2 3	ERASCA-
ERAS-12 (EGFR D2/D3)		EGFR & RAS/MAPK altered solid tumors						1	ERASCA-

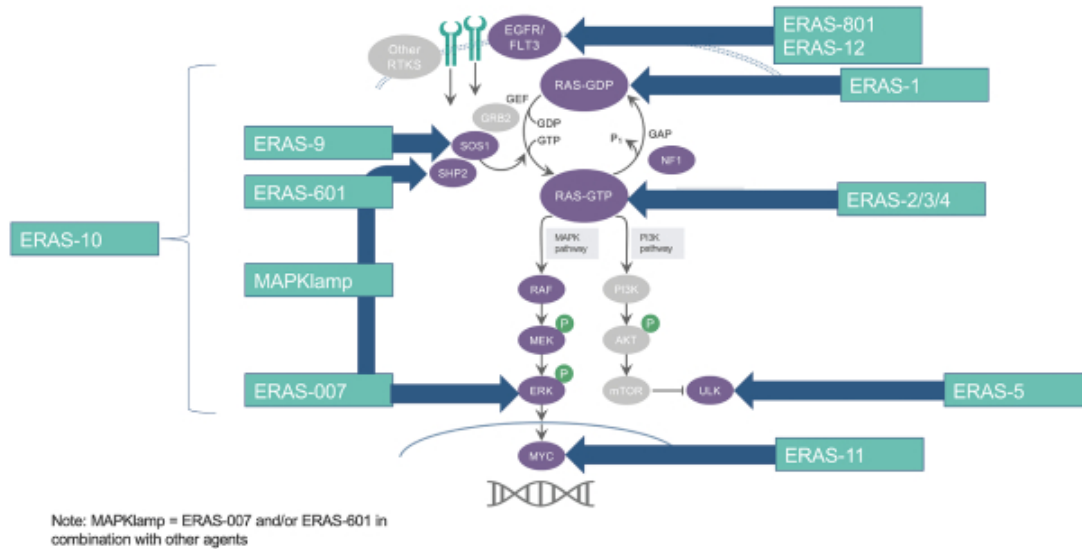
 = small molecule  = large molecule  = protein degrader

* Phase 1 clinical trial of ERAS-007 evaluating the safety, tolerability, PK, PD, and preliminary anti-tumor activity of ERAS-007 in patients with advanced solid cancers was completed by Asana. The results of this trial helped inform the design of our clinical development program and doses to be tested for ERAS-007, which we will study in more specific patient populations. Please refer to the detailed results of this trial and the description of our ongoing and planned HERKULES clinical trials beginning on pages 135 and 143 of this prospectus, respectively.

In addition, we have two additional discovery programs, ERAS-9 and ERAS-11, small molecule inhibitor programs targeting SOS1 and MYC, respectively.

Importantly, we believe the target breadth and molecular diversity represented in our pipeline enable us to pursue a systematic, data-driven clinical development effort to identify single agent and combination approaches designed to comprehensively shut down the RAS/MAPK pathway in a range of underserved cancer indications. The figure below illustrates the overlay between our current pipeline and several key nodes in the RAS/MAPK pathway that we believe are attractive targets for therapeutic intervention. Our pipeline also

provides potential solutions for patients with limited or no treatments available by directly targeting with single agents and/or clamping with combinations, the various nodes of the RAS/MAPK pathway.



MAPKlamp: our therapeutic strategy targeting proximal and distal nodes of the RAS/MAPK pathway

Our first therapeutic strategy to erase cancer is MAPKlamp, a novel approach targeting upstream and downstream nodes in the RAS/MAPK pathway designed to shut down, or clamp, the signaling of various oncogenic drivers, such as RTKs, NF1, RAS, RAF, and MEK alterations trapped in between any nodes involving this pathway. With our MAPKlamp approach, we aim to induce tumor regression in RAS/MAPK pathway-driven cancers, while also blocking the main escape routes that lead to tumor resistance.

Our lead product candidates are ERAS-007 (our oral ERK1/2 inhibitor) and ERAS-601 (our oral SHP2 inhibitor), which together comprise our first, innovative MAPKlamp. ERK and SHP2 are the convergent downstream and upstream nodes of the RAS/MAPK pathway, respectively. ERK proteins propagate signaling for multiple cellular functions involved in cell growth and differentiation, which are often overactivated in RAS/MAPK pathway-driven cancers. We believe that targeting ERK, the most distal node of the RAS/MAPK pathway, is preferable to targeting MEK because it is less prone to MAPK pathway reactivation, which leads to greater suppression of signaling. The second prong of our MAPKlamp, ERAS-601, is a potent and selective oral inhibitor of SHP2, a critical “on/off switch” that activates RAS-GTP signaling. Our SHP2 inhibitor is designed to block oncogenic signal transduction and delay the onset of therapeutic resistance. Targeting either or both of these key nodes thereby has the potential to serve as a backbone of combination therapy against RAS/MAPK pathway altered cancers.

As our portfolio advances, we anticipate additional MAPKlamp combinations to emerge. Given the breadth of our pipeline, we believe we are the only company that has the therapeutic and strategic flexibility to comprehensively target every critical node in the RAS/MAPK pathway that could drive cancer signaling.

ERAS-007: our ERK inhibitor

ERAS-007 is designed to be a potent and selective oral inhibitor of ERK1/2. We in-licensed ERAS-007 from Asana based in part on preclinical studies that demonstrated the highest potency and longest target residence time of ERK inhibitors of which we are aware. In a Phase 1 clinical trial completed by Asana, ERAS-007 demonstrated single-agent activity including objective responses in tumors harboring RAS/MAPK pathway alterations and was well tolerated. We are pursuing a broad clinical development plan for ERAS-007, which we refer to as our HERKULES series of clinical trials, across multiple tumor types that will include both monotherapy and combinations with approved and investigational agents, such as RTK, SHP2, RAS, and/or RAF inhibitors. The first four HERKULES Phase 1b/2 clinical trials will explore both tissue agnostic and tissue specific indications in patients with solid tumors and hematologic malignancies. We dosed the first patient in HERKULES-1 in May 2021 and we expect to dose the first patient in the additional three HERKULES trials by the first quarter of 2022. We believe that as many as 4.5 million patients worldwide per year could benefit from ERAS-007 combinations that include MAPK1amp, including 4.0 million patients with blue ocean indications where there are currently limited or no approved therapies.

Preclinical profile of ERAS-007

Asana completed a series of preclinical studies to characterize the differentiated attributes, namely high potency and long target residence time, of ERAS-007 in vivo and in vitro. In multiple assays, ERAS-007 achieved potent, reversible, and ATP-competitive inhibition of ERK1 and ERK2 with a biochemical IC₅₀ (a measure of 50% inhibition) against both ERK1 and ERK2 of 2 nM and cell-based mechanistic IC₅₀ against pRSK of 7 nM. In addition, ERAS-007 exhibited long biochemical residence time while bound to ERK, which has been measured as 550 minutes against ERK2. This longer target residence time compared to other clinical-stage ERK inhibitors may allow for longer intervals between doses in patients.

Assay Type	Assay	ERAS-007 IC ₅₀ (nM)
Biochemical	ERK1	2
	ERK2	2
Cell-based mechanistic (HT-29)	pRSK	7

ERAS-007 IC₅₀s against ERK1 and ERK2 were characterized in a biochemical kinase activity. Cell-based IC₅₀ was characterized by the ability of ERAS-007 to inhibit ERK from phosphorylating one of its downstream targets, RSK1. pRSK represents RSK1 phosphorylation.

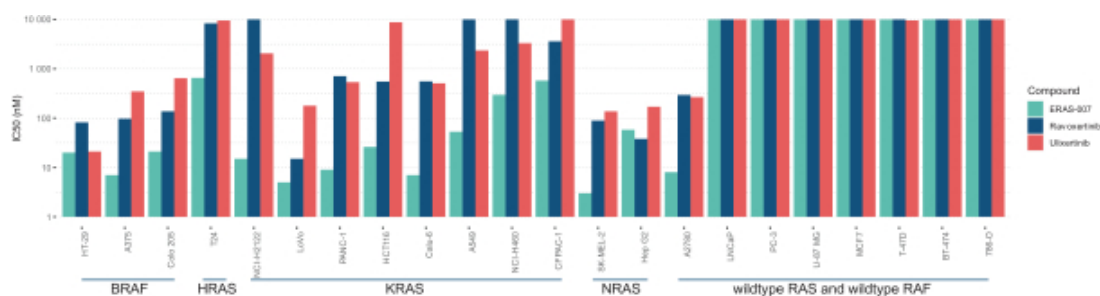
Compound	k _{off} (s ⁻¹)	Residence Time (min)
ERAS-007	0.30 x 10⁻⁴	550
Ulixertinib	10.1 x 10 ⁻⁴	16
Ravoxertinib	13.9 x 10 ⁻⁴	12

The biochemical binding properties of three clinical-stage ERK inhibitors shown as both the rate at which each inhibitor dissociates from ERK2 (k_{off}) and the period of time that each ERK inhibitor binds ERK2 (residence time).

This biochemical potency has translated into strong anti-proliferative activity in cell lines with mutations in the RAS/MAPK pathway compared to other clinical-stage ERK inhibitor compounds. In 14 out of 14 cell lines that

Table of Contents

harbored activating RAS/MAPK pathway alterations, ERAS-007 exhibited potent activity with a less than 1 μM IC50. In two KRAS G12C cell lines, ERAS-007 showed greater potency to ulixertinib, an ERK inhibitor, comparable potency to binimetinib, a MEK inhibitor, and sotorasib, a KRAS G12C inhibitor. Cellular signaling studies demonstrated that ERAS-007 inhibited phosphorylation of downstream targets of ERK such as ribosomal S6 kinases (RSK), Fos-related antigen (FRA), and ETS domain-containing protein (ELK) in the BRAF V600E CRC HT-29 cell line. Demonstrating its selectivity, in seven out of eight cell lines that did not harbor any activating RAS/MAPK pathway alterations, ERAS-007 showed weak inhibition with a greater than 10 μM IC50. Together, these results suggest that ERAS-007 is a potent and selective ERK inhibitor with the ability to inhibit cell growth in multiple models of RAS/MAPK pathway-driven cancers relative to other agents used in these settings.



ERAS-007, ulixertinib and ravoxertinib were profiled in 3 BRAF mutant, 1 HRAS mutant, 8 KRAS mutant, 2 NRAS mutant, and 8 wildtype RAS and wildtype RAF cell lines. Nanomolar IC50 values are represented on the y-axis. Lower IC50s denote stronger activity.

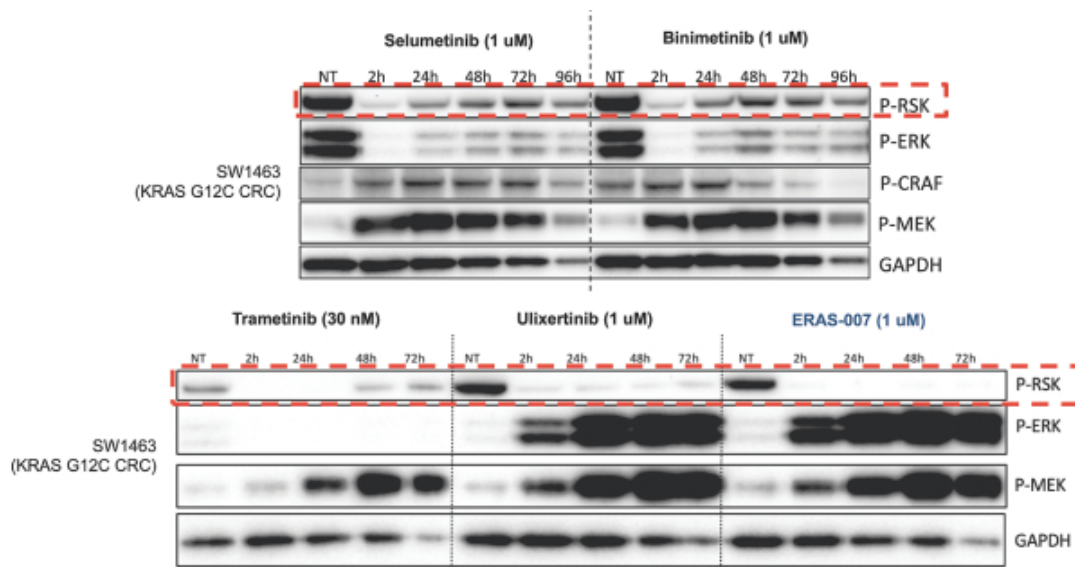
Compound Name	Inhibitor Class	MIA PaCa-2 IC50 (nM)	NCI-H358 IC50 (nM)
ERAS-007	ERKi	7.1	8.2
Ulixertinib	ERKi	206.8	131.3
Binimetinib	MEKi	16.6	5.4
Trametinib	MEKi	3.4	0.8
Sotorasib	KRAS G12Ci	13.3	2.6

ERAS-007 inhibits cell viability of two KRAS G12C mutant cell lines, pancreatic carcinoma MIA PaCa-2 and NSCLC NCI-H358, with higher potency than a clinical-stage ERK inhibitor, ulixertinib, and comparable potency to an approved MEK inhibitor, binimetinib, and an approved KRAS G12C inhibitor, sotorasib.

Inhibition of signaling by kinases is typically achieved by either: (1) ATP-competitive inhibition whereby an inhibitor blocks ATP binding or (2) allosteric inhibition whereby an inhibitor does not block ATP binding but rather binds to a different region to prevent the kinase from signaling downstream. Currently approved MEK inhibitors, trametinib, binimetinib, selumetinib, and cobimetinib, are allosteric MEK inhibitors. A potential limitation of these allosteric MEK inhibitors is that they preferentially bind MEK in the inactive state and have weaker inhibitory activity against activated MEK proteins. Another limitation is that some MEK inhibitors preferentially disrupt activation via one RAF family member (e.g., BRAF) but not another (e.g., CRAF). Due to negative feedback regulation in the RAS/MAPK pathway, inhibition of downstream signaling nodes can result in

Table of Contents

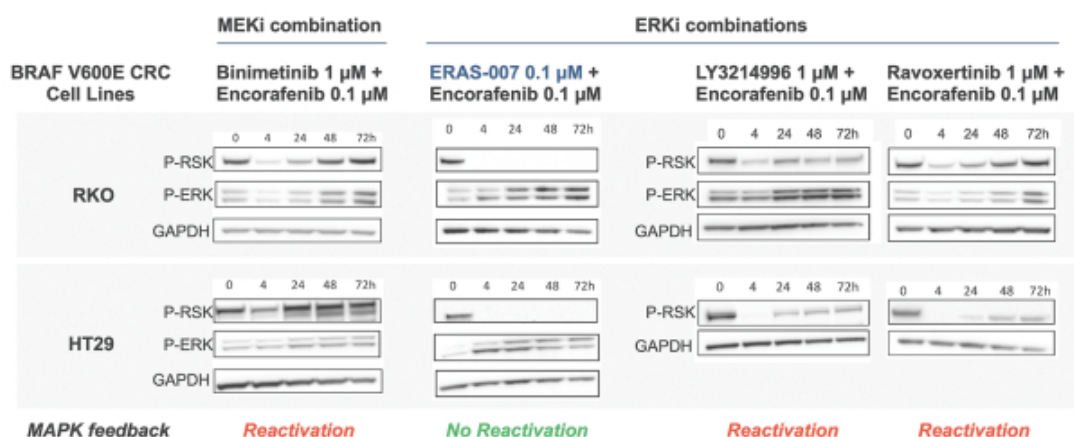
RAS/MAPK pathway feedback reactivation that is mediated through multiple members of the RAF family. This increased upstream signaling pressure can serve as a resistance mechanism to MEK inhibitors and has been observed in the clinic. As an ATP-competitive ERK inhibitor, ERAS-007 has been shown to more robustly block RAS/MAPK pathway reactivation than allosteric MEK inhibitors. As shown in the figure below, ERAS-007 continuously inhibited downstream ERK activity in a KRAS G12C mutant CRC cell line, whereas the RAS/MAPK pathway was reactivated beginning as early as 24 hours after treatment with each of the three MEK inhibitors, which is illustrated with the emergence of the dark P-RSK bands (darker intensity equates to higher signaling or reactivation) in the following Western blots.



Western blot characterization of three MEK inhibitors (selumetinib, binimetinib, and trametinib) and two ERK inhibitors (ulixertinib and ERAS-007) in the KRAS G12C mutant CRC cell line SW1463. The phosphorylation states of RSK (P-RSK), ERK (P-ERK), CRAF (P-CRAF) and MEK (P-MEK) are shown. Band intensity indicates level of phosphorylation. Total GAPDH (GAPDH), a housekeeping gene, is used as a protein loading control. Times, in hours, represent the duration of compound incubation. NT means “no treatment,” and this sample serves as a negative control. The level of P-RSK, highlighted in dotted red rectangles, indicates ERK signaling activity. The absence of a P-RSK band indicates inhibition of ERK signaling activity and thereby inhibition of RAS/MAPK pathway signaling.

Table of Contents

In BRAF V600E colorectal cell lines, ERAS-007 also blocked the RAS/MAPK pathway feedback reactivation observed with MEK or other ERK plus BRAF inhibitor combinations at one-tenth the concentration used for the MEK and other ERK inhibitors. These results provide further support that inhibition of ERK by ERAS-007 may lead to more complete and durable blockade of the RAS/MAPK pathway relative to other inhibitors of ERK or MEK, either alone or in combination.

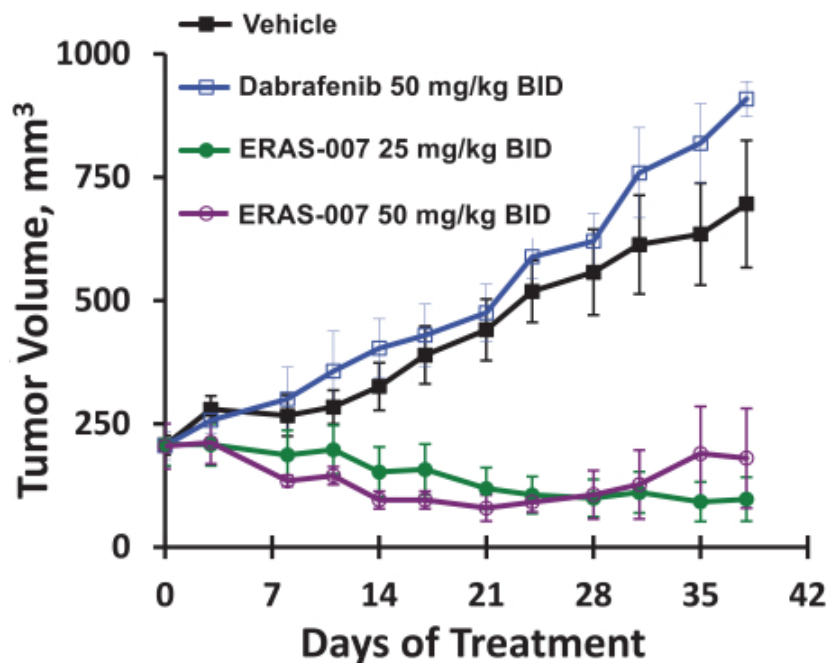


Treatment of two BRAF V600E mutant CRC cell lines, RKO and HT-29, with encorafenib in combination with the MEK inhibitor binimetinib, the ERK inhibitor ERAS-007, the ERK inhibitor LY3214996, and the ERK inhibitor ravoxertinib. The Western blot gels depict phosphorylation of RSK (P-RSK) and ERK (P-ERK). Higher levels of phosphorylation are depicted by higher (i.e., darker) band intensity. Total GAPDH protein (GAPDH) serves as a loading control. ERK signaling activity is represented by the phosphorylation state of RSK (P-RSK), which is a downstream target of ERK. The column values indicate the duration of compound incubation of up to 72 hours.

To explore ERAS-007 activity in vivo, we measured tumor growth inhibition (TGI) in a melanoma patient-derived xenograft (PDX) model resistant to BRAF and MEK inhibitors. Whereas treatment with dabrafenib, a BRAF inhibitor, and vehicle showed similar tumor growth trajectories, ERAS-007 significantly inhibited tumor growth at the end of the 38-day treatment period at both 25 mg/kg BID (p-value < 0.001) and 50 mg/kg BID (p-value < 0.01). These data suggest ERAS-007 may be more potent than BRAF or MEK inhibitors in achieving inhibition of the RAS/MAPK pathway and may be able to overcome treatment resistance.

A p-value is the probability that the reported result was achieved purely by chance, such that a p-value of less than or equal to 0.05 means that there is a less than or equal to 5% probability that the difference between the control group and the treatment group is purely due to chance. A p-value of 0.05 or less typically represents a statistically significant result. The FDA's evidentiary standard of efficacy when evaluating the results of a clinical trial generally relies on a p-value of less than or equal to 0.05.

ERAS-007 TGI in a dabrafenib resistant BRAF V600E mutant melanoma PDX model

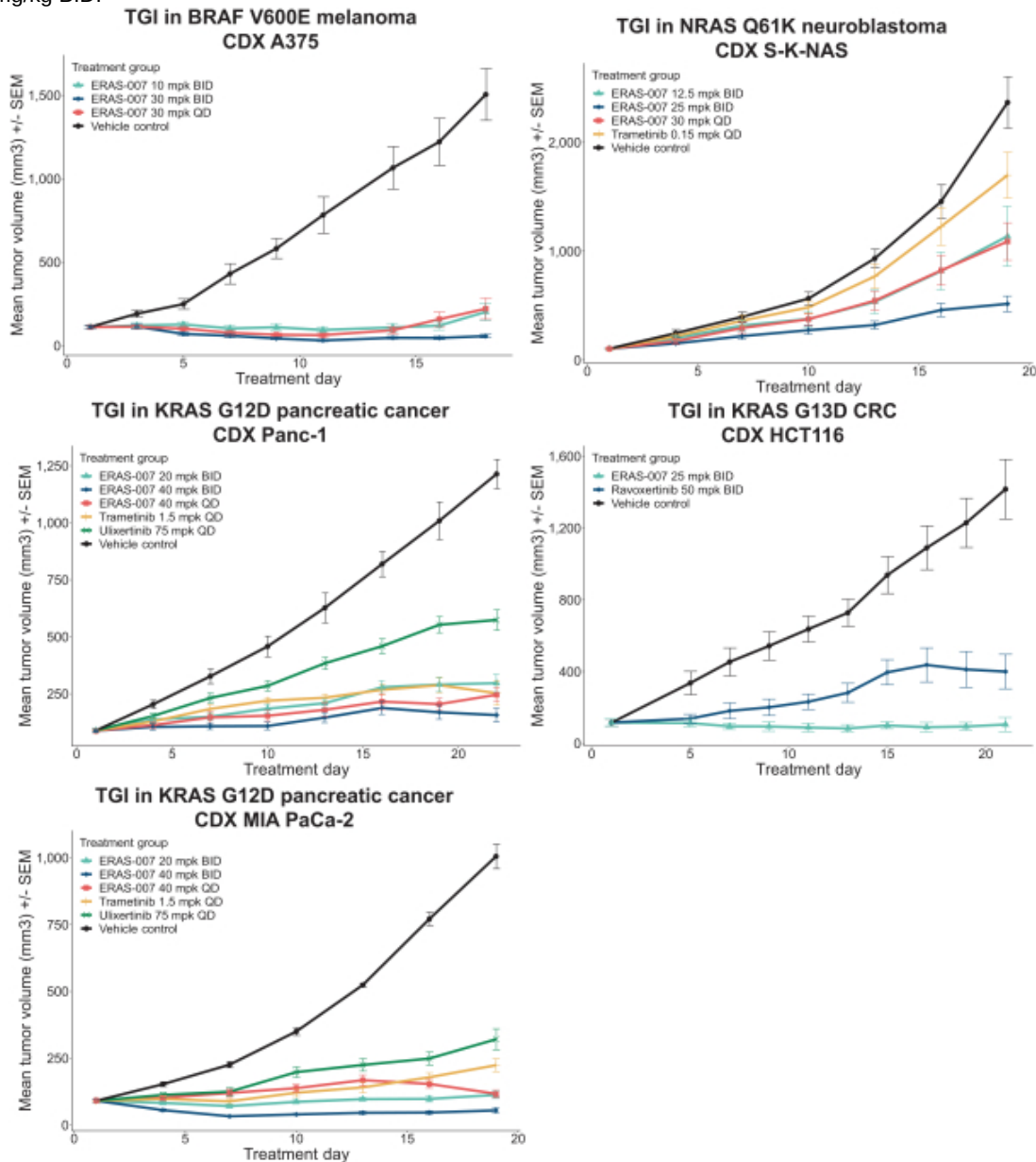


ERAS-007 shows significant TGI relative to vehicle control at both 25 mg/kg BID (p -value < 0.001) and 50 mg/kg BID (p -value < 0.01) in a dabrafenib resistant melanoma PDX model.

Preclinical anti-tumor activity of ERAS-007

We further showed the breadth of ERAS-007 in vivo activity in CRC, NSCLC, pancreatic cancer, melanoma, and neuroblastoma models harboring alterations in the BRAF, NRAS, or KRAS nodes of the RAS/MAPK pathway. In the BRAF V600E mutant melanoma cell line-derived xenograft (CDX) A375 model, ERAS-007 showed dose-dependent tumor inhibition with a maximal 104% TGI at 30 mg/kg BID (p -value < 0.001 across all ERAS-007 doses relative to vehicle control). In the NRAS Q61K mutant neuroblastoma CDX SK-N-AS model, ERAS-007 showed dose-dependent tumor inhibition with a maximal 82% TGI at 25 mg/kg BID (p -value < 0.001 across all ERAS-007 doses relative to vehicle control). In the KRAS G12D pancreatic CDX Panc-1 model, ERAS-007 showed dose-dependent TGI with a maximal 94% TGI at 40 mg/kg BID (p -value < 0.001 across all ERAS-007 doses).

relative to vehicle control). In the KRAS G13D CRC CDX HCT116 model, ERAS-007 showed 101% TGI at 25 mg/kg BID (p-value < 0.001 relative to vehicle control). ERAS-007 showed superior TGI to ulixertinib at 75 mg/kg QD in Panc-1 and MIA PaCa-2 at doses ranging from 20 mg/kg BID to 40 mg/kg BID.

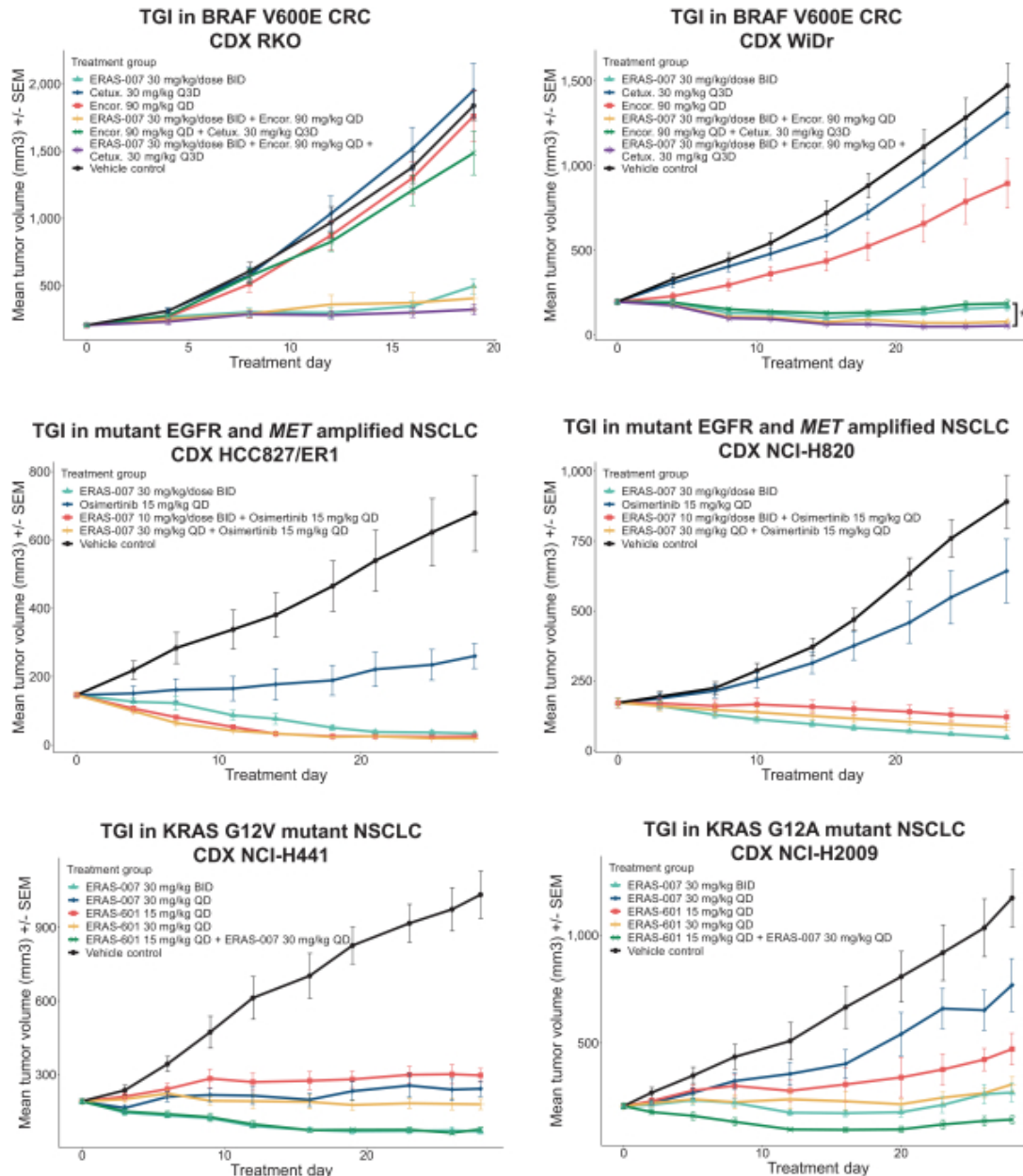


ERAS-007 showed significant TGI in pancreatic cancer, CRC, melanoma, and neuroblastoma CDX models at doses ranging from as low as 10 mg/kg BID (p-value < 0.001). At doses ranging from 20 mg/kg BID to 40 mg/kg BID, ERAS-007 showed superior TGI to a clinical-stage ERK inhibitor, ulixertinib, at 75 mg/kg

QD, in pancreatic cancer Panc-1 and MIA PaCa-2 CDX models. ERAS-007 at 25 mg/kg BID also showed superior TGI to ravoxertinib at 50 mg/kg BID in the CRC HCT-116 CDX model. Relative to trametinib at 1.5 mg/kg QD, ERAS-007 showed superior TGI in the MIA PaCa-2 CDX model at doses ranging from 20 mg/kg BID to 40 mg/kg BID and in the pancreatic cancer CDX Panc-1 at 40 mg/kg BID. In the neuroblastoma S-K-NAS model, ERAS-007 showed superior TGI at doses as low as 12.5 mg/kg BID to trametinib at 0.15 mg/kg QD. Error bars represent standard error of the mean (SEM).

ERAS-007 showed statistically significant TGI in BRAF V600E CRC, mutant EGFR NSCLC, and mutant KRAS NSCLC CDX models as a monotherapy and in combination with standard of care targeted therapies and with ERAS-601 (our first MAPKlamp). In the BRAF V600E CRC CDX model RKO, ERAS-007 exhibited 82% TGI as a monotherapy (p-value < 0.001), 88% TGI in combination with encorafenib (p-value < 0.001) and 93% TGI in combination with encorafenib and cetuximab (p-value < 0.001). In the BRAF V600E CRC CDX model WiDr, ERAS-007 exhibited 102% TGI as a monotherapy (p-value < 0.001), 109% TGI in combination with encorafenib (p-value < 0.001), and 111% TGI in combination with encorafenib and cetuximab (p-value < 0.001). Indicated with an asterisk in the graphic, both ERAS-007 combinations achieved statistically significant TGI relative to either the encorafenib and cetuximab combination or ERAS-007 monotherapy (p-values < 0.01). In the EGFR exon 19 deletion and MET amplified CDX HCC827/ER1, ERAS-007 achieved 121% TGI as a monotherapy (p-value < 0.001), 123% in combination with osimertinib at 10 mg/kg BID (p-value < 0.001), and 124% TGI in combination with osimertinib at 30 mg/kg QD (p-value < 0.001). In the EGFR exon 19 deletion, EGFR T790M, and MET amplified CDX NCI-H820, ERAS-007 achieved 117% TGI as monotherapy (p-value < 0.001), 107% TGI in combination with osimertinib at 10 mg/kg BID (p-value < 0.001), and 112% TGI in combination with osimertinib at 30 mg/kg QD (p-value < 0.001).

In the KRAS G12V NSCLC CDX model NCI-H441, the MAPKlamp combination of ERAS-007 at 30 mg/kg QD and ERAS-601 at 15 mg/kg QD achieved a statistically significant TGI of 113% (p-value < 0.001), demonstrating statistically significant benefit relative to the respective monotherapy doses of both ERAS-007 at 30 mg/kg QD and ERAS-601 at 15 mg/kg QD (p-value < 0.01). ERAS-007 as a monotherapy at 30 mg/kg BID and 30 mg/kg QD doses achieved statistically significant TGI of 115% (p-value < 0.001) and 94% (p-value < 0.001), respectively. ERAS-601 as a monotherapy at 30 mg/kg QD and 15 mg/kg QD doses achieved statistically significant TGI of 101% (p-value < 0.001) and 87% (p-value < 0.001), respectively. In the KRAS G12A NSCLC CDX model NCI-H2009, the MAPKlamp combination of ERAS-007 at 30 mg/kg QD and ERAS-601 at 15 mg/kg QD achieved statistically significant TGI of 107% (p-value < 0.001). MAPKlamp achieved a statistically significant combination benefit relative to the respective monotherapy doses of both ERAS-007 at 30 mg/kg QD and ERAS-601 at 15 mg/kg QD (p-value < 0.01). The MAPKlamp combination also showed statistically significant superior TGI relative to ERAS-007 monotherapy at 30 mg/kg BID (p-value < 0.05) and ERAS-601 monotherapy at 30 mg/kg QD (p-value < 0.01). These doses represent the maximum monotherapy nonclinical efficacious doses for ERAS-007 and ERAS-601. ERAS-007 as a monotherapy at 30 mg/kg BID achieved statistically significant TGI of 93%. ERAS-601 as a monotherapy at 30 mg/kg QD and 15 mg/kg QD doses achieved statistically significant TGI of 90% (p-value < 0.001) and 73% (p-value < 0.001), respectively.

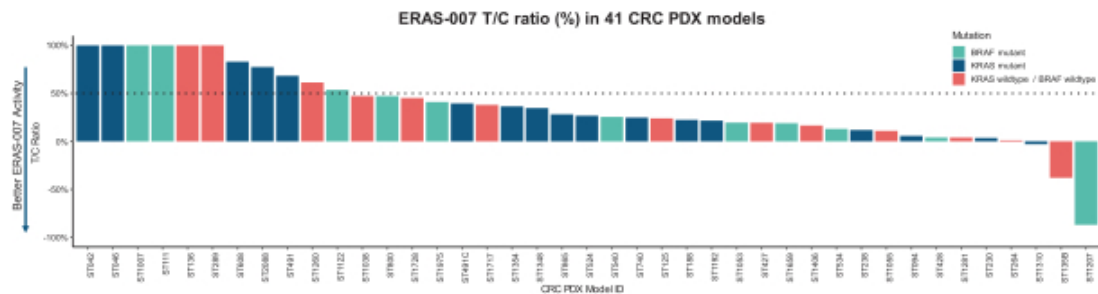


ERAS-007 was profiled in two BRAF V600E CRC CDX models, RKO, which was insensitive to encorafenib and cetuximab treatment, and WiDr, which was sensitive to encorafenib and cetuximab treatment. In both models, ERAS-007 combinations showed superior TGI to encorafenib (Encor.) and cetuximab (Cetux.) monotherapies and to the encorafenib and cetuximab combination (p -value < 0.01). The asterisk in the WiDr graphic indicates that the TGI of the ERAS-007 combinations relative to either the encorafenib and cetuximab combination or ERAS-007 monotherapy was statistically significant (p -value < 0.01). In two osimertinib-resistant mutant EGFR NSCLC CDX models, HCC827/ER1 and NCI-H820, ERAS-007 showed

Table of Contents

superior TGI to osimertinib monotherapy both as a single agent and in combination with osimertinib (p -value < 0.001). In two mutant KRAS NSCLC CDX models, NCI-H441 and NCI-H2009, the MAPKlamp combination of ERAS-007 and ERAS-601 achieved statistically significant TGI relative to vehicle (p -values < 0.01) and showed statistically significant combination benefit relative to the respective monotherapy doses used in the MAPKlamp combination (p -values < 0.01). At their efficacious monotherapy doses, ERAS-007 and ERAS-601 also achieved significant TGI in both models as monotherapies (p -values < 0.01).

In a panel of 41 CRC PDX models, which include the most common genetic alterations in CRC, ERAS-007 inhibited tumor growth by greater than 50% relative to untreated tumors in 30 out of the 41 CRC PDX models (73%). ERAS-007's inhibitory activity was observed in 71% of KRAS mutant models ($n=17$ total), 73% of BRAF models ($n=11$ total), and 77% of KRAS wildtype and BRAF wildtype models ($n=13$ total). Together, these in vivo results suggest ERAS-007 exhibits strong single agent anti-tumor activity across a wide range of tumors with alterations in BRAF and KRAS relative to other agents in use today.



ERAS-007 inhibited tumor growth by greater than 50% in 73% of CRC PDX tumor models. The T/C (treated/control) ratio is calculated as the ratio of mean volume of ERAS-007 treated tumors to mean volume of untreated tumors in the control group. Lower values represent better TGI.

Phase 1 trial of single agent ERAS-007 in patients with advanced solid tumors

Asana completed a Phase 1 first-in-human clinical trial (ASN007-101) that evaluated the safety, tolerability, PK, PD, and preliminary anti-tumor activity of ERAS-007 in patients with advanced cancers. Forty-nine patients were enrolled and administered ERAS-007 QD (17 patients) or QW (32 patients). Following dose escalation using both schedules, the recommended dose (RD) of 250 mg QW was selected. The maximum tolerated dose (MTD) on a daily schedule was 40 mg QD.

[Table of Contents](#)*Phase 1 safety and tolerability*

ERAS-007 showed a reversible and manageable adverse event profile, consistent with other RAS/MAPK-pathway inhibitors (e.g., MEK inhibitors), as shown in the table below.

System Organ Class / Preferred Term	Treatment-Related Adverse Events			
	Once Daily Schedule (10-80 mg QD) N=17		Once Weekly Schedule (80-350 mg QW) N=32	
	All (%)	Gr \geq 3 (%)	All (%)	Gr \geq 3 (%)
Gastro-Intestinal				
Diarrhea	7 (41)	-	19 (59)	4 (13)
Nausea	6 (35)	-	20 (63)	-
Vomiting	5 (29)	-	18 (56)	3 (9)
Skin				
Rash – acneiform	7 (41)	-	7 (22)	-
Rash – maculopapular	3 (18)	2 (12)	7 (22)	1 (3)
Rash	6 (35)	1 (6)	3 (9)	-
Eye				
Chorioretinopathy	5 (29)	-	6 (19)	-
Blurred vision	1 (6)	-	8 (25)	-

Overall, QW dosing was better tolerated at doses up to 250 mg QW than 40 mg for the QD dosing. The ERAS-007 QW dosing schedule was better tolerated than QD dosing based on the treatment-related adverse events (TRAEs) reported. Transient nausea and vomiting observed with QW dosing were manageable. Skin toxicities have been noted as a class effect of inhibitors of RAF, MEK, or ERK. Less skin toxicity was observed with QW dosing of ERAS-007 compared to QD dosing. Ophthalmic toxicities have been observed during treatment with MEK targeted agents and occur with ERK inhibitors, and reversible retinopathy is a well-known MEK/ERK inhibitor class effect.

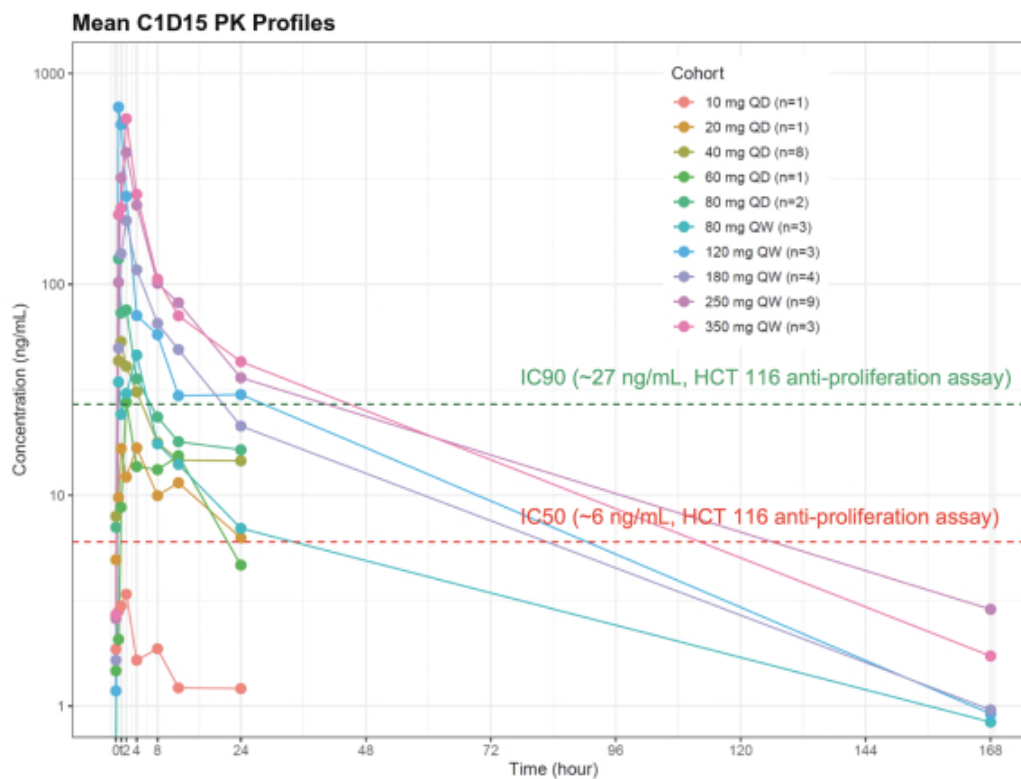
[Table of Contents](#)

The ERAS-007 250 mg QW RD was well tolerated with minimal grade 3 and no grade 4 or 5 TRAEs, as shown in the table below. No grade 3 or higher eye toxicity was observed at this dose. We believe these safety results and QW dosing support combination strategies in our ERAS-007 clinical development plan.

System Organ Class / Preferred Term	Treatment-Related Adverse Events				
	250 mg Once Weekly Schedule N=13				
	All (%)	Gr 1 (%)	Gr 2 (%)	Gr 3 (%)	Gr \geq 4 (%)
Gastro-Intestinal					
Diarrhea	10 (77)	6 (46)	4 (31)	-	-
Nausea	8 (62)	5 (38)	3 (23)	-	-
Vomiting	5 (38)	1 (8)	2 (15)	2 (15)	-
Skin					
Rash – acneiform	3 (23)	2 (15)	1 (8)	-	-
Rash – maculopapular	5 (38)	2 (15)	2 (15)	1 (8)	-
Rash	1 (8)	-	1 (8)	-	-
Eye					
Chorioretinopathy	-	-	-	-	-
Blurred vision	6 (46)	3 (23)	3 (23)	-	-

Phase 1 pharmacokinetics

ERAS-007 exhibited relatively fast absorption, with peak plasma concentration (C_{max}) achieved at median time (T_{max}) ranging from approximately 1-4 hours post-dose. PK exposure as measured by C_{max} and AUC increased in a dose-dependent manner. Mean terminal half-life following QW dosing ranged from 29.8 to 37.9 hours. No significant accumulation was observed following QW dosing. Following 250 mg QW dosing, the mean average concentration (C_{avg}) at Cycle 1 Day 15 (C1D15) exceeded the anti-proliferative IC90 determined in human cancer cell line HCT116 that harbors the KRAS mutation, and the mean trough concentration at the end of dosing interval (C_{min}) was slightly below the corresponding IC50.



[Table of Contents](#)

As shown in the table below, the ERAS-007 Phase 1 data suggest that intermittent QW dosing is preferable to QD dosing. The duration of time in which mean concentration was above IC90 (%T>IC90), which correlates with tumor cell killing, was substantially longer for 250 mg QW (~29%) compared to 40 mg QD (~17%). The lower C_{min} for 250 mg QW, compared to 40 mg QD, allows more time for RAS/MAPK pathway recovery, which gives normal cells a treatment break during each dosing interval.

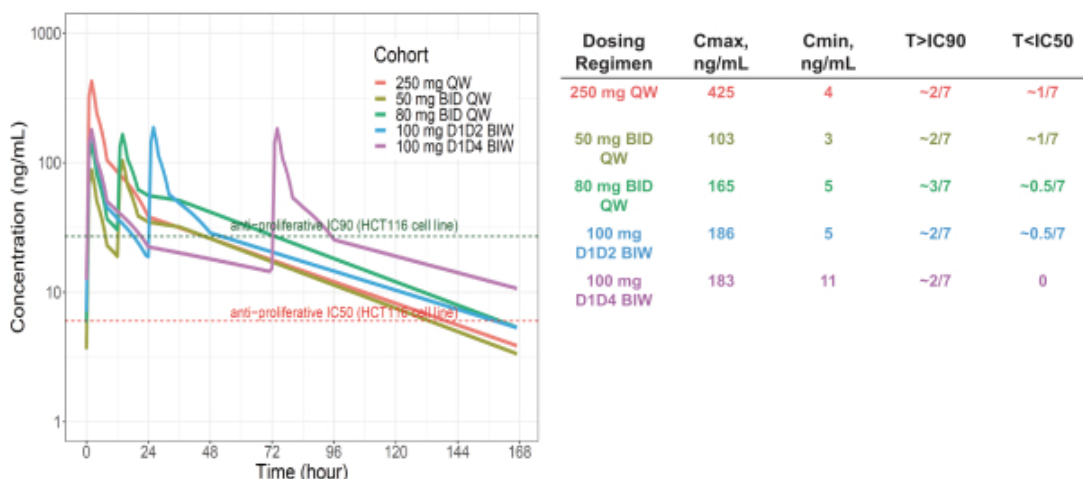
Mean Steady State PK Parameters (%CV)

Cohort	C _{max} , ng/mL	C _{avg} , ng/mL	C _{min} , ng/mL	T>IC90*
40 mg QD (n=8)	61 (54%)	19 (39%)	15 (100%)	~ 17%
250 mg QW (n=9)	495 (42%)	33 (73%)	3.5 (96%)	~ 29%

* IC90 based on HCT 116 anti-proliferation assay

Optimizing dosing and scheduling

The observed long biochemical residence time of ERAS-007 bound to ERK (greater than 9 hours) and the observed human half-life (approximately 30 hours) offer flexibility in optimizing the dosing schedule. While the QW schedule of ERAS-007 demonstrated clinical activity with an acceptable adverse event profile, our exploratory PK/PD analyses suggest that increasing duration of exposure above IC90 (which increases tumor cell killing) may drive anti-tumor activity, and that maintaining C_{min} near or below IC50 (which allows normal cells to recover) may improve safety and tolerability. Informed by the clinical data observed from the Phase 1 trial, we conducted PK simulations (projections based on the data) to explore alternative dosing regimens to provide additional flexibility for combinations with ERAS-601 (together, our first MAPKlamp) and other agents, as shown in the figure and table below.

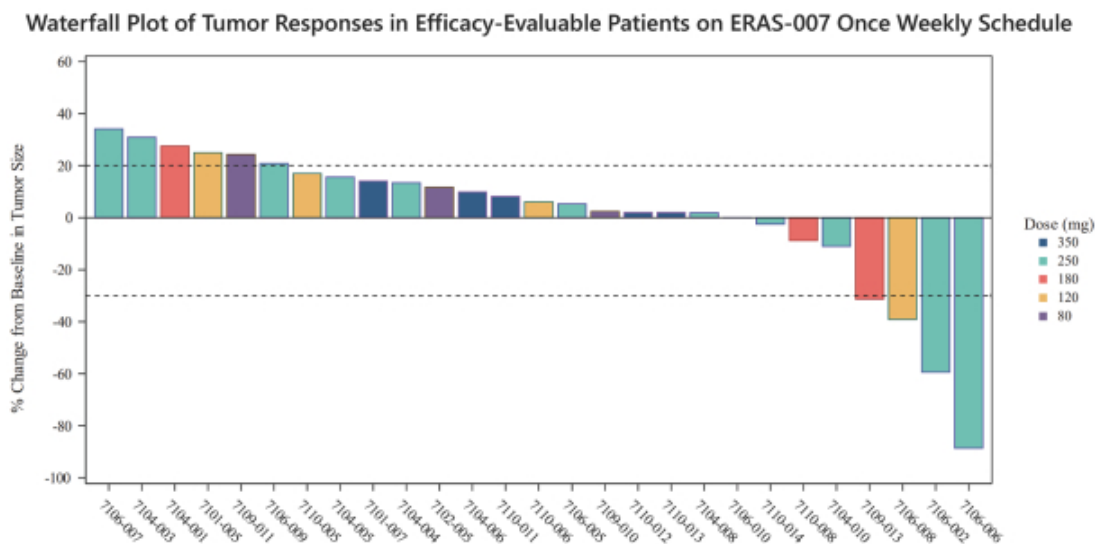


The PK simulations suggest that the dosing regimen of twice daily on day 1 of each week (BID-QW) may potentially provide a meaningful extension of the duration of the PK exposure above the IC90 beyond what has been achieved with 250 mg QW to improve cancer cell killing, while still maintaining C_{min} near or below the IC50, to give normal cells a treatment break during each dosing interval. Therefore, in the Phase 1b/2 trial of

ERAS-007 in patients with advanced or metastatic cancers (HERKULES-1, described below), we plan to evaluate this BID-QW dosing schedule in the dose escalation cohort, in addition to the 250 mg QW expansion cohort.

Phase 1 clinical activity

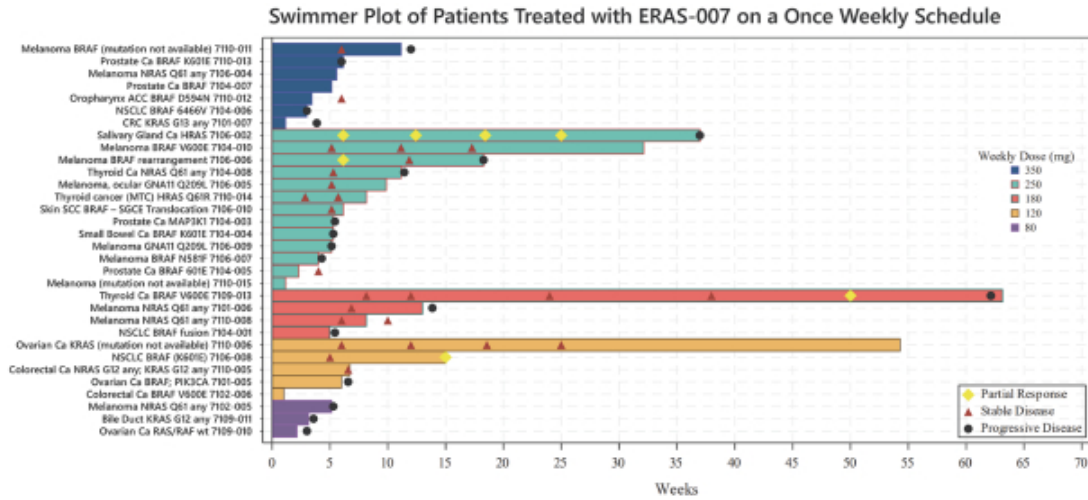
Objective tumor responses and durable disease control of ERAS-007 were observed in diverse tumor types at doses ranging from 120 to 250 mg QW in patients with BRAF-, HRAS-, and NRAS-driven cancers. As of the December 21, 2020 data cutoff, the waterfall plot below illustrates the objective responses seen in all patients who had received at least one dose of ERAS-007 and underwent at least one tumor assessment (the efficacy-evaluable patients). Four responses were observed in patients with BRAF V600E thyroid cancer (180 mg QW), BRAF K601E NSCLC (120 mg QW), HRAS salivary gland cancer (250 mg QW), and BRAF rearranged melanoma (250 mg QW).



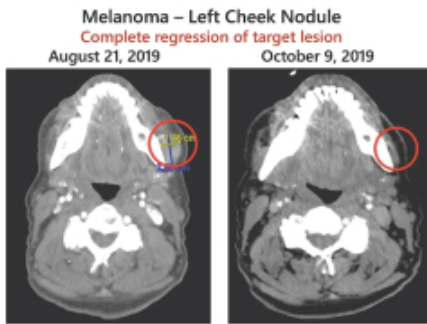
“% Change from Baseline in Tumor Size” is defined as the maximum reduction in the sum of tumor diameters of selected target lesions measured after a patient started on study treatment compared to the baseline measurements of the same target lesions before study treatment was started. “Efficacy-Evaluable” is defined as patients who have a baseline tumor scan and at least one post-baseline scan after starting study treatment, to allow assessment of tumor response. Prior treatments in patients with objective responses included: HRAS salivary gland—radiation; BRAF rearranged melanoma—nivolumab/ipilimumab, radiation; BRAF V600E thyroid—radiation; BRAF K601E NSCLC—carboplatin/pemetrexed, carboplatin/paclitaxel plus durvalumab. The dashed lines represent the RECIST-defined definitions of response (30% decrease) or progression (20% increase) in tumor size.

Table of Contents

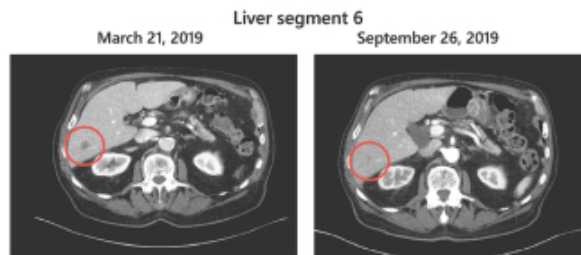
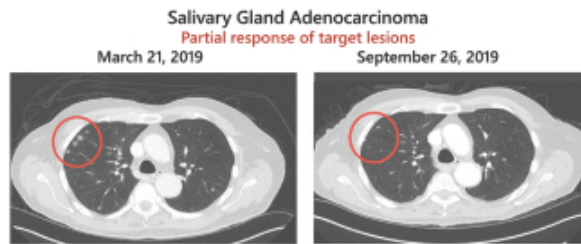
As of the December 21, 2020 data cutoff, the swimmer plot below demonstrated encouraging duration of treatment, with three patients who achieved disease control that exceeded one year. One patient with BRAF V600E melanoma (7104-010) received ERAS-007 for a total of 71 weeks before experiencing disease progression, first on the ASN007-101 clinical trial (shown in this swimmer plot) and subsequently on a single patient IND (not shown in this swimmer plot), since the patient was deriving clinical benefit at the time the ASN007-101 trial had completed.



Examples of single agent activity of ERAS-007 from these responses in patients with melanoma and salivary gland adenocarcinoma are shown in the scan images below. On the left, a patient with a BRAF rearranged melanoma, who had prior progression on nivolumab/ipilimumab, showed complete regression of the target lesion. On the right, a patient with HRAS salivary gland cancer showed partial response of target lesions.



- Melanoma – BRAF rearrangement
- Prior progression on nivolumab/ipilimumab
- 250 mg QW starting dose



- Salivary Gland Adenocarcinoma - HRAS
- Prior radiotherapy – 7,500 cGy total
- 250 mg QW starting dose

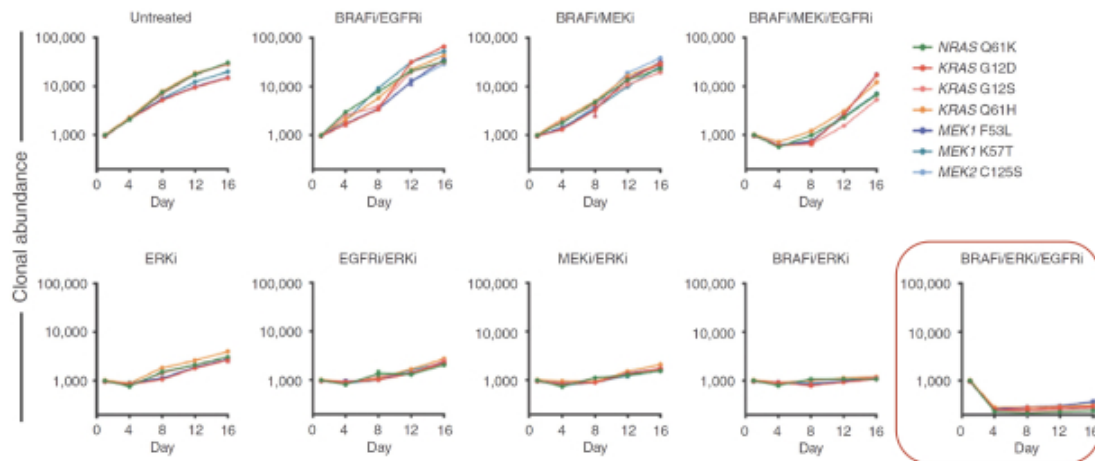
Rationale for combining with other targeted agents

Since ERK is the most distal node of the RAS/MAPK pathway and activates hundreds to thousands of downstream proteins, we believe an ERK inhibitor is an attractive combination partner to achieve maximal inhibition of the RAS/MAPK pathway. In combination with RTK, SHP2, RAS, and/or RAF inhibitors, an ERK inhibitor has the potential to further inhibit RAS/MAPK pathway signaling and delay development of resistance. The RAS/MAPK pathway is regulated by negative feedback mechanisms that desensitize the pathway when active. In the presence of a RAS/MAPK pathway inhibitor, pathway signaling activity is reduced, alleviating negative feedback mechanisms and sensitizing the RAS/MAPK pathway to upstream signaling. This sensitization can prevent RAS/MAPK pathway inhibitors from achieving therapeutic levels of pathway inhibition. Another challenge for RAS/MAPK pathway inhibitors is the activation of RTKs that can generate sufficient upstream RAS/MAPK pathway signaling pressure that overwhelms RAS/MAPK pathway inhibitors. Combining upstream RAS/MAPK pathway inhibitors with an ERK inhibitor can potentially enable pathway inhibition in the absence of negative feedback and in the presence of additional upstream signaling pressure. The activity of RAS/MAPK pathway inhibitors can also be bypassed by the emergence of activating mutations in RAS/MAPK pathway proteins that lie downstream. For example, activating mutations in RAS can emerge as a resistance mechanism against EGFR inhibitors in mutant EGFR NSCLC, and MEK mutations can develop as a resistance mechanism against BRAF plus MEK inhibitors in melanoma. As the most distal node of the RAS/MAPK pathway, ERK inhibition can help address activating RAS, RAF, or MEK mutations that can act as resistance mechanisms to RAS/MAPK pathway inhibitors.

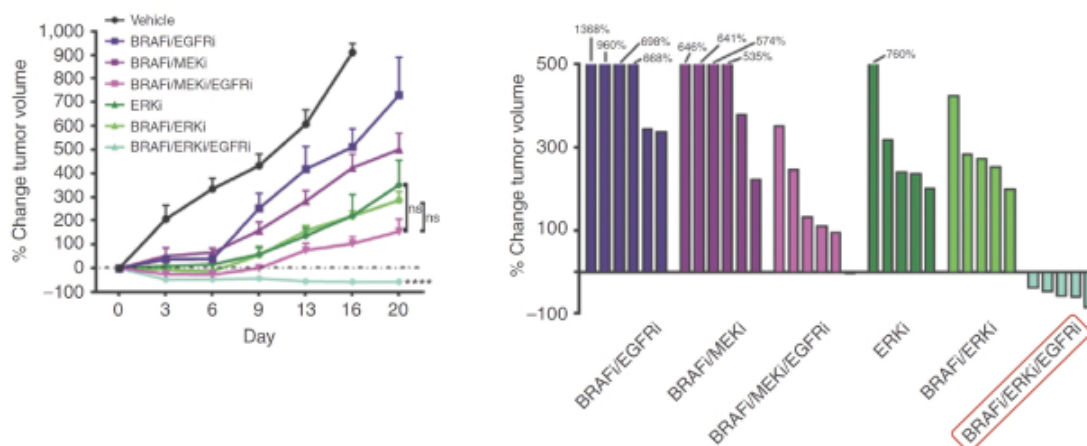
BRAF V600E CRC as an example that ERK inhibition can reduce the emergence of resistance

While the combination of a BRAF inhibitor and an EGFR inhibitor (encorafenib plus cetuximab) has been approved for the second- and third-line treatment of BRAF V600E CRC, only 20% of patients experience an objective response, and only half of these responses last more than 4 months. Therefore, emergence of resistance is a major therapeutic barrier to long-term clinical benefit. Analysis of post-progression biopsies and cell-free DNA samples revealed a heterogeneous collection of resistance mutations in the RAS/MAPK pathway, including KRAS, NRAS, MEK1, and MEK2. A set of published experiments conducted by researchers at Massachusetts General Hospital modeled this clinical resistance in a pooled clone model system and xenograft models. Seven different resistant BRAF V600E CRC cells, each engineered with one of these resistance mutations, were introduced at 1% allele frequency into a pool of sensitive BRAF V600E CRC cells. Of all combination therapies evaluated, a triple blockade of BRAF, EGFR, and ERK (identified with a red box around the image below) proved to be the most effective in reducing tumor volume and preventing the emergence of resistance clones.

Change in Clonal Abundance from Baseline to the Completion of Therapy



Treatment of Tumor Xenografts Derived from Clonal Pools



These data suggest that: (1) in tumors that are highly addicted to the RAS/MAPK pathway, such as BRAF V600E CRC, resistance mechanisms are dominated by reactivation of this critical pathway via mutations within the pathway, and (2) an ERK inhibitor can potentially overcome these resistance mechanisms by blocking the terminal node of the pathway. Therefore, ERAS-007 may be combined with other RAS/MAPK pathway inhibitors (e.g., KRAS G12C inhibitor and BRAF inhibitor) as either initial therapy or in the post-progression setting in patients who have been treated with RAS/MAPK pathway inhibitors.

Development strategy for ERAS-007

We are pursuing a broad clinical development plan for ERAS-007 across multiple tumor types that will include both monotherapy and combinations with approved and investigational agents. The first series of trials will be four POC trials in solid tumors, NSCLC, CRC, and AML. While providing POC data, these trials may be expanded to enable potential accelerated approvals in their respective indications:

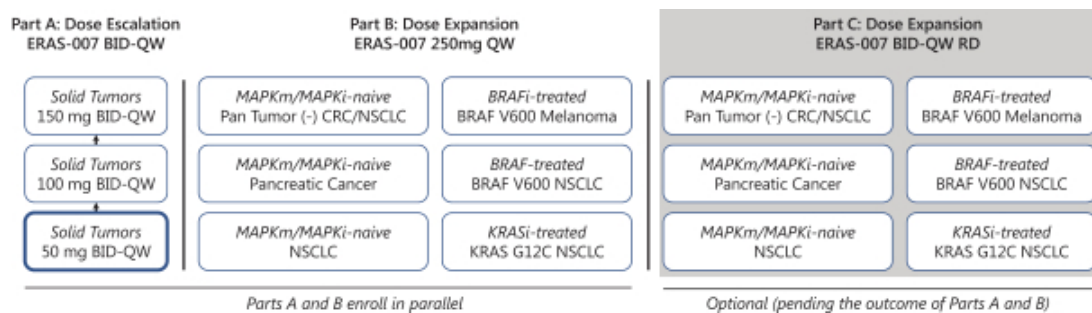
1. **HERKULES-1** for a potential tissue agnostic indication in solid tumors with RAS/MAPK pathway alterations

Table of Contents

2. **HERKULES-2** for EGFR mutant or KRAS mutant NSCLC
3. **HERKULES-3** for KRAS mutant, NRAS mutant, or BRAF V600E CRC initially, with potential to subsequently expand to other CRC populations
4. **HERKULES-4** for FLT3 mutant AML

We anticipate one or multiple Phase 1b data readout(s) from our HERKULES studies in 2022.

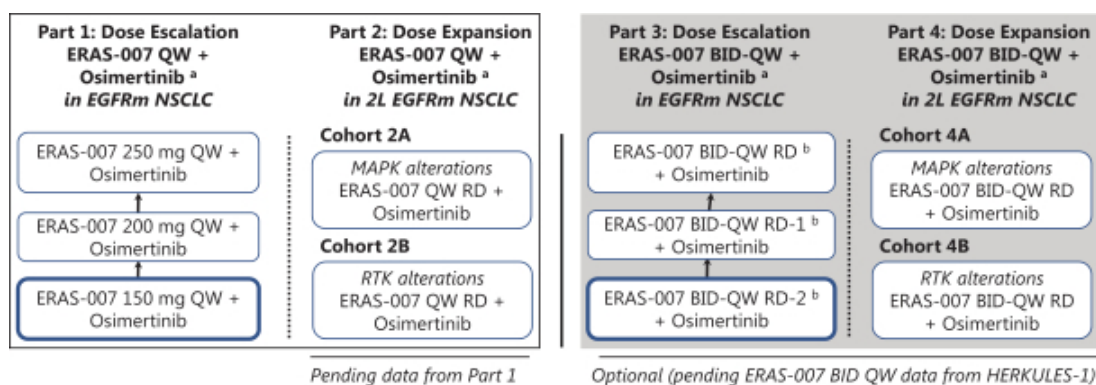
As shown in the schema below, **HERKULES-1** is a Phase 1b/2 trial evaluating ERAS-007 monotherapy in patients with solid tumors. In **Part A**, a dose-finding portion will determine the maximum tolerated dose and recommended dose when ERAS-007 is given twice-daily on day 1 of each week (BID-QW), the rationale of which was described earlier in the Phase 1 PK pharmacokinetics section. The primary endpoint of this part is to characterize the safety profile of ERAS-007 when given on a BID-QW schedule. Testing this alternative intermittent dosing schedule will provide us with three schedules (daily, weekly, and twice a day weekly) from which to select the optimal dose and schedule to combine with ERAS-601 (our first MAPKlamp) and other agents. When the ERAS-601 recommended dose is identified from the FLAGSHP-1 trial (described below), we expect to amend the HERKULES-1 trial protocol to identify the optimal dose and schedule for the ERAS-007 and ERAS-601 combination and to evaluate the preliminary efficacy and safety of this MAPKlamp in multiple tumor types. In **Part B**, which will run in parallel with Part A (since monotherapy responses were observed with the weekly schedule in the completed Phase 1 clinical trial of ERAS-007), separate cohorts will evaluate ERAS-007 weekly in patients with NSCLC, pancreatic cancer, melanoma, and other solid tumors that harbor RAS/MAPK pathway alterations. These patient populations have high unmet medical needs, as they would have exhausted all approved therapies. Patients in some cohorts will not have been previously treated with any RAS/MAPK pathway inhibitors (e.g., KRAS, BRAF, or MEK inhibitors), since none of these inhibitors are approved for use in these patients. Patients in other cohorts will have been previously treated with RAS/MAPK pathway inhibitors if these agents are part of standard of care. The primary endpoint is an assessment of anti-tumor activity of ERAS-007 in the patient populations. We dosed the first patient in **HERKULES-1** in May 2021.



As shown in the schema below, **HERKULES-2** is a Phase 1b/2 trial that will evaluate ERAS-007 in combination with osimertinib in patients with EGFR mutant NSCLC, which represents 15% of all patients with NSCLC, or approximately 184,000 new patients worldwide each year. The standard of care for newly diagnosed patients with metastatic disease is osimertinib, an EGFR inhibitor. While 77% of patients respond initially, nearly all patients experience disease progression while on osimertinib treatment, and no other targeted therapy is approved in the post-osimertinib setting. Biomarker analyses of tumors that developed resistance to osimertinib showed that RAS/MAPK pathway alterations make up a substantial portion of resistance mechanisms. With the ERAS-007 plus osimertinib combination, we will evaluate in this trial whether combined ERK and EGFR inhibition can overcome osimertinib resistance in EGFR mutant NSCLC with RAS/MAPK pathway alterations. In **Part 1**, an ERAS-007 weekly recommended dose will be identified in combination with osimertinib. The primary endpoint will be a safety

Table of Contents

assessment of this combination. In **Part 2**, this combination regimen will be evaluated in second-line EGFR mutant NSCLC patients who have progressed on first-line osimertinib monotherapy. The primary endpoint will be an assessment of anti-tumor activity. Part 3 will identify the RD of ERAS-007 on a BID-QW schedule in combination with osimertinib, with a safety assessment as the primary endpoint. Part 4 will evaluate this combination with BID-QW schedule in a larger patient population, with a preliminary assessment of anti-tumor activity as the primary endpoint. When the optimal dose and schedule for our first MAPKlamp combination (ERAS-007 plus ERAS-601) have been identified in the HERKULES-1 trial, this combination will be introduced into the HERKULES-2 trial to evaluate MAPKlamp plus osimertinib in EGFR mutant NSCLC. We expect to dose the first patient in **HERKULES-2** in the third quarter of 2021.



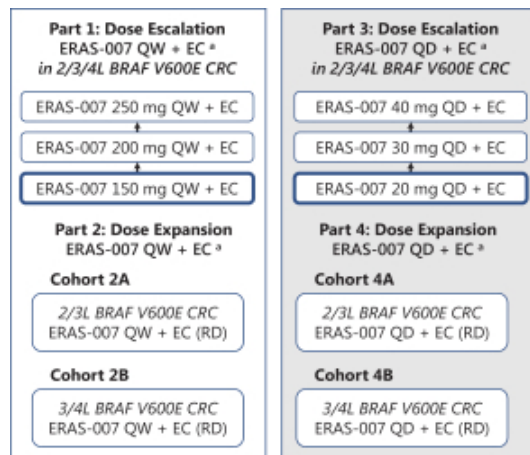
^a Osimertinib 80 mg PO QD.

^b BID-QW RD: monotherapy recommended dose given twice on a single day every week. RD-1 or RD-2: one or two dose levels below RD.

As shown in the schema below, **HERKULES-3** is a Phase 1b/2 trial that will evaluate ERAS-007 in RAS and RAF mutation-defined CRC patient populations. ERAS-007 in combination with a CDK4/6 inhibitor will be evaluated in patients with KRAS mutant and NRAS mutant CRC, which represents approximately 50% of all patients with CRC, or 830,000 new patients worldwide each year. ERAS-007 in combination with encorafenib and cetuximab will be evaluated in patients with BRAF V600E CRC, which represents nearly 10% of all patients with CRC, or 153,000 new patients worldwide each year. The standard of care for KRAS mutant and NRAS mutant CRC in the third-/fourth-line metastatic setting is typically either single agent chemotherapy or targeted therapy, in which less than 10% of patients respond, nearly all patients experience disease progression, and median overall survival is less than 10 months. The standard of care for patients with BRAF V600E CRC in the second-/third-line metastatic setting is encorafenib plus cetuximab, an anti-BRAF and anti-EGFR doublet therapy. Only 20% of patients respond, nearly all patients experience disease progression, and the median overall survival is less than 9 months. The prognosis for patients in the post-encorafenib plus cetuximab setting is worse. In preclinical models of BRAF V600E CRC, the addition of an ERK inhibitor to BRAF inhibitor plus EGFR inhibitor substantially enhanced anti-tumor activity and reduced the development of resistance to BRAF inhibitor plus EGFR inhibitor. In **Part 1** of this trial, an ERAS-007 weekly recommended dose will be identified in combination with encorafenib plus cetuximab, with a safety assessment of the combination as the primary endpoint. In **Part 2**, the recommended dose of the triplet regimen from Part 1 will be evaluated in two patient populations: second-/third-line BRAF V600E CRC and third-/fourth-line BRAF V600E CRC. The primary endpoint will be an assessment of anti-tumor activity. **Parts 3** and **4** contain optional cohorts that would allow us to evaluate alternative schedules of ERAS-007 in combination with encorafenib and cetuximab, depending on the results from Parts 1 and 2. In **Parts 5** and **7**, an ERAS-007 weekly recommended dose will be identified in combination with a CDK4/6 inhibitor on a continuous or intermittent schedule, respectively. The primary endpoint will be an assessment of safety. In **Parts 6** and **8**, these combination regimens at their recommended doses may be further evaluated in patients with third-/fourth-line KRAS mutant or NRAS mutant CRC. The primary endpoint will be an assessment of anti-tumor activity. When the optimal dose

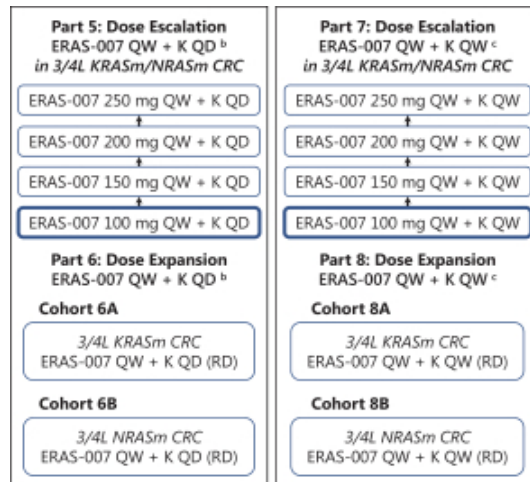
[Table of Contents](#)

and schedule for our first MAPKlamp combination (ERAS-007 plus ERAS-601) have been identified in the HERKULES-1 trial, this combination will be introduced into the HERKULES-3 trial to evaluate MAPKlamp plus encorafenib and cetuximab or MAPKlamp plus a CDK4/6 inhibitor in BRAF V600E CRC or KRAS/NRAS mutant CRC, respectively. We expect to dose the first patient in **HERKULES-3** in the second half of 2021.



Part 3 may open after review of data from Part 1. Part 2 or 4 may open after RD for ERAS-007 + EC is identified in Part 1 or 3.

^a EC: Encorafenib 300 mg PO QD + Cetuximab loading dose 400 mg/m² IV, subsequent dose 250 mg/m² IV QW



Part 6 or 8 may open after RD for ERAS-007 + K is identified in Part 5 or 7.

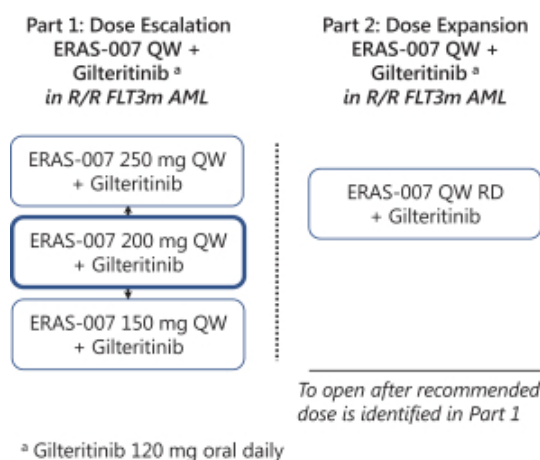
^b K QD: CDK4/6 inhibitor oral daily for 21 days followed by 7 days off in a 28-day cycle.

^c K QW: CDK4/6 inhibitor oral weekly.

As shown in the schema below, **HERKULES-4** is a Phase 1b/2 trial that will evaluate ERAS-007 in combination with gilteritinib in patients with FLT3 mutant AML, which represents 30-40% of all AML, or approximately 61,000 new patients worldwide each year. The standard of care for patients with relapsed/refractory AML is gilteritinib, a FLT3 inhibitor. Only 14% of patients achieve a complete response, nearly all patients experience

[Table of Contents](#)

disease progression, and the median overall survival is less than 10 months. While FLT3 is the most commonly altered gene in AML, alterations along the entire RAS/MAPK pathway are also prevalent, including SHP2, KRAS, NRAS, and BRAF, suggesting dual FLT3 and ERK inhibition or triple FLT3, SHP2, and ERK inhibition may improve the efficacy of gilteritinib monotherapy. In **Part 1**, an ERAS-007 weekly recommended dose will be identified in combination with gilteritinib, with a safety assessment as the primary endpoint. In **Part 2**, this combination regimen will be evaluated in patients with relapsed/refractory AML. The primary endpoint will be an assessment of anti-tumor activity. When the optimal dose and schedule for our first MAPKlamp combination (ERAS-007 plus ERAS-601) have been identified in the HERKULES-1 trial, this combination will be introduced into the HERKULES-4 trial to evaluate MAPKlamp plus gilteritinib in FLT3 mutant AML. We expect to dose the first patient in **HERKULES-4** in the first quarter of 2022.



These and other trial designs may be modified based on evolving clinical and nonclinical data, as well as feedback from regulatory agencies.

ERAS-601: our SHP2 inhibitor

ERAS-601 is designed to be a potent and selective oral inhibitor of SHP2. In preclinical studies, ERAS-601 has demonstrated strong in vitro potency relative to other SHP2 inhibitors (RMC-4550 and TNO155) and favorable absorption, distribution, metabolism, and excretion (ADME) and PK properties, which we believe support its use in a broad range of combination therapies. ERAS-601 is the second prong of our first MAPKlamp with ERAS-007. In our first-in-human trial, FLAGSHP-1, we are evaluating the safety, tolerability, PK, PD, and preliminary anti-tumor activity of ERAS-601 in patients with advanced or metastatic solid tumors. We believe that approximately 4.9 million patients worldwide per year could benefit from ERAS-601 in combination with other agents, including ERAS-007.

Table of Contents

Preclinical profile of ERAS-601

In a biochemical assay, ERAS-601 potently and selectively inhibited full length SHP2 with an IC₅₀ value of 4.6 nM as shown in the table on the left below. By binding to an allosteric pocket that is present only in the inactive conformation of SHP2, ERAS-601 inhibited SHP2 activity by stabilizing the protein in the inactive state. No ERAS-601 activity was observed against 10 other phosphatases (including SHP1), and ERAS-601 showed no strong inhibition of any kinase in a 300-kinase panel (i.e., less than 30% inhibition at 1 μM), demonstrating high selectivity as shown in the table on the right below.

Compound	Biochemical SHP2 inhibition IC ₅₀ (nM)
ERAS-601	4.6

ERAS-601 demonstrated no off-target activity in 300 kinase (<30% inhibition @ 1μM) and 12 phosphatase panels (IC₅₀ >10μM)

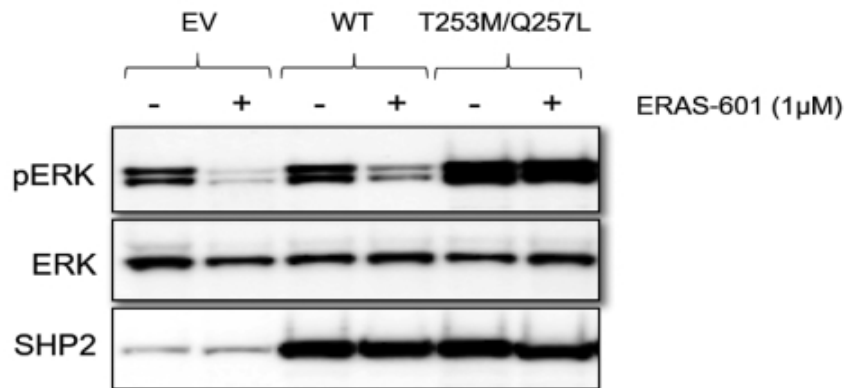
Phosphatase	% inhibition at 10 μM ERAS-601 relative to DMSO control
PP1B	0
PP1A	0
PP2A Alpha / PP2R1A complex	1
PTPRC	6
DUSP22	0
PTPN2	3
PTPN7	0
PTPN12	0
PTPN1	0
PTPN6 (SHP1) full length	0
PTPN11 (SHP2) catalytic domain	0
PTPN11 (SHP2) full length	100

Off target

On target

Biochemical on-target activity of ERAS-601 against SHP2 (left) and biochemical activity of ERAS-601 in a panel of 12 phosphatases (right). PTPN11 (SHP2) catalytic domain protein is a truncated form of SHP2 (246 aa – 593 aa). This truncated form contains a phosphatase domain and is missing two regulatory domains. The PTPN11 (SHP2) catalytic domain does not harbor the binding site of ERAS-601 due to these missing domains, while the PTPN11 (SHP2) full length protein does harbor ERAS-601's binding site.

ERAS-601's activity against SHP2 was shown in a cell-based assay using a SHP2 inhibitor-sensitive cell line, NCI-H1666, which was transduced with either wildtype SHP2 or mutant SHP2 (T253M / Q257L). ERAS-601 inhibited RAS/MAPK pathway signaling, shown by a decrease of phosphorylated ERK (pERK) relative to total ERK in the figure below, but ERAS-601 had no effect on RAS/MAPK pathway signaling in the double mutant SHP2 cell line. These cell data support that ERAS-601's cellular activity is due to SHP2 binding and not due to off-target activity. In vitro cell line screening revealed potent ERAS-601 activity in EGFR, KRAS, NF1, and class III BRAF mutant cell lines. Generally, ERAS-601 showed greater activity in RAS/MAPK pathway mutant cell lines that relied on upstream RTK signaling, such as EGFR, NF1 loss-of-function, and class III BRAF mutants. ERAS-601 did not show activity in cell lines that harbored activating RAS/MAPK pathway activating mutations that were not dependent on upstream signaling, such as the melanoma BRAF V600E mutant cell line A375.



Western blot of the NCI-H1666 cell line transduced with empty vector (EV), wildtype SHP2 (WT), and double mutant SHP2 (T253M and Q257L). The two T253M and Q257L mutations in SHP2 prevent ERAS-601 from binding SHP2 via steric hindrance. ERAS-601 at 1 μ M inhibited pERK in empty vector and SHP2 wildtype transduced cells. ERAS-601 at 1 μ M did not inhibit pERK in cells transduced with double mutant SHP2, thereby suggesting that ERAS-601's cellular activity is due to SHP2 binding.

[Table of Contents](#)

The ADME/PK properties of ERAS-601 have been extensively evaluated in non-clinical studies. As shown in the table below, ERAS-601 demonstrated favorable physicochemical and PK properties, including low risk of drug-drug interaction (DDI), negligible CYP enzyme inhibition, and moderate plasma protein binding. It also showed high oral bioavailability and low clearance across multiple animal species. We believe these properties support ERAS-601's use in a broad range of combination therapies.

Assay	ERAS-601
cLogP/PSA	<1/<130
MW	<600
PBS solubility (μM)	>300
Caco2 permeability at 10 μM , P_{app} (AB/BA) (10^{-6} , cm/s)	2.57/27.5
Plasma protein binding, Free fraction % M/R/D/H	26/12/35/33
Stability in liver microsomes M/R/D/H	Low Clearance
Inhibition of CYP 3A4, 2C9, 2D6, IC50 (μM)	>100
CYP3A4 TDI	No flag
hERG Q-patch IC50 (μM)	>30
GLP hERG IC50 (μM)	12

Table of Contents

Preclinical anti-tumor activity of ERAS-601

As shown in the table below, ERAS-601 significantly inhibited tumor growth as a monotherapy in 21 in vivo models, including KRAS G12C, KRAS G12D, KRAS G12V, EGFR, BRAF class I and III, and NF1 loss-of-function mutations. In 18 models, ERAS-601 was well tolerated and showed significant TGI at QD and BID dose schedules. In a PK/PD study, ERAS-601 also achieved time and dose-dependent increases in plasma concentrations and concomitant reductions in RAS/MAPK pathway signaling, as measured by pERK, in the KRAS G12C mutant NSCLC xenograft model NCI-H358. Tumor pERK1/2 levels were reduced by more than 50% when ERAS-601 total plasma concentrations exceeded or approximated the IC50/fu, which is the in vitro cellular pERK IC50 unbound fraction in plasma.

Mutation	Model ID	Tumor type	Antitumor activity of ERAS-601	
			10 mg/kg BID (% TGI)	30 mg/kg QD (% TGI)
KRAS ^{G12C}	NCI-H358	NSCLC	101%***	71%**
	LUN156	NSCLC	87%**	86%*
	MIA PaCa-2	PDAC	91%***	79%***
	CO-04-0310	CRC	80%***	67%***
	CR022	CRC	72%***	75%***
KRAS ^{G12D}	LUN232	NSCLC	Not evaluated	73%***
	GP2D	CRC	60%**	71%**
	LS513	CRC	66%*	77%**
	LUN137	CRC	Not evaluated	82%*
KRAS ^{G12V}	H441	NSCLC	Not evaluated	98%***
	HCC827 (Exon19Del)	NSCLC	118%***	126%***
EGFR	HCC827-ER1 (Exon19del and MET amp)	NSCLC	97%***	102%***
	NCI-H820 (EGFR Exon19Del, EGFR T790M, MET amp)	NSCLC	84%**	81%**
	KYSE-520 (amplification)	Esophageal	100%***	101%***
BRAF class I (BRAF V600E)	WiDr	CRC	67%***	68%***
BRAF class III	NCI-H508	CRC	136%**	135%**
	LUN023	NSCLC	100%*	123%**
NF1 ^{LOF}	MeWo	Melanoma	86%***	85%***
	NCI-H1838	NSCLC	140%**	144%**
	LUN150	NSCLC	167%***	167%***
	LU6484	NSCLC	77%***	83%***

ERAS-601 exhibited significant TGI relative to vehicle control (p -value < 0.05) in 10 KRAS mutant, four EGFR mutant, three BRAF mutant, and four NF1^{LOF} mutant CDX and PDX models. Significant TGI was observed at both 30 mg/kg QD and 10 mg/kg BID doses. * p -value < 0.05 ** p -value < 0.01 *** p -value < 0.001 (p -values assessed relative to vehicle control)

Preclinical activity of ERAS-601 combination therapies

As shown in the figures below, when combined with inhibitors of EGFR, KRAS G12C, BRAF, and MEK, ERAS-601 showed significantly greater TGI than dosing of these inhibitors as monotherapies. This benefit was observed in models that harbored mutations both upstream and downstream of SHP2. These ERAS-601 combinations were generally well tolerated across the tested models as demonstrated by the minimal percentage body weight changes observed.

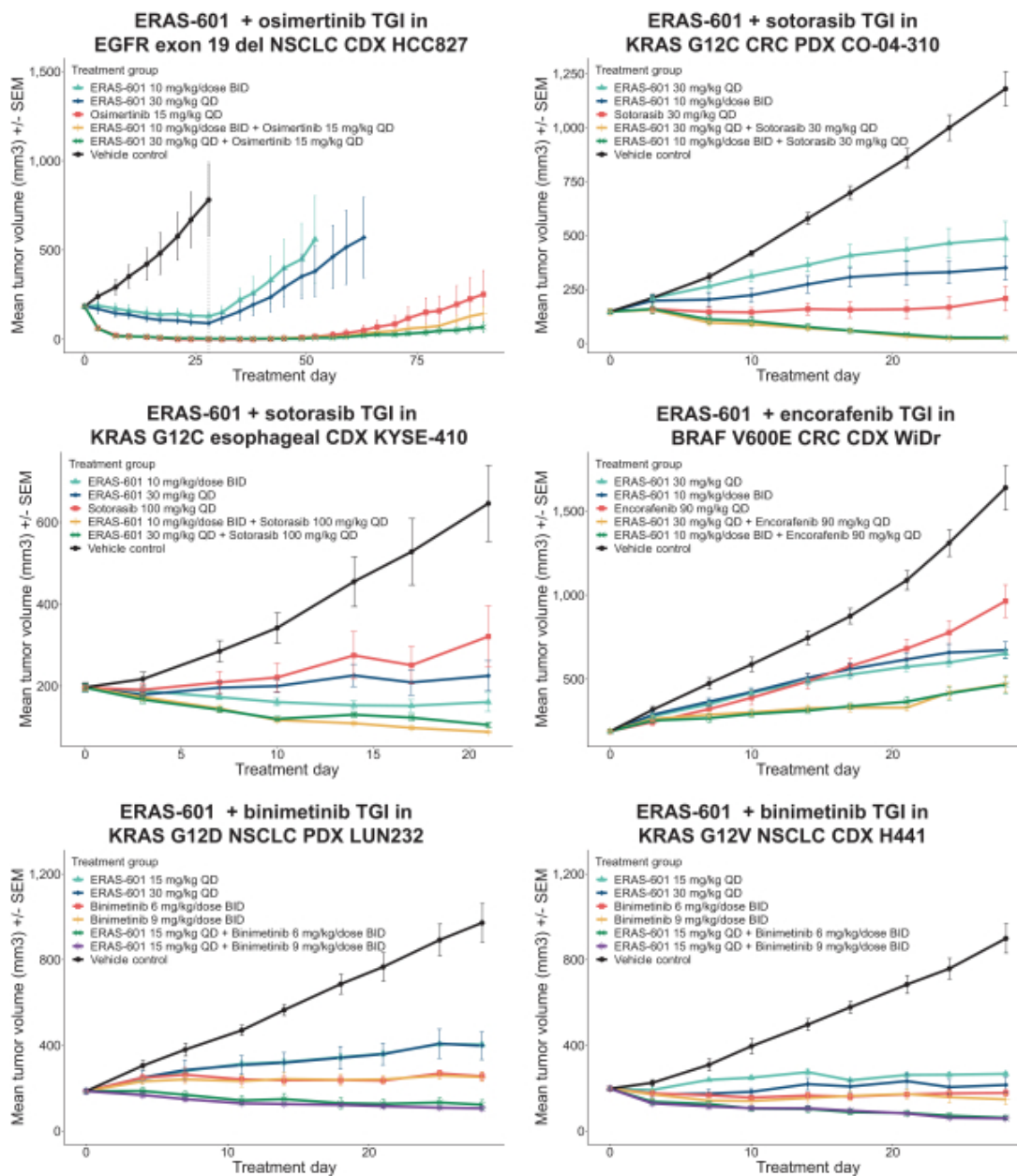
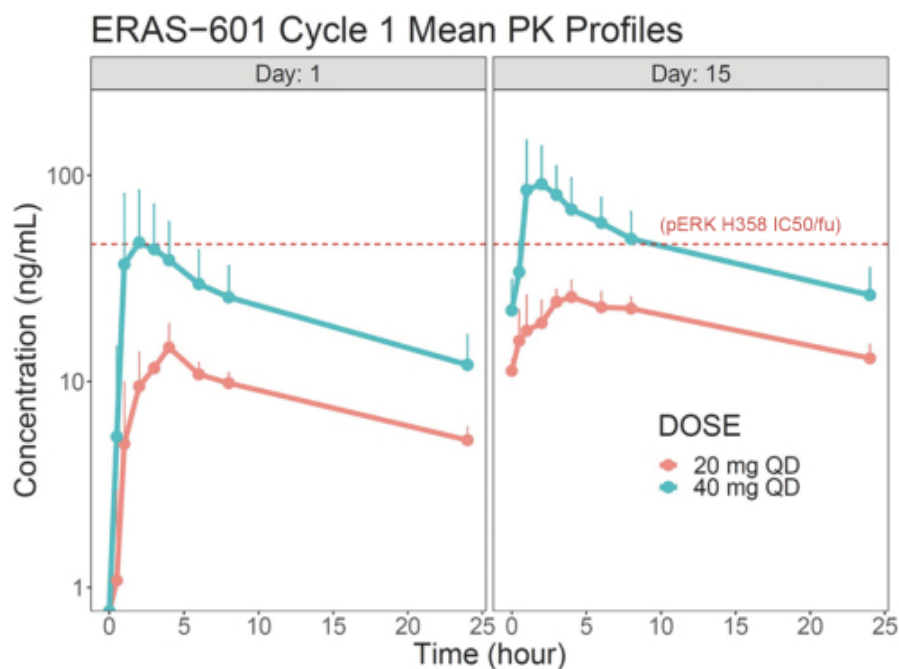


Table of Contents

ERAS-601 combined with osimertinib, sotorasib, encorafenib, and binimetinib showed significant TGI in six CDX and PDX models. The ERAS-601 + osimertinib (EGFR inhibitor) combination showed superior though non-significant TGI relative to osimertinib and ERAS-601 monotherapy on day 90. The dotted line indicates day 28, when dosing was stopped in all treatment groups. The ERAS-601 + sotorasib (KRAS G12C inhibitor) showed significant TGI relative to vehicle control (p -value < 0.01) and monotherapy arms (p -value < 0.05) in KRAS G12C mutant CRC PDX and esophageal CDX models. The ERAS-601 + encorafenib (BRAF V600E inhibitor) combination showed significant TGI in a BRAF V600E mutant CDX model relative to vehicle control (p -value < 0.001) and the monotherapy doses (p -value < 0.05). In two KRAS mutant NSCLC models, ERAS-601 + binimetinib (MEK inhibitor) combination showed significant TGI relative to vehicle control (p -value < 0.001) and monotherapy doses (p -value < 0.01).

Phase 1 pharmacokinetics

As of April 6, 2021, preliminary PK data were available from six subjects enrolled in the FLAGSHIP-1 study following single- and multiple-dose administration of ERAS-601 at doses ranging from 20 to 40 mg QD ($n=3$ /dose). As shown below, following oral administration, ERAS-601 exhibited relatively fast absorption, with peak plasma concentration, C_{max} , generally achieved within 4 hours post-dose. PK exposure as measured by C_{max} and AUC increased in a dose-dependent manner. Mean terminal half-life at steady state ranged from 16 to 22 hours. Approximately 2-fold accumulation for AUC was observed following QD dosing which is consistent with the elimination half-life and dosing schedule. Overall, ERAS-601 exhibited promising PK characteristics based on data from the first two cohorts as of the data cutoff.



Development strategy for ERAS-601

Our clinical development plan aims to advance ERAS-601 in combination with other targeted agents to prevent and overcome adaptive resistance mechanisms in order to achieve more durable clinical benefit. In the fourth

quarter of 2020, we began evaluating the safety and tolerability of ERAS-601 in a first-in-human dose escalation trial in patients with advanced or metastatic solid tumors in our FLAGSHIP-1 trial. The primary endpoints of this trial are assessments of safety and anti-tumor activity. As of June 1, 2021, we have dosed 14 patients. Through the first four cohorts, ERAS-601 has been well-tolerated with one dose-limiting toxicity of grade 3 thrombocytopenia observed at the highest once-daily dose tested to date, and showed good PK characteristics. Thrombocytopenia is a known adverse event associated with other clinical-stage SHP2 inhibitors. A total of four serious adverse events (SAEs) were observed, three of which were attributed to ERAS-601 (two grade 3 hypertension and one grade 3 diarrhea) and one of which was unrelated to study drug (grade 3 bladder infection), and all of which were manageable and reversible. We anticipate a Phase 1 data readout from our FLAGSHIP-1 trial in the second half of 2022. After we have identified the monotherapy RD of ERAS-601, we will evaluate rational combinations with ERAS-601, including with ERAS-007 (our first, innovative MAPKlamp) in our HERKULES series of clinical trials. Other agents for potential combinations include approved RTK inhibitors, RAS/MAPK pathway inhibitors, and/or investigational agents we are developing, such as ERAS-801 and ERAS-3490, our ERAS-1 DevCan. Given the wide range of cancers that are dependent on SHP2, we believe ERAS-601 could serve as a backbone for compelling combination therapies to prolong survival for patients.

ERAS-1: our CNS-penetrant KRAS G12C inhibitor program

RAS proteins are the most frequently mutated oncoproteins, with KRAS being the most abundantly expressed RAS isoform. Despite decades of research focused on KRAS as a target of interest in oncology, it was generally deemed to be undruggable until 2013, when Dr. Shokat and his colleagues at UCSF identified a new binding pocket, S-IIP, via crystallography studies. Importantly, they also described the discovery of small molecules that irreversibly bound to this pocket on KRAS G12C – a finding that turned an undruggable target into a druggable one.

This historic discovery spurred multiple companies to develop KRAS G12C inhibitors, including the recently approved sotorasib and others that are currently in clinical trials. While single agent activity to date has been most promising in NSCLC, opportunities remain for improvement in CNS penetration to be able to address the propensity of NSCLC to metastasize to the brain. Worldwide, KRAS G12C mutations affect approximately 350,000 patients with cancer, with NSCLC comprising two-thirds of these patients, and CRC one-sixth of these patients. NSCLC has the highest rate of CNS metastases, and the CNS is a site of progression in approximately 25% to 50% of patients on standard of care therapies. Hence, we believe a CNS-penetrant KRAS G12C inhibitor, either as a monotherapy or in combination therapies, would represent an important advance in maintaining systemic disease control, prolonging response, and preventing CNS progression. In preclinical in vivo experiments, an approved KRAS G12C inhibitor and a late clinical-stage KRAS G12C inhibitor (sotorasib and adagrasib, respectively, and together, the reference compounds) were poorly CNS-penetrant, detectable in the CNS at less than 10% of the plasma level. We have been designing and optimizing KRAS G12C inhibitors that have shown comparable or superior anti-tumor activity to the reference compounds and robust ability to cross the blood-brain barrier (BBB) in order to address this key limitation.

Table of Contents

Preclinical profile of ERAS-1 pre-candidates

Our team discovered a novel scaffold that binds the S-IIP in a different configuration which allows us to optimize potency while also enabling high CNS penetration. We have discovered and are characterizing five KRAS G12C inhibitor pre-candidates based on this scaffold that have promising potency, selectivity, and physicochemical properties relative to the reference compounds.

Importantly, all five pre-candidates (ERAS-3490, ERAS-3691, ERAS-3599, ERAS-3537, and ERAS-3788) have shown attractive physicochemical properties relative to the reference compounds, especially with respect to in vitro CNS penetration:

Parameter	3490	3691	3599	3537	3788	Reference compounds
Mouse AUC ₀₋₂₄ /D (hr*kg*ng/mL/mg)	693	597	1,333	535	326	102 - 637
Rat brain _{total} / plasma _{total} (%)	52%	13%	66%	68%	11%	1 - 6%
Rat brain concentration (ng / g)	156	32	176	290	91	6 - 36
P-gp substrate ratio	1.1	4.1	2.7	8.3	4.0	30.9
Human LM metabolic stability (CL normalized to hepatic blood flow)	0.7	0.5	0.6	0.4	0.5	0.7 - 0.8
Mouse LM metabolic stability (CL normalized to hepatic blood flow)	0.8	0.6	0.7	0.7	0.4	0.4 - 0.9
In vitro potency (4 hr pERK IC50, nM / RAS Initiative KRAS G12C 3D 5-day viability IC50, nM)	13 / 4	58 / 9	37 / 15	21 / 9	12 / 2	17 - 31 / 1 - 4

Five ERAS-1 pre-candidates showed comparable in vitro and in vivo PK characteristics and in vitro potency to the reference compounds. ERAS-3490 and ERAS-3599 exhibited superior exposure and CNS penetration relative to the reference compounds, and ERAS-3537 and ERAS-3788 exhibited superior CNS penetration relative to the reference compounds. A green arrow indicates a favorable value relative to the reference compounds, a yellow arrow indicates a comparable value, and an orange arrow indicates an inferior value. P-gp substrate ratios were characterized in a P-gp expressing MDCK cell line. Per compound, a P-gp substrate ratio was calculated by dividing its efflux ratio in absence of a P-gp inhibitor by its efflux ratio in presence of a P-gp inhibitor. Compounds with lower P-gp substrate ratios are less likely to have CNS penetration limited by P-gp mediated efflux. LM stands for liver microsome and CL stands for clearance. Liver microsome stability is normalized to hepatic blood flow to better enable cross-species comparisons. In vitro potency was characterized by both pERK inhibition and cell viability. Both potency assays used the RAS Initiative KRAS G12C cell line.

We are aiming to optimize CNS penetration while maintaining comparable potency and metabolic stability to the reference compounds. This is a highly challenging balancing act to achieve because typically, the attributes of a molecule that endow it with potency against the S-IIP (e.g., hydroxyl group moiety for one of the reference compounds) are the very properties that compromise its ability to cross the BBB. Our goal with our CNS-penetrant KRAS G12C inhibitor discovery program has been to significantly increase CNS penetration as measured by the rat brain_{total}/plasma_{total} ratio (RBP, measured in percent). Reference compounds have RBPs ranging from 1% to 6%. Our pre-candidates have RBPs ranging from 11% to 68% (ERAS-3537 [68%], ERAS-3599

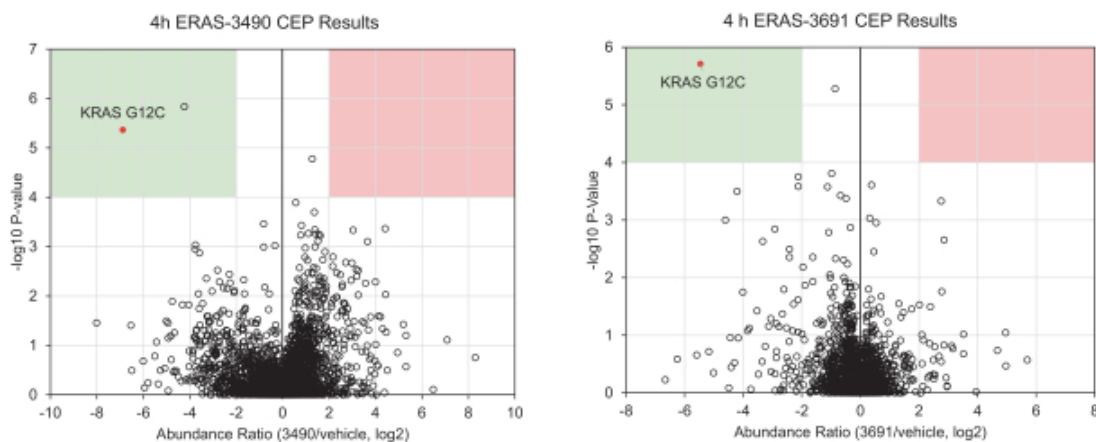
[66%], ERAS-3490 [52%], ERAS-3691 [13%], and ERAS-3788 [11%]), and therefore have the potential to demonstrate better CNS penetration in the clinic than the reference compounds. Our team has significant experience developing targeted CNS-penetrant compounds, including entrectinib (ROZLYTREK), an FDA-approved product for ROS1 fusion-positive NSCLC and NTRK fusion-positive solid tumors, including those in patients with CNS metastases. Using the rat brain assays, entrectinib has an RBP of 16% and an absolute value of 80 ng/g rat brain concentration.

Furthermore, ERAS-3490 and ERAS-3599 are not P-glycoprotein (P-gp) substrates, meaning they are less likely to be effluxed, or pumped, from the brain back out into the blood. This feature further enhances the potential for high CNS penetration of these two pre-candidates relative to the other three pre-candidates and reference compounds that are P-gp substrates.

Our most advanced ERAS-1 pre-candidates

Two of our most advanced compounds, ERAS-3490 and ERAS-3691, which are representative molecules from two different series derived from the same novel scaffold, have different advantages along the dimensions of PK or metabolic stability while maintaining comparable potency against KRAS G12C. ERAS-3490 potently inhibited the proliferation of 17 KRAS G12C cell lines with IC50s ranging from 1.4 nM to 82 nM. ERAS-3691 potently inhibited the growth of the same 17 KRAS G12C cell lines with IC50s ranging from 5.7 nM to 65 nM. These values were comparable to the reference compounds, which showed IC50s ranging from 2 nM to 35 nM in the same cell line panel.

These pre-candidates were shown to be highly selective inhibitors of KRAS G12C. This is supported by ERAS-3490 adducting with only one other peptide and ERAS-3691 adducting with no other peptides when incubated for 4 hours in the KRAS G12C mutant cell line NCI-H358. The figure below shows that KRAS G12C was strongly (x-axis) and significantly depleted (y-axis) when incubated with either ERAS-3490 or ERAS-3691 relative to vehicle control, indicating that both compounds strongly bound to KRAS G12C.



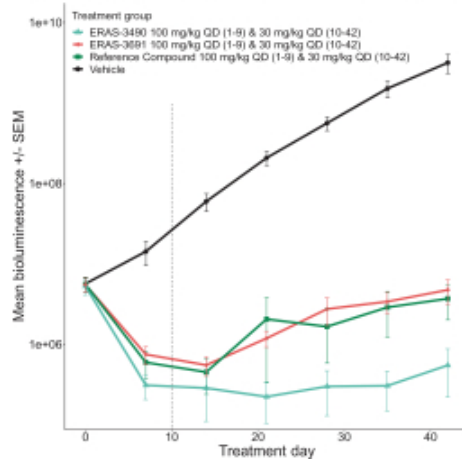
ERAS-3490 and ERAS-3691 selectively bound to KRAS G12C protein in cell-based Cysteine Enrichment Proteome (CEP) assays. This assay quantifies the covalent binding activity of cysteine-targeting compounds, like ERAS-3490 and ERAS-3691, after being incubated with NCI-H358 cells for 4 hours at 1 μ M. The depletion of cysteine-containing proteins in the compound treatment sample relative to vehicle treatment indicates that the compound is covalently binding to that peptide. The x-axis represents the magnitude of protein depletion, and the y-axis represents the significance of depletion. Proteins in the shaded green region are significantly depleted by at least 4-fold (p -value < $1.0e-4$) and proteins in the

shaded red region are significantly enriched by at least 4-fold (p -value $< 1.0e-4$). Both compounds were profiled in the KRAS G12C mutant NSCLC cell line NCI-H358. In the ERAS-3490 study, KRAS G12C and one other protein, PDS5, were the only two proteins out of 2,602 detected proteins that were significantly depleted. In the ERAS-3691 study, KRAS G12C was the only detected protein out of 3,103 detected proteins that was significantly depleted. Collectively, these data suggest that these compounds are highly selective for the KRAS G12C mutant protein.

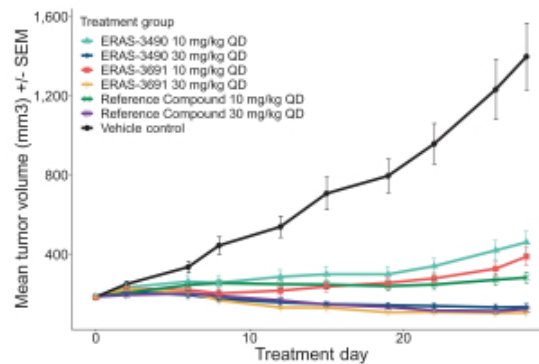
In an exploratory intracranial KRAS G12C NSCLC CDX NCI-H1373 model in panel (A) of the figure below, ERAS-3490 demonstrated that its superior physicochemical properties and PK profile enabled it to significantly outperform ERAS-3691 and a reference compound in anti-tumor activity, both at the initial dose of 100 mg/kg QD for the first nine days and upon lowering the dose to 30 mg/kg for the remainder of the study. In panels (B) to (D), the two pre-candidates demonstrated comparable to superior anti-tumor activity at two different doses relative to a reference compound in three different subcutaneous models of NSCLC (NCI-1373, NCI-H2122) and pancreatic cancer (MIA PaCa-2).

The PK/PD data shown in panel (E) help explain why ERAS-3490 seemed to outperform ERAS-3691 in the intracranial model with its superior PK profile, with high oral bioavailability (mean plasma AUC_{0-last} of 21,606 ng*h/g vs. 10,065 ng*h/g) and high brain bioavailability (mean brain AUC_{0-last} of 1985 ng*h/g vs. ND) at the 30 mg/kg dose. In these in vivo studies, these pre-candidates were well tolerated, as body weights remained constant across all the models. Panel (F) shows representative body weight change % of two different doses of the two pre-candidates and a reference compound in the subcutaneous KRAS G12C NSCLC CDX NCI-H2122 model, suggesting the doses were tolerable.

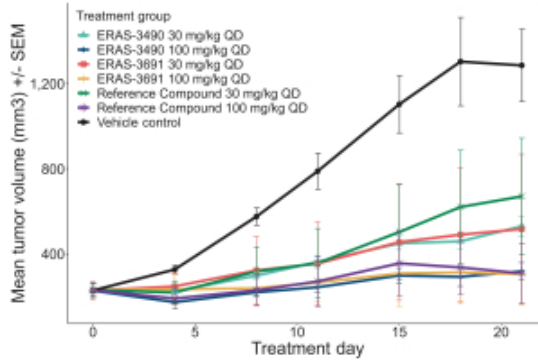
A. ERAS-3490 and ERAS-3691 TGI in intracranial KRAS G12C NSCLC CDX NCI-H1373



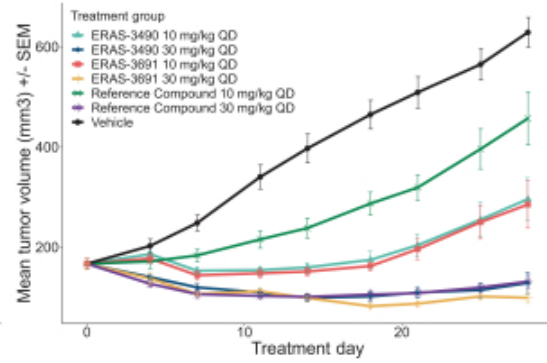
B. ERAS-3490 and ERAS-3691 TGI in subcutaneous KRAS G12C NSCLC CDX NCI-H1373



C. ERAS-3490 and ERAS-3691 TGI in subcutaneous KRAS G12C NSCLC CDX NCI-H2122

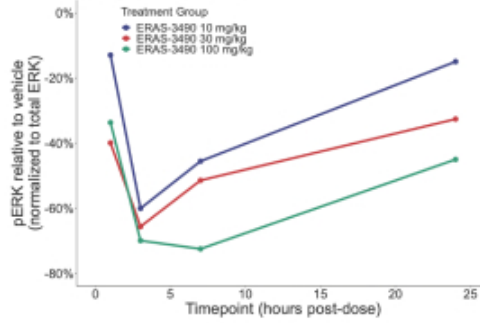


D. ERAS-3490 and ERAS-3691 TGI in subcutaneous KRAS G12C pancreatic cancer CDX MIA PaCa-2

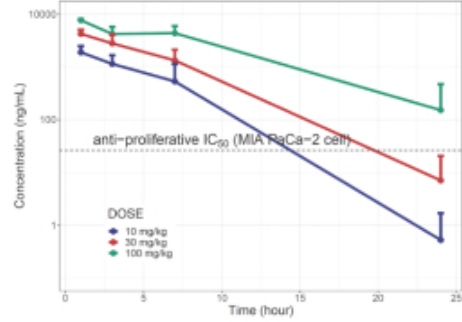


E. ERAS-3490 and ERAS-3691 single dose pharmacodynamic and pharmacokinetic data in subcutaneous KRAS G12C pancreatic cancer CDX MIA PaCa-2

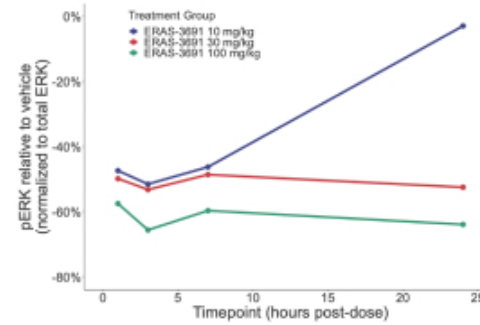
ERAS-3490 pERK Inhibition



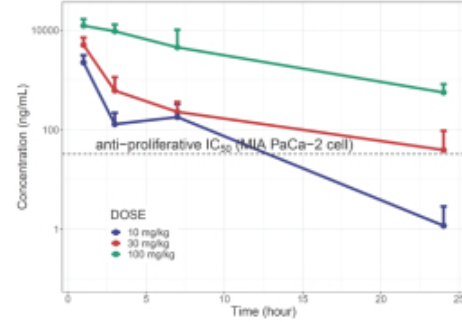
ERAS-3490 Mean Plasma PK Profiles



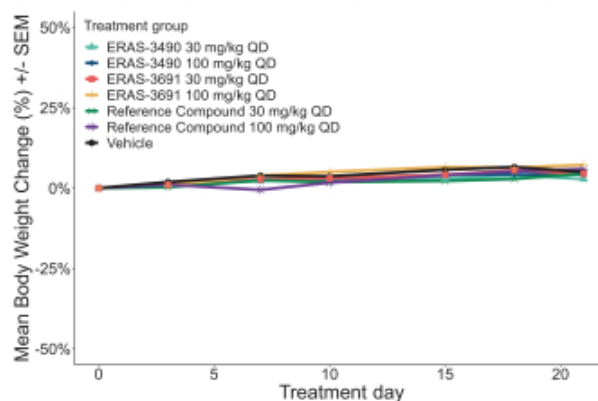
ERAS-3691 pERK Inhibition



ERAS-3691 Mean Plasma PK Profiles



F. ERAS-3490 and ERAS-3691 body weight change % in subcutaneous KRAS G12C NSCLC CDX NCI-H2122



(A) ERAS-3490, ERAS-3691, and a reference compound were dosed in an intracranially injected and luciferase labeled KRAS G12C mutant CDX model, NCI-H1373. All compounds were dosed at 100 mg/kg QD on days 1-9 and then at 30 mg/kg QD on days 10-42. ERAS-3490 and ERAS-3691 significantly inhibited tumor growth relative to vehicle control (p -value < 0.01). (B)-(D) ERAS-3490, ERAS-3691, and a reference compound were dosed in a KRAS G12C inhibitor sensitive subcutaneous NSCLC CDX, NCI-H1373, for 28 days (B), a KRAS G12C inhibitor-insensitive NSCLC CDX, NCI-H2122, for 21 days (C), and a KRAS G12C inhibitor sensitive pancreatic cancer CDX, MIA PaCa-2, for 28 days (D). In all three subcutaneous models, ERAS-3490 and ERAS-3691 significantly inhibited tumor growth at both 30 mg/kg QD (p -value < 0.01) and 100 mg/kg QD (p -value < 0.001) relative to vehicle control. (E) ERAS-3490 and ERAS-3691 inhibited pERK dose-dependently in a single dose PK/PD study in a subcutaneous pancreatic cancer MIA PaCa-2 CDX model. Both ERAS-3490 and ERAS-3691 at 30 mg/kg and 100 mg/kg show sustained pERK inhibition through 24 hours. ERAS-3490 and ERAS-3691 also showed dose-dependent PK. ERAS-3490 maintained plasma concentrations above its *in vitro* MIA PaCa-2 cell proliferation IC₅₀ for 24 hours at 100 mg/kg, and ERAS-3691 maintained total plasma concentrations above its *in vitro* MIA PaCa-2 cell proliferation IC₅₀ for 24 hours at both 30 mg/kg and 100 mg/kg. (F) Body weight change of ERAS-3490, ERAS-3691, and a reference compound in the subcutaneous CDX model, NCI-H2122. Compounds were continuously dosed at 30 mg/kg QD and 100 mg/kg QD for 21 days.

We believe our ERAS-1 pre-candidates are the only KRAS G12C inhibitors specifically designed to cross the BBB. We nominated ERAS-3490 as our DevCan in June 2021 and expect to file an IND in the second half of 2022.

Development strategy for ERAS-3490

The initial development of ERAS-3490 as a monotherapy will be in KRAS G12C mutant NSCLC. We will evaluate the hypothesis that improved CNS penetration will enhance clinical activity, broaden the patient population, prolong response, delay disease progression, and extend survival. Our deep pipeline within the RAS/MAPK pathway will allow a number of combination therapies to be developed in NSCLC and other solid tumors, such as CRC and pancreatic cancer. One of the initial combinations to be assessed will be with ERAS-601, as preclinical and clinical data supported the synergistic effect of inhibiting KRAS and SHP2. In addition, the combination of our first MAPKlamp (ERAS-601 plus ERAS-007) and a KRAS G12C inhibitor may effect an even more potent shutdown of the RAS/MAPK pathway. We intend to explore additional combinations of ERAS-3490 with other approved and investigational agents.

Current approved and clinical-stage KRAS G12C inhibitors have demonstrated limited monotherapy activity in CRC. We believe the greatest benefit in CRC for using KRAS G12C inhibitors—and one that underscores our belief in the importance of assembling a robust pipeline to enable such combinations—will be in combinations with ERAS-601, ERAS-007, or both (our first MAPKlamp) because they may be able to overcome the feedback loops and bypass pathways that underlie the innate resistance to single agent KRAS G12C inhibition in CRC.

Our RAS-GTP franchise

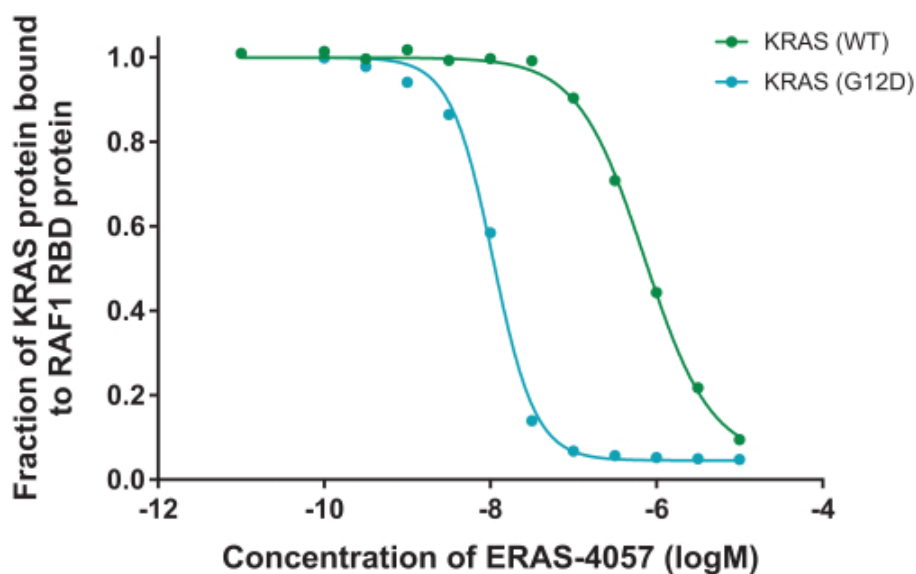
Over 2 million patients annually worldwide are affected by RAS mutations other than KRAS G12C. Like KRAS G12C, these mutations hyperactivate RAS/MAPK pathway signaling by diminishing RAS's ability to transition from the active to the inactive state. Nearly 700,000 of these 2 million patients are affected by tumors that harbor KRAS G12D, which is the most prevalent KRAS mutation. This mutation results in hyperactive RAS/MAPK pathway signaling and is frequently observed in NSCLC, CRC, endometrial cancer, and pancreatic cancer. Targeting non-G12C RAS mutations (the focus of our RAS-GTP franchise, including ERAS-4 and ERAS-2/3) is more challenging than targeting KRAS G12C because: (1) KRAS G12D and other non-G12C RAS mutations are more commonly found in the active RAS-GTP state; (2) non-G12C mutations do not have a mutant-specific site for irreversible inhibitor binding; and (3) these mutations alter the conformation dynamics of RAS, hindering the ability of small molecules to target the same binding site as KRAS G12C inhibitors, S-IIP.

ERAS-4: our KRAS G12D program

Our ERAS-4 program endeavors to develop small molecules that potently and selectively bind KRAS G12D. When bound to KRAS G12D, these inhibitors will prevent RAS-mediated signaling by locking KRAS G12D in the inactive GDP-bound state and/or obstructing KRAS G12D's ability to bind downstream effector proteins, such as BRAF and CRAF. We are accelerating advancement of this program by leveraging our in-house chemistry, biology, and structural biology expertise gained from working on our RAS-GDP and other RAS-GTP programs.

We have made a recent breakthrough in this regard, having generated molecules with low nanomolar IC₅₀ potency against KRAS G12D in the biochemical RAS-cRAF binding assay and high selectivity vs. KRAS wildtype (WT). As shown in the figure below, ERAS-4057 has strong potency of 10.8 nM, with 66-fold selectivity vs. KRAS WT. We are optimizing the properties of these molecules utilizing SBDD and structure-activity relationships while continuing to focus on generating other highly potent and selective compounds against KRAS G12D, with the intention to nominate and advance a DevCan into IND-enabling activities.

Inhibition of RAS-RAF1 RBD binding by ERAS-4057

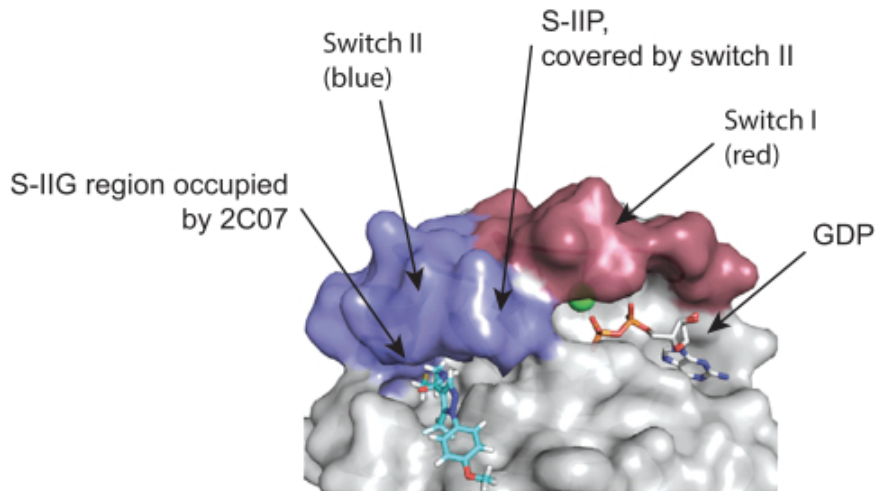


ERAS-4057 potently and selectively bound KRAS G12D with an IC₅₀ of 10.8 nM (blue) and KRAS WT, an off-target protein, with an IC₅₀ of 717.3 nM (green). Lower values on the y-axis indicate stronger inhibition of KRAS-RAF1 Ras binding domain (RBD) binding. Higher values on the x-axis indicate higher concentrations of ERAS-4057. In this assay, GDP-bound KRAS was converted to GTP-bound KRAS via an interaction with SOS1 and GTP-bound KRAS then bound the RAF1 RBD protein. A compound that inhibited the transition of KRAS from the GDP-bound to GTP-bound state and/or inhibited the protein-protein binding of KRAS and RAF1 resulted in a lower fraction of KRAS-RAF1 RBD binding.

ERAS-2/3: our other RAS-GTP programs

Our ERAS-2/3 program is focused on the development of small molecule inhibitors that target a novel region on RAS called the switch II groove (S-II_G). Unlike the S-II_P, the S-II_G is accessible in both the GDP-bound and GTP-bound states of RAS, making it a robust binding region across multiple RAS mutants.

Dr. Shokat identified a new binding site called S-IIG, as shown in the figure below. The original S-IIP that was the binding site for KRAS G12C inhibitors is present in the RAS-GDP state only. When RAS cycles to the RAS-GTP state, the S-IIP becomes obscured by switch II. Unlike the S-IIP, the S-IIG is not obscured by switch II, which enables small molecules to access the S-IIG independently of the phosphorylation state of the bound guanosine. Therefore, S-IIG is present in both the RAS-GTP and RAS-GDP states. Disruption of these switch regions can inhibit RAS signaling since GTP-bound RAS binds to effector proteins at these switch regions. We entered into an exclusive worldwide license agreement with UCSF for Dr. Shokat's work related to RAS-GTP which guides our ERAS-2/3 programs.



The small molecule tool compound binds to the S-IIG region on GDP-bound KRAS M72C in this surface representation of RAS. The S-IIG is less obstructed by switch II, and this feature allows small molecules to bind to the S-IIG independently of the phosphorylation state of the bound guanosine. Unlike S-IIG, access to S-IIP is influenced by the phosphorylation state of the bound guanosine. Most selective KRAS G12C inhibitors in development bind to the S-IIP. Switch II is flexible in the GDP-bound state, allowing small molecule inhibitors to access the S-IIP. In the GTP-bound state, switch II rigidly folds over the S-IIP and occludes access to the S-IIP, thereby preventing most selective KRAS G12C inhibitors from accessing the S-IIP. Binding of GDP to RAS is coordinated by a magnesium ion, shown in green.

Our EGFR franchise

EGFR is a transmembrane protein and member of the ErbB family of receptor tyrosine kinases (RTKs) that under normal conditions bind various growth factors to activate cellular signaling to regulate homeostasis. However, when the receptor is overexpressed, amplified, and/or mutated, it becomes oncogenic, thereby contributing to cell survival, proliferation, and metastasis.

We are developing a differentiated portfolio of programs that target EGFR, including ERAS-801, our CNS-penetrant small molecule EGFR inhibitor, and ERAS-12, our EGFR domain II/domain III (D2/D3) targeting bispecific antibody.

ERAS-801: our CNS-penetrant EGFR inhibitor

EGFR-mediated signaling plays a key role in the growth of many tumor types. Targeting of wildtype EGFR (wtEGFR) and mutant variants of EGFR (EGFRm) by small molecules and antibodies has resulted in improved

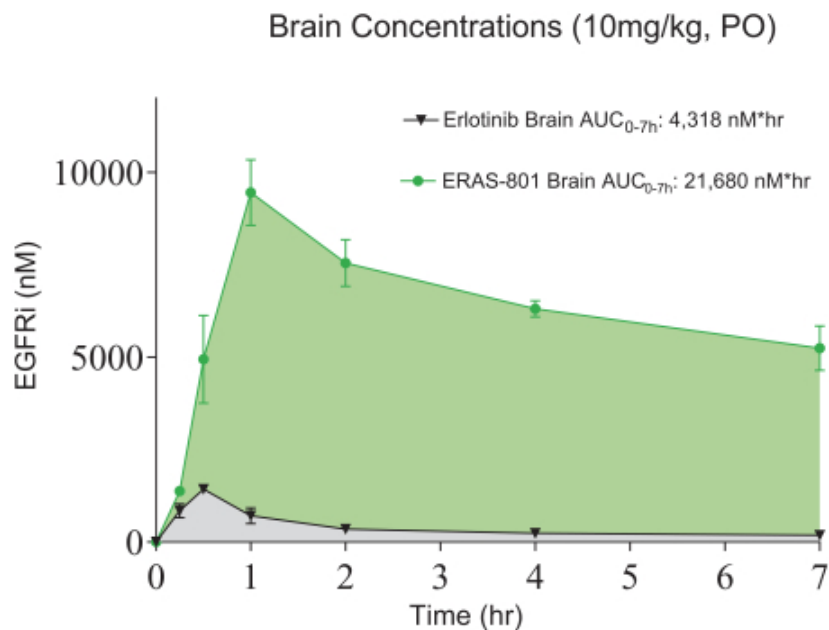
patient outcomes in NSCLC, CRC, and HNSCC. However, the ability of these agents to effectively target wtEGFR and EGFRm in the CNS remains an unmet medical need. For example, in primary CNS tumors like GBM that have amplification of wtEGFR as well as expression of a mutation in the extracellular domain, the most common of which is epidermal growth factor receptor variant III (EGFRvIII), approved small molecule EGFR inhibitors have not demonstrated clinical activity.

The lack of clinical activity is likely multifactorial, but we believe there are two primary reasons why approved EGFR inhibitors are not effective: (1) the molecules do not penetrate the CNS well, and (2) the molecules are weak inhibitors of the EGFRvIII mutant protein as homodimers or heterodimers that include wildtype EGFR.

ERAS-801 is designed to be a potent, selective, reversible, and orally available small molecule with both: (1) highly enhanced CNS penetration (3.7:1 brain:plasma ratio in mice) and (2) the ability to target both EGFR alterations such as EGFRvIII, the most common mutant form of EGFR found in GBM, and wtEGFR, which heterodimerizes with EGFRvIII.

High CNS penetration of ERAS-801

As shown below, following administration of a single oral dose of 10 mg/kg in mice, ERAS-801 demonstrated substantially higher brain concentrations than erlotinib, an approved EGFR inhibitor:



Brain concentrations and exposures of ERAS-801 and erlotinib in mice when administered a single 10 mg/kg dose. The x-axis represents time when brain concentration was assessed post-dose. The y-axis represents total concentration of compound in nanomolars.

Whereas approved EGFR inhibitors have suboptimal CNS penetration for primary brain tumors, as shown below, ERAS-801 showed substantially higher values of K_p and $K_{p,uu}$ (partition coefficients that measure bound and unbound drug concentration, respectively) compared to osimertinib, afatinib, erlotinib, gefitinib, and

Table of Contents

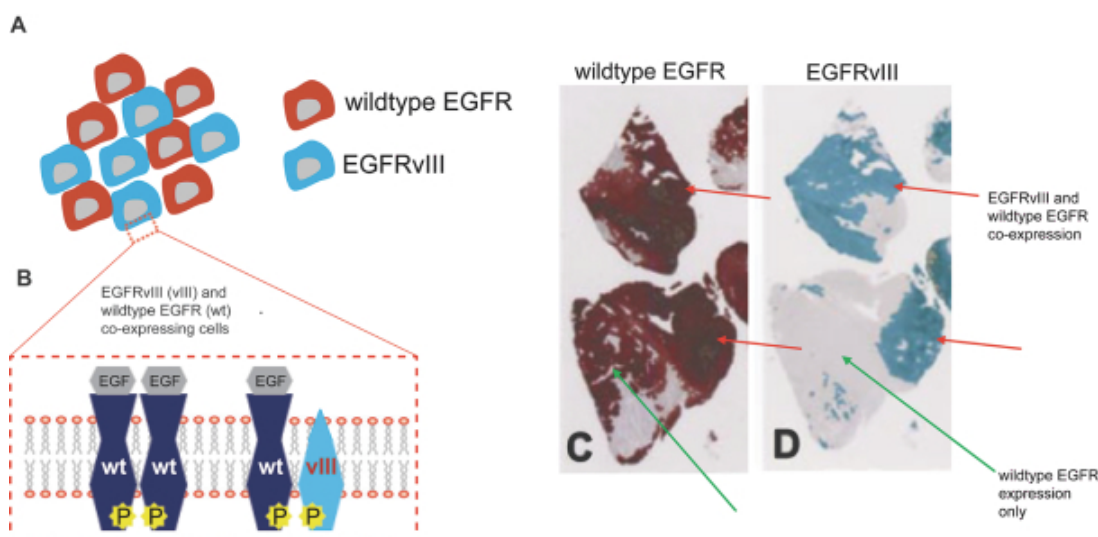
dacomitinib. The below figure is for illustrative purposes only and is not a head-to-head comparison. These data were generated from different studies, and caution should be exercised when comparing data across studies.

Compound (Brand Name)	Company	K_p , brain (mouse)	$K_{p,uu}$, brain (mouse)
ERAS-801	Erasca	3.7	1.2
Osimertinib (Tagrisso)	AstraZeneca	0.99	0.29
Afatinib (Gilotrif)	Boehringer Ingelheim	0.25	0.05
Erlotinib (Tarceva)	Genentech	0.06	0.13
Gefitinib (Iressa)	AstraZeneca	0.36	0.10
Dacomitinib (Vizimpro)	Pfizer	0.61	0.49

Comparison of CNS penetration characteristics of ERAS-801 relative to approved EGFR inhibitors in mouse. K_p is a ratio of bound brain exposure to bound plasma exposure. $K_{p,uu}$ is a ratio of unbound brain exposure to unbound plasma exposure. ERAS-801 K_p and $K_{p,uu}$ values were determined internally, and data for other compounds are based on published results.

Dual targeting of EGFR alterations and wtEGFR in GBM to address heterodimerization

The most common mutant form of EGFR found in GBM is EGFRvIII. Given the promiscuous nature of EGFR signaling, ERAS-801 has been specifically designed to have activity against both EGFR alterations such as EGFRvIII and wildtype EGFR, as we believe that wtEGFR inhibition is critical to impairing the growth of EGFR altered GBM because of the propensity of wtEGFR to heterodimerize with EGFRvIII to drive oncogenic signaling, as seen below with substantial co-expression of EGFRvIII and wtEGFR.



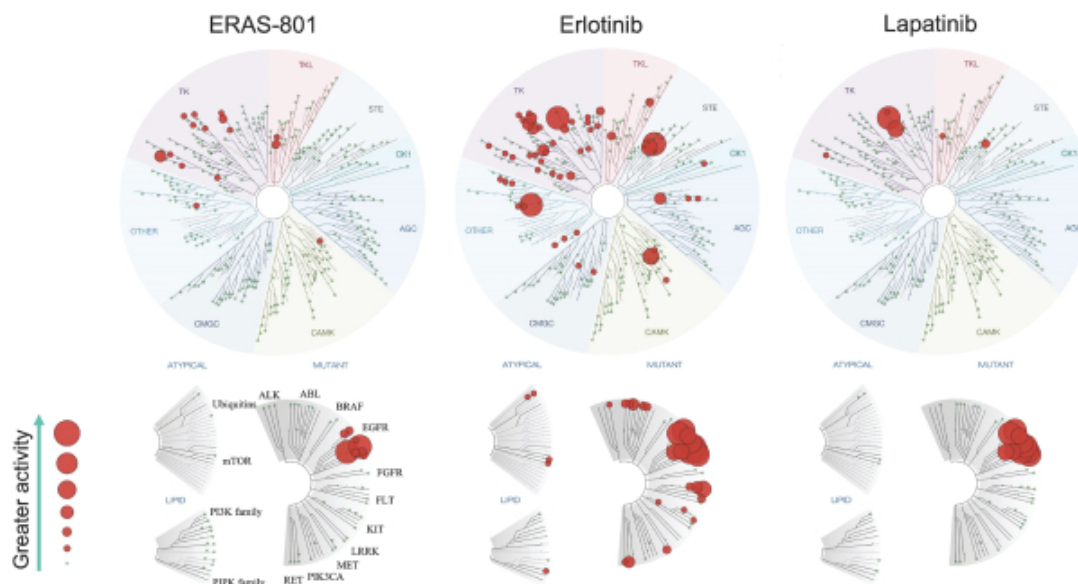
Panel A showed that the EGFR splice variant mutant EGFRvIII may be expressed in a subset of GBM tumor cells and that it can be co-expressed with wildtype EGFR. Panel B showed a zoomed in diagram of

Table of Contents

a GBM tumor cell membrane that harbors both wildtype EGFR and EGFRvIII. Wildtype EGFR can homodimerize with another wildtype EGFR protein or heterodimerize with EGFRvIII, in each case potentially leading to oncogenic signaling. In panels C and D, an immunohistochemistry-stained section of GBM tumor tissue shows wildtype EGFR-expressing tumor cells in brown and EGFRvIII-expressing tumor cells in blue. Regions that are stained both brown and blue express both wildtype EGFR and EGFRvIII proteins while regions that are stained brown but not blue express wildtype EGFR only.

Preclinical profile of ERAS-801

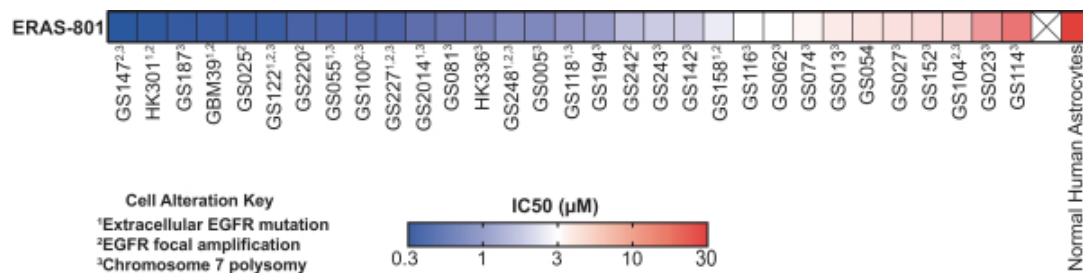
In preclinical studies, ERAS-801 has demonstrated strong biochemical and cell-based potency, as well as strong biochemical selectivity. ERAS-801 has shown high potency against EGFR with a biochemical IC₅₀ of 0.3 nM and high CNS penetration. It also showed high selectivity for EGFR based on a biochemical screen of 484 kinases in which ERAS-801 at 10 μ M inhibited only two non-EGFR family kinases at greater than 90%.



The biochemical activities of ERAS-801 and two approved compounds that are active against EGFR, erlotinib and lapatinib, were characterized at a single concentration (10 μ M) in kinome screens. Inhibitory activity has been mapped onto a kinase phylogenetic tree where related kinases within 8 kinase groups are grouped by color (top row). Red circles indicate kinases where inhibitory activity has been observed; the diameter of the circle represents the strength of inhibition (i.e., large circles mean greater inhibitory activity). Activity against atypical and mutant kinases are shown in the bottom row.

Table of Contents

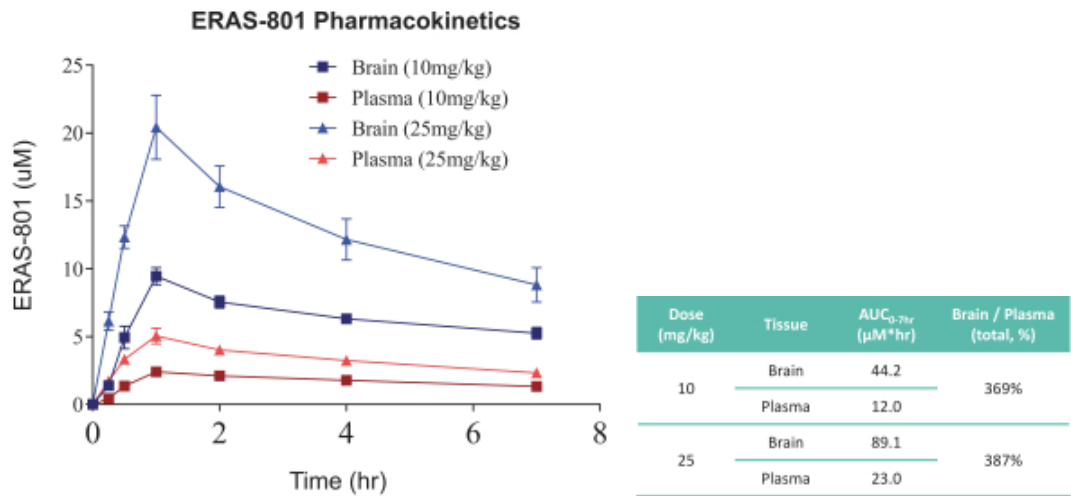
In cell-based assays, ERAS-801 was potent against wildtype EGFR with an IC₅₀ of 1.1 nM and EGFRvIII with an IC₅₀ of 0.7 nM. In a 31 patient-derived glioma cell panel, ERAS-801 inhibited the growth of 65% of glioma cells with IC₅₀ values less than 3 μM. This glioma cell panel included the most frequent types of EGFR alterations observed in GBM: amplification, EGFRvIII, extracellular domain mutations (e.g., A289V and A289D), and chromosome 7 polysomy. ERAS-801 showed no activity in normal human astrocytes (i.e., IC₅₀ greater than 25 μM), which is the most common cell type in the human brain. ERAS-801's lack of activity against this normal brain cell type demonstrated that ERAS-801 selectively inhibited EGFR and that these normal brain cells were not dependent on EGFR signaling.



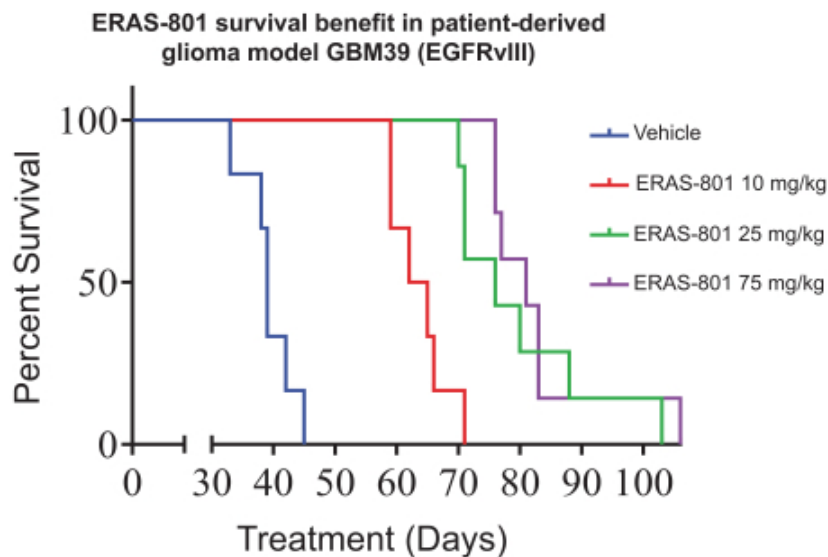
ERAS-801 showed broad activity in a panel of 31 patient-derived glioma cell lines. Demonstrating selectivity, ERAS-801 showed no activity in normal human astrocyte cells. Lower IC₅₀ values, in blue, indicated stronger activity. The EGFR mutation status of the GBM patient-derived cells is indicated by symbols. Mutations include extracellular domain EGFR mutations and EGFR splice variants, such as EGFRvIII. Focal amplification indicates a high-level gain of the chromosomal region that includes the EGFR gene locus. Polysomy indicates cells that harbor more copies of chromosome 7, which contained the EGFR gene, than expected in a normal cell. Two copies of chromosome 7 are expected in normal cells.

[Table of Contents](#)

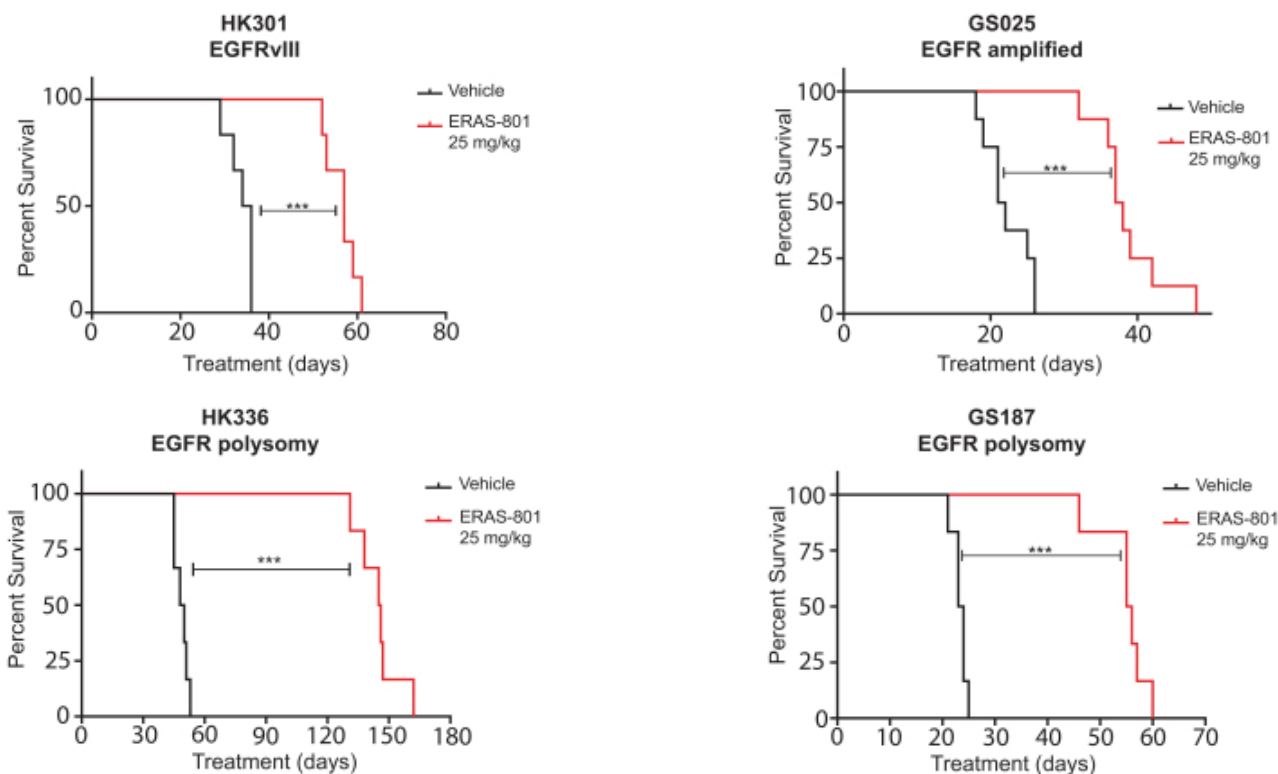
In vivo studies showed that total ERAS-801 concentration was present in the brain by a factor of 3.7x relative to plasma, and its unbound concentration in the brain was 1.2x higher than in plasma. This high CNS penetration translated into enhanced in vivo survival benefit, which was observed in the EGFRvIII mutant patient-derived glioma model GBM39. In this study, ERAS-801 significantly extended the survival of mice at 10 mg/kg, 25 mg/kg, and 75 mg/kg doses relative to vehicle control (p-value < 0.05). Relative to vehicle control, significant survival benefit was observed in four additional patient-derived glioma models that harbor EGFRvIII, EGFR amplified, or chromosome 7 polysomy mutations (p-value < 0.001). These preclinical in vivo data highlight ERAS-801's potent CNS activity against EGFR mutant GBM, which comprises 40-60% of all GBM.



ERAS-801 plasma and brain concentrations in mice that have been administered a single dose of ERAS-801 at 10 mg/kg or 25 mg/kg. The table summarizes the PK profiles shown in the graph.



ERAS-801 showed dose-dependent survival benefit in the in vivo GBM PDX model GBM39, which harbored the EGFRvIII splice variant.



ERAS-801 showed significant survival benefit in multiple glioma PDX models that harbored a variety of EGFR mutations. ***p-value < 0.001.

Development strategy for ERAS-801

We believe that ERAS-801 could provide benefit to approximately 125,000 patients with GBM worldwide per year. GBM is a difficult-to-treat, aggressive cancer that can occur in the brain or spinal cord. Current therapy consists primarily of surgical resection of the tumor, followed by radiation and chemotherapy. Once GBM recurs, therapeutic options for patients are limited. EGFR amplifications and mutations are detected in 40-60% of GBM cases and are generally indicative of poor prognosis. We expect to file an IND in the first quarter of 2022, and thereafter initiate a first-in-human trial in refractory GBM that will evaluate the safety, PK, and PD effects of ERAS-801 as a single agent. Preliminary evaluation of anti-tumor activity will also be performed in patients who have tumors harboring alterations in EGFR.

ERAS-12: our EGFR D2/D3 bispecific antibody program

Inhibition of wildtype EGFR signaling mediated by overexpression of EGFR has shown promise in treating various tumors, including HNSCC and CRC. In tumors where overexpression of EGFR is thought to be the primary driver of EGFR signaling, an antibody-based approach is the most effective way to target the receptor, and approved antibodies have demonstrated good tolerability as well as activity by inhibiting EGFR activation and mediating antibody-dependent cellular cytotoxicity (ADCC), a process by which the antibody alerts the immune system to attack the bound tumor cell. However, all approved anti-EGFR antibodies target domain III (D3) only, which is the inactive conformation of wildtype EGFR, and no approved antibodies target domain II (D2), which is

Table of Contents

the active, ligand binding, conformation of wildtype EGFR. Antibodies targeting D2 are expected to be more effective when epidermal growth factor (EGF) or other members of the EGF family are overexpressed.

We are developing a bispecific antibody that is active against both the inactive and active conformations of wildtype EGFR, and we anticipate filing an IND for this program by 2024.

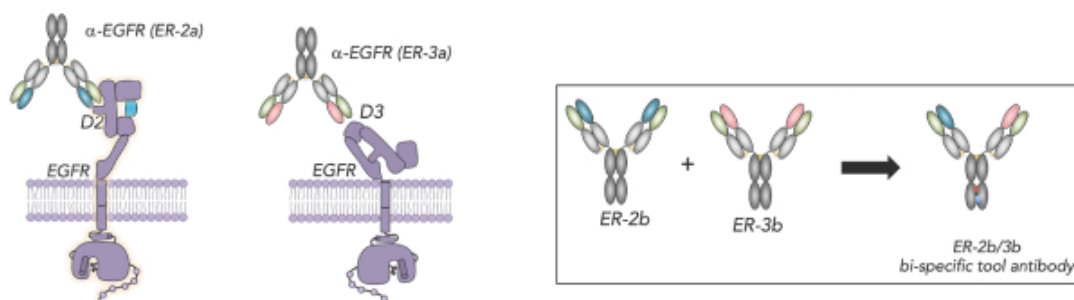
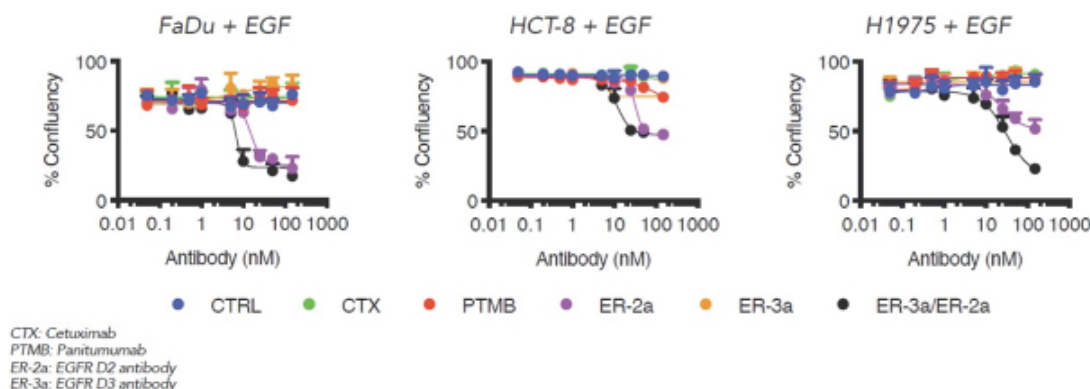


Diagram (A) visualizes the EGFR antibody ER-2a binding to the extracellular domain II of EGFR wildtype (purple), which is accessible when EGFR is in the active state. EGFR assumes an active state conformation when its ligand is bound (the bound ligand is shown in blue). Diagram (B) visualizes the EGFR antibody ER-3a binding to the extracellular domain III of EGFR wildtype (purple), which is accessible when EGFR is in the inactive state. In the rectangle, the portion of ER-2b that recognizes domain II of EGFR and the portion of ER-3b that recognizes domain III of EGFR are combined into a bispecific antibody that binds EGFR in both states.

By binding to EGFR in the active D2 state, our D2/D3 bispecific antibody can likely better prevent EGFR dimerization and can potentially achieve higher levels of EGFR inhibition than currently approved EGFR antibodies. Achieving a higher level of EGFR inhibition may better control tumor growth and delay the emergence of resistance mechanisms involving EGFR that spends more time in the active conformation.

Targeting D2 via the ER-3a/2a and ER-2a antibodies show a concentration-dependent inhibition of cancer cell proliferation.



The bispecific antibody ER-3a/ER-2a and EGFR active state-binding antibody ER-2a inhibited cell growth in FaDu, an HNSCC cell line, and HCT-8, a CRC cell line, and the NSCLC cell line H1975. FaDu and HCT-8 expressed wildtype EGFR and H1975 expressed EGFR with two kinase domain mutations, L858R and T790M. EGFR's ligand, EGF, was added to these cells to further stimulate EGFR activity and model environments where EGF is expressed. As expected, only the two antibodies that recognized the active state of EGFR, ER-3a/ER-2a, inhibited the proliferation of all three cell lines, as indicated by a reduced confluency percentage.

Over 1.8 million patients with cancer annually worldwide could benefit from development of a wildtype targeting EGFR therapy that potently inhibits both the inactive and active conformations of EGFR, either as a monotherapy or as a combination.

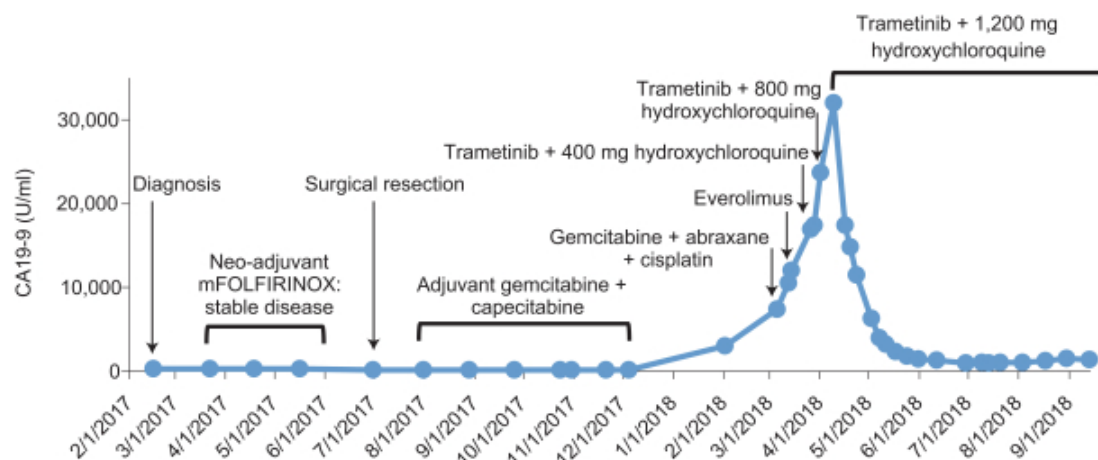
ERAS-5: our ULK program

The ULK1 and ULK2 kinases are key regulators of the metabolic process known as autophagy. Under physiological conditions, cells utilize autophagy to recycle cellular components, breaking down older components that may be malfunctioning due to age and stress into subunits that are combined to form new components. This process can act as a survival mechanism during stress, such as nutrient starvation, by enabling cells to break down non-critical cellular components to support critical functions. Autophagy can be upregulated in tumor cells where RAS/MAPK pathway signaling is inhibited, acting as an escape route mechanism by preventing tumor cell death.

To pursue our therapeutic strategy of targeting escape routes, our ERAS-5 program is focused on developing potent, selective inhibitors of ULK1/2 so that we can further boost tumor cell death in combination with our RAS/MAPK pathway inhibitors. We have identified a promising ERAS-5 compound that showed strong potency, target engagement, inhibition of autophagy, and selectivity. In a biochemical assay, it exhibited IC50s of 2.4 nM and 2.6 nM against ULK1 and ULK2, respectively. In cell-based assays, this compound showed an IC50 of 13.4 nM in an ULK1 target engagement assay and an IC50 of 5.9 nM in an autophagy pathway activity assay that visualized GFP-labeled LC3 puncta (LC3 proteins localize on autophagosomes and, when labeled with a fluorophore, can enable quantification of autophagosomes by microscopy; higher numbers of autophagosomes in the cell, which are generated during the autophagy process, indicate higher levels of autophagy). Our promising ERAS-5 compound also showed biochemical selectivity—greater than 375x selectivity against TBK1 and greater than 240x selectivity against AMPK, two off-target kinases that are commonly inhibited by other ULK inhibitors with published structures.

Table of Contents

We believe that agents targeting the RAS/MAPK pathway could benefit from combination with an ULK1/2 inhibitor, addressing up to 2.6 million patients with cancer annually worldwide. This includes over 400,000 patients with RAS mutant pancreatic cancer since pancreatic cancer tumors have upregulated RAS/MAPK pathway signaling and autophagy may already be upregulated due to these tumors growing in nutrient poor environments. As shown below, a promising clinical case report showed that combining a non-specific autophagy inhibitor, hydroxychloroquine, with a RAS/MAPK pathway inhibitor, trametinib, meaningfully reduced tumor burden in a patient with metastatic pancreatic cancer. The patient's level of CA19-9, a blood-based marker of overall tumor burden, rapidly decreased upon initiation of this combination therapy and remained low through 5 months of treatment. This patient had previously progressed on multiple chemotherapy regimens and an mTOR inhibitor, everolimus.



In a patient with metastatic pancreatic cancer, the combination of an autophagy inhibitor, hydroxychloroquine, with a RAS/MAPK pathway inhibitor, trametinib, resulted in a steep reduction of overall tumor burden as represented by a decrease in CA19-9. Higher tumor burden levels are shown as higher concentrations of CA19-9. The x-axis represents dates within the patient's treatment journey and the y-axis is the detected concentration of CA19-9. Prior to initiation of trametinib and hydroxychloroquine treatment, the patient was treated with chemotherapy regimens mFOLFIRINOX (folinic acid [leucovorin], fluorouracil, irinotecan, and oxaliplatin), gemcitabine, and capecitabine, and gemcitabine, abraxane, and cisplatin. After progressing on the gemcitabine, abraxane, and cisplatin triplet, the patient was treated with an mTOR inhibitor, everolimus. The patient progressed on everolimus and was then treated with trametinib at 2 mg QD in combination with escalating doses of hydroxychloroquine up to 1,200 mg QD. The combination of trametinib at 2 mg QD with hydroxychloroquine at 1,200 mg resulted in a significant decrease in overall tumor burden that continued through 5 months of treatment.

ERAS-9: our SOS1 program

SOS1 is a protein that binds to RAS and enables it to transition from the inactive RAS-GDP state to the active RAS-GTP state. RAS proteins bind GDP tightly, and a cofactor, such as a SOS1, is required to facilitate RAS's release of GDP followed by its binding to GTP. Without this cofactor, RAS will accumulate in the inactive state as active state RAS hydrolyzes bound GTP. We are developing small molecule inhibitors in our ERAS-9 program that obstruct SOS1-RAS binding and thereby prevent RAS from cycling to the active RAS-GTP state. SOS1-RAS inhibition can prevent RAS activation mediated by upstream signaling (e.g., via EGFR activation) and can be

[Table of Contents](#)

combined with downstream RAS/MAPK pathway inhibitors to potentially address RAS and RAF mutations that result in constitutive RAS/MAPK pathway signaling. SOS1-RAS inhibitors can address as many as 4.9 million patients with cancer who harbor RAS/MAPK pathway activating mutations annually worldwide either as a monotherapy or in combination therapies.

ERAS-10: our protein degrader program

We are exploring protein degradation as an alternative mechanism to complement our approach of enzymatically inhibiting oncogenic proteins. Degradation molecules bind to a target oncogenic protein and cellular machinery that label proteins for degradation. Within proximity of each other, the degradation machinery labels the target protein through a process called ubiquitination, and the labeled protein is degraded. Degradation molecules can offer advantages over enzymatic inhibitors, such as the ability of a single degradation molecule to tag many copies of the target oncoprotein for degradation and the ability of a degradation molecule to more effectively inhibit the function of non-enzymatic proteins. We think this approach will allow us to target a broader range of proteins within the RAS/MAPK pathway and may help us more effectively target a subset of oncogenic proteins than via enzymatic inhibition alone.

ERAS-11: our MYC program

MYC is a transcription factor that is mutated in 40% of cancers, affecting approximately 7.7 million patients with cancer annually worldwide. These mutations promote cancer by hyperactivating MYC and/or its protein dimerization partners (e.g., MAX). Inhibiting MYC by disrupting its ability to dimerize with other proteins or bind DNA has been pursued for over 20 years but has not yet been successful. We are exploring novel approaches to targeting MYC utilizing our internal discovery expertise complemented with partnerships to overcome the challenges that have prevented the successful development of MYC protein inhibitors.

Our acquisition and license agreements

Asana BioSciences

In November 2020, we entered into an agreement and plan of merger with Asana and ASN Product Development, Inc. (ASN) (the Asana Merger Agreement), pursuant to which ASN became our wholly-owned subsidiary. Asana and ASN had previously entered into a license agreement, which was amended and restated prior to the closing of the merger transaction (the Asana License Agreement, and collectively with the Asana Merger Agreement, the Asana Agreements), pursuant to which ASN acquired an exclusive, worldwide license to certain intellectual property rights relating to inhibitors of ERK1 and ERK2 owned or controlled by Asana to develop and commercialize ERAS-007 and certain other related compounds for all applications. We have the right to sublicense (through multiple tiers) the licensed rights under the Asana Agreements, subject to certain conditions. The foregoing license is subject to Asana's non-exclusive right to practice the licensed rights to research and conduct preclinical pharmacology activities with a specified combination of compounds, subject to certain specified conditions. Pursuant to the Asana License Agreement, neither Asana nor ASN can directly or indirectly exploit certain classes of competing products, subject to specified exceptions. In addition, we are required to use commercially reasonable efforts to develop and obtain regulatory approval for ERAS-007 in the United States, at least one major market country in Europe, and either China or Japan.

Under the Asana Merger Agreement, we made an upfront payment of \$20 million and issued 4,000,000 shares of our Series B-2 convertible preferred stock to Asana. We are obligated to make future development and regulatory milestone cash payments for a licensed product in an amount of up to \$90 million. Additionally, upon achieving a development milestone related to demonstration of successful proof-of-concept in a specified

[Table of Contents](#)

clinical trial, we will be required to issue 3,888,889 shares of our common stock to Asana. We are not obligated to pay royalties on the net sales of licensed products.

Upon our payment to Asana of all merger consideration, including upfront cash and equity payments, the milestone payments, the equity payment related to the proof-of-concept development milestone, and all other development milestone payments, with the exception of a specific milestone that does not need to be achieved at such time and will remain subject to payment in the event that such milestone occurs at a later time, all licensed rights will become fully paid-up, perpetual, and irrevocable. The License Agreement may be terminated by either Asana or us in the event of an uncured material breach by the other party. Asana also has the right to terminate the Asana License Agreement if we fail to engage in material activities in support of clinical development and commercialization of ERAS-007 for a period of 12 consecutive months, excluding reasons outside of our reasonable control and subject to certain limitations. However, Asana's right to terminate the Asana License Agreement for any reason ends once we have paid to Asana all merger consideration, or if Asana's equity interest in us becomes publicly traded and exceeds a certain threshold value. We may terminate the Asana License Agreement at any time upon the provision of prior written notice to Asana.

NiKang Therapeutics

In February 2020, we entered into a license agreement (the NiKang Agreement) with NiKang Therapeutics, Inc. (NiKang) under which we were granted an exclusive, worldwide license to certain intellectual property rights owned or controlled by NiKang related to certain SHP2 inhibitors to develop and commercialize ERAS-601 and certain other related compounds for all applications. We have the right to sublicense (through multiple tiers) our rights under the NiKang Agreement, subject to certain conditions, and are required to use commercially reasonable efforts to develop and commercialize licensed products. The parties are obligated to negotiate in good faith for a certain period of time to grant NiKang the exclusive commercial distribution rights in greater China once a licensed product reaches a certain development stage.

Under the NiKang Agreement, we made an upfront payment of \$5 million to NiKang and reimbursed NiKang \$0.4 million for certain initial manufacturing costs. In addition, we paid an additional \$7 million after publication of a US patent application that covered the composition of matter of ERAS-601. We are also obligated to pay (i) development and regulatory milestone payments in an aggregate amount of up to \$16 million for the first licensed product and \$12 million for a second licensed product, and (ii) commercial milestone payments in an aggregate amount of up to \$157 million for the first licensed product and \$151 million for a second licensed product. We are also obligated to: (i) pay tiered royalties on net sales of all licensed products in the mid-single digit percentages, subject to certain reductions; and (ii) equally split net sublicensing revenues earned under sublicense agreements that we enter into with any third party before commencement of the first Phase I clinical trial for a licensed product.

The NiKang Agreement will expire upon the last to expire royalty term, which is determined on a licensed product-by-licensed product and country-by-country basis, and is the later of (i) ten years from the date of first commercial sale, (ii) the last to expire valid claim within the licensed patent rights covering such licensed product, or (iii) the expiration of all regulatory exclusivity for the licensed product in such country. Upon expiration of the NiKang Agreement, on a licensed product-by-licensed product and country-by-country basis, we will have a fully paid-up, non-exclusive license to conduct research and to develop and commercialize the licensed products.

The NiKang Agreement may be terminated in its entirety by NiKang in the event of our uncured material breach, which includes our failure to use commercially reasonable efforts to satisfy certain specified clinical development diligence milestones. In addition, NiKang may terminate if we, directly or indirectly, commence a legal action challenging the validity or enforceability of any licensed patents. Further, if we acquire more than

[Table of Contents](#)

50% of the equity or assets of a company that owns a competing small molecule that is designed to prevent the same target as set forth in the NiKang Agreement from switching to an enzymatically active state, then we must either divest such competing product or terminate the NiKang Agreement. We may terminate the NiKang Agreement at any time upon the provision of prior written notice to NiKang. Upon termination of the NiKang Agreement for any reason, all rights and licenses granted to us, as well as any sublicenses that we granted thereunder, will terminate. In addition, upon any termination (but not expiration) of the NiKang Agreement and upon NiKang's request, the parties are obligated to meet and negotiate in good faith the terms of a license from us to NiKang to allow NiKang's continued development, manufacture, and commercialization of the licensed products.

Katmai Pharmaceuticals

In March 2020, we entered into a license agreement (the Katmai Agreement) with Katmai Pharmaceuticals, Inc. (Katmai) under which we were granted an exclusive, worldwide, royalty-bearing license to certain patent rights and know-how controlled by Katmai related to the development of small molecule therapeutic and diagnostic products that modulate EGFR and enable the identification, diagnosis, selection, treatment, and/or monitoring of patients for neuro-oncological applications to develop, manufacture, use, and commercialize ERAS-801 and certain other related compounds in all fields of use. We have the right to sublicense (through multiple tiers) our rights under the Katmai Agreement, subject to certain limitations and conditions, and are required to use commercially reasonable efforts to develop, manufacture, and commercialize licensed products and to meet certain specified development and launch milestones by certain dates. We are obligated to use commercially reasonable efforts to develop the licensed products first for use within the neuro-oncology field before expanding our development efforts to include other indications in the oncology field. Following the first achievement of a clinical proof-of-concept for any indication, we have the right to submit a non-binding offer to Katmai for (i) the purchase of all licensed patent rights, know-how, and other assets owned by Katmai that are necessary or useful for the exploitation of the licensed products or (ii) for the purchase of Katmai. Pursuant to the Katmai Agreement, neither Katmai nor we can directly or indirectly exploit certain specified classes of competing products.

The license granted under the Katmai Agreement is subject to The Regents of the University of California's reserved right to (i) use the licensed patent rights and know-how for educational and non-commercial research purposes, and to publish results arising therefrom, and (ii) grant licenses to the licensed know-how to third parties without notice because the licensed know-how is non-exclusively licensed to Katmai by The Regents of the University of California. Further, the license granted under the Katmai Agreement is subject to the rights of the United States government under the Bayh-Dole Act, including (i) a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced the invention claimed by the licensed patent rights throughout the world and (ii) the obligation that any licensed products used or sold in the United States be manufactured substantially in the United States.

Under the Katmai Agreement, we made an upfront payment of \$5.7 million and Katmai agreed to purchase shares of our Series B-1 convertible preferred stock and Series B-2 convertible preferred stock having an aggregate value of \$2.7 million. We are obligated to make future development and regulatory milestone payments of up to \$26 million and commercial milestone payments of up to \$101 million. We are also obligated to pay tiered royalties on net sales of each licensed product, at rates ranging from the mid- to high-single digit percentages, subject to a minimum annual royalty payment in the low six figures and certain permitted deductions.

Our royalty obligations and the Katmai Agreement will expire, on a licensed product-by-licensed product and country-by-country basis, on the earlier of (i) the ten-year anniversary of the expiration of all valid claims

[Table of Contents](#)

included in the licensed patents covering the composition of matter or method of use of such licensed product in such country or (ii) the twentieth anniversary of the first commercial sale of such licensed product in such country. Upon the expiration of the Katmai Agreement, we will have a fully paid-up and irrevocable license.

The Katmai Agreement may be terminated in its entirety by either party (i) in the event of an uncured material breach by the other party or (ii) in the event the other party becomes subject to specified bankruptcy, insolvency, or similar circumstances. Provided that we are in full compliance with the Katmai Agreement, we may terminate the Katmai Agreement upon written notice to Katmai. Upon termination of the Katmai Agreement for any reason, all rights and licenses granted to us thereunder will terminate. Upon termination of the Katmai Agreement, we are obligated, among other things, to (i) grant an exclusive license to Katmai under all of our right, title and interest in all inventions and know-how developed under the Katmai Agreement existing at the time of termination that are specific to the licensed compounds or products, including without limitation all data and results related to their exploitation and (ii) transfer to Katmai ownership and possession of all regulatory filings related to the licensed compounds and products. Unless the Katmai Agreement is terminated for our material breach, the parties will negotiate in good faith the financial terms pursuant to which the foregoing actions will be conducted, provided that our performance of such actions may not be conditioned upon the conduct or completion of such negotiations. If the parties are unable to agree upon such terms within the specified time period, then the parties will submit all unresolved matters for resolution by arbitration.

Emerge LifeSciences

In March 2021, we entered into an asset purchase agreement (the ELS Purchase Agreement) with ELS wherein we purchased all rights, title, and interest (including all patent and other intellectual property rights) to ELS's EGFR antibodies directed against the EGFR domain II (EGFR-D2) and domain III (EGFR-D3) as well as a bispecific antibody where one arm is directed against EGFR-D2 and the other is directed against EGFR-D3 (the Antibodies). Under the ELS Purchase Agreement, we issued to ELS 500,000 shares of our common stock and made an upfront payment of \$2 million. We are not obligated to pay royalties on the net sales of products covered by the acquired intellectual property. Under the ELS Purchase Agreement, ELS is committed to performing certain studies on the Antibodies to assist in development activities, the costs of which shall be mutually agreed upon and for which we will be responsible.

Pursuant to the ELS Purchase Agreement, at any time between 12 months and 36 months after the effective date of the ELS Purchase Agreement, if we reasonably determine that none of the Antibodies should be taken into human clinical trials due to safety, efficacy or CMC issues, then we have the option to select another antibody developed and solely owned by ELS that is not the subject of a license, collaboration, or option to a third party (the Option). If we elect to exercise the Option, then ELS will provide to us a list of all available antibodies that meet the aforementioned requirements, and we have the right to select one antibody from the list. Upon our selection of an antibody, ELS will assign us all rights, title and interest to such antibody (including patent and other intellectual property rights) subject to any pre-existing obligations or restrictions. In the event that we wish to have ELS conduct any studies on such optioned antibody, then after mutual agreement as to the scope of the studies, we will be responsible for the cost for such studies.

LifeArc

In April 2020, we entered into a license agreement with LifeArc (the LifeArc Agreement) under which we were granted an exclusive, worldwide license to certain materials, know-how, and intellectual property rights owned or controlled by LifeArc to develop, manufacture, use, and commercialize certain ULK inhibitors for all applications. We also have the right to sublicense (through multiple tiers) our rights under the LifeArc

[Table of Contents](#)

Agreement, subject to certain conditions. The foregoing license is subject to LifeArc's retained non-exclusive, irrevocable, worldwide, sublicensable (to its academic collaborators), royalty-free right to use the licensed intellectual property rights within all fields of use for LifeArc's own non-commercial, non-clinical academic research. Notwithstanding its retained rights, LifeArc will not seek to develop or undertake any other ULK1/2 therapeutic development programs either in-house or via third parties until April 2025. We are required to use diligent efforts to achieve certain development and regulatory milestones with respect to submission of an IND, initiation of clinical trials, submission of an NDA, and commencement of commercial sales.

Under the LifeArc Agreement, we were granted the license at no upfront cost and a period of three months after the effective date to conduct experiments on LifeArc's compounds. Upon completion of this initial testing period, we had the option to continue the license and make a one-time license payment of \$75,000 to LifeArc, which payment was subsequently made. We are obligated to make future development milestone payments for a licensed product of up to \$11 million and sales milestone payments of up to \$50 million. We are also obligated to pay royalties on net sales of all licensed products, in the low-single digit percentages, subject to certain reductions.

Our royalty obligations and the LifeArc Agreement will expire, on a licensed product-by-licensed product and country-by-country basis, on the later of (i) ten years from the date of first commercial sale, (ii) when there is no longer a valid patent claim covering such licensed product, or (iii) expiration of regulatory exclusivity for the licensed product in such country. Upon expiration of the LifeArc Agreement, all rights and licenses granted to us and under the LifeArc Agreement will continue on a fully paid-up basis.

The LifeArc Agreement may be terminated in its entirety by either LifeArc or us in (i) the event of an uncured material breach by the other party or (ii) in the event the other party becomes subject to an order by a court of competent jurisdiction for winding-up or dissolution or similar circumstances. Further, LifeArc may terminate the LifeArc Agreement by giving written notice to us if (i) we fail to comply with our diligence obligations and fail to take remedial actions, (ii) we fail to agree on a mechanism to cure a persistent breach, or (iii) we fail to provide proof of the insurance coverage as required under the LifeArc Agreement. We may terminate the agreement at any time upon the provision of written notice to LifeArc.

Upon termination of the LifeArc Agreement for any reason, all rights and licenses granted to us, as well as any sublicenses we granted thereunder, will terminate. In addition, upon termination of the LifeArc Agreement for any reason other than its natural expiration or termination by us for LifeArc's material breach, LifeArc has an option to negotiate an exclusive, worldwide, sublicensable license to commercialize any patent rights, technical and clinical data, and any development results relating to the licensed products that are owned or controlled by us for the purpose of developing, manufacturing and commercializing the licensed products on terms to be negotiated between the parties.

University of California, San Francisco

In December 2018, we entered into a license agreement, as amended (the UCSF Agreement), with The Regents of the University of California, San Francisco (the Regents), under which we were granted an exclusive, worldwide, royalty-bearing license under certain patent rights claiming novel covalent inhibitors of GTP- and GDP-bound RAS for the development and commercialization of products covered by such patent rights for the prevention, treatment and amelioration of human cancers and other diseases and conditions. We have the right to sublicense (through multiple tiers) our rights under the UCSF Agreement, subject to certain conditions. The UCSF Agreement was amended in May 2021. The foregoing license is subject to various retained rights and restrictions, including (i) the Regents' reserved right to make, use and practice the licensed patent rights and any technology relating thereto for educational and research purposes, (ii) Howard Hughes Medical Institute's non-exclusive, fully paid-up, irrevocable worldwide license to use the licensed patent rights for research

[Table of Contents](#)

purposes, (iii) Howard Hughes Medical Institute's statement of policy on research tools, and (iv) the obligations to the US government under the Bayh-Dole Act, including the obligation to report on the utilization of the invention covered by the licensed patent rights and a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced such invention throughout the world. We are required to use diligent efforts to proceed with the development and commercialization of licensed products including by achieving certain milestone events within the specified time periods.

Under the UCSF Agreement, we made upfront payments of \$50,000 to the Regents and pay the Regents an annual license maintenance fee, but such fee will not be due on any anniversary if, on that date, we are making royalty payments to the Regents. We are obligated to make future development and regulatory milestone payments of up to \$6.4 million and a sales milestone payment of \$2 million for either of the first two licensed products. We are also obligated to pay royalties on net sales of all licensed products in the low-single digit percentages, subject to a minimum annual royalty payment in the low six figures, commencing on the year of the first sale of a licensed product and continuing, on a licensed product-by-licensed product and country-by-country basis, until there are no valid claims of the licensed patent rights covering the licensed product in such country. Additionally, we are obligated to pay tiered sublicensing fees, with the first two tiers in the low-to-mid teen percentages and the third tier at 30%, on certain fees we receive from any sublicense that we grant, depending on the stage of development of a licensed product when such sublicense is granted. Prior to the execution of the amendment, we were obligated to make a cash payment to the Regents in the event of our initial public offering, a change of control transaction or a reverse merger (the Corporate Milestone). In the amendment, the amount of the cash payment payable upon our achievement of a Corporate Milestone was reduced and we agreed to issue the Regents 944,945 shares of our common stock, which issuance is not contingent upon the achievement of a Corporate Milestone and occurred in May 2021.

The UCSF Agreement will expire upon the expiration of the last of the licensed patent rights. The UCSF Agreement may be terminated in its entirety by the Regents (i) for our uncured breach; (ii) for our bankruptcy; or (iii) if we challenge, directly or indirectly, the validity or enforceability of any licensed patents. Further, if we fail to satisfy any diligence milestones, the Regents has the right and option to either terminate the UCSF Agreement or modify the exclusive license granted thereunder to a non-exclusive license. We may terminate the UCSF Agreement in its entirety or on a country-by-country basis at any time upon the provision of written notice to the Regents. Upon termination of the UCSF Agreement for any reason, all rights and licenses granted to us thereunder will terminate.

Commercialization

We intend to maintain exclusive worldwide development and commercialization rights to our product candidates and, if marketing approval is obtained, to commence commercialization activities by building a focused sales and marketing organization to sell our products on our own in the United States and potentially other regions such as Europe. We will likely seek commercialization partnerships for our product candidates in other regions beyond the United States and Europe. We currently have no sales, marketing, or commercial product distribution capabilities. We intend to build the necessary infrastructure and capabilities over time for commercialization in the United States and potentially other regions, following further advancement of our product candidates. Clinical data, the size of the addressable patient population, the size of the commercial infrastructure and manufacturing needs, and the status of our pipeline, may all influence or alter our commercialization plans.

Competition + Cooperation ("Coopetition")

Although the biotechnology and pharmaceutical industries, and the oncology sector, are characterized by rapid evolution of technologies, fierce competition, and strong defense of intellectual property rights, we believe the

[Table of Contents](#)

most fearsome competitor of all is cancer itself. As such, we view other companies in this sector more as potential allies and collaborators than as competitors, as we all have a common cause: to defeat cancer. Many of the companies that are developing or marketing treatments for cancer, including major pharmaceutical and biotechnology companies that are working on therapies targeting the RAS/MAPK pathway, are companies with whom we endeavor to collaborate in our mission to erase cancer.

Collaborating with these companies alleviates some of the traditional challenges that emerging companies face with respect to financial resources, established presence in the market, expertise in research and development, manufacturing, preclinical and clinical testing, obtaining regulatory approvals and reimbursement, and marketing approved products. Similarly, recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, programs are challenges for all companies developing or marketing treatments for cancer.

That said, our commercial potential could be reduced or eliminated if other companies develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than products that we may develop. Other companies also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in these companies establishing a strong market position before we are able to enter the market or make our development more complicated.

There are numerous companies developing or marketing treatments for cancer, including many major pharmaceutical and biotechnology companies. These treatments consist of small molecule drug products, biologics, cell-based therapies, and traditional chemotherapy. There are also a number of pharmaceutical companies with product candidates in development that target the nodes involving the RAS/MAPK pathway. These include, among others, Amgen, AstraZeneca, Black Diamond Therapeutics, BioMed Valley Discoveries, Boehringer Ingelheim, Deciphera Pharmaceuticals, Eli Lilly, Jacobio Pharmaceuticals (in collaboration with AbbVie), Janssen, Merck, Mirati Therapeutics, Navire Pharma (a subsidiary of BridgeBio), Novartis, Pfizer, Relay Therapeutics (in collaboration with Genentech), Revolution Medicines, Roche/Genentech, Sanofi, and Schrödinger (in collaboration with Bristol Myers Squibb).

Intellectual property

We strive to protect the proprietary technology, inventions, and improvements that are commercially or strategically important to our business, including seeking, maintaining, and defending patent rights, whether developed internally or in-licensed/acquired from third parties. We also rely on trade secrets and know-how relating to our proprietary technology and product candidates and continuing innovation to develop, strengthen and maintain our proprietary position. We also plan to rely on data exclusivity, market exclusivity and patent term extensions when available. Our commercial success will depend in part on our ability to obtain and maintain patent and other intellectual property protection for our proprietary technology, inventions and improvements; to preserve the confidentiality of our trade secrets; to defend and enforce our proprietary rights, including any patents or trademarks that we may own in the future; and to operate without infringing on the valid and enforceable patents and other proprietary rights of third parties. Intellectual property rights may not address all potential threats to our competitive advantage.

We continually assess and refine our intellectual property strategy as we develop new product candidates. To that end, we are prepared to file additional patent applications in any appropriate fields if our intellectual property strategy includes such filings, or where we seek to adapt to competition or seize business opportunities. Further, we are prepared to file patent applications, as we consider appropriate under the circumstances, relating to the new technologies that we develop.

[Table of Contents](#)

We cannot be sure that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications we may own or license in the future, nor can we be sure that any of our existing patents or any patents we may own or license in the future will be useful in protecting our technology.

To cover our proprietary technologies and our current pipeline of proprietary product candidates and related methods, such as methods of use, we have issued patents and patent applications representing 16 patent families. As of June 30, 2021, our patent estate, which consists of owned and in-licensed patent families, includes five issued US patents, eight pending US non-provisional patent applications, 36 pending US provisional patent applications, two issued foreign patents, four pending international patent applications filed under the Patent Cooperation Treaty (PCT application), and 66 pending foreign patent applications in various markets outside of the United States. In particular, we have patent applications pending for each of our product candidates.

ERAS-007

As of June 30, 2021, we have in-licensed three patent families from Asana. The three patent families relate to ERK 1/2 inhibitors, their preparation and methods of use. One of the families covers the ERAS-007 product candidate compound, its preparation and method of use, and includes two issued US patents, one pending US non-provisional patent application, two issued foreign patents, and 13 pending foreign patent applications. This patent family also includes one issued US patent that covers additional ERK1/2 inhibitor compounds. The second and third families cover methods of using ERAS-007, and includes one pending US provisional patent application, one pending PCT application and two pending foreign patent applications. The issued US patents are expected to expire in June 2036, absent any patent term adjustments or extensions. Any patents issued from the patent applications related to ERAS-007 are expected to expire between 2036 and 2042, absent any patent term adjustments or extensions.

As of June 30, 2021, we also own six patent families relating to ERAS-007. The patent family includes six pending US provisional patent application. Any patents issued from these patent applications are expected to expire in 2042, absent any patent term adjustments or extensions.

ERAS-601

As of June 30, 2021, we have in-licensed two patent families from NiKang. The two patent families relate to SHP2 inhibitor compositions, their preparation and methods of use. One of the families covers the ERAS-601 product candidate compound, its preparation and method of use, and includes two issued US patents, two pending US non-provisional patent applications, and 24 pending foreign patent applications. The second family covers additional SHP2 inhibitor compositions, their preparation and methods of use, and includes one pending US non-provisional application and six pending foreign patent applications. The granted patent and any further patents issued from these applications from the two families are expected to expire in 2039, absent any patent term adjustments or extensions.

As of June 30, 2021, we also own one patent family relating to ERAS-601. This family includes ten pending US provisional patent applications. Any patents issued from these applications are expected to expire in 2041, absent any patent term adjustments or extensions.

ERAS-1

As of June 30, 2021, we own four patent families relating to KRAS G12C inhibitors, their preparation and method of use. These patent families include two pending US non-provisional patent applications, ten pending US provisional patent applications, two pending PCT applications, and two pending foreign applications. Any patents issued from the first family of applications are expected to expire in 2040, any patents issued from the

[Table of Contents](#)

second family of applications are expected to expire in 2041, and any patents issued from the third and fourth families of applications are expected to expire in 2042, in each case, absent any patent term adjustments or extensions.

ERAS-801

As of June 30, 2021, we have sub-licensed three patent families from Katmai, which Katmai in-licensed from the University of California, Los Angeles (UCLA). Two of the patent families relate to EGFR inhibitor compositions, their preparation and methods of use. The first patent family includes one pending US non-provisional patent application, and six pending foreign patent applications. The second patent family covers the ERAS-801 product candidate and includes one pending PCT application. The third patent family relates to a functional companion assay for brain cancer therapy and includes one pending US provisional patent application. Any patents issued from the first family of applications are expected to expire in 2038, any patents issued from the second family of applications are expected to expire in 2040, and any patents issued from the third family of applications are expected to expire in 2041, in each case, absent any patent term adjustments or extensions.

As of June 30, 2021, we also co-own with UCLA one patent family relating to EGFR inhibitor compositions, their preparation and methods of use. This patent family includes one US provisional patent application. Any patents issued from this application are expected to expire in 2041, absent any patent term adjustments or extensions.

ERAS-2/3

As of June 30, 2021, we have in-licensed one patent family from UCSF relating to covalent inhibitors of GTP- and GDP-bound RAS, their preparation and method of use. This patent family includes one pending US non-provisional patent application and 13 pending foreign patent applications. Any patents issued from these applications are expected to expire in 2037, absent any patent term adjustments or extensions.

ERAS-4

As of June 30, 2021, we own one patent family relating to KRAS G12D inhibitors, their preparation and method of use. The patent family includes three pending US provisional patent applications. Any patents issued from these applications are expected to expire in 2042, absent any patent term adjustments or extensions.

ERAS-5

As of June 30, 2021, we have in-licensed one patent family from LifeArc relating to ULK1/2 inhibitors, their preparation and method of use. The patent family includes one pending US provisional patent application. Any patents issued from this application are expected to expire in 2042, absent any patent term adjustments or extensions.

ERAS-10

As of June 30, 2021, we own one patent family relating to PROTAC conjugates with undisclosed RAS/MAPK pathway target(s), their preparation and method of use. The patent family includes three pending US provisional patent applications. Any patents issued from these applications are expected to expire in 2042, absent any patent term adjustments or extensions.

ERAS-12

As of June 30, 2021, we own one patent family relating to EGFR D2/D3 bispecific antibodies, their preparation and method of use. The patent family includes one pending US provisional patent application. Any patents issued from this application are expected to expire in 2042, absent any patent term adjustments or extensions.

Other IP programs or patents

With respect to our product candidates and processes we intend to develop and commercialize in the normal course of business, we intend to pursue patent protection covering, when possible, compositions, methods of use, dosing and formulations. We may also pursue patent protection with respect to manufacturing and drug development processes and technologies. Obtaining and maintaining patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental patent agencies. We may not be able to obtain patent protections for our compositions, methods of use, dosing and formulations, manufacturing and drug development processes and technologies throughout the world. Issued patents can provide protection for varying periods of time, depending upon the date of filing of the patent application, the date of patent issuance and the legal term of patents in the countries in which they are obtained. In general, patents issued for applications filed in the United States can provide exclusionary rights for 20 years from the earliest effective filing date. In addition, in certain instances, the term of an issued US patent that covers or claims an FDA-approved product can be extended to recapture a portion of the term effectively lost as a result of the FDA regulatory review period, which is called patent term extension. The restoration period cannot be longer than five years and the total patent term, including the restoration period, must not exceed 14 years following FDA approval. The USPTO may also adjust the term of a US patent to accommodate for delays caused by the USPTO during the prosecution of a US patent application. Congress has defined the conditions upon which an applicant can receive an adjustment to the term and such requirements are established in 35 USC 154(b). Similar provisions are available in Europe and other jurisdictions to extend the term of a patent that covers an approved drug. The term of patents outside of the United States varies in accordance with the laws of the foreign jurisdiction, but typically is also 20 years from the earliest effective filing date. However, the actual protection afforded by a patent varies on a product-by-product basis, from country-to-country, and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory-related extensions, the availability of legal remedies in a particular country, and the validity and enforceability of the patent. Patent terms may be inadequate to protect our competitive position on our products for an adequate amount of time. In the future, if and when our therapeutic candidates receive FDA approval, we expect to apply for patent term extensions on patents covering those therapeutic candidates. We intend to seek patent term extensions in any jurisdiction where these are available and where we also have a patent that may be eligible; however, there is no guarantee that the applicable authorities, including the USPTO and FDA, will agree with our assessment of whether such extensions should be granted, and even if granted, the length of such extensions.

The patent positions of companies like ours are generally uncertain and involve complex legal and factual questions. No consistent policy regarding the scope of claims allowable in patents in the field of biopharmaceuticals has emerged in the United States. The relevant patent laws and their interpretation outside of the United States is also uncertain. Changes in either the patent laws or their interpretation in the United States and other countries may diminish our ability to protect our technology or product candidates and could affect the value of such intellectual property. In particular, our ability to stop third parties from making, using, selling, offering to sell or importing products that infringe our intellectual property will depend in part on our success in obtaining and enforcing patent claims that cover our technology, inventions and improvements. We cannot guarantee that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications we may file in the future, nor can we be sure that any patents that may be granted to us in the future will be commercially useful in protecting our products, the methods of use or manufacture of those products. Moreover, even our issued patents do not guarantee us the right to practice our technology in relation to the commercialization of our products. Patent and other intellectual property rights in the pharmaceutical and biotechnology space are evolving and involve many risks and uncertainties. For example, third parties may have blocking patents that could be used to prevent us from commercializing our product candidates and practicing our proprietary technology, and our issued patents may be challenged, invalidated or circumvented, which could limit our ability to stop

competitors from marketing related products or could limit the term of patent protection that otherwise may exist for our product candidates. In addition, the scope of the rights granted under any issued patents may not provide us with protection or competitive advantages against competitors with similar technology. Furthermore, our competitors may independently develop similar technologies that are outside the scope of the rights granted under any issued patents. For these reasons, we may face competition with respect to our product candidates. Moreover, because of the extensive time required for development, testing and regulatory review of a potential product, it is possible that, before any particular product candidate can be commercialized, any patent protection for such product may expire or remain in force for only a short period following commercialization, thereby reducing the commercial advantage the patent provides.

We also rely on trade secrets to protect aspects of our technology and business not amenable to, or that we do not consider appropriate for, patent protection. We seek to protect this intellectual property, in part, by requiring our employees, consultants, outside scientific collaborators, sponsored researchers and other service providers and advisors to execute confidentiality agreements upon the commencement of employment or other relationship with us. In general, these agreements provide that confidential information concerning our business or financial affairs developed or made known to the individual during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees, the agreements further provide that inventions and discoveries conceived or reduced to practice by the individual that are related to our business, or actual, or demonstrably anticipated, research or development, or made during normal working hours, on our premises or using our equipment, supplies, or proprietary information, are our exclusive property. In many cases our agreements with consultants, outside scientific collaborators, sponsored researchers and other service providers and advisors require them to assign, or grant us licenses to, inventions resulting from the work or services they render under such agreements or grant us an option to negotiate a license to use such inventions.

We seek trademark protection in the United States and in certain other jurisdictions where available and when we deem appropriate. We currently have registrations for our "ERASCA" mark in the United States as well as in over 20 foreign jurisdictions, including the European Union. We have also filed a trademark application in the United States for registration of our "MAPKLAMP" mark.

Manufacturing

We do not own or operate, and currently have no plans to establish, any manufacturing facilities. We rely, and expect to continue to rely, on third parties for the manufacture of our product candidates for preclinical and clinical testing, as well as for commercial manufacture if any of our product candidates obtain marketing approval. We are working with our current manufacturers to ensure that we will be able to scale up our manufacturing capabilities to support our clinical plans. We are also in the process of locating and qualifying additional manufacturers to build redundancies into our supply chain. In addition, we rely on third parties to package, label, store, and distribute our product candidates, and we intend to rely on third parties for our commercial products if marketing approval is obtained. We believe that this strategy allows us to maintain a more efficient infrastructure by eliminating the need for us to invest in our own manufacturing facilities, equipment, and personnel while also enabling us to focus our expertise and resources on the design and development of our product candidates.

Government Regulation

The FDA and comparable regulatory authorities in state and local jurisdictions and in other countries impose substantial and burdensome requirements upon companies involved in the clinical development, manufacture, marketing and distribution of drugs and biologics such as those we are developing. These entities regulate, among other things, the research and development, testing, manufacture, quality control, safety, effectiveness, labeling, storage, record keeping, approval, advertising and promotion, distribution, post-approval monitoring and reporting, sampling and export and import of our product candidates.

US regulation of drugs and biologics

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act (FDCA), and its implementing regulations, and biologics under the FDCA and the Public Health Service Act and their implementing regulations. FDA approval of a new drug application (NDA) or biologics license application (BLA) or supplement is required before any new unapproved drug, biologic or dosage form, including a new use of a previously approved drug or biologic, can be marketed in the United States.

The process required by the FDA before such product candidates may be marketed in the United States generally involves the following:

- completion of extensive preclinical laboratory tests and preclinical animal studies, all performed in accordance with the Good Laboratory Practice (GLP) regulations;
- submission to the FDA of an investigational new drug application (IND) which must become effective before human clinical studies may begin and must be updated annually;
- approval by an independent IRB or ethics committee representing each clinical site before each clinical study may be initiated;
- performance of adequate and well-controlled human clinical studies in accordance with Good Clinical Practice (GCP) requirements to establish the safety and efficacy, or with respect to biologics, the safety, purity and potency of the product candidate for each proposed indication;
- preparation of and submission to the FDA of an NDA or BLA, after completion of all pivotal clinical studies;
- potential review of the product application by an FDA advisory committee, where appropriate and if applicable;
- a determination by the FDA within 60 days of its receipt of an NDA or BLA to file the application for review;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facilities where the proposed product drug substance is produced to assess compliance with current Good Manufacturing Practice requirements (cGMPs) and audits of selected clinical trial sites to ensure compliance with GCP; and
- FDA review and approval of an NDA or BLA prior to any commercial marketing or sale of the drug in the United States.

Preclinical studies include laboratory evaluation of product chemistry, toxicity and formulation, as well as *in vitro* and animal studies to assess potential safety and efficacy. The conduct of preclinical studies is subject to federal regulations and requirements, including GLP regulations applicable to certain safety/toxicology studies.

An IND is a request for authorization from the FDA to administer an investigational new drug product to humans. The central focus of an IND submission is on the general investigational plan and the protocol or protocols for preclinical studies and clinical trials. The IND also includes results of animal and *in vitro* studies assessing the toxicology, pharmacokinetics, pharmacology and pharmacodynamic characteristics of the product, chemistry, manufacturing and controls (CMC) information, and any available human data or literature to support the use of the investigational product. An IND must become effective before human clinical trials may begin. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day period, raises safety concerns or questions about the proposed clinical trial. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before the clinical trial can begin. Submission of an IND therefore may or may not result in FDA authorization to begin a clinical trial.

Clinical trials involve the administration of the investigational product to human subjects under the supervision of qualified investigators in accordance with GCP, which includes the requirement that all research subjects, or their legal representative, provide their informed consent for their participation in any clinical study. Clinical

trials are conducted under protocols detailing, among other things, the inclusion and exclusion criteria, the objectives of the study, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. A separate submission to the existing IND must be made for each successive clinical trial conducted during product development and for any subsequent protocol amendments. Furthermore, an independent IRB for each site proposing to conduct the clinical trial must review and approve the plan for any clinical trial and its informed consent form before the clinical trial begins at that site, and must monitor the study until completed. An IRB is charged with protecting the welfare and rights of trial participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. Regulatory authorities, the IRB or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects are being exposed to an unacceptable health risk or that the trial is unlikely to meet its stated objectives. Some studies also include oversight by an independent group of qualified experts organized by the clinical study sponsor, known as a data safety monitoring board or committee, which provides authorization for whether or not a study may move forward at designated check points based on access to certain data from the study and may recommend that the clinical trial be halted if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy. There are also requirements governing the reporting of clinical trials and clinical study results to public registries.

The clinical investigation of a drug is generally divided into three phases. Although the phases are usually conducted sequentially, they may overlap or be combined.

- **Phase 1:** The investigational product is initially introduced into healthy human subjects or patients with the target disease or condition. These studies are designed to test the safety, dosage tolerance, absorption, metabolism and distribution of the investigational product in humans, the side effects associated with increasing doses, and, if possible, to gain early evidence on effectiveness.
- **Phase 2:** The investigational product is administered to a limited patient population with a specified disease or condition to evaluate the preliminary efficacy, optimal dosages and dosing schedule and to identify possible adverse side effects and safety risks. Multiple Phase 2 clinical trials may be conducted to obtain information prior to beginning larger and more expensive Phase 3 clinical trials.
- **Phase 3:** The investigational product is administered to an expanded patient population to further evaluate dosage, to provide statistically significant evidence of clinical efficacy and to further test for safety, generally at multiple geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk/benefit ratio of the investigational product and to provide an adequate basis for labeling.

Post-marketing studies, sometimes referred to as Phase 4 clinical trials, may be conducted after initial marketing approval. These clinical trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication. In certain instances, such as with accelerated approval drugs, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval.

Concurrent with clinical trials, companies may complete additional animal studies and develop additional information about the biological characteristics of the product candidate, and must finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, must develop methods for testing the identity, strength, quality and purity of the final product, or for biologics, the safety, purity and potency.

While the IND is active and before approval, progress reports summarizing the results of the clinical trials and nonclinical studies performed since the last progress report must be submitted at least annually to the FDA, and written IND safety reports must be submitted to the FDA and investigators for serious and unexpected

suspected adverse events, findings from other studies suggesting a significant risk to humans exposed to the same or similar drugs or biologics, findings from animal or *in vitro* testing suggesting a significant risk to humans, and any clinically important increased incidence of a serious suspected adverse reaction compared to that listed in the protocol or investigator brochure.

In addition, during the development of a new drug or biologic, sponsors are given opportunities to meet with the FDA at certain points. These points may be prior to submission of an IND, at the end of Phase 2, and before an NDA or BLA is submitted. Meetings at other times may be requested. These meetings can provide an opportunity for the sponsor to share information about the data gathered to date, for the FDA to provide advice, and for the sponsor and the FDA to reach agreement on the next phase of development. Sponsors typically use the meetings at the end of the Phase 2 trial to discuss Phase 2 clinical results and present plans for the pivotal Phase 3 clinical trials that they believe will support approval of the new drug or biologic.

NDA and BLA review process

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, the results of product development, nonclinical studies and clinical trials are submitted to the FDA as part of an NDA or BLA requesting approval to market the product for one or more indications. The submission of an NDA or BLA requires payment of a substantial application user fee to the FDA, unless a waiver or exemption applies.

The NDA or BLA must include all relevant data available from pertinent preclinical studies and clinical trials, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's CMC and proposed labeling, among other things. Data can come from company-sponsored clinical studies intended to test the safety and effectiveness of the product, or from a number of alternative sources, including studies initiated and sponsored by investigators. In addition, under the Pediatric Research Equity Act (PREA), a NDA or BLA or supplement to an NDA or BLA must contain data to assess the safety and effectiveness of the biological product candidate for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The Food and Drug Administration Safety and Innovation Act requires that a sponsor who is planning to submit a marketing application for a drug or biological product that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit an initial pediatric study plan within sixty days after an end-of-Phase 2 meeting or as may be agreed between the sponsor and FDA. Unless otherwise required by regulation, PREA does not apply to any drug or biological product for an indication for which orphan designation has been granted.

Within 60 days following submission of the application, the FDA reviews the submitted BLA or NDA to determine if the application is substantially complete before the agency accepts it for filing. The FDA may refuse to file any NDA or BLA that it deems incomplete or not properly reviewable at the time of submission and may request additional information. In this event, the NDA or BLA must be resubmitted with the additional information. Once an NDA or BLA has been accepted for filing, the FDA's goal is to review standard applications within ten months after the filing date, or, if the application qualifies for priority review, six months after the FDA accepts the application for filing. In both standard and priority reviews, the review process may also be extended by FDA requests for additional information or clarification. Once accepted for filing, the FDA reviews an NDA to determine, among other things, whether a product is safe and effective for its intended use and whether its manufacturing is sufficient to assure and preserve the product's identity, strength, quality and purity. The FDA reviews a BLA to determine, among other things, whether a product is safe, pure and potent and the facility in which it is manufactured, processed, packed or held meets standards designed to assure the product's continued safety, purity and potency. When reviewing an NDA or BLA, the FDA may convene an

advisory committee to provide clinical insight on application review questions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

Before approving an NDA or BLA, the FDA will typically inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA or BLA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP. If the FDA determines that the application, manufacturing process or manufacturing facilities are not acceptable, it will outline the deficiencies in the submission and often will request additional testing or information. Notwithstanding the submission of any requested additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval.

After the FDA evaluates the NDA or BLA and conducts inspections of manufacturing facilities where the investigational product and/or its drug substance will be produced, the FDA may issue an approval letter or a Complete Response Letter (CRL). An approval letter authorizes commercial marketing of the product with specific prescribing information for specific indications. A CRL signals that the review cycle is complete and the application cannot be approved. The CRL will describe all of the deficiencies that the FDA has identified in the NDA or BLA, except that where the FDA determines that the data supporting the application are inadequate to support approval, the FDA may issue the CRL without first conducting required inspections, testing submitted product lots and/or reviewing proposed labeling. In issuing the CRL, the FDA may recommend actions that the applicant might take to place the NDA or BLA in condition for approval, including requests for additional information or clarification. The FDA may delay or refuse approval of an NDA or BLA if applicable regulatory criteria are not satisfied, require additional testing or information and/or require post-marketing testing and surveillance to monitor safety or efficacy of a product.

If regulatory approval of a product is granted, such approval will be granted for particular indications and may entail limitations on the indicated uses for which such product may be marketed. For example, the FDA may approve the NDA or BLA with a Risk Evaluation and Mitigation Strategy (REMS) to ensure the benefits of the product outweigh its risks. A REMS is a safety strategy to manage a known or potential serious risk associated with a product and to enable patients to have continued access to such medicines by managing their safe use, and could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labeling or the development of adequate controls and specifications. Once approved, the FDA may withdraw the product approval if compliance with pre- and post-marketing requirements is not maintained or if problems occur after the product reaches the marketplace. The FDA may require one or more Phase 4 post-market studies and surveillance to further assess and monitor the product's safety and effectiveness after commercialization, and may limit further marketing of the product based on the results of these post-marketing studies.

Expedited development and review programs

The FDA offers a number of expedited development and review programs for qualifying product candidates. For example, the fast track program is intended to expedite or facilitate the process for reviewing product candidates that meet certain criteria. Specifically, product candidates are eligible for fast track designation if they are intended to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs for the disease or condition. Fast track designation applies to the combination of the product candidate and the specific indication for which it is being studied. The sponsor of a fast track

[Table of Contents](#)

product candidate has opportunities for more frequent interactions with the review team during product development and, once an NDA or BLA is submitted, the product may be eligible for priority review, if the relevant criteria are met. A fast track product candidate may also be eligible for rolling review, where the FDA may consider for review sections of the NDA or BLA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the NDA or BLA, the FDA agrees to accept sections of the NDA or BLA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the NDA or BLA.

A product candidate intended to treat a serious or life-threatening disease or condition may also be eligible for breakthrough therapy designation to expedite its development and review. A product can receive breakthrough therapy designation if preliminary clinical evidence indicates that the product candidate, alone or in combination with one or more other drugs or biologics, may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. The designation includes all of the fast track program features, as well as more intensive FDA interaction and guidance beginning as early as Phase 1 and an organizational commitment to expedite the development and review of the product candidate, including involvement of senior managers.

Any marketing application for a drug or biologic submitted to the FDA for approval, including a product candidate with a fast track designation and/or breakthrough therapy designation, may be eligible for other types of FDA programs intended to expedite the FDA review and approval process, such as priority review and accelerated approval. A product candidate is eligible for priority review if it has the potential to provide a significant improvement in the treatment, diagnosis or prevention of a serious disease or condition. For new molecular entity NDAs and original BLAs, priority review designation means the FDA's goal is to take action on the marketing application within six months of the 60-day filing date (as compared to 10 months under standard review).

Additionally, product candidates studied for their safety and effectiveness in treating serious or life-threatening diseases or conditions may receive accelerated approval upon a determination that the product candidate has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of accelerated approval, the FDA will generally require the sponsor to perform adequate and well-controlled post-marketing clinical studies to verify and describe the anticipated effect on irreversible morbidity or mortality or other clinical benefit. Products receiving accelerated approval may be subject to expedited withdrawal procedures if the sponsor fails to conduct the required post-marketing studies or if such studies fail to verify the predicted clinical benefit. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product.

Fast track designation, breakthrough therapy designation, priority review, and accelerated approval do not change the standards for approval but may expedite the development or approval process. Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened.

Orphan drug designation

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition, which is a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States for which there is no reasonable expectation that the cost of developing and making available in the United States a drug or biologic for this type of disease or condition will be recovered from sales in the United States for that drug or biologic. Orphan drug

designation must be requested before submitting an NDA or BLA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. The orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review or approval process.

If a product candidate that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan drug exclusive approval (or exclusivity), which means that the FDA may not approve any other applications, including a full NDA or BLA, to market the same drug or biologic for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or if the FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug or biologic was designated. Orphan drug exclusivity does not prevent the FDA from approving a different drug or biologic for the same disease or condition, or the same drug or biologic for a different disease or condition. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the NDA or BLA application user fee.

A designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. In addition, exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

Post-approval requirements

Any products manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to record-keeping, reporting of adverse experiences, periodic reporting, product sampling and distribution, and advertising and promotion of the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims, are subject to prior FDA review and approval. There also are continuing user fee requirements, under which the FDA assesses an annual program fee for each product identified in an approved NDA or BLA. Drug and biologic manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMPs, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Changes to the manufacturing process are strictly regulated, and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMPs and impose reporting requirements upon us and any third-party manufacturers that we may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMPs and other aspects of regulatory compliance.

The FDA may withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of a product, complete withdrawal of the product from the market or product recalls;

[Table of Contents](#)

- fines, warning letters or holds on post-approval clinical studies;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of existing product approvals;
- product seizure or detention, or refusal of the FDA to permit the import or export of products;
- consent decrees, corporate integrity agreements, debarment or exclusion from federal healthcare programs;
- mandated modification of promotional materials and labeling and the issuance of corrective information;
- injunctions or the imposition of civil or criminal penalties.

The FDA closely regulates the marketing, labeling, advertising and promotion of drug products. A company can make only those claims relating to safety and efficacy, purity and potency that are approved by the FDA and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses. Failure to comply with these requirements can result in, among other things, adverse publicity, warning letters, corrective advertising and potential civil and criminal penalties. Physicians may prescribe, in their independent professional medical judgment, legally available products for uses that are not described in the product's labeling and that differ from those tested by us and approved by the FDA. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, restrict manufacturer's communications on the subject of off-label use of their products. The federal government has levied large civil and criminal fines against companies for alleged improper promotion of off-label use and has enjoined companies from engaging in off-label promotion. The FDA and other regulatory agencies have also required that companies enter into consent decrees or permanent injunctions under which specified promotional conduct is changed or curtailed. However, companies may share truthful and not misleading information that is otherwise consistent with a product's FDA-approved labeling.

In addition, the distribution of prescription biopharmaceutical products is subject to the Prescription Drug Marketing Act (PDMA) which regulates the distribution of drugs and drug samples at the federal level, and sets minimum standards for the registration and regulation of drug distributors by the states. Both the PDMA and state laws limit the distribution of prescription pharmaceutical product samples and impose requirements to ensure accountability in distribution.

Drug product marketing exclusivity

Market exclusivity provisions under the FDCA can delay the submission or the approval of certain marketing applications. For example, the FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not approve or even accept for review an abbreviated new drug application (ANDA), or an NDA submitted under Section 505(b)(2), or 505(b)(2) NDA, submitted by another company for another drug based on the same active moiety, regardless of whether the drug is intended for the same indication as the original innovative drug or for another indication, where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator NDA holder.

The FDCA alternatively provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the

applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the modification for which the drug received approval on the basis of the new clinical investigations and does not prohibit the FDA from approving ANDAs or 505(b)(2) NDAs for drugs containing the active agent for the original indication or condition of use. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to any preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Pediatric exclusivity is another type of marketing exclusivity available in the United States. Pediatric exclusivity provides for an additional six months of marketing exclusivity attached to another period of exclusivity if a sponsor conducts clinical trials in children in response to a Written Request from the FDA. The issuance of a written request does not require the sponsor to undertake the described clinical trials. In addition, orphan drug exclusivity, as described above, may offer a seven-year period of marketing exclusivity, except in certain circumstances.

Biosimilars and reference product exclusivity

The Biologics Price Competition and Innovation Act of 2009 (BPCIA) created an abbreviated approval pathway for biological products that are highly similar, or “biosimilar,” to or interchangeable with an FDA-approved reference biological product. Biosimilarity, which requires that there be no clinically meaningful differences between the biological product and the reference product in terms of safety, purity, and potency, is generally shown through analytical studies, animal studies, and a clinical study or studies. Interchangeability requires that a product is biosimilar to the reference product and the product must demonstrate that it can be expected to produce the same clinical results as the reference product in any given patient and, for products that are administered multiple times to an individual, the biologic and the reference biologic may be alternated or switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biologic. A product shown to be biosimilar or interchangeable with an FDA-approved reference biological product may rely in part on the FDA’s previous determination of safety and effectiveness for the reference product for approval, which can potentially reduce the cost and time required to obtain approval to market the product.

Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a full BLA for the competing product containing that applicant’s own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity and potency of its product. The BPCIA also created certain exclusivity periods for biosimilars approved as interchangeable products. At this juncture, it is unclear whether products deemed “interchangeable” by the FDA will, in fact, be readily substituted by pharmacies, which are governed by state pharmacy law.

A biological product can also obtain pediatric market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric study in accordance with an FDA-issued “Written Request” for such a study.

FDA regulation of companion diagnostics

If safe and effective use of a drug or biologic depends on an *in vitro* diagnostic, then the FDA may require approval or clearance of that diagnostic, known as a companion diagnostic, at the same time that the FDA approves the therapeutic product. In August 2014, the FDA issued final guidance clarifying the requirements that will apply to approval of therapeutic products and *in vitro* companion diagnostics. According to the guidance, if FDA determines that a companion diagnostic device is essential to the safe and effective use of a novel therapeutic product or indication, FDA may will not approve the drug or new indication if the companion diagnostic device is not also approved or cleared for that indication. Approval or clearance of the companion diagnostic device will ensure that the device has been adequately evaluated and has adequate performance characteristics in the intended population. The review of *in vitro* companion diagnostics in conjunction with the review of our product candidates will, therefore, likely involve coordination of review by the FDA's Center for Drug Evaluation and Research or the FDA's Center for Biologics Evaluation and Research and the FDA's Center for Devices and Radiological Health Office of *In Vitro* Diagnostics and Radiological Health.

Under the FDCA, *in vitro* diagnostics, including companion diagnostics, are regulated as medical devices. In the United States, the FDCA and its implementing regulations, and other federal and state statutes and regulations govern, among other things, medical device design and development, preclinical and clinical testing, premarket clearance or approval, registration and listing, manufacturing, labeling, storage, advertising and promotion, sales and distribution, export and import, and post-market surveillance. Unless an exemption applies, diagnostic tests require marketing clearance or approval from the FDA prior to commercial distribution. The two primary types of FDA marketing authorization applicable to a medical device are clearance of a premarket notification pursuant to Section 510(k) of the FDCA, also called 510(k) clearance, and approval of a premarket approval application (PMA).

The PMA process, including the gathering of clinical and preclinical data and the submission to and review by the FDA, can take several years or longer. It involves a rigorous premarket review during which the applicant must prepare and provide the FDA with reasonable assurance of the device's safety and effectiveness and information about the device and its components regarding, among other things, device design, manufacturing and labeling. PMA applications are subject to an application fee. In addition, PMAs for certain devices must generally include the results from extensive preclinical and adequate and well-controlled clinical trials to establish the safety and effectiveness of the device for each indication for which FDA approval is sought. As part of the PMA review, the FDA will typically inspect the manufacturer's facilities for compliance with the Quality System Regulation (QSR) which imposes elaborate testing, control, documentation and other quality assurance requirements.

If the FDA's evaluation of the PMA application is favorable, the FDA typically issues an approvable letter requiring the applicant's agreement to specific conditions, such as changes in labeling, or specific additional information, such as submission of final labeling, in order to secure final approval of the PMA. If the FDA's evaluation of the PMA or manufacturing facilities is not favorable, the FDA will deny approval of the PMA or issue a not approvable letter. A not approvable letter will outline the deficiencies in the application and, where practical, will identify what is necessary to make the PMA approvable. The FDA may also determine that additional clinical trials are necessary, in which case the PMA approval may be delayed for several months or years while the trials are conducted and then the data submitted in an amendment to the PMA. If the FDA concludes that the applicable criteria have been met, the FDA will issue a PMA for the approved indications, which can be more limited than those originally sought by the applicant. The PMA can include post-approval conditions that the FDA believes necessary to ensure the safety and effectiveness of the device, including, among other things, restrictions on labeling, promotion, sale and distribution. Once granted, PMA approval may be withdrawn by the FDA if compliance with post-approval requirements, conditions of approval or other regulatory standards are not maintained or problems are identified following initial marketing.

[Table of Contents](#)

After a device is placed on the market, it remains subject to significant regulatory requirements. Medical devices may be marketed only for the uses and indications for which they are cleared or approved. Device manufacturers must also establish registration and device listings with the FDA. A medical device manufacturer's manufacturing processes and those of its suppliers are required to comply with the applicable portions of the QSR, which cover the methods and documentation of the design, testing, production, processes, controls, quality assurance, labeling, packaging and shipping of medical devices. Domestic facility records and manufacturing processes are subject to periodic unscheduled inspections by the FDA. The FDA also may inspect foreign facilities that export products to the United States.

Other US regulatory requirements

In addition to FDA regulation of pharmaceutical products, pharmaceutical companies are also subject to additional healthcare regulation and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which they conduct their business and may constrain the financial arrangements and relationships through which we research, as well as sell, market and distribute any products for which we obtain marketing authorization. Such laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, data privacy and security, and transparency laws and regulations related to drug pricing and payments and other transfers of value made to physicians and other healthcare providers. If their operations are found to be in violation of any of such laws or any other governmental regulations that apply, they may be subject to penalties, including, without limitation, administrative, civil and criminal penalties, damages, fines, disgorgement, the curtailment or restructuring of operations, integrity oversight and reporting obligations, exclusion from participation in federal and state healthcare programs and imprisonment.

US coverage and reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidate for which we may seek regulatory approval. Sales in the United States will depend, in part, on the availability of sufficient coverage and adequate reimbursement from third-party payors, which include government health programs such as Medicare, Medicaid, TRICARE and the Veterans Administration, as well as managed care organizations and private health insurers. Prices at which we or our customers seek reimbursement for our product candidates can be subject to challenge, reduction or denial by third-party payors.

The process for determining whether a third-party payor will provide coverage for a product is typically separate from the process for setting the reimbursement rate that the payor will pay for the product. In the United States, there is no uniform policy among payors for coverage or reimbursement. Decisions regarding whether to cover any of a product, the extent of coverage and amount of reimbursement to be provided are made on a plan-by-plan basis. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own coverage and reimbursement policies, but also have their own methods and approval processes. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that can require manufacturers to provide scientific and clinical support for the use of a product to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. In addition, companion diagnostic tests require coverage and reimbursement separate and apart from the coverage and reimbursement for their companion pharmaceutical or biological products. Similar challenges to obtaining coverage and reimbursement, applicable to pharmaceutical or biological products, will apply to companion diagnostics.

Third-party payors are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. Third-party payors may

not consider our product candidates to be medically necessary or cost-effective compared to other available therapies. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit sales of any product that receives approval.

US healthcare reform

In the United States, there have been, and continue to be, legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of product candidates, restrict or regulate post-approval activities, and affect the profitable sale of product candidates. Among policy makers and payors in the United States, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

By way of example, in March 2010, the Patient Protection and Affordable Care Act (the ACA) was passed, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly affected the pharmaceutical industry. The ACA, among other things, increased the minimum level of Medicaid rebates payable by manufacturers of brand name drugs from 15.1% to 23.1% of the average manufacturer price; required collection of rebates for drugs paid by Medicaid managed care organizations; required manufacturers to participate in a coverage gap discount program, in which manufacturers must agree to offer point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; imposed a non-deductible annual fee on pharmaceutical manufacturers or importers who sell certain "branded prescription drugs" to specified federal government programs; implemented a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted, or injected; expanded eligibility criteria for Medicaid programs; creates a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and established a Center for Medicare Innovation at the CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Since its enactment, there have been judicial, executive and political challenges to certain aspects of the ACA. On June 17, 2021, the US Supreme Court dismissed a challenge on procedural grounds that argued the ACA is unconstitutional in its entirety because the "individual mandate" was repealed by Congress. Thus, the ACA will remain in effect in its current form. Prior to the US Supreme Court ruling, President Biden issued an executive order that initiated a special enrollment period from February 15, 2021 through August 15, 2021 for purposes of obtaining health insurance coverage through the ACA marketplace. The executive order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is possible that the ACA will be subject to judicial or Congressional challenges in the future. It is unclear how such challenges, if any, or other healthcare reform measures of the Biden administration will impact the ACA.

In addition, other legislative changes have been proposed and adopted since the ACA was enacted. These changes included aggregate reductions to Medicare payments to providers of 2% per fiscal year, which went into effect on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2030, with the exception of a temporary suspension from May 1, 2020 through December 31, 2021,

unless additional Congressional action is taken. On January 2, 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, reduced Medicare payments to several providers, including hospitals, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Moreover, there has recently been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for pharmaceutical products. Further, we expect that additional healthcare reform measures will be adopted in the future, particularly in light of the new presidential administration.

Individual states in the United States have also become increasingly active in implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine which drugs and suppliers will be included in their healthcare programs. Furthermore, there has been increased interest by third party payors and governmental authorities in reference pricing systems and publication of discounts and list prices.

EU drug regulation

In order to market any product outside of the United States, we would need to comply with numerous and varying regulatory requirements of other countries and jurisdictions regarding quality, safety and efficacy and governing, among other things, clinical trials, marketing authorization, commercial sales and distribution of our products. Whether or not we obtain FDA approval for a product, we would need to obtain the necessary approvals by the comparable foreign regulatory authorities before we can commence clinical trials or marketing of the product in foreign countries and jurisdictions such as in China and Japan. Although many of the issues discussed above with respect to the United States apply similarly in the context of the European Union (EU), the approval process varies between countries and jurisdictions and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries and jurisdictions might differ from and be longer than that required to obtain FDA approval. Regulatory approval in one country or jurisdiction does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country or jurisdiction may negatively impact the regulatory process in others. Failure to comply with applicable foreign regulatory requirements, may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Non-clinical studies and clinical trials

Similarly to the United States, the various phases of non-clinical and clinical research in the EU are subject to significant regulatory controls.

Non-clinical studies are performed to demonstrate the health or environmental safety of new chemical or biological substances. Non-clinical studies must be conducted in compliance with the principles of good laboratory practice (GLP) as set forth in EU Directive 2004/10/EC. In particular, non-clinical studies, both in vitro and in vivo, must be planned, performed, monitored, recorded, reported and archived in accordance with

the GLP principles, which define a set of rules and criteria for a quality system for the organizational process and the conditions for non-clinical studies. These GLP standards reflect the Organization for Economic Co-operation and Development requirements.

Clinical trials of medicinal products in the EU must be conducted in accordance with EU and national regulations and the International Conference on Harmonization (ICH) guidelines on good clinical practices (GCP) as well as the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki. Additional GCP guidelines from the European Commission, focusing in particular on traceability, apply to clinical trials of advanced therapy medicinal products. If the sponsor of the clinical trial is not established within the EU, it must appoint an entity within the EU to act as its legal representative. The sponsor must take out a clinical trial insurance policy, and in most EU member states, the sponsor is liable to provide 'no fault' compensation to any study subject injured in the clinical trial.

Certain countries outside of the United States, including the EU, have a similar process that requires the submission of a clinical study application (CTA) much like the IND prior to the commencement of human clinical studies. A CTA must be submitted to each country's national health authority and an independent ethics committee, much like the FDA and the IRB, respectively. Once the CTA is approved by the national health authority and the ethics committee has granted a positive opinion in relation to the conduct of the trial in the relevant member state(s), in accordance with a country's requirements, clinical study development may proceed.

The CTA must include, among other things, a copy of the trial protocol and an investigational medicinal product dossier containing information about the manufacture and quality of the medicinal product under investigation. Currently, CTAs must be submitted to the competent authority in each EU member state in which the trial will be conducted. Under the new Regulation on Clinical Trials, which is currently expected to become applicable by early 2022, there will be a centralized application procedure where one national authority takes the lead in reviewing the application and the other national authorities have only a limited involvement. Any substantial changes to the trial protocol or other information submitted with the CTA must be notified to or approved by the relevant competent authorities and ethics committees. Medicines used in clinical trials must be manufactured in accordance with good manufacturing practice (GMP). Other national and EU-wide regulatory requirements also apply.

Marketing Authorizations

To market a medicinal product in the EU and in many other foreign jurisdictions, we must obtain separate regulatory approvals. More concretely, in the EU, medicinal product candidates can only be commercialized after obtaining a Marketing Authorization (MA). To obtain regulatory approval of an investigational medicinal product under EU regulatory systems, we must submit a marketing authorization application (MAA.) The process for doing this depends, among other things, on the nature of the medicinal product. There are two types of MAs:

- the "Union MA", which is issued by the European Commission through the Centralized Procedure, based on the opinion of the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) and which is valid throughout the entire territory of the EU. The Centralized Procedure is mandatory for certain types of products, such as (i) medicinal products derived from biotechnology medicinal products, (ii) designated orphan medicinal products, (iii) advanced therapy products (such as gene therapy, somatic cell therapy or tissue-engineered medicines), and (iv) medicinal products containing a new active substance indicated for the treatment certain diseases, such as HIV/AIDS, cancer, neurodegenerative diseases, diabetes, other auto-immune and viral diseases. The Centralized Procedure is optional for products

containing a new active substance not yet authorized in the EU, or for products that constitute a significant therapeutic, scientific or technical innovation or that the granting of authorization would be in the interest of public health in the EU; and

- “National MAs”, which are issued by the competent authorities of the EU member states and only cover their respective territory, are available for products not falling within the mandatory scope of the Centralized Procedure. Where a product has already been authorized for marketing in an EU member state, this National MA can be recognized in another member state through the Mutual Recognition Procedure. If the product has not received a National MA in any member state at the time of application, it can be approved simultaneously in various member states through the Decentralized Procedure. Under the Decentralized Procedure an identical dossier is submitted to the competent authorities of each of the member states in which the MA is sought, one of which is selected by the applicant as the Reference member state.

Under the above-described procedures, in order to grant the MA, the EMA or the competent authorities of the EU member states make an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy.

Under the Centralized Procedure, the maximum timeframe for the evaluation of a MAA by the EMA is 210 days. Where there is a major public health interest and an unmet medical need for a product, the CHMP may perform an accelerated review of a MA in no more than 150 days (not including clock stops). Innovative products that target an unmet medical need and are expected to be of major public health interest may be eligible for a number of expedited development and review programs, such as the PRIME scheme, which provides incentives similar to the breakthrough therapy designation in the US. PRIME is a voluntary scheme aimed at enhancing the EMA’s support for the development of medicines that target unmet medical needs. It is based on increased interaction and early dialogue with companies developing promising medicines, to optimize their product development plans and speed up their evaluation to help them reach patients earlier. Product developers that benefit from PRIME designation can expect to be eligible for accelerated assessment but this is not guaranteed. The benefits of a PRIME designation include the appointment of a CHMP rapporteur before submission of a MAA, early dialogue and scientific advice at key development milestones, and the potential to qualify products for accelerated review earlier in the application process.

MAs have an initial duration of five years. After these five years, the authorization may be renewed for an unlimited period on the basis of a reevaluation of the risk-benefit balance, unless the EMA decides, on justified grounds relating to pharmacovigilance, to mandate one additional five-year renewal period.

Data and marketing exclusivity

The EU also provides opportunities for market exclusivity. Upon receiving MA, new chemical entity, or reference product candidates, generally receive for eight years of data exclusivity and an additional two years of market exclusivity. If granted, the data exclusivity period prevents generic or biosimilar applicants from relying on the pre-clinical and clinical trial data contained in the dossier of the reference product when applying for a generic or biosimilar MA in the EU during a period of eight years from the date on which the reference product was first authorized in the EU. The market exclusivity period prevents a successful generic or biosimilar applicant from commercializing its product in the EU until 10 years have elapsed from the initial authorization of the reference product in the EU. The overall 10-year market exclusivity period can be extended to a maximum of eleven years if, during the first eight years of those 10 years, the MA holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. However, there is no guarantee that a product will be considered by the EU’s regulatory authorities to be a new chemical entity, and products may not qualify for data exclusivity.

Pediatric Development

In the EU, MAAs for new medicinal products candidates have to include the results of trials conducted in the pediatric population, in compliance with a pediatric investigation plan (PIP) agreed with the EMA's Pediatric Committee (PDCO). The PIP sets out the timing and measures proposed to generate data to support a pediatric indication of the drug for which MA is being sought. The PDCO can grant a deferral of the obligation to implement some or all of the measures of the PIP until there are sufficient data to demonstrate the efficacy and safety of the product in adults. Further, the obligation to provide pediatric clinical trial data can be waived by the PDCO when these data is not needed or appropriate because the product is likely to be ineffective or unsafe in children, the disease or condition for which the product is intended occurs only in adult populations, or when the product does not represent a significant therapeutic benefit over existing treatments for pediatric patients. Once the MA is obtained in all EU Member States and study results are included in the product information, even when negative, the product is eligible for six months' supplementary protection certificate extension (if any is in effect at the time of authorization).

Post-Approval Requirements

Similar to the United States, both MA holders and manufacturers of medicinal products are subject to comprehensive regulatory oversight by the EMA, the European Commission and/or the competent regulatory authorities of the member states. The holder of a MA must establish and maintain a pharmacovigilance system and appoint an individual qualified person for pharmacovigilance who is responsible for oversight of that system. Key obligations include expedited reporting of suspected serious adverse reactions and submission of periodic safety update reports (PSURs).

All new MAA must include a risk management plan (RMP) describing the risk management system that the company will put in place and documenting measures to prevent or minimize the risks associated with the product. The regulatory authorities may also impose specific obligations as a condition of the MA. Such risk-minimization measures or post-authorization obligations may include additional safety monitoring, more frequent submission of PSURs, or the conduct of additional clinical trials or post-authorization safety studies.

The advertising and promotion of medicinal products is also subject to laws concerning promotion of medicinal products, interactions with physicians, misleading and comparative advertising and unfair commercial practices. All advertising and promotional activities for the product must be consistent with the approved summary of product characteristics, and therefore all off-label promotion is prohibited.

Direct-to-consumer advertising of prescription medicines is also prohibited in the EU. Although general requirements for advertising and promotion of medicinal products are established under EU directives, the details are governed by regulations in each member state and can differ from one country to another.

The aforementioned EU rules are generally applicable in the European Economic Area (EEA) which consists of the 27 EU member states plus Norway, Liechtenstein and Iceland.

For other countries outside of the EU, such as countries in Latin America or Asia (e.g. China and Japan), the requirements governing the conduct of clinical studies, product licensing, pricing and reimbursement vary from country to country. In all cases, again, the clinical studies are conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki. If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Privacy and data protection laws

We are also subject to laws and regulations in non-US countries covering data privacy and the protection of health-related and other personal information. For instance, EU member states and other jurisdictions have adopted data protection laws and regulations, which impose significant compliance obligations. Laws and regulations in these jurisdictions apply broadly to the collection, use, storage, disclosure, processing and security of personal information that identifies or may be used to identify an individual, such as names, contact information, and sensitive personal data such as health data. These laws and regulations are subject to frequent revisions and differing interpretations,

As of May 2018, the General Data Protection Regulation (GDPR) replaced the Data Protection Directive with respect to the processing of personal data in the European Union. The GDPR imposes many requirements for controllers and processors of personal data, including, for example, higher standards for obtaining consent from individuals to process their personal data, more robust disclosures to individuals and a strengthened individual data rights regime, shortened timelines for data breach notifications, limitations on retention and secondary use of information, increased requirements pertaining to health data and pseudonymised (i.e., key-coded) data and additional obligations when we contract third-party processors in connection with the processing of the personal data. The GDPR allows EU member states to make additional laws and regulations further limiting the processing of genetic, biometric or health data. Failure to comply with the requirements of GDPR and the applicable national data protection laws of the EU member states may result in fines of up to €20,000,000 or up to 4% of the total worldwide annual turnover of the preceding financial year, whichever is higher, and other administrative penalties.

PRC (People's Republic of China) drug regulation

Introduction

China heavily regulates the development, approval, manufacturing and distribution of drugs, including biologics. The specific regulatory requirements applicable depend on whether the drug is made and finished in China, which is referred to as a domestically manufactured drug, or made abroad and imported into China in finished form, which is referred to as an imported drug, as well as the approval or "registration" category of the drug. For both imported and domestically manufactured drugs, China typically requires regulatory approval for a Clinical Trial Application (CTA) to conduct clinical trials in China and submit China clinical trial data, prior to submitting an application for marketing approval. For a domestically manufactured drug, there is also a requirement to have a drug manufacturing license for a facility in China.

In 2017, the drug regulatory system entered a new and significant period of reform. The General Office of the State Council and the General Office of the Central Committee of the China Communist Party jointly issued the Opinion on Deepening the Reform of the Evaluation and Approval System to Encourage Innovation in Drugs and Medical Devices (the Innovation Opinion) in October 2017. The expedited programs and other advantages under this and other recent reforms encourage drug manufacturers to seek marketing approval in China first, manufacture domestically, and develop drugs in high priority disease areas, such as oncology.

To implement the regulatory reform introduced by the Innovation Opinion, the National People's Congress of the PRC (NPC) and the National Medical Products Administration of the PRC (NMPA) has been revising the fundamental laws, regulations and rules regulating pharmaceutical products and the industry, which include the framework law known as the PRC Drug Administration Law (DAL). The DAL was promulgated by the Standing Committee of the NPC on September 20, 1984 and last amended on August 26, 2019 and took effect as of December 1, 2019. The DAL is implemented by a high-level regulation issued by the State Council of the PRC referred to as the DAL Implementing Regulation. The NMPA has its own set of regulations further implementing

the DAL; the primary one governing CTAs, marketing approval, and post-approval amendment and renewal is known as the Drug Registration Regulation (DRR). The DRR was promulgated by the NMPA on February 28, 2005 and the last amended DRR was promulgated by the State Administration for Market Regulation and became effective from July 1, 2020. Although the NMPA has issued several notices and proposed regulations in 2018 and 2019 to implement the reforms, the implementing regulations for many of the reforms in the Innovation Opinion have not yet been finalized and issued, and therefore, the details regarding the implementation of the regulatory changes remained uncertain in some respects.

Regulatory authorities and recent government reorganization

In the PRC, the NMPA is the primary regulatory agency for pharmaceutical products and businesses. The agency was formed from the former China Food and Drug Administration (CFDA) in 2018 as part of a government reorganization. Pursuant to the Decision of the First Session of the Thirteenth National People's Congress on the State Council Institutional Reform Proposal made by the NPC on March 17, 2018, NMPA and the National Intellectual Property Administration are managed by the State Administration for Market Regulation (SAMR) which are responsible for consumer protection, advertising, anticorruption, pricing and fair competition matters.

Like the CFDA, the NMPA is still the primary drug regulatory agency and implements the same laws, regulations, rules, and guidelines as the CFDA. It also regulates almost all of the key stages of the life-cycle of pharmaceutical products, including nonclinical studies, clinical trials, marketing approvals, manufacturing, advertising and promotion, distribution, and pharmacovigilance (i.e., post-marketing safety reporting obligations). The NMPA's Center for Drug Evaluation (CDE) conducts the technical evaluation of each drug and biologic application to assess safety and efficacy.

The National Health Commission of the PRC (NHC) (formerly known as The Ministry of Health (MOH) and National Health and Family Planning Commission (NHFPC)), is China's primary healthcare regulatory agency. It is responsible for overseeing the operation of medical institutions, some of which also serve as clinical trial sites, and regulating the licensure of hospitals and other medical personnel.

Breakthrough therapy designation by the NMPH

In July 2020, the NMPA announced the procedure and guidance document for applying and qualifying for Breakthrough Therapy designation. To qualify, a drug has to be intended to treat a serious or life-threatening condition, and demonstrate substantial improvement over available therapies on one or more clinically significant endpoints. Drugs that are designated as breakthrough therapies will receive priority in meeting scheduling and enhanced guidance from the Center for Drug Evaluation (CDE) to expedite drug development and may also qualify for priority review and conditional approval.

Non-clinical research

The NMPA requires preclinical data to support registration applications for imported and domestic drugs. According to the DRR, nonclinical safety studies must comply with the Administrative Measures for Good Laboratories Practice of Non-clinical Laboratory. On August 6, 2003, the NMPA promulgated the Administrative Measures for Good Laboratories Practice of Non-clinical Laboratory, which was revised on July 27, 2017, to improve the quality of non-clinical research, and began to conduct the Good Laboratories Practice. Pursuant to the Circular on Administrative Measures for Certification of Good Laboratory Practice for Non-clinical Laboratory issued by the NMPA on April 16, 2007, the NMPA is responsible for the certification of non-clinical research institutions nationwide and local provincial medical products administrative authorities is in charge of

the daily supervision of non-clinical research institution. The NMPA decides whether an institution is qualified for undertaking pharmaceutical non-clinical research by evaluating such institution's organizational administration, its research personnel, its equipment and facilities, and its operation and management of non-clinical pharmaceutical projects. A Good Laboratory Practice Certification will be issued by the NMPA if all the relevant requirements are satisfied, which will also be published on the NMPA's website.

Clinical trials and regulatory approval

Upon completion of preclinical studies, a sponsor typically needs to conduct clinical trials in China for registering a new drug. The materials required for this application and the data requirements are determined by the registration category. The NMPA has taken a number of steps to increase efficiency for approving CTAs, and it has also significantly increased monitoring and enforcement of the Administrative Regulations of Quality of Drug Clinical Practice (the PRC's GCP) to ensure data integrity.

Trial approval

All clinical trials conducted in China for new drug registration purposes must be approved by and conducted at pharmaceutical clinical trial institutions which shall be under the filing administration. For imported drugs, proof of foreign approval is required prior to the trial, unless the drug has never been approved anywhere in the world. In addition to a standalone China trial to support development, imported drug applicants may establish a site in China that is part of an international multicenter trial (IMCT) at the outset of the global trial. Domestically manufactured drugs are not subject to foreign approval requirements, and in contrast to prior practice, the NMPA has recently decided to permit those drugs to conduct development via an IMCT as well.

In 2015, the NMPA began to issue an umbrella approval for all phases (typically three) of a new drug clinical trial, instead of issuing approval phase by phase. For certain types of new drug candidates, CTAs may be prioritized over other applications and put in a separate expedited queue for approval.

The NMPA has now adopted a system for clinical trials of new drugs where trials can proceed if after 60 business days, the applicant has not received any objections from the CDE. China is also expanding the number of trial sites by changing from a clinical trial site certification procedure into a notification procedure.

Drug clinical trial registration

Pursuant to the DRR, where a clinical trial of drugs is approved, the sponsor shall, prior to conducting subsequent phases of the clinical trial of drugs, formulate the corresponding scheme on the clinical trial of drugs, carry out after review and approval by the Ethics Committee, and submit the corresponding scheme on clinical trials of drugs and supporting materials on the Center for Drug Evaluation website. On September 6, 2013, the NMPA released the Announcement on Drug Clinical Trial Information Platform, requiring the registration for all clinical trials approved by the NMPA to be completed and trial information to be published through the Drug Clinical Trial Information Platform. The applicant shall complete trial pre-registration within one month after obtaining the clinical trial approval to obtain the trial's unique registration number and shall complete registration of certain follow-up information before the first subject's enrollment in the trial. If approval of the foregoing pre-registration and registration is not obtained within one year after obtaining the clinical trial approval, the applicant shall submit an explanation, and if the procedure is not completed within three years, the clinical trial approval shall automatically be annulled.

Pursuant to the DRR, during the period of clinical trial, the applicant must continuously update the registration information and the trial results after completion of each clinical trial on the Drug Clinical Trial Information Platform. Applicants are responsible for the authenticity of the registration information.

Trial exemptions and acceptance of foreign data

The NMPA may reduce requirements for clinical trials and data, depending on the drug and the existing data. The NMPA has granted waivers for all or part of trials and has stated that it will accept data generated abroad (even if not part of a global study), including early phase data, that meets its requirements. On July 6, 2018, the NMPA issued the Technical Guidance Principles on Accepting Foreign Drug Clinical Trial Data (the Guidance Principles) as one of the implementing rules for the Innovation Opinion. According to the Guidance Principles, the data of foreign clinical trials must meet the authenticity, completeness, accuracy and traceability requirements and such data must be obtained consistent with the relevant requirements under the GCP of the International Conference on Harmonization of Technical Requirements for Registration of Pharmaceuticals for Human Use (ICH). Sponsors must be attentive to potentially meaningful ethnic differences in the subject population.

Clinical trial process and good clinical practices

Typically drug clinical trials in China have four phases. Phase 1 refers to the initial clinical pharmacology and human safety evaluation studies. Phase 2 refers to the preliminary evaluation of a drug candidate's therapeutic efficacy and safety for target indication(s) in patients. Phase 3 (often the pivotal study) refers to clinical trials to further verify the drug candidate's therapeutic efficacy and safety in patients with target indication(s) and ultimately provide sufficient evidence for the review of a drug registration application. Phase 4 refers to a new drug's post-marketing study to assess therapeutic effectiveness and adverse reactions when the drug is widely used to evaluate overall benefit-risk relationships of the drug when used among the general population or specific groups and to adjust the administration dose, etc. The NMPA requires that the different phases of clinical trials in China receive ethics committee approval and comply with the PRC's GCP. The NMPA conducts inspections to assess the PRC's GCP compliance and will cancel the CTA if it finds substantial issues.

On August 6, 2003, the NMPA promulgated the PRC's GCP, which was amended by NMPA and NHC on April 23, 2020 and took effect on July 1, 2020, to improve the quality of clinical trials. According to the PRC's GCP, the sponsor shall provide insurance to the subjects participating in the clinical trial and bear the cost of the treatment and the corresponding financial compensation for the subjects who suffer harm or death related to the trial. The sponsor shall provide legal and economic guarantee to the investigator, but harm or death caused by the medical accident shall be excluded. Pursuant to the Innovation Opinion, the accreditation of the institutions for drug clinical trials shall be subject to record-filing administration. The conduct of clinical trials must adhere to the PRC's GCP, and the protocols must be approved by the ethics committees of each study site. Pursuant to the newly amended DAL, and the Regulations on the Administration of Drug Clinical Trial Institution jointly promulgated by NMPA and NHC on November 29, 2019 and effective from December 1, 2019, drug clinical trial institutions shall be under filing administration. Entities that only conduct analysis of biological samples related to clinical trials of drugs do not need to be filed.

New drug application and approval

According to the DRR, the applicant may submit an application for drug marketing registration to CDE upon completion of relevant research on pharmacy, pharmacology, toxicology and drug clinical trials, determination the quality standards of the drug, validation of commercial-scale production processes and preparation for acceptance of verification and inspection conducted by professional technical institution designated by competent NMPA. The CDE will organize pharmaceutical, medical and other technicians to conduct comprehensive review of the safety, efficacy and quality controllability, among others, of the drug according to the application materials submitted by the applicant, the results of the verification and inspection conducted by professional technical institution, etc. If the comprehensive review conclusion is affirmative, the drug shall be

approved for marketing and a drug registration certificate will be issued containing the information of the drug approval number, the marketing authorization holders and the manufacturer. Pursuant to the Opinions on the Reform of Evaluation and Approval System for Drugs and Medical Devices and Equipment promulgated on August 9, 2015, the State Council published the policy for carrying out a pilot plan for the drug marketing authorization holder mechanism.

Pursuant to the newly amended DAL, under the drug marketing authorization holder mechanism, an enterprise obtained drug registration certificate and a research and development institution are eligible to be a pharmaceutical marketing authorization holder, and this pharmaceutical marketing authorization holder shall be responsible for nonclinical laboratory studies, clinical trials, production and distribution, post-market studies, and the monitoring, reporting, and handling of adverse reactions in connection with pharmaceuticals in accordance with the provisions of the DAL. The pharmaceutical marketing authorization holder may engage contract manufacturers for manufacturing, provided that the contract manufacturers are licensed and may engage pharmaceutical distribution enterprises with drug distribution license for the distribution activities. Upon the approval of the medical products administrative department under the State Council, a drug marketing authorization holder may transfer the drug marketing license and the transferee shall have the capability of quality management, risk prevention and control, and liability compensation to ensure the safety, effectiveness and quality controllability of drugs, and fulfill the obligations of the drug marketing license holder.

Japanese drug regulation

Non-clinical studies and clinical trials

Being a member of the International Conference on Harmonization (ICH), Japan has pharmaceutical regulations fundamentally similar to those of the United States or EU.

Non-clinical studies are performed to demonstrate the health safety of new chemical or biological substances. Non-clinical studies must be conducted in compliance with the principles of Japanese good laboratory practice (GLP) which reflect the Organization for Economic Co-operation and Development requirements. Currently, Japan and EU have a mutual recognition agreement for GLP, and data generated compliant with EU requirements will be accepted by the Japanese authorities. There is no similar agreement with the United States.

Clinical trials of medicinal products in Japan must be conducted in accordance with Japanese regulations based on ICH guidelines governing good clinical practices (GCP). They focus on ethics of the clinical trial and protection of the privacy of the trial subjects. If the sponsor of the clinical trial is not established within Japan, it must appoint an entity within the country to act as its caretaker who should be authorized to act on the sponsor's behalf. The sponsor must take out a clinical trial insurance policy, and, according to the industry agreement, should put in place a common compensation policy for the injuries from the trial.

Prior to the commencement of human clinical studies, the sponsor must complete evaluation of the safety of the investigative product, and submit a clinical trial notification and the protocol to the authorities in advance, upon agreement of the IRB of the participating institutions. When the authorities do not comment on the notification, the sponsor may proceed with the clinical trial.

Any substantial changes to the trial protocol or other information submitted must be cleared by the IRB and notified to the authorities. Medicines used in clinical trials must be manufactured in accordance with good manufacturing practice (GMP).

Product approval

To market a medicinal product in Japan, we must obtain regulatory approval. To obtain regulatory approval of an investigational medicinal product, we must submit a new drug application. The process for doing this depends, among other things, on the nature of the medicinal product and there are currently a few different pathways for approval. If the product is designed for treating certain “difficult diseases” or those whose patient size is limited, we may be able to obtain designation as an orphan drug product if it demonstrates unique therapeutic value. Approval application for such designated orphan products will be processed on an expedited basis and the authorities’ requirement for clinical data will be much limited. Separately, the latest amendment to the law introduced separate pathways for (i) truly innovative products with a unique mode of action and (ii) those which will satisfy unmet medical needs. These products will also be processed on an expedited basis.

The evaluation of applications will be based on an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy. Once the review organization complete its review task, the matter will be considered by the advisory committee of experts, and the government will grant approval upon positive recommendation from the committee.

The volume and quality of the clinical data will be the key determinant of the approval decision. Clinical trial data generated overseas will be accepted as part of the data package consistent with the ICH recommendation. Typically, a limited dose response clinical trial for Japanese subjects is required to ensure that data are extrapolatable for the Japanese population. In a more recent development, the authorities encourage manufacturers to organize an international joint clinical trial with some Japanese participation under a joint protocol, to expedite the clinical trial process. Regulatory approval does not expire.

Licensing requirement

Separate from the approval requirement, it is also mandatory to possess a distribution license of an appropriate class for the manufacturer to commercially distribute the product in Japan. Non Japanese companies who possess only the product approval may designate a appropriate license holder in Japan to commercially distribute the product, rather than distributing it on its own. The license is valid for 5 years.

Facilities

Our corporate headquarters are located in San Diego, California, where we currently lease approximately 16,153 square feet of office and laboratory space pursuant to a non-cancelable lease that expires at the end of May 2024. In order to ensure adequate space to accommodate our long-term laboratory and office space needs, in September 2020 we entered into a lease of approximately 59,407 square feet of office and laboratory space in a facility in San Diego, California that is currently under construction and further expanded our lease in March 2021 to include an additional 18,421 square feet of office space, resulting in 77,828 square feet of total leased space within this facility. The lease has an initial term of 10.5 years with a target commencement date of August 2021. We believe our existing facilities are adequate to meet our current business requirements for the near-term, and that additional space will be available on commercially reasonable terms, if required.

Employees

As of June 30, 2021, we had 102 full-time employees (FTEs), 42 of whom have doctorate degrees. Of our FTEs, 71 are engaged in research and development activities, and 31 are engaged in general and administrative activities. Substantially all of our employees are located in San Diego County, California. None of our employees are represented by labor unions or covered by collective bargaining units. We consider our relationship with our employees to be good.

Our human resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing, and integrating our existing and additional employees. The principal purposes of our equity incentive plans are to attract, retain, and motivate selected employees, consultants, and directors through the granting of stock-based compensation awards.

Legal proceedings

From time to time, we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not currently a party to any material proceedings. Regardless of outcome, such proceedings or claims can have an adverse impact on us because of defense and settlement costs, diversion of resources and other factors, and there can be no assurances that favorable outcomes will be obtained.

Management

Executive officers and directors

The following table sets forth the name, age and position of each of our executive officers and directors as of June 30, 2021.

Name	Age	Position
Executive Officers		
Jonathan E. Lim, M.D.	49	Chairman, Chief Executive Officer and Co-Founder
David M. Chacko, M.D.	39	Chief Financial Officer
Ebun S. Garner	49	General Counsel and Corporate Secretary
Wei Lin, M.D.	52	Chief Medical Officer
Directors		
James A. Bristol, Ph.D. ⁽¹⁾⁽³⁾	74	Director
Alexander W. Casdin ⁽²⁾	53	Director
Bihua Chen ⁽²⁾	53	Director
Julie Hambleton, M.D. ⁽¹⁾⁽²⁾	63	Director
Valerie Harding-Start, Ph.D. ⁽¹⁾⁽³⁾	62	Director
Pratik S. Multani, M.D. ⁽³⁾	54	Director
Michael D. Varney, Ph.D.	63	Director, Chair of Research and Development and SAB member

(1) Member of the compensation committee

(2) Member of the audit committee

(3) Member of the nominating and corporate governance committee

Executive officers

Jonathan E. Lim, M.D. co-founded Erasca in July 2018, joined us as Executive Chairman in October 2018, and has served as our Chairman and Chief Executive Officer since March 2019. Dr. Lim has also served as a Venture Partner at ARCH Venture Partners since December 2018 and as Managing Partner at City Hill since founding it in 2010. Prior to founding Erasca, in 2011 Dr. Lim co-founded and served as Chairman of Ignyta, Inc., a public precision oncology company, and led it from 2012 as Chairman, Chief Executive Officer and President through its acquisition by Roche in February 2018 and subsequent integration into Roche and Genentech in July 2018. During his tenure at Ignyta, in 2015 Dr. Lim co-founded Bonti, Inc., a private pain management and anesthetics company, and served as its Chairman from February 2016 until its acquisition by Allergan plc in October 2018. Prior to joining Ignyta, Dr. Lim served as Chairman and Chief Executive Officer of Eclipse Therapeutics, Inc., a private oncology company targeting cancer stem cells that he co-founded in March 2011 as a spinout from Biogen Idec and that was sold to Bionomics Ltd. in 2012. Prior to Eclipse, Dr. Lim served as the President, Chief Executive Officer and a Director (including as Chairman from 2004 to 2005) of Halozyme Therapeutics, Inc., a public biotechnology company, from May 2003 to December 2010. Prior to Halozyme, Dr. Lim's experience included management consulting at McKinsey & Company, a National Institutes of Health Postdoctoral

[Table of Contents](#)

Fellowship at Harvard Medical School and the Dana-Farber Cancer Institute, and two years of general surgery residency at New York Hospital-Cornell and Memorial Sloan Kettering Cancer Center. Dr. Lim has also served as a member of the board of directors of Maze Therapeutics, Inc., a private company advancing precision medicines for both rare and common diseases, since October 2019, and as Chairman and co-founder of Boundless Bio, Inc., a private precision oncology company, since December 2018. Dr. Lim has been a member of the Board of Overseers at Scripps Research since October 2018, a member of the Board of Visitors of the Moores Cancer Center at the University of California, San Diego since 2015, and a member of the Stanford Interdisciplinary Biosciences Council since 2014. Dr. Lim has B.S. and M.S. degrees from Stanford University, an M.D. from McGill University, and an M.P.H. from Harvard University. Dr. Lim's intimate knowledge of our business as a co-founder of our company and his extensive experience as an executive officer and director of multiple public and private biotechnology companies contributed to our board of directors' conclusion that he should serve as a director of our company.

David M. Chacko, M.D. has served as our Chief Financial Officer since December 2020 and joined Erasca in August 2019 as our Chief Business Officer. Prior to Erasca, Dr. Chacko was a principal at Versant Ventures, a healthcare venture capital firm, from September 2017 to August 2019, where he led investment opportunities across multiple therapeutic areas and was intimately involved in advancing several Versant portfolio companies operationally through company formation, fundraising, corporate and business development, and clinical and regulatory activities. Dr. Chacko joined Versant from Alcon, a multinational company specializing in eye care products, where he served as Chief of Staff to the Chief Executive Officer from 2014 to September 2017. Prior to Alcon, Dr. Chacko was a management consultant at McKinsey & Company from 2011 to 2014. Dr. Chacko previously held positions at SR One, Amgen, and Morgan Stanley. Dr. Chacko holds an M.D. from the University of Pennsylvania, an M.B.A. from the Wharton School of Business, an M. Phil. from Oxford University, where he was a Marshall Scholar, and B.A. and B.S. degrees in biology and business from the University of Southern California, where he was the university valedictorian.

Ebun S. Garner has served as our General Counsel and Corporate Secretary since April 2021. Prior to joining us, Mr. Garner served as Assistant General Counsel of Acadia Pharmaceuticals, Inc., a publicly-traded biopharmaceutical company, from August 2020 until April 2021. Prior to Acadia, Mr. Garner served as the Chief Legal Officer and Corporate Secretary of Imbria Pharmaceuticals, Inc., a private therapeutics company, where he oversaw all legal and intellectual property matters from April 2019 to July 2020. From March 2017 to April 2019, Mr. Garner served as Associate General Counsel at Neurocrine Biosciences, Inc., a publicly-traded biopharmaceutical company, where he was the primary legal support for all non-commercial legal matters and public company reporting. Prior to that, Mr. Garner served as the Senior Vice President, General Counsel and Corporate Secretary of Alphatec Spine, Inc., a publicly-traded medical device company, where he worked from 2005 until February 2017. Mr. Garner was a corporate associate in the New York office of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. from 2000 to 2005. He received a B.A. in Economics from the University of Pennsylvania and a J.D. from New York University School of Law.

Wei Lin, M.D. has served as our Chief Medical Officer since January 2021. Dr. Lin joined Erasca from Nektar Therapeutics, where he served as Senior Vice President and Head of Development, as well as a member of the executive committee, from October 2018 to January 2021. Prior to Nektar, from October 2011, Wei held roles of increasing responsibility at Roche and its subsidiary, Genentech, most recently as the Global Development Lead in cancer immunotherapy for lung cancer and head and neck cancer. Dr. Lin was also the Site Head for oncology product development at Roche China. Dr. Lin served on the faculty of the MD Anderson Cancer Center, where he completed his medical oncology fellowship, from 2006 to 2009. Dr. Lin completed his internal medicine residency at Massachusetts General Hospital, and holds an M.D. from Harvard Medical School and a B.A. in physics from Haverford College.

Directors

James A. Bristol, Ph.D. has served on our board of directors since June 2018. Dr. Bristol worked for more than three decades in drug discovery, research and preclinical development at Schering-Plough Corporation, Parke-Davis and Pfizer Inc., serving in various senior research and development roles. From 2003 until his retirement in 2007, Dr. Bristol served as Senior Vice President of Worldwide Drug Discovery Research at Pfizer Global Research & Development. In 2009, Dr. Bristol joined Frazier Healthcare Ventures as a Senior Advisor, and since 2007, Dr. Bristol has been working as a consultant with James Bristol LLC. He has served as Chairperson of Deciphera Pharmaceuticals, Inc. since 2015 and as a director since 2007, as well as a director of Ignyta, Inc. from 2014 to February 2018 and Cadent Therapeutics, Inc. from 2011 to January 2021. Dr. Bristol is the author of over 100 publications, abstracts and patents, and he conducted postdoctoral research at the University of Michigan (NIH Postdoctoral Fellow) and at The Squibb Institute for Medical Research. Dr. Bristol holds a Ph.D. in organic chemistry from the University of New Hampshire and a B.S. in Chemistry from Bates College. Dr. Bristol's extensive research and development and board-level experience in the biopharmaceutical industry contributed to our board of directors' conclusion that he should serve as a director of our company.

Alexander W. Casdin has served on our board of directors since July 2018. Mr. Casdin has served as Chief Financial Officer of Epirium Bio Inc. since October 2020. Previously, Mr. Casdin was the founder and served as the Chief Executive Officer and portfolio manager of Reneo Capital Management LP from January 2015 to October 2020. From September 2012 through December 2014, Mr. Casdin was a private investor focused on the healthcare sector. From October 2011 through September 2012, Mr. Casdin was the Chief Financial Officer of Sophiris Bio, Inc., a Canadian public urology company. Prior to Sophiris Bio, Mr. Casdin served as the Vice President, Finance of Amylin Pharmaceuticals, Inc., a biopharmaceutical company that was acquired by Bristol-Myers Squibb in 2012, a position he held from October 2009 to October 2011. Prior to his position at Amylin Pharmaceuticals, Mr. Casdin founded and operated Casdin Advisors LLC, where he served as a strategic advisor to companies in the life sciences industry. Before founding Casdin Advisors, Mr. Casdin was the Chief Executive Officer and Portfolio Manager of Cooper Hill Partners, LLC, a healthcare investment fund. Mr. Casdin has also held previous positions at Pequot Capital Management and Dreyfus Corporation. Mr. Casdin has served on the board of directors for multiple life sciences companies, including Ignyta, Inc. from 2013 to 2018 and DUSA Pharmaceuticals Inc. from 2009 to 2012. Mr. Casdin holds a B.A. in political science from Brown University and an M.B.A. from Columbia Business School, where he graduated Beta Gamma Sigma. Mr. Casdin's extensive financial experience in the biopharmaceutical industry contributed to our board of directors' conclusion that he should serve as a director of our company.

Bihua Chen has served on our board of directors since March 2021. Ms. Chen is the founder and portfolio manager of Cormorant Asset Management, LLC. Since August 2020, Ms. Chen has also served as the Chief Executive Officer and Chairman of the board of directors of Helix Acquisition Corp., a publicly-traded biotechnology special purpose acquisition company. Prior to founding Cormorant, Ms. Chen managed a separately managed account focused on the healthcare sector as a sub-adviser to a large, multi-strategy hedge fund based in New York. Prior to that, Ms. Chen was a healthcare analyst/sector portfolio manager for American Express Asset Management Boston. Ms. Chen also served as a portfolio manager for the Asterion Life Science Fund from 2001 to 2002, an equity analyst/portfolio manager for Bellevue Research from 2000 to 2001 and an equity analyst for Putnam Investments from 1998 to 2000. Ms. Chen has served on the board of directors of Biomea Fusion, Inc. since December 2020. Ms. Chen holds an M.B.A. from the Wharton School, an M.S. in molecular biology from Cornell Medical College's Graduate School of Biomedical Science and a B.S. in genetics and genetic engineering from Fudan University in Shanghai, China. Ms. Chen's extensive experience in investing in the biopharmaceutical industry contributed to our board of directors' conclusion that she should serve as a director of our company.

[Table of Contents](#)

Julie Hambleton, M.D. has served on our board of directors since March 2021. From August 2020 to March 2021, Dr. Hambleton served as interim President and Chief Executive Officer of Arch Therapeutics, Inc., a private biotechnology company. From June 2018 to April 2020, when she retired, Dr. Hambleton was Senior Vice President, Chief Medical Officer, Head of Development at IDEAYA Biosciences, Inc., an oncology medicine company. From September 2017 to May 2018 and from March 2016 to May 2016, Dr. Hambleton served as an independent strategic consultant for various life sciences companies. From May 2016 to September 2017, she served as Vice President, Head US Medical at Bristol-Myers Squibb, a global biopharmaceutical company. From August 2015 to February 2016, Dr. Hambleton served as Executive Vice President, Chief Medical Officer at Five Prime Therapeutics, a biotechnology company, and as Senior Vice President, Chief Medical Officer from December 2012 to August 2015. From April 2010 to November 2012, Dr. Hambleton served as Vice President, Clinical Development at Clovis Oncology, and from 2003 to 2010, Dr. Hambleton held roles of increasing responsibility in BioOncology at Genentech. Dr. Hambleton serves on the boards of two publicly-traded biotechnology companies: IGM Biosciences, Inc., since August 2018, and SpringWorks Therapeutics, Inc., since May 2020. Dr. Hambleton completed her hematology-oncology training at the University of California, San Francisco, where she then served on the faculty from 1993 to 2003. Dr. Hambleton holds a B.S. in nursing from Duke University and an M.D. from Case Western Reserve University School of Medicine, and is board-certified in hematology and internal medicine. Dr. Hambleton's extensive executive leadership experience in the biopharmaceutical industry and her medical expertise in oncology, hematology-oncology and internal medicine contributed to our board of directors' conclusion that she should serve as a director of our company.

Valerie Harding-Start, Ph.D. has served on our board of directors since June 2019. Since February 2019, Dr. Harding-Start has been a principal and advisor at Start Pharma Consulting LLC. From 2015 to January 2019, Dr. Harding-Start served as Ignyta, Inc.'s Senior Vice President of Chemistry, Manufacturing and Controls (CMC), as well as Site Head during Ignyta's acquisition by Roche. Prior to Ignyta, Dr. Harding-Start served as Vice President of Product Differentiation, Pharmaceutical Sciences for Worldwide Research and Development at Pfizer, Inc. Dr. Harding-Start is also a member of the community of practice and thought partner for Smallify LLC, an innovation capacity-building firm. Dr. Harding-Start holds a B. Pharm. from the University of London and a Ph.D. in Pharmaceutical Microbiology from the University of Nottingham. Dr. Harding-Start's extensive experience in the biopharmaceutical industry and her expertise in CMC contributed to our board of directors' conclusion that she should serve as a director of our company.

Pratik S. Multani, M.D. has served on our board of directors since July 2018. Dr. Multani has served as Chief Medical Officer of ORIC Pharmaceuticals, Inc., a public oncology therapeutic company, since September 2018. From 2015 to February 2018, Dr. Multani served as the Chief Medical Officer of Ignyta, Inc. From 2009 to 2015, Dr. Multani was Chief Medical Officer at Fate Therapeutics, Inc., a biopharmaceutical company. Prior to that, Dr. Multani was Vice President of Clinical Development at Kalypsys, Inc. and Senior Vice President of Clinical Development and Chief Medical Officer at Kanisa Pharmaceuticals, Inc. Dr. Multani also held academic and clinical positions at Harvard Medical School and Massachusetts General Hospital, where he was a member of the bone marrow transplant unit. He completed his internship and residency training in internal medicine at Massachusetts General Hospital and his oncology fellowship at the Dana-Farber/Partners combined program. Dr. Multani has served on the board of directors of Chimerix, Inc., a public biopharmaceutical company, since February 2020. Dr. Multani holds an M.D. from Harvard Medical School, an M.S. in epidemiology from the Harvard School of Public Health and a B.S. in chemistry and biology from Yale University. Dr. Multani's executive and academic experience in the biopharmaceutical industry and his medical expertise in oncology and hematology-oncology contributed to our board of directors' conclusion that he should serve as a director of our company.

Michael D. Varney, Ph.D. has served as our Chair of Research and Development and Scientific Advisory Board member since August 2020 and on our board of directors since December 2020. From 2005 until his retirement in July 2020, Dr. Varney served in progressing roles at Genentech, Inc., most recently as Executive Vice

[Table of Contents](#)

President and Head of Research and Early Development, as well as a member of the Corporate Executive Committee of Roche, Genentech's parent company. Prior to Genentech, from 1987 to 2005 Dr. Varney served as Head of Research at Agouron Pharmaceuticals, Inc., a biotechnology company later acquired by Pfizer, Inc. Dr. Varney served on the board of directors of Foundation Medicine, Inc. (acquired by Roche Holdings AG) from 2015 until March 2018. Dr. Varney was an American Cancer Society postdoctoral fellow at Columbia University, and holds a B.S. in chemistry from the University of California, Los Angeles and a Ph.D. in synthetic organic chemistry from the California Institute of Technology. Dr. Varney's extensive executive leadership experience in the biopharmaceutical industry and his extensive drug discovery and development expertise contributed to our board of directors' conclusion that he should serve as a director of our company.

Board composition and election of directors

Director independence

Our board of directors currently consists of eight members. Our board of directors has determined that all of our directors, other than Drs. Lim and Varney, are independent directors in accordance with the listing requirements of the Nasdaq Global Market (Nasdaq). The Nasdaq independence definition includes a series of objective tests, including that the director is not, and has not been for at least three years, one of our employees and that neither the director nor any of his or her family members has engaged in various types of business dealings with us. In addition, as required by Nasdaq rules, our board of directors has made a subjective determination as to each independent director that no relationships exist, which, in the opinion of our board of directors, would interfere with the exercise of independent judgment in carrying out the responsibilities of the director. In making these determinations, our board of directors reviewed and discussed information provided by the directors and us with regard to each director's business and personal activities and relationships as they may relate to us and our management. There are no family relationships among any of our directors or executive officers.

Classified board of directors

In accordance with the terms of our amended and restated certificate of incorporation that will go into effect immediately prior to the closing of this offering, our board of directors will be divided into three classes with staggered, three-year terms. At each annual meeting of stockholders, the directors whose terms then expire will be eligible for reelection until the third annual meeting following reelection. Effective upon the closing of this offering, our directors will be divided among the three classes as follows:

- the Class I directors will be James A. Bristol, Ph.D., Valerie Harding-Start, Ph.D., and Jonathan E. Lim, M.D., and their terms will expire at our first annual meeting of stockholders following this offering;
- the Class II directors will be Alexander W. Casdin, Julie Hambleton, M.D., and Michael D. Varney, Ph.D., and their terms will expire at our second annual meeting of stockholders following this offering; and
- the Class III directors will be Bihua Chen and Pratik S. Multani, M.D., and their terms will expire at our third annual meeting of stockholders following this offering.

Our amended and restated certificate of incorporation that will go into effect immediately prior to the closing of this offering will provide that the authorized number of directors may be changed only by resolution of the board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our board of directors into three classes with staggered three-year terms may delay or prevent a change of our board of directors or a change in control of our company. Our directors may be removed only for cause by the affirmative vote of the holders of at least two-thirds of our outstanding voting stock then entitled to vote in an election of directors.

Board leadership structure

Our board of directors is currently chaired by Dr. Lim, who also serves as our Chief Executive Officer. Our board of directors has determined that having an employee director serve as Chairman is in the best interest of our stockholders at this time because combining the roles allows one person to drive strategy and agenda-setting at the board level, as well as maintaining responsibility for executing on that strategy. Although we do not have a policy regarding the separation of the roles of Chief Executive Officer and Chairman of the board of directors, our board of directors believes that having the positions combined is the appropriate leadership structure for us at this time. We have a governance structure in place, including independent directors, designed to ensure the powers and duties of the dual role are handled responsibly. Our board of directors recognizes that, depending on the circumstances, other leadership models, such as separating the roles of Chief Executive Officer and Chairman, might be appropriate. Accordingly, our board of directors will continue to periodically review our leadership structure and may make such changes in the future as it deems appropriate.

Role of board in risk oversight process

Our board of directors has responsibility for the oversight of our risk management processes and, either as a whole or through its committees, regularly discusses with management our major risk exposures, their potential impact on our business and the steps we take to manage them. The risk oversight process includes receiving regular reports from board committees and members of senior management to enable our board of directors to understand our risk identification, risk management and risk mitigation strategies with respect to areas of potential material risk, including operations, finance, legal, regulatory, strategic and reputational risk.

The audit committee reviews information regarding liquidity and operations, and oversees our management of financial risks. Periodically, the audit committee reviews our policies with respect to risk assessment, risk management, loss prevention and regulatory compliance. Oversight by the audit committee includes direct communication with our external auditors, and discussions with management regarding significant risk exposures and the actions management has taken to limit, monitor or control such exposures. The compensation committee is responsible for assessing whether any of our compensation policies or programs has the potential to encourage excessive risk-taking. The nominating and corporate governance committee manages risks associated with the independence of the board of directors, corporate disclosure practices and potential conflicts of interest. While each committee is responsible for evaluating certain risks and overseeing the management of such risks, the entire board of directors is regularly informed through committee reports about such risks. Matters of significant strategic risk are considered by our board of directors as a whole.

Board committees and independence

Our board of directors has established three standing committees—audit, compensation and nominating and corporate governance—each of which operates under a charter that has been approved by our board of directors.

Audit committee

The audit committee's main function is to oversee our accounting and financial reporting processes and the audits of our consolidated financial statements. This committee's responsibilities include, among other things:

- appointing our independent registered public accounting firm;
- evaluating the qualifications, independence and performance of our independent registered public accounting firm;

Table of Contents

- approving the audit and non-audit services to be performed by our independent registered public accounting firm;
- reviewing the design, implementation, adequacy and effectiveness of our internal accounting controls and our critical accounting policies;
- discussing with management and the independent registered public accounting firm the results of our annual audit and the review of our quarterly unaudited financial statements;
- reviewing, overseeing and monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to financial statements or accounting matters;
- reviewing on a periodic basis, or as appropriate, any investment policy and recommending to our board of directors any changes to such investment policy;
- reviewing with management and our auditors any earnings announcements and other public announcements regarding our results of operations;
- preparing the report that the SEC requires in our annual proxy statement;
- reviewing and approving any related party transactions and reviewing and monitoring compliance with our code of conduct and ethics; and
- reviewing and evaluating, at least annually, the performance of the audit committee and its members including compliance of the audit committee with its charter.

The members of our audit committee are Mr. Casdin, Ms. Chen, and Dr. Hambleton. Mr. Casdin serves as the chairperson of the committee. All members of our audit committee meet the requirements for financial literacy under the applicable rules and regulations of the SEC and Nasdaq. Our board of directors has determined that Mr. Casdin is an “audit committee financial expert” as defined by applicable SEC rules and has the requisite financial sophistication as defined under the applicable Nasdaq listing standards. Our board of directors has determined each of Mr. Casdin, Ms. Chen, and Dr. Hambleton is independent under the applicable rules of the SEC and Nasdaq. Upon the listing of our common stock on Nasdaq, the audit committee will operate under a written charter, which the audit committee will review and evaluate at least annually.

Compensation committee

Our compensation committee approves policies relating to compensation and benefits of our officers and employees. The compensation committee approves corporate goals and objectives relevant to the compensation of our Chief Executive Officer and other executive officers, evaluates the performance of these officers in light of those goals and objectives and approves the compensation of these officers based on such evaluations. The compensation committee also approves the issuance of stock options and other awards under our equity plans. The compensation committee will review and evaluate, at least annually, the performance of the compensation committee and its members, including compliance by the compensation committee with its charter.

The members of our compensation committee are Dr. Bristol, Dr. Hambleton, and Dr. Harding-Start. Dr. Bristol serves as the chairperson of the committee. Our board of directors has determined that each of Dr. Bristol, Dr. Hambleton, and Dr. Harding-Start is independent under the applicable Nasdaq listing standards, and is a “non-employee director” as defined in Rule 16b-3 promulgated under the Exchange Act. Upon the listing of our common stock on Nasdaq, the compensation committee will operate under a written charter, which the compensation committee will review and evaluate at least annually.

Nominating and corporate governance committee

The nominating and corporate governance committee is responsible for assisting our board of directors in discharging the board of directors' responsibilities regarding the identification of qualified candidates to become board members, the selection of nominees for election as directors at our annual meetings of stockholders (or special meetings of stockholders at which directors are to be elected), and the selection of candidates to fill any vacancies on our board of directors and any committees thereof. In addition, the nominating and corporate governance committee is responsible for overseeing our corporate governance policies, reporting and making recommendations to our board of directors concerning governance matters and oversight of the evaluation of our board of directors. The members of our nominating and corporate governance committee are Dr. Harding-Start, Dr. Bristol, and Dr. Multani. Dr. Harding-Start serves as the chairperson of the committee. Our board of directors has determined that each of Dr. Bristol, Dr. Harding-Start, and Dr. Multani is independent under the applicable Nasdaq listing standards. Upon the listing of our common stock on Nasdaq, the nominating and corporate governance committee will operate under a written charter, which the nominating and corporate governance committee will review and evaluate at least annually.

Compensation committee interlocks and insider participation

None of the members of our compensation committee has ever been one of our officers or employees. None of our executive officers currently serves, or has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving as a member of our board of directors or compensation committee.

Board diversity

Upon the closing of this offering, our nominating and corporate governance committee will be responsible for reviewing with the board of directors, on an annual basis, the appropriate characteristics, skills and experience required for the board of directors as a whole and its individual members. In evaluating the suitability of individual candidates (both new candidates and current members) for election or appointment, the nominating and corporate governance committee and the board of directors will take into account many factors, including the following:

- personal and professional integrity, ethics, and values;
- experience in corporate management, such as serving as an officer or former officer of a publicly-held company;
- experience as a board member or executive officer of another publicly-held company;
- strong finance experience;
- diversity of expertise and experience in substantive matters pertaining to our business relative to other board members;
- diversity of background and perspective, including, but not limited to, with respect to age, gender, race, place of residence, and specialized experience;
- experience relevant to our business industry and with relevant social policy concerns; and
- relevant academic expertise or other proficiency in an area of our business operations.

Currently, our board of directors evaluates, and following the closing of this offering will evaluate, each individual in the context of the board of directors as a whole, with the objective of assembling a group that can best maximize the success of the business and represent stockholder interests through the exercise of sound judgment using its diversity of experience in these various areas.

Code of business conduct and ethics

We have adopted a written code of business conduct and ethics that applies to our directors, officers, and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, which will be effective upon the closing of this offering. Upon the closing of this offering, our code of business conduct and ethics will be available under the Corporate Governance section of our website at www.erasca.com. In addition, we intend to post on our website all disclosures that are required by law or the listing standards of Nasdaq concerning any amendments to, or waivers from, any provision of the code. The reference to our website address does not constitute incorporation by reference of the information contained at or available through our website, and you should not consider it to be a part of this prospectus. We have included our website address as an inactive textual reference only.

Executive and director compensation

This section discusses the material components of the executive compensation program for our executive officers who are named in the "Summary compensation table" below, whom we refer to as our NEOs.

Summary compensation table

The following table presents summary information regarding the total compensation that was awarded to, earned by or paid to our NEOs for services rendered during the year ended December 31, 2020.

Name and principal position	Year	Salary (\$)	Bonus (\$)	Stock awards (\$)	Option awards (\$) ⁽¹⁾	Non-equity incentive plan compensation (\$) ⁽²⁾	All other compensation (\$) ⁽³⁾	Total (\$)
Jonathan E. Lim, M.D. <i>Chairman and Chief Executive Officer</i>	2020	300,000	—	—	1,484,696	180,000	—	1,964,696
David M. Chacko, M.D. <i>Chief Financial Officer and Chief Business Officer</i>	2020	314,000	—	—	207,461	141,300	—	662,761
Gary Yeung ⁽⁴⁾ <i>Former Chief Financial Officer and Chief Operating Officer</i>	2020	356,792	—	—	446,460	99,600	27,600	930,452

(1) Represents the grant date fair value of stock options to purchase shares of our common stock computed in accordance with FASB ASC 718. See Note 10 to our consolidated financial statements for the year ended December 31, 2020 included with this prospectus for a description of the assumptions used in valuing our stock options.

(2) Represents annual performance bonuses earned with respect to 2020 as described below under "Bonus compensation."

(3) Represents housing allowance provided to Mr. Yeung.

(4) Mr. Yeung's employment terminated on December 15, 2020. The "Salary" figure for Mr. Yeung also includes \$41,179 in accrued paid time off paid to Mr. Yeung in connection with his termination of employment.

Narrative disclosure to compensation tables

The primary elements of compensation for our NEOs are base salary, annual performance bonuses and equity awards. The NEOs also participate in employee benefit plans and programs that we offer to our other employees, as described below.

Annual base salary

We pay our NEOs a base salary to compensate them for the satisfactory performance of services rendered to us. The base salary payable to each NEO is intended to provide a fixed component of compensation reflecting the executive's skill set, experience, role and responsibilities. Base salaries for our NEOs have generally been set at levels deemed necessary to attract and retain individuals with superior talent.

Our NEOs' base salaries in effect for 2020 were as follows: Dr. Lim, \$300,000; Dr. Chacko, \$314,000; and Mr. Yeung, \$332,000. Effective January 2, 2021, the base salaries for Dr. Lim and Dr. Chacko were increased to \$453,800 and \$342,500, respectively.

In connection with this offering, Dr. Lim's base salary will be increased to \$549,900, and Dr. Chacko's base salary will be increased to \$406,900.

Bonus compensation

From time to time, our board of directors or compensation committee may approve bonuses for our NEOs based on individual performance, company performance, or as otherwise determined appropriate. Pursuant to their respective employment letter agreements, each NEO has an established target annual bonus amount. For 2020, our NEOs' target bonuses, expressed as a percentage of annual base salary, were 40% for Dr. Lim, 30% for Dr. Chacko, and 30% for Mr. Yeung.

For 2020, annual bonuses were based on corporate performance and each individual NEO's performance as it relates to his or her area of responsibility, except for Mr. Yeung, who received his target bonus for 2020 as part of his separation agreement, as described below. The annual bonuses paid to our NEOs for 2020 are reflected in the Summary Compensation Table above.

The 2021 target annual bonus amounts for each NEO, expressed as a percentage of annual base salary, are 50% for Dr. Lim and 40% for Dr. Chacko.

Equity-based incentive awards

Our equity-based incentive awards are designed to align our interests and the interests of our stockholders with those of our employees and consultants, including our NEOs. The board of directors and compensation committee is responsible for approving equity grants. We typically grant equity awards to new hires upon their commencing employment with us. Generally, our equity awards vest over four years, subject to the employee's continued employment with us on each vesting date.

In September 2020, we granted Dr. Lim, Dr. Chacko, and Mr. Yeung options to purchase 1,791,666 shares, 250,354 shares and 538,768 shares, respectively, of our common stock under our 2018 Equity Incentive Plan (the 2018 Plan). The options were granted at an exercise price of \$1.25 per share, which our board of directors determined was equal to the fair market value per share of our common stock on the date of grant. The options are eligible to vest over a period of four years, with 1/48th of the options vesting on a monthly basis following the vesting commencement date, or September 23, 2020, subject to continuous service through each vesting date. Dr. Lim and Mr. Yeung early exercised all of these options, and Dr. Chacko early exercised 66,666 of these options for restricted shares, in each case subject to the same vesting schedule. Mr. Yeung held 516,320 restricted shares from such award at the time of the termination of his employment in December 2020, which we repurchased from him in December 2020. These stock options, and any restricted shares issued upon early exercise of these stock options, are eligible for accelerated vesting on the terms provided in each executive's employment letter.

Employment letter agreements with our NEOs

Employment letter agreement with Dr. Lim

We have entered into an employment letter agreement with Dr. Lim, which governs the terms of his employment with us as Chairman of our board of directors and as our Chief Executive Officer. Pursuant to his letter agreement, Dr. Lim is entitled to an annual base salary and an annual performance bonus with a target amount of 50% of his base salary. Dr. Lim's employment is at-will.

Regardless of the manner in which his service terminates, Dr. Lim is entitled to receive amounts previously earned during his term of service, including unpaid salary and bonus and cash out of unused vacation or paid time off. In addition, Dr. Lim is entitled to certain severance benefits under our Severance Plan under the "CEO" tier, as described below under "Severance and change in control severance plan."

Employment letter agreement with Dr. Chacko

We have entered into an employment letter agreement with Dr. Chacko, which governs the terms of his employment with us as our Chief Financial Officer. Pursuant to his letter agreement, Dr. Chacko is entitled to an annual base salary and an annual performance bonus with a target amount of 40% of his base salary. Dr. Chacko's employment is at-will.

Regardless of the manner in which his service terminates, Dr. Chacko is entitled to receive amounts previously earned during his term of service, including unpaid salary and bonus and cash out of unused vacation or paid time off. In addition, Dr. Chacko is entitled to certain severance benefits under our Severance Plan as a Tier 1 Covered Employee, as described below under "Severance and change in control severance plan."

Release agreement with Mr. Yeung

On December 15, 2020, Mr. Yeung's employment as our Chief Financial Officer and Chief Operating Officer terminated. In connection with his separation, we entered into a release agreement with Mr. Yeung, pursuant to which we agreed to pay him his target annual bonus for 2020 in the amount of \$99,600, payable in a lump sum following the effectiveness of his release. Pursuant to his release, certain unvested restricted shares were forfeited by Mr. Yeung or repurchased by us pursuant to the terms of the award agreements.

Severance and change in control severance plan

In connection with this offering, our board of directors adopted our Severance and Change in Control Severance Plan (the Severance Plan) for the benefit of certain employees of our company or any of our parents or subsidiaries as designated by our compensation committee (the Covered Employees). The severance benefits under the Severance Plan will supersede any severance benefits otherwise payable under the Covered Employees' employment offer letters.

The Severance Plan provides assurances of specified severance benefits to Covered Employees whose employment is subject to involuntary termination by us other than for cause (as defined in the Severance Plan) or the Covered Employee resigns for good reason (as defined in the Severance Plan) under the circumstances described in the Severance Plan, including, but not limited to, following a change in control (as defined in the Severance Plan). The severance benefits each Covered Employee could be entitled to receive under the Severance Plan are determined pursuant to each Covered Employee's classification as the CEO, a Tier 1 Covered Employee, Tier 2 Covered Employee or Tier 3 Covered Employee. Covered Employees are classified as follows:

- "CEO" means our Chief Executive Officer.
- "Tier 1 Covered Employee" means an employee of our company who has been designated by our compensation committee as eligible to participate under Tier 1 in the Severance Plan.
- "Tier 2 Covered Employee" means an employee of our company who has been designated by our compensation committee as eligible to participate under Tier 2 in the Severance Plan.
- "Tier 3 Covered Employee" means an employee of our company who has been designated by our compensation committee as eligible to participate under Tier 3 in the Severance Plan.

Pursuant to the Severance Plan, if, at any time before or after the end of the 12-month period beginning on the date of a change in control, we (or any of our parents or subsidiaries) terminate a Covered Employee's employment other than for cause (and other than due to death or disability (as defined in the Severance Plan)) or the Covered Employee resigns for good reason, then the Covered Employee will be entitled to receive the

[Table of Contents](#)

following severance benefits, subject to his or her execution of a release of claims and compliance with certain restrictive covenants, including with respect to non-solicitation and non-disparagement:

- An amount equal to the Covered Employee's annualized Base Pay (as defined in the Severance Plan) for 12 months, nine months, six months or six months following termination in the case of the CEO, a Tier 1, Tier 2 or Tier 3 Covered Employee, respectively, paid in a lump sum.
- Company-paid COBRA coverage for 12 months, nine months, six months or six months following termination in the case of the CEO, a Tier 1, Tier 2 or Tier 3 Covered Employee, respectively.
- The accelerated vesting of the equity compensation awards (as defined in the Severance Plan) that would have become vested and exercisable within 12 months, nine months, six months or six months following termination automatically accelerate as of the date of termination in the case of the CEO, a Tier 1, Tier 2 or Tier 3 Covered Employee, respectively.

Pursuant to the Severance Plan, if, at any time within the 12-month period following a change in control, we (or any of our parents or subsidiaries) terminate a Covered Employee's employment other than for cause (and other than due to death or disability) or the Covered Employee resigns for Good Reason, then the Covered Employee will be entitled to receive the following severance benefits, subject to his or her execution of a release of claims and compliance with certain restrictive covenants, including with respect to non-solicitation and non-disparagement:

- The following aggregate cash amount paid in installments over the following time period:
 - In the case of the CEO, the sum of 18 months of annualized base pay and 1.5 times his or her target bonus (as defined in the Severance Plan) paid in a lump sum.
 - In the case of a Tier 1 and Tier 2 Covered Employee, the sum of 12 months of annualized base pay and 1.0 times his or her target bonus paid in lump sum.
 - In the case of a Tier 3 Covered Employee, the sum of nine months of annualized base pay and the greater of 0.75 times his or her target bonus or a prorated target bonus based on the period of time he or she was employed for the fiscal year in which termination occurs.
- Company-paid COBRA coverage for 18 months, 12 months, 12 months or nine months following termination in the case of the CEO, a Tier 1, Tier 2 or Tier 3 Covered Employee, respectively.
- 100% accelerated vesting of the Covered Employee's equity compensation awards.

The severance benefits prescribed by the Severance Plan are subject to a Section 280G better-off cutback provision, which provides that, in the event that the benefits provided to the Covered Employee pursuant to the Severance Plan or otherwise constitute parachute payments with the meaning of Section 280G of the Internal Revenue Code, the Covered Employee's severance benefits under the Severance Plan will either be delivered in full or reduced to the extent necessary to avoid an excise tax under Section 4999 of the Code, whichever would result in the Covered Employee receiving the largest amount of severance benefits on an after-tax basis.

Table of Contents

Outstanding equity awards at fiscal year-end

The following table sets forth information with respect to outstanding equity awards for each of our NEOs as of December 31, 2020.

	Grant date	Option awards				Stock awards	
		Number of securities underlying unexercised options exercisable (#)	Number of securities underlying unexercised options unexercisable (#)	Option exercise price (\$)	Option expiration date	Number of shares or units of stock that have not vested (#)	Market value of shares or units of stock that have not vested (\$) ⁽⁵⁾
Jonathan E. Lim, M.D.	9/23/2020 ⁽¹⁾	—	—	—	—	1,679,687 ⁽³⁾	26,874,992
	12/11/2019 ⁽²⁾	—	—	—	—	234,375 ⁽⁴⁾	3,750,000
David M. Chacko, M.D.	9/23/2020 ⁽¹⁾	—	—	—	—	62,500 ⁽³⁾	1,000,000
	9/23/2020 ⁽¹⁾	11,481	172,207	1.25	9/22/2030	—	—
	12/11/2019 ⁽²⁾	26,042	78,124	0.67	12/10/2029	—	—
	8/21/2019 ⁽²⁾	39,064	416,665	0.67	8/20/2029	—	—
Gary Yeung	—	—	—	—	—	—	—

- (1) Stock option award vests over a period of four years with 1/48th of the shares underlying the option vesting on a monthly basis following the vesting commencement date (September 23, 2020), subject to continued service through each vesting date, and subject to accelerated vesting in certain circumstances as described above under "Employment letter agreements with our NEOs."
- (2) Stock option award vests over a period of four years with 25% of the shares underlying the option vesting on the one year anniversary of the vesting commencement date (December 11, 2019 for Drs. Lim and Chacko's December 2019 grants and August 12, 2019 for Dr. Chacko's August 2019 grant) and 1/48th of the shares underlying the option vesting on a monthly basis thereafter, subject to continued service through each vesting date, and subject to accelerated vesting in certain circumstances as described above under "Employment letter agreements with our NEOs."
- (3) Represents restricted shares issued upon early exercise of stock options originally granted on September 23, 2020 at an exercise price of \$1.25 per share, which options were subject to the standard vesting schedule described in footnote (1) above. The remaining restricted shares will vest in equal monthly installments until fully vested on September 23, 2024, subject to accelerated vesting in certain circumstances as described above under "Employment letter agreements with our NEOs."
- (4) Represents restricted shares issued upon early exercise of stock options originally granted on December 11, 2019 at an exercise price of \$0.67 per share, which options were subject to the standard vesting schedule described in footnote (2) above. The remaining restricted shares will vest in equal monthly installments until fully vested on December 11, 2023, subject to accelerated vesting in certain circumstances as described above under "Employment letter agreements with our NEOs."
- (5) The market value was computed using \$16.00 per share, which was the initial price to the public pursuant to this prospectus.

Other elements of compensation

Perquisites, health, welfare and retirement benefits

Our NEOs are eligible to participate in our employee benefit plans, including our medical, dental, vision, group life, disability and accidental death and dismemberment insurance plans, in each case on the generally on same basis as all of our other employees.

We generally do not provide perquisites or personal benefits to our named executive officers, except in limited circumstances. In 2020, we provided an allowance of \$27,600 to Mr. Yeung for housing in San Diego, California, where our principal offices are located. Our board of directors may elect to adopt qualified or non-qualified benefit plans in the future if it determines that doing so is in our best interests.

401(k) plan

We maintain a defined contribution employee retirement plan (401(k)) plan, for our employees. Our NEOs are eligible to participate in the 401(k) plan on the same basis as our other employees. The 401(k) plan is intended to qualify as a tax-qualified plan under Section 401(a) of the Internal Revenue Code. The 401(k) plan provides that each participant may make pre-tax deferrals from his or her compensation up to the statutory limit, which is \$19,500 for calendar year 2021, and other testing limits. Participants that are 50 years or older can also make "catch-up" contributions, which in calendar year 2021 may be up to an additional \$6,500 above the statutory limit. Although the 401(k) plan provides for discretionary matching and profit-sharing contributions, we currently do not make either type of contribution to the 401(k) plan. Participant contributions are held and invested, pursuant to the participant's instructions, by the plan's trustee.

Nonqualified deferred compensation

We do not maintain nonqualified defined contribution plans or other nonqualified deferred compensation plans. Our board of directors may elect to provide our officers and other employees with non-qualified defined contribution or other nonqualified deferred compensation benefits in the future if it determines that doing so is in our best interests.

Termination or change in control benefits

Our NEOs may become entitled to certain benefits or enhanced benefits in connection with a change in control of our company. Our Severance Plan entitles each of our NEOs to certain benefits upon a qualifying termination and in connection with a change in control of our company. For additional discussion, please see "Severance and change in control severance plan" above.

Incentive award plans

2021 Incentive Award Plan

Our board of directors has adopted and our stockholders have approved the 2021 Plan, which became effective in connection with this offering. Under the 2021 Plan, we may grant cash and equity incentive awards to eligible service providers in order to attract, motivate and retain the talent for which we compete. The material terms of the 2021 Plan are summarized below.

Eligibility and administration. Our employees, consultants and directors, and employees and consultants of our subsidiaries, will be eligible to receive awards under the 2021 Plan. Following our initial public offering, the 2021 Plan will generally be administered by our board of directors with respect to awards to non-employee directors and by our compensation committee with respect to other participants, each of which may delegate its duties and responsibilities to committees of our directors and/or officers (referred to collectively as the plan administrator below), subject to certain limitations that may be imposed under the 2021 Plan, Section 16 of the Exchange Act and/or stock exchange rules, as applicable. The plan administrator will have the authority to make all determinations and interpretations under, prescribe all forms for use with, and adopt rules for the administration of, the 2021 Plan, subject to its express terms and conditions. The plan administrator will also set the terms and conditions of all awards under the 2021 Plan, including any vesting and vesting acceleration conditions.

Limitation on awards and shares available. The number of shares initially available for issuance under awards granted pursuant to the 2021 Plan is the sum of (1) 15,150,000 shares of our common stock, plus (2) any shares

subject to outstanding awards under the 2018 Plan as of the effective date of the 2021 Plan that became available for issuance under the 2021 Plan thereafter in accordance with its terms. The number of shares initially available for issuance will be increased on January 1 of each calendar year beginning in 2022 and ending in 2031, by an amount equal to the lesser of (a) 5% of the shares of common stock outstanding on the final day of the immediately preceding calendar year and (b) such smaller number of shares as determined by our board of directors. No more than 100,000,000 shares of common stock may be issued upon the exercise of incentive stock options under the 2021 Plan. Shares issued under the 2021 Plan may be authorized but unissued shares, shares purchased on the open market or treasury shares.

If an award under the 2021 Plan or the 2018 Plan expires, lapses or is terminated, exchanged for or settled in cash, surrendered, repurchased, cancelled without having been fully exercised or forfeited, any shares subject to such award will, as applicable, become or again be available for new grants under the 2021 Plan. Awards granted under the 2021 Plan upon the assumption of, or in substitution for, awards authorized or outstanding under a qualifying equity plan maintained by an entity with which we enter into a merger or similar corporate transaction will not reduce the shares available for grant under the 2021 Plan.

Awards. The 2021 Plan provides for the grant of stock options, including incentive stock options, or ISOs, and nonqualified stock options, or NSOs; restricted stock; dividend equivalents; restricted stock units, or RSUs; stock appreciation rights, or SARs; and other stock or cash-based awards. Certain awards under the 2021 Plan may constitute or provide for a deferral of compensation, subject to Section 409A of the Internal Revenue Code, which may impose additional requirements on the terms and conditions of such awards. All awards under the 2021 Plan will be set forth in award agreements, which will detail the terms and conditions of the awards, including any applicable vesting and payment terms and post-termination exercise limitations. Awards other than cash awards generally will be settled in shares of our common stock, but the plan administrator may provide for cash settlement of any award. A brief description of each award type follows.

- **Stock options.** Stock options provide for the purchase of shares of our common stock in the future at an exercise price set on the grant date. ISOs, by contrast to NSOs, may provide tax deferral beyond exercise and favorable capital gains tax treatment to their holders if certain holding period and other requirements of the Internal Revenue Code are satisfied. The exercise price of a stock option will not be less than 100% of the fair market value of the underlying share on the date of grant (or 110% in the case of ISOs granted to certain significant stockholders), except with respect to certain substitute options granted in connection with a corporate transaction. The term of a stock option may not be longer than ten years (or five years in the case of ISOs granted to certain significant stockholders). Vesting conditions determined by the plan administrator may apply to stock options and may include continued service, performance and/or other conditions. ISOs generally may be granted only to our employees and employees of our parent or subsidiary corporations, if any.
- **SARs.** SARs entitle their holder, upon exercise, to receive from us an amount equal to the appreciation of the shares subject to the award between the grant date and the exercise date. The exercise price of a SAR will not be less than 100% of the fair market value of the underlying share on the date of grant (except with respect to certain substitute SARs granted in connection with a corporate transaction), and the term of a SAR may not be longer than ten years. Vesting conditions determined by the plan administrator may apply to SARs and may include continued service, performance and/or other conditions.
- **Restricted stock and RSUs.** Restricted stock is an award of nontransferable shares of our common stock that remain forfeitable unless and until specified conditions are met, and which may be subject to a purchase price. RSUs are contractual promises to deliver shares of our common stock in the future, which may also remain forfeitable unless and until specified conditions are met. Delivery of the shares underlying RSUs may be deferred under the terms of the award or at the election of the participant, if the plan administrator

[Table of Contents](#)

permits such a deferral. Conditions applicable to restricted stock and RSUs may be based on continuing service, the attainment of performance goals and/or such other conditions as the plan administrator may determine.

- *Other stock or cash-based awards.* Other stock or cash-based awards are awards of cash, fully vested shares of our common stock and other awards valued wholly or partially by referring to, or otherwise based on, shares of our common stock. Other stock or cash-based awards may be granted to participants and may also be available as a payment form in the settlement of other awards, as standalone payments and as payment in lieu of base salary, bonus, fees or other cash compensation otherwise payable to any individual who is eligible to receive awards. The plan administrator will determine the terms and conditions of other stock or cash-based awards, which may include vesting conditions based on continued service, performance and/or other conditions.
- *Dividend equivalents.* RSUs or other stock and cash-based awards may be accompanied by the right to receive the equivalent value of dividends paid on shares of our common stock prior to the delivery of the underlying shares. Such dividend equivalents will only be paid out to the extent that any vesting conditions are subsequently satisfied, unless otherwise determined by the plan administrator. No dividend equivalents will be payable on stock options or SARs.

Performance awards. Performance awards include any of the foregoing awards that are granted subject to vesting and/or payment based on the attainment of specified performance goals or other criteria the plan administrator may determine, which may or may not be objectively determinable. Performance criteria upon which performance goals are established by the plan administrator may include: net earnings or losses (either before or after one or more of interest, taxes, depreciation, amortization and noncash equity-based compensation expense); gross or net sales or revenue or sales or revenue growth; net income (either before or after taxes) or adjusted net income; profits (including, but not limited to, gross profits, net profits, profit growth, net operation profit or economic profit), profit return ratios or operating margin; budget or operating earnings (either before or after taxes or before or after allocation of corporate overhead and bonus); cash flow (including operating cash flow and free cash flow or cash flow return on capital); return on assets; return on capital or invested capital; cost of capital; return on stockholders' equity; total stockholder return; return on sales; costs, reductions in costs and cost control measures; expenses; working capital; earnings or loss per share; adjusted earnings or loss per share; price per share or dividends per share (or appreciation in or maintenance of such price or dividends); regulatory achievements or compliance; implementation, completion or attainment of objectives relating to research, development, regulatory, commercial or strategic milestones or developments; market share; economic value or economic value added models; division, group or corporate financial goals; customer satisfaction/growth; customer service; employee satisfaction; recruitment and maintenance of personnel; human capital management (including diversity and inclusion); supervision of litigation and other legal matters; strategic partnerships and transactions; financial ratios (including those measuring liquidity, activity, profitability or leverage); debt levels or reductions; sales-related goals; financing and other capital raising transactions; cash on hand; acquisition activity; investment sourcing activity; and marketing initiatives, any of which may be measured in absolute terms or as compared to any incremental increase or decrease. Such performance goals also may be based solely by reference to our performance or the performance of a subsidiary, division, business segment or business unit, or based upon performance relative to performance of other companies or upon comparisons of any of the indicators of performance relative to performance of other companies.

Director compensation. The 2021 Plan provides that the plan administrator may establish compensation for non-employee directors from time to time subject to the 2021 Plan's limitations. Prior to this offering, our stockholders approved the initial terms of our non-employee director compensation program, which is

[Table of Contents](#)

described below under the heading “Director Compensation.” Our board of directors or its authorized committee may modify the non-employee director compensation program from time to time in the exercise of its business judgment, taking into account such factors, circumstances and considerations as it shall deem relevant from time to time, provided that the sum of any cash compensation or other compensation and the grant date fair value (as determined in accordance with FASB ASC 718, or any successor thereto) of any equity awards granted as compensation for services as a non-employee director during any calendar year may not exceed \$750,000, increased to \$1,500,000 in the calendar year of a non-employee director’s initial service as a non-employee director or during which a non-employee director serves as chair of our board of directors or lead independent director (which limits will not apply to the compensation for any non-employee director who serves in any capacity in addition to that of a non-employee director for which he or she receives additional compensation or any compensation paid to any non-employee director prior to the calendar year following the calendar year in which this offering occurs). The plan administrator may make exceptions to this limit for individual non-employee directors in extraordinary circumstances, as the plan administrator may determine in its discretion, provided that the non-employee director receiving such additional compensation may not participate in the decision to award such compensation or in other contemporaneous compensation decisions involving non-employee directors.

Certain transactions. In connection with certain transactions and events affecting our common stock, including a change in control (as defined below), or change in any applicable laws or accounting principles, the plan administrator has broad discretion to take action under the 2021 Plan to prevent the dilution or enlargement of intended benefits, facilitate such transaction or event, or give effect to such change in applicable laws or accounting principles. This includes canceling awards in exchange for either an amount in cash or other property with a value equal to the amount that would have been obtained upon exercise or settlement of the vested portion of such award or realization of the participant’s rights under the vested portion of such award, accelerating the vesting of awards, providing for the assumption or substitution of awards by a successor entity, adjusting the number and type of shares available, replacing awards with other rights or property or terminating awards under the 2021 Plan. In the event of a change in control where the acquirer does not assume awards granted under the 2021 Plan, awards issued under the 2021 Plan shall be subject to accelerated vesting such that 100% of the awards will become vested and exercisable or payable, as applicable. In addition, in the event of certain non-reciprocal transactions with our stockholders (an equity restructuring) the plan administrator will make equitable adjustments to the 2021 Plan and outstanding awards as it deems appropriate to reflect the equity restructuring.

For purposes of the 2021 Plan, a “change in control” means and includes each of the following:

- a transaction or series of transactions whereby any “person” or related “group” of “persons” (as such terms are used in Sections 13(d) and 14(d)(2) of the Exchange Act) (other than our company or our subsidiaries or any employee benefit plan maintained by us or any of our subsidiaries or a “person” that, prior to such transaction, directly or indirectly controls, is controlled by, or is under common control with, us) directly or indirectly acquires beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) of our securities possessing more than 50% of the total combined voting power of our securities outstanding immediately after such acquisition; or
- during any period of two consecutive years, individuals who, at the beginning of such period, constitute our board of directors together with any new directors (other than a director designated by a person who shall have entered into an agreement with us to effect a change in control transaction) whose election by our board of directors or nomination for election by our stockholders was approved by a vote of at least two-thirds of the directors then still in office who either were directors at the beginning of the two-year period or whose election or nomination for election was previously so approved, cease for any reason to constitute a majority thereof; or

[Table of Contents](#)

- the consummation by us (whether directly or indirectly) of (x) a merger, consolidation, reorganization, or business combination or (y) a sale or other disposition of all or substantially all of our assets in any single transaction or series of related transactions or (z) the acquisition of assets or stock of another entity, in each case other than a transaction:
 - which results in our voting securities outstanding immediately before the transaction continuing to represent either by remaining outstanding or by being converted into voting securities of the company or the person that, as a result of the transaction, controls, directly or indirectly, the company or owns, directly or indirectly, all or substantially all of our assets or otherwise succeeds to our business, directly or indirectly, at least a majority of the combined voting power of the successor entity's outstanding voting securities immediately after the transaction, and
 - after which no person or group beneficially owns voting securities representing 50% or more of the combined voting power of the successor entity; provided, however, that no person or group shall be treated as beneficially owning 50% or more of the combined voting power of the successor entity solely as a result of the voting power held in our company prior to the consummation of the transaction.

Foreign participants, clawback provisions, transferability and participant payments. With respect to foreign participants, the plan administrator may modify award terms, establish subplans and/or adjust other terms and conditions of awards, subject to the share limits described above. All awards will be subject to the provisions of any clawback policy implemented by our company and to the extent set forth in such clawback policy or in the applicable award agreement. With limited exceptions for estate planning, domestic relations orders, certain beneficiary designations and the laws of descent and distribution, awards under the 2021 Plan are generally nontransferable prior to vesting and are exercisable only by the participant. With regard to tax withholding obligations arising in connection with awards under the 2021 Plan and exercise price obligations arising in connection with the exercise of stock options under the 2021 Plan, the plan administrator may, in its discretion, accept cash, wire transfer, or check, shares of our common stock that meet specified conditions (a market sell order) or such other consideration as it deems suitable or any combination of the foregoing.

Plan amendment and termination. Our board of directors may amend, suspend or terminate the 2021 Plan at any time; however, except in connection with certain changes in our capital structure, stockholder approval will be required for any amendment that increases the number of shares available under the 2021 Plan. The plan administrator will have the authority, without the approval of our stockholders, to amend any outstanding stock option or SAR to reduce its exercise price per share. No award may be granted pursuant to the 2021 Plan after the tenth anniversary of the date on which our board of directors adopts the 2021 Plan.

Securities laws. The 2021 Plan is intended to conform to all provisions of the Securities Act, the Exchange Act and any and all regulations and rules promulgated by the SEC thereunder, including, without limitation, Exchange Act Rule 16b-3. The 2021 Plan will be administered, and awards will be granted and may be exercised, only in such a manner as to conform to such laws, rules and regulations.

Federal income tax consequences. The material federal income tax consequences of the 2021 Plan under current federal income tax law are summarized in the following discussion, which deals with the general US federal income tax principles applicable to the 2021 Plan. The following discussion is based upon laws, regulations, rulings and decisions now in effect, all of which are subject to change. Foreign, state and local tax laws and employment, estate and gift tax considerations are not discussed due to the fact that they may vary depending on individual circumstances and from locality to locality.

- *Stock options and SARs.* A 2021 Plan participant generally will not recognize taxable income and we generally will not be entitled to a tax deduction upon the grant of a stock option or SAR. The tax consequences of exercising a stock option and the subsequent disposition of the shares received upon

exercise will depend upon whether the option qualifies as an ISO or an NSO. Upon exercising an NSO when the fair market value of our stock is higher than the exercise price of the option, a 2021 Plan participant generally will recognize taxable income at ordinary income tax rates equal to the excess of the fair market value of the stock on the date of exercise over the purchase price, and we (or our subsidiaries, if any) generally will be entitled to a corresponding tax deduction for compensation expense, in the amount equal to the amount by which the fair market value of the shares purchased exceeds the purchase price for the shares. Upon a subsequent sale or other disposition of the option shares, the participant will recognize a short-term or long-term capital gain or loss in the amount of the difference between the sales price of the shares and the participant's tax basis in the shares.

Upon exercising an ISO, a 2021 Plan participant generally will not recognize taxable income, and we will not be entitled to a tax deduction for compensation expense. However, upon exercise, the amount by which the fair market value of the shares purchased exceeds the purchase price will be an item of adjustment for alternative minimum tax purposes. The participant will recognize taxable income upon a sale or other taxable disposition of the option shares. For federal income tax purposes, dispositions are divided into two categories: qualifying and disqualifying. A qualifying disposition generally occurs if the sale or other disposition is made more than two years after the date the option was granted and more than one year after the date the shares are transferred upon exercise. If the sale or disposition occurs before these two periods are satisfied, then a disqualifying disposition generally will result.

Upon a qualifying disposition of ISO shares, the participant will recognize long-term capital gain in an amount equal to the excess of the amount realized upon the sale or other disposition of the shares over their purchase price. If there is a disqualifying disposition of the shares, then the excess of the fair market value of the shares on the exercise date (or, if less, the price at which the shares are sold) over their purchase price will be taxable as ordinary income to the participant. If there is a disqualifying disposition in the same year of exercise, it eliminates the item of adjustment for alternative minimum tax purposes. Any additional gain or loss recognized upon the disposition will be recognized as a capital gain or loss by the participant.

We will not be entitled to any tax deduction if the participant makes a qualifying disposition of ISO shares. If the participant makes a disqualifying disposition of the shares, we should be entitled to a tax deduction for compensation expense in the amount of the ordinary income recognized by the participant.

Upon exercising or settling a SAR, a 2021 Plan participant will recognize taxable income at ordinary income tax rates, and we should be entitled to a corresponding tax deduction for compensation expense, in the amount paid or value of the shares issued upon exercise or settlement. Payments in shares will be valued at the fair market value of the shares at the time of the payment, and upon the subsequent disposition of the shares the participant will recognize a short-term or long-term capital gain or loss in the amount of the difference between the sales price of the shares and the participant's tax basis in the shares.

- *Restricted stock and RSUs.* A 2021 Plan participant generally will not recognize taxable income at ordinary income tax rates and we generally will not be entitled to a tax deduction upon the grant of restricted stock or RSUs. Upon the termination of restrictions on restricted stock or the payment of RSUs, the participant will recognize taxable income at ordinary income tax rates, and we should be entitled to a corresponding tax deduction for compensation expense, in the amount paid to the participant or the amount by which the then fair market value of the shares received by the participant exceeds the amount, if any, paid for them. Upon the subsequent disposition of any shares, the participant will recognize a short-term or long-term capital gain or loss in the amount of the difference between the sales price of the shares and the participant's tax basis in the shares. However, a 2021 Plan participant granted restricted stock that is subject to forfeiture or repurchase through a vesting schedule such that it is subject to a risk of forfeiture (as defined in Section 83 of the Internal Revenue Code) may make an election under Section 83(b) of the Internal Revenue Code to

[Table of Contents](#)

recognize taxable income at ordinary income tax rates, at the time of the grant, in an amount equal to the fair market value of the shares of common stock on the date of grant, less the amount paid, if any, for the shares. We will be entitled to a corresponding tax deduction for compensation, in the amount recognized as taxable income by the participant. If a timely Section 83(b) election is made, the participant will not recognize any additional ordinary income on the termination of restrictions on restricted stock, and we will not be entitled to any additional tax deduction.

- *Other stock or cash-based awards.* A 2021 Plan participant will not recognize taxable income and we will not be entitled to a tax deduction upon the grant of other stock or cash-based awards until cash or shares are paid or distributed to the participant. At that time, any cash payments or the fair market value of shares that the participant receives will be taxable to the participant at ordinary income tax rates and we should be entitled to a corresponding tax deduction for compensation expense. Payments in shares will be valued at the fair market value of the shares at the time of the payment. Upon the subsequent disposition of the shares, the participant will recognize a short-term or long-term capital gain or loss in the amount of the difference between the sales price of the shares and the participant's tax basis in the shares.

2018 Equity Incentive Plan

Our board of directors adopted the 2018 Plan in July 2018 and our stockholders approved our 2018 Plan in July 2018. Our 2018 Plan was most recently amended by our board of directors and our stockholders in February 2021.

Eligibility and administration. Our employees, consultants and directors, and employees and consultants of our subsidiaries, are eligible to receive awards under the 2018 Plan. Our board of directors, or a duly authorized committee of our board of directors to which the board delegates its administrative authority, administers our 2018 Plan and is referred to as the plan administrator herein. Under our 2018 Plan, the plan administrator has the authority to, among other things, select the persons to whom awards are to be made, to determine the type or types of awards to be granted to each person, determine the number of awards to grant, determine the number of shares to be subject to awards, and the terms and conditions of awards, and make all other determinations and decisions and to take all other actions necessary or advisable for the administration of the 2018 Plan. The plan administrator is also authorized to establish, adopt, amend or revise rules relating to administration of the 2018 Plan, subject to certain restrictions.

Shares available. Subject to certain adjustments, awards may be made under the 2018 Plan covering up to 21,545,845 shares of common stock. Shares subject to stock awards granted under our 2018 Plan that expire, lapse or are terminated, surrendered, cancelled without having been fully exercised or that are forfeited or repurchased, in any case in a manner that results in any shares of common stock covered by the award not being issued or being so reacquired, then those shares will again become available for issuance under the 2018 Plan. This includes shares used to pay the exercise price of a stock award or to satisfy the tax withholding obligations related to a stock award.

As of December 31, 2020, 6,541,422 shares of our common stock were subject to outstanding awards under the 2018 Plan and 2,314,746 shares of our common stock remained available for future issuance under the 2018 Plan. Following the adoption of the 2021 Plan, no further awards will be granted under the 2018 Plan.

Effective February 22, 2021, the share reserve under our 2018 Plan was increased to 21,545,845 shares pursuant to an amendment approved by our board of directors and our stockholders. As of March 31, 2021, 10,030,681 shares of our common stock were subject to outstanding awards under the 2018 Plan and 6,719,209 shares of our common stock remained available for issuance under the 2018 Plan. Since March 31, 2021, we have granted options to purchase a total of 3,729,154 shares of our common stock under the 2018 Plan.

[Table of Contents](#)

Awards. The 2018 Plan provides for the grant of ISOs to employees, including employees of any parent or subsidiary, and for the grant of NSOs, restricted stock awards, RSUs, and other stock-based awards to employees, directors and consultants. All awards under the 2018 Plan will be set forth in award agreements, which will detail the terms and conditions of the awards, including any applicable vesting and payment terms and post-termination exercise limitations. A brief description of each award type follows.

- *Stock options.* Stock options provide for the purchase of shares of our common stock in the future at an exercise price set on the grant date. ISOs, by contrast to NSOs, may provide tax deferral beyond exercise and favorable capital gains tax treatment to their holders if certain holding period and other requirements of the Internal Revenue Code are satisfied. The exercise price of a stock option will not be less than 100% of the fair market value of the underlying share on the date of grant (or 110% in the case of ISOs granted to certain significant stockholders), except with respect to certain substitute options granted in connection with a corporate transaction. The term of a stock option may not be longer than ten years (or five years in the case of ISOs granted to certain significant stockholders). Vesting conditions determined by the plan administrator may apply to stock options and may include continued service, performance and/or other conditions. ISOs generally may be granted only to our employees and employees of our parent or subsidiary corporations, if any.
- *Restricted stock and RSUs.* Restricted stock is an award of shares of our common stock that remain forfeitable or subject to repurchase at the original purchase price paid by the holder unless and until specified conditions are met, and which may be subject to a purchase price. RSUs are contractual promises to deliver shares of our common stock in the future, which may also remain forfeitable unless and until specified conditions are met and may be accompanied by the right to receive the equivalent value of dividends paid on shares of our common stock prior to the delivery of the underlying shares. Delivery of the shares underlying RSUs may be deferred under the terms of the award or at the election of the participant, if the plan administrator permits such a deferral. Conditions applicable to restricted stock and RSUs may be based on continuing service, the attainment of performance goals and/or such other conditions as the plan administrator may determine.
- *Other stock-based awards.* Other stock-based awards are awards of fully vested shares of our common stock and other awards valued wholly or partially by referring to, or otherwise based on, shares of our common stock. Other stock-based awards may be granted to participants and may also be available as a payment form in the settlement of other awards, as standalone payments and as payment in lieu of base salary, bonus, fees or other cash compensation otherwise payable to any individual who is eligible to receive awards. The plan administrator will determine the terms and conditions of other stock or cash-based awards, which may include vesting conditions based on continued service, performance and/or other conditions.

Certain transactions. The plan administrator has broad discretion to equitably adjust the provisions of the 2018 Plan and the terms and conditions of existing and future awards, including with respect to aggregate number and type of shares subject to the 2018 Plan and awards granted pursuant to the 2018 Plan, to prevent the dilution or enlargement of intended benefits and/or facilitate necessary or desirable changes in the event of certain transactions and events affecting our common stock, such as stock dividends, stock splits, mergers, acquisitions, consolidations and other corporate transactions. The plan administrator may also provide for the acceleration, cash-out, termination, assumption, substitution or conversion of awards in the event of a change in control or certain other unusual or nonrecurring events or transactions. In addition, in the event of certain non-reciprocal transactions with our stockholders (an equity restructuring) the plan administrator will make equitable adjustments to the 2018 Plan and outstanding awards as it deems appropriate to reflect the equity restructuring. In the event of a change in control where the acquirer does not assume awards granted under the 2018 Plan, with respect to awards issued under the 2018 Plan held by persons who have not experienced a

termination of service, the 2018 Plan provides for accelerated vesting such that 100% of the awards will become vested and exercisable or payable, as applicable, immediately prior to the change in control.

Plan amendment or termination. Our board of directors has the authority to amend, suspend or terminate the 2018 Plan, provided that such action does not materially and adversely affect any award outstanding without the affected participant's consent. Stockholder approval of any amendment to the 2018 Plan will be obtained to the extent necessary and desirable to comply with any applicable law. Unless terminated sooner, the 2018 Plan will automatically terminate in July 2028.

Securities laws and federal income tax consequences. The 2018 Plan is designed to comply with applicable securities laws in the same manner as described above in the description of the 2021 Plan under the heading “—2021 incentive award plan—securities laws.” The general US federal income tax consequences of awards under the 2018 Plan are the same as those described above with respect to similar awards in the description of the 2021 Plan under the heading “—2021 incentive award plan—federal income tax consequences.”

2021 Employee Stock Purchase Plan

Our board of directors has adopted and our stockholders have approved the ESPP, which became effective the day prior to the first public trading date of our common stock. The material terms of which are summarized below.

The ESPP is comprised of two distinct components in order to provide increased flexibility to grant options to purchase shares under the ESPP to US and to non-US employees. Specifically, the ESPP authorizes (1) the grant of options to US employees that are intended to qualify for favorable US federal tax treatment under Section 423 of the Code (Section 423 Component), and (2) the grant of options that are not intended to be tax-qualified under Section 423 of the Code to facilitate participation for employees located outside of the US who do not benefit from favorable US federal tax treatment and to provide flexibility to comply with non-US law and other considerations (Non-Section 423 Component). Where permitted under local law and custom, we expect that the Non-Section 423 Component will generally be operated and administered on terms and conditions similar to the Section 423 Component.

Shares available for awards; administration. A total of 1,260,000 shares of our common stock will initially be reserved for issuance under the ESPP. In addition, the number of shares available for issuance under the ESPP will be annually increased on January 1 of each calendar year beginning in 2022 and ending in and including 2031, by an amount equal to the lesser of (A) 1% of the shares outstanding on the final day of the immediately preceding calendar year and (B) such smaller number of shares as is determined by our board of directors, provided that no more than 20,000,000 shares of our common stock may be issued under the Section 423 Component. Our board of directors or a committee of our board of directors will administer and will have authority to interpret the terms of the ESPP and determine eligibility of participants. We expect that the compensation committee will be the initial administrator of the ESPP (referred to as the plan administrator below).

Eligibility. We expect that all of our employees will be eligible to participate in the ESPP. However, an employee may not be granted rights to purchase stock under the ESPP if the employee, immediately after the grant, would own (directly or through attribution) stock possessing 5% or more of the total combined voting power or value of all classes of our stock.

Grant of rights. Stock will be offered under the ESPP during offering periods. The length of the offering periods under the ESPP will be determined by the plan administrator and may be up to twenty-seven months long. Employee payroll deductions will be used to purchase shares on each purchase date during an offering period. The purchase dates for each offering period will be the final trading day in the offering period. Offering

[Table of Contents](#)

periods under the ESPP will commence when determined by the plan administrator. The plan administrator may, in its discretion, modify the terms of future offering periods. In non-US jurisdictions where participation in the ESPP through payroll deductions is prohibited, the plan administrator may provide that an eligible employee may elect to participate through contributions to the participant's account under the ESPP in a form acceptable to the plan administrator in lieu of or in addition to payroll deductions.

The ESPP permits participants to purchase common stock through payroll deductions of up to a specified percentage of their eligible compensation. The plan administrator will establish a maximum number of shares that may be purchased by a participant during any offering period. In addition, no employee will be permitted to accrue the right to purchase stock under the Section 423 Component at a rate in excess of \$25,000 worth of shares during any calendar year during which such a purchase right is outstanding (based on the fair market value per share of our common stock as of the first day of the offering period).

On the first trading day of each offering period, each participant will automatically be granted an option to purchase shares of our common stock. The option will expire at the end of the applicable offering period and will be exercised at that time to the extent of the payroll deductions accumulated during the offering period. The purchase price of the shares, in the absence of a contrary designation, will be 85% of the lower of the fair market value of our common stock on the first trading day of the offering period or on the purchase date. Participants may voluntarily end their participation in the ESPP at any time during a specified period prior to the end of the applicable offering period and will be paid their accrued payroll deductions that have not yet been used to purchase shares of common stock. Participation ends automatically upon a participant's termination of employment.

A participant may not transfer rights granted under the ESPP other than by will or the laws of descent and distribution, and such rights are generally exercisable only by the participant.

Certain transactions. In the event of certain non-reciprocal transactions or events affecting our common stock, the plan administrator will make equitable adjustments to the ESPP and outstanding rights. In the event of certain unusual or non-recurring events or transactions, including a change in control, the plan administrator may provide for (1) either the replacement of outstanding rights with other rights or property or termination of outstanding rights in exchange for cash, (2) the assumption or substitution of outstanding rights by the successor or survivor corporation or parent or subsidiary thereof, if any, (3) the adjustment in the number and type of shares of stock subject to outstanding rights, (4) the use of participants' accumulated payroll deductions to purchase stock on a new purchase date prior to the next scheduled purchase date and termination of any rights under ongoing offering periods or (5) the termination of all outstanding rights.

Plan amendment. The plan administrator may amend, suspend or terminate the ESPP at any time. However, stockholder approval will be obtained for any amendment that increases the aggregate number or changes the type of shares that may be sold pursuant to rights under the ESPP or changes the corporations or classes of corporations whose employees are eligible to participate in the ESPP.

Securities laws. The ESPP has been designed to comply with various securities laws in the same manner as described above in the description of the 2021 Plan.

Federal income taxes. The material US federal income tax consequences of the ESPP under current US federal income tax law are summarized in the following discussion, which deals with the general US federal income tax principles applicable to the ESPP. The following discussion is based upon US laws, regulations, rulings and decisions now in effect, all of which are subject to change. Foreign, state and local tax laws and employment, estate and gift tax considerations are not discussed due to the fact that they may vary depending on individual circumstances and from locality to locality.

[Table of Contents](#)

The ESPP, and the right of participants to make purchases thereunder, is intended to qualify under the provisions of Section 423 of the Internal Revenue Code. Under the applicable Internal Revenue Code provisions, no income will be taxable to a participant until the sale or other disposition of the shares purchased under the ESPP. This means that an eligible employee will not recognize taxable income on the date the employee is granted an option under the ESPP (i.e., the first day of the offering period). In addition, the employee will not recognize taxable income upon the purchase of shares. Upon such sale or disposition, the participant will generally be subject to tax in an amount that depends upon the length of time such shares are held by the participant prior to disposing of them. If the shares are sold or disposed more than two years from the first day of the offering period during which the shares were purchased and more than one year from the date of purchase, or if the participant dies while holding the shares, the participant (or his or her estate) will recognize ordinary income measured as the lesser of: (1) the excess of the fair market value of the shares at the time of such sale or disposition over the purchase price; or (2) an amount equal to 15% of the fair market value of the shares as of the first day of the offering period. Any additional gain will be treated as long-term capital gain. If the shares are held for the holding periods described above but are sold for a price that is less than the purchase price, there is no ordinary income and the participating employee has a long-term capital loss for the difference between the sale price and the purchase price.

If the shares are sold or otherwise disposed of before the expiration of the holding periods described above, the participant will recognize ordinary income generally measured as the excess of the fair market value of the shares on the date the shares are purchased over the purchase price and we will be entitled to a tax deduction for compensation expense in the amount of ordinary income recognized by the employee. Any additional gain or loss on such sale or disposition will be long-term or short-term capital gain or loss, depending on how long the shares were held following the date they were purchased by the participant prior to disposing of them. If the shares are sold or otherwise disposed of before the expiration of the holding periods described above but are sold for a price that is less than the purchase price, the participant will recognize ordinary income equal to the excess of the fair market value of the shares on the date of purchase over the purchase price (and we will be entitled to a corresponding deduction), but the participant generally will be able to report a capital loss equal to the difference between the sales price of the shares and the fair market value of the shares on the date of purchase.

Director compensation

From time to time, we have granted stock-based compensation to the non-employee members of our board of directors for their services as directors.

In September 2020, we granted Dr. Varney options to purchase 125,000 shares of our common stock and 83,333 shares of our common stock, in each case, under the 2018 Plan. The options were granted in connection with Dr. Varney's service as an SAB member and his commencement of employment with us. The options vest over a period of four years, with 25% of the options vesting on the one year anniversary of the vesting commencement date, or August 15, 2020 and September 1, 2020, respectively, and 1/48th of the options vesting on a monthly basis thereafter, subject to Dr. Varney's continuous service through each vesting date. The options were granted at an exercise price of \$1.25 per share, which our board of directors determined was equal to the fair market value per share of our common stock on the date of grant.

Also in September 2020, we granted each of Dr. Bristol, Mr. Casdin, Dr. Multani, and Dr. Harding-Start an option to purchase 62,500 shares of our common stock under the 2018 Plan. The options vest over a period of four years with 1/48th of the options vesting on a monthly basis following the vesting commencement date, or September 23, 2020, subject to continuous service through each vesting date, and are early exercisable. The options were granted at an exercise price of \$1.25 per share, which our board of directors determined was

[Table of Contents](#)

equal to the fair market value per share of our common stock on the date of grant. Dr. Bristol and Mr. Casdin early exercised these options (62,500 shares each) and Dr. Multani early exercised a portion of these options (41,666 shares) for restricted shares, in each case subject to the same vesting schedule.

In addition, we have reimbursed, and will continue to reimburse, our non-employee directors for their actual out-of-pocket costs and expenses incurred in connection with attending board and committee meetings.

The following table summarizes compensation received by our non-employee directors during the year ended December 31, 2020. Dr. Lim, our Chairman and Chief Executive Officer, and Dr. Varney, our Chair of R&D and SAB member, are also members of our board of directors, but do not receive any additional compensation for their service as directors in addition to the compensation they receive as employees. Dr. Lim's compensation is described further above. Dr. Varney is currently a non-executive employee. For a description of the employment arrangements with Dr. Varney, please see "—Employment arrangements with Dr. Varney" below.

Name	Fees earned or paid in cash (\$)	Option awards (\$)⁽¹⁾	All other compensation (\$)⁽²⁾	Total (\$)
James A. Bristol, Ph.D.	—	51,792	—	51,792
Alexander W. Casdin	—	51,792	—	51,792
Valerie Harding-Start, Ph.D.	—	51,792	—	51,792
Pratik S. Multani, M.D.	—	51,792	—	51,792
Michael D. Varney, Ph.D.	—	172,885	26,300	199,185

(1) Represents the grant date fair value of stock options to purchase shares of our common stock computed in accordance with FASB ASC 718. See Note 10 to our consolidated financial statements for the year ended December 31, 2020 included with this prospectus for a description of the assumptions used in valuing our stock options.

(2) Amounts in this column for Dr. Varney include the base salary paid to him for his role as Chair of R&D during 2020.

The aggregate number of shares subject to stock options or restricted shares outstanding at December 31, 2020 for the individuals who served as non-employee directors during 2020 was as follows:

Name	Number of securities underlying options outstanding at December 31, 2020	Number of shares of restricted stock outstanding at December 31, 2020
James A. Bristol, Ph.D.	—	108,074
Alexander W. Casdin	—	108,074
Valerie Harding-Start, Ph.D.	187,500	—
Pratik S. Multani, M.D.	20,833	87,240
Michael D. Varney, Ph.D.	208,333	—

In connection with this offering, our board of directors has adopted and our stockholders have approved the initial terms of our non-employee director compensation program. The material terms of the non-employee director compensation program are summarized below.

The non-employee director compensation program will provide for annual retainer fees and/or long-term equity awards for our non-employee directors. We expect each non-employee director will receive an annual retainer of \$40,000. Non-employee directors serving as the chairs of the audit, compensation and nominating and corporate governance committees will receive additional annual retainers of \$15,000, \$10,000 and \$8,000, respectively. Non-employee directors serving as members of the audit, compensation and nominating and corporate governance committees will receive additional annual retainers of \$7,500, \$5,000 and \$4,000, respectively. The non-employee directors will also receive initial grants of options to purchase 80,000 shares of our common stock, vesting over three years, upon election to the board of directors, and thereafter annual

grants of options to purchase 40,000 shares of our common stock, vesting on the first to occur of (i) the first anniversary of the grant date or (ii) the next occurring annual meeting of our stockholders.

Compensation under our non-employee director compensation program will be subject to the annual limits on non-employee director compensation set forth in the 2021 Plan, as described above. Our board of directors or its authorized committee may modify the non-employee director compensation program from time to time in the exercise of its business judgment, taking into account such factors, circumstances and considerations as it shall deem relevant from time to time, subject to the annual limit on non-employee director compensation set forth in the 2021 Plan (which limits will not apply to any non-employee director that serves in any additional capacity with the company for which he or she receives compensation or any compensation paid to any non-employee director prior to the calendar year following the calendar year in which this offering occurs). As provided in the 2021 Plan, our board of directors or its authorized committee may make exceptions to this limit for individual non-employee directors in extraordinary circumstances, as the board of directors or its authorized committee may determine in its discretion, provided that the non-employee director receiving such additional compensation may not participate in the decision to award such compensation or in other compensation decisions involving non-employee directors.

Employment arrangements with Dr. Varney

We have entered into an employment letter agreement with Dr. Varney, which governs the terms of his employment with us as our Chair of R&D. In this role, Dr. Varney also acts as a Senior Advisor to our Chief Executive Officer. Pursuant to his letter agreement, Dr. Varney is entitled to an annual base salary of \$78,000. Dr. Varney also serves on our scientific advisory board, or SAB, but does not receive any additional cash compensation for such service. Dr. Varney's employment is at-will.

We have also entered into a scientific advisory board agreement with Dr. Varney, which governs the terms of his retention with us as a SAB member and as a consultant. Pursuant to his scientific advisory board agreement, Dr. Varney is subject to a non-competition covenant during the term of his service with us, as well as one-year post-termination non-solicitation of employees and consultants covenant and a perpetual confidentiality covenant, in addition to his obligations under our standard proprietary information and inventions agreement, which was entered into in connection with his commencement of employment with us.

Limitations of liability and indemnification matters

Our amended and restated certificate of incorporation and our amended and restated bylaws provide that we will indemnify our directors and officers to the fullest extent permitted by the Delaware General Corporation Law, which prohibits our amended and restated certificate of incorporation from limiting the liability of our directors for the following:

- any breach of the director's duty of loyalty to us or our stockholders;
- acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law;
- unlawful payment of dividends or unlawful stock repurchases or redemptions; or
- any transaction from which the director derived an improper personal benefit.

Our amended and restated certificate of incorporation and our amended and restated bylaws also provide that if Delaware law is amended to authorize corporate action further eliminating or limiting the personal liability of a director, then the liability of our directors will be eliminated or limited to the fullest extent permitted by Delaware law, as so amended. This limitation of liability does not apply to liabilities arising under the federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

[Table of Contents](#)

Our amended and restated certificate of incorporation and our amended and restated bylaws also provide that we shall have the power to indemnify our employees and agents to the fullest extent permitted by law. Our amended and restated bylaws also permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in this capacity, regardless of whether our amended and restated bylaws would permit indemnification. We have obtained directors' and officers' liability insurance.

We have entered into separate indemnification agreements with our directors and executive officers, in addition to indemnification provided for in our amended and restated certificate of incorporation and amended and restated bylaws. These agreements, among other things, provide for indemnification of our directors and executive officers for expenses, judgments, fines and settlement amounts incurred by this person in any action or proceeding arising out of this person's services as a director or executive officer or at our request. We believe that these provisions in our amended and restated certificate of incorporation and amended and restated bylaws and indemnification agreements are necessary to attract and retain qualified persons as directors and executive officers.

The above description of the indemnification provisions of our amended and restated certificate of incorporation, our amended and restated bylaws and our indemnification agreements is not complete and is qualified in its entirety by reference to these documents, each of which is filed as an exhibit to the registration statement of which this prospectus is a part.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit us and our stockholders. A stockholder's investment may be harmed to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. Insofar as indemnification for liabilities under the Securities Act may be permitted to directors, officers or persons controlling us pursuant to the foregoing provisions, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable. There is no pending litigation or proceeding naming any of our directors or officers as to which indemnification is being sought, nor are we aware of any pending or threatened litigation that may result in claims for indemnification by any director or officer.

Certain relationships and related person transactions

The following includes a summary of transactions since our inception in July 2018 to which we have been a party in which the amount involved exceeded or will exceed the lesser of \$120,000 and one percent of the average of our total assets at year-end for the last two completed fiscal years, and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our capital stock or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other arrangements, which are described under “Executive and director compensation.” We also describe below certain other transactions with our directors, executive officers and stockholders.

Preferred stock financings

Series A convertible preferred stock financings. In October 2018, we entered into a Series A preferred stock purchase agreement, pursuant to which we sold to investors in an initial closing and subsequent closings from October 2018 to March 2019 in private placements an aggregate of 38,103,681 Series A preferred stock. The per share purchase price was \$1.667, and we received gross proceeds of approximately \$63.5 million.

Series B convertible preferred stock financings. In April 2020, we entered into a Series B preferred stock purchase agreement, pursuant to which we sold to investors in an initial closing and subsequent closings in April 2020, August 2020 and January 2021, respectively, in private placements, an aggregate of 43,412,773 shares of Series B-1 and B-2 convertible preferred stock. The Series B-1 per share purchase price was \$5.00 and the Series B-2 per share purchase price was \$7.50, and we received gross proceeds of approximately \$256.9 million.

The following table sets forth the aggregate number of shares acquired by the listed directors, executive officers or holders of more than 5% of our capital stock, or their affiliates. Each outstanding share of convertible preferred stock, including the shares identified in the table below, will convert into shares of common stock at a ratio of one-for-1.2 immediately prior to the closing of this offering.

Participants	Series A convertible preferred stock	Series B-1 convertible preferred stock	Series B-2 convertible preferred stock
5% or greater stockholders⁽¹⁾			
Entities affiliated with ARCH Venture Partners ⁽²⁾	4,200,000	6,800,000	2,266,666
City Hill, LLC ⁽³⁾	6,081,233	336,000	112,000
Entities affiliated with Colt Ventures, Ltd. ⁽⁴⁾	3,458,000	1,203,206	3,124,444
Entities affiliated with Cormorant Asset Management ⁽⁵⁾	4,800,000	5,000,000	1,666,666
Officers and Directors			
Jonathan E. Lim, M.D. ⁽⁶⁾	6,162,468	—	—
Alexander W. Casdin ⁽⁷⁾	1,080,000	—	—

(1) Additional details regarding these stockholders and their equity holdings are provided in “Principal stockholders.”

(2) Represents securities acquired by ARCH Venture Fund X, L.P. and ARCH Venture Fund X Overage, L.P. Since December 2018, Dr. Lim, our Chairman and Chief Executive Officer, has been a venture partner of ARCH Venture Partners.

(3) Includes 3,081,233 shares acquired pursuant to the merger described below under “—Common stock issuance and merger” below. Dr. Lim, our Chairman and Chief Executive Officer, is the Managing Partner of City Hill, LLC.

(4) Represents securities held by Colt Erasca Partners, LLC, Colt Second Erasca Partners, LLC and Colt Third Erasca Partners, LLC.

(5) Represents securities acquired by Cormorant Global Healthcare Master Fund, LP, Cormorant Private Healthcare Fund II, LP and CRMA SPV, LP.

[Table of Contents](#)

- (6) Represents securities acquired by a family trust pursuant to the merger described below under “—Common stock issuance and merger” below. Dr. Lim is a co-trustee of the family trust.
- (7) Represents securities acquired by Alexander W. Casdin and Reneo Capital SPV IV LP (Reneo SPV). Alexander W. Casdin is currently, and was at the time of the Series A convertible preferred stock financing, a member of our Board of Directors and the managing member of Reneo GP LLC, the general partner of Reneo SPV.

Common stock issuance and merger

In July 2018, Dr. Lim assigned his founders common stock to City Hill Ignition, Inc. (CHI), to which we issued and sold 19,374,999 shares of common stock for an aggregate purchase price of \$2,325. Conyee Lim, the spouse of Dr. Lim, was the President of CHI. City Hill, LLC and a family trust of Drs. Lim were the sole stockholders of CHI. In December 2018, CHI merged with and into Erasca CHI Merger Sub LLC, a wholly-owned subsidiary of Erasca (the Merger). At the consummation of the Merger, the issued and outstanding shares of our common stock held by CHI were extinguished and cancelled in exchange for the receipt by City Hill, LLC and the Lim family trust, of 6,458,333 shares and 12,916,666 shares of our common stock, respectively. Additionally, 3,081,233 and 6,162,468 shares of our Series A convertible preferred stock were issued to City Hill, LLC and Lim family trust, respectively, in exchange for cash held by CHI of \$5.2 million and the extinguishment and cancellation of the 6,100,000 shares of our Series A convertible preferred stock that were purchased for \$10.2 million and held by CHI as a result of the merger.

Directed share program

At our request, the underwriters have reserved up to 5% of the shares offered by this prospectus for sale at the initial public offering price to certain individuals through a directed share program, including our directors, officers, employees, business associates and related persons. Each participant in the directed share program will agree that any shares purchased through this program will be subject to a 180-day lock-up restriction. See the section titled “Underwriting” for additional information.

Stockholders agreement

We entered into an amended and restated stockholders agreement in April 2020, or the stockholders agreement, with the holders of our convertible preferred stock, including entities with which certain of our directors are affiliated. This agreement provides for certain rights relating to the registration of their shares of common stock issuable upon conversion of their convertible preferred stock and certain additional covenants made by us. Except for the registration rights (including the related provisions pursuant to which we have agreed to indemnify the parties to the stockholders agreement), all rights under this agreement will terminate upon closing of this offering. The registration rights will continue following this offering and will terminate five years after the closing of this offering. See “Description of capital stock—Registration rights” for more information regarding these registration rights.

Equity grants to executive officers and directors

We have granted restricted stock and stock options to certain of our executive officers and non-employee directors, as more fully described in the section titled “Executive and director compensation.”

Employment arrangements

We have entered into employment letter agreements with our executive officers. For more information regarding these letter agreements, see the section titled “Executive and director compensation—Employment letter agreements and service agreements with our NEOs.”

Director and officer indemnification

We have entered into indemnification agreements with each of our directors and executive officers. These agreements, among other things, require us or will require us to indemnify each director (and in certain cases

[Table of Contents](#)

their related venture capital funds) and executive officer to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys' fees, judgments, fines and settlement amounts incurred by the director or executive officer in any action or proceeding, including any action or proceeding by or in right of us, arising out of the person's services as a director or executive officer.

Our amended and restated certificate of incorporation and our amended and restated bylaws provide that we will indemnify each of our directors and officers to the fullest extent permitted by the Delaware General Corporation Law. Further, we have purchased a policy of directors' and officers' liability insurance that insures our directors and officers against the cost of defense, settlement or payment of a judgment under certain circumstances. For further information, see "Executive and director compensation—Limitations of liability and indemnification matters."

Policies and procedures for related person transactions

Our board of directors has adopted a written related person transaction policy, to be effective upon the closing of this offering, setting forth the policies and procedures for the review and approval or ratification of related-person transactions. This policy will cover, with certain exceptions set forth in Item 404 of Regulation S-K under the Securities Act, any transaction, arrangement or relationship, or any series of similar transactions, arrangements or relationships in which we were or are to be a participant, where the amount involved exceeds the lesser of \$120,000 or one percent of the average of our total assets at year-end for the last two completed fiscal years, and a related person had or will have a direct or indirect material interest, including, without limitation, purchases of goods or services by or from the related person or entities in which the related person has a material interest, indebtedness, guarantees of indebtedness and employment by us of a related person. In reviewing and approving any such transactions, our audit committee is tasked to consider all relevant facts and circumstances, including, but not limited to, whether the transaction is on terms comparable to those that could be obtained in an arm's length transaction and the extent of the related person's interest in the transaction. All of the transactions described in this section occurred prior to the adoption of this policy.

Principal stockholders

The following table sets forth information with respect to the beneficial ownership of our common stock as of June 30, 2021, and as adjusted to reflect the sale of shares of common stock in this offering, by:

- our named executive officers;
- each of our directors;
- all of our executive officers and directors as a group; and
- each person or group of affiliated persons known by us to beneficially own more than 5% of our common stock.

The number of shares beneficially owned by each stockholder is determined under rules issued by the SEC. Under these rules, beneficial ownership includes any shares as to which a person has sole or shared voting power or investment power. Applicable percentage ownership is based on 98,563,808 shares of common stock outstanding on June 30, 2021, which gives effect to the automatic conversion of all outstanding shares of our convertible preferred stock into 71,263,685 shares of our common stock immediately prior to the closing of this offering and includes 2,929,524 shares subject to forfeiture or a right of repurchase. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of common stock subject to options or other rights held by such person that are currently exercisable or will become exercisable within 60 days of June 30, 2021 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person. The table below excludes any purchases that may be made through our directed share program and any potential purchases in this offering by the beneficial owners identified in the table below.

Unless otherwise indicated, the address of each beneficial owner listed below is c/o Erasca, Inc., 10835 Road to the Cure, Suite 140, San Diego, CA 92121. We believe, based on information provided to us, that each of the stockholders listed below has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable.

Name of beneficial owner	Number of shares beneficially owned	Percentage of shares beneficially owned	
		Before offering	After offering
5% or Greater Stockholders			
City Hill, LLC ⁽¹⁾	11,899,360	12.1%	10.1%
Entities affiliated with ARCH Venture Partners ⁽²⁾	11,055,554	11.2%	9.4%
Entities affiliated with Colt Ventures, Ltd. ⁽³⁾	6,488,040	6.6%	5.5%
Entities affiliated with Cormorant Asset Management ⁽⁴⁾	9,555,554	9.7%	8.1%
Named Executive Officers and Directors			
Jonathan E. Lim, M.D. ⁽⁵⁾	32,055,582	32.5%	27.3%
David M. Chacko, M.D. ⁽⁶⁾	464,673	*	*
Gary Yeung ⁽⁷⁾	390,502	*	*
James A. Bristol, Ph.D. ⁽⁸⁾	187,500	*	*
Alexander W. Casdin ⁽⁹⁾	1,087,500	1.1%	*
Bihua Chen ⁽¹⁰⁾	9,722,220	9.8%	8.3%
Julie Hambleton, M.D. ⁽¹¹⁾	166,666	*	*
Valerie Harding-Start, Ph.D. ⁽¹²⁾	187,500	*	*
Pratik S. Multani, M.D. ⁽¹³⁾	187,499	*	*
Michael D. Varney, Ph.D. ⁽¹⁴⁾	197,916	*	*
All executive officers and directors as a group (11 persons) ⁽¹⁵⁾	44,569,556	44.8%	37.7%

* Less than 1%.

Table of Contents

- (1) Dr. Lim, our Chairman and CEO, is the Managing Partner of City Hill, LLC. Dr. Lim has sole voting and investment control over the shares held by City Hill. Dr. Lim disclaims beneficial ownership of such shares except to the extent of any pecuniary interest therein. The address of City Hill, LLC is 4653 Carmel Mountain Road, Suite 308-501, San Diego, CA 92121.
- (2) Consists of 5,527,777 shares held by ARCH Venture Fund X, L.P. (ARCH X), and 5,527,777 shares held by ARCH Venture Fund X Overage, L.P. (ARCH X Overage). ARCH Venture Partners X, L.P. (AVP X LP) is the sole general partner of ARCH X. ARCH Venture Partners X Overage, L.P. (AVP X Overage LP) is the sole general partner of ARCH X Overage. ARCH Venture Partners X, LLC (AVP X LLC) is the sole general partner of each of AVP X LP and AVP X Overage LP. Keith Crandell, Kristina Burow, Steven Gillis, and Robert Nelsen comprise the investment committee of AVP X LLC (the AVP X Committee Members). AVP X LP and AVP X Overage LP may be deemed to beneficially own the shares held by ARCH X and ARCH X Overage, respectively, AVP X LLC may be deemed to beneficially own the shares held by ARCH X and ARCH X Overage, and each of the AVP X Committee Members may be deemed to share the power to direct the disposition and vote of the shares held by ARCH X and ARCH X Overage. AVP X LP, AVP X Overage LP, AVP X LLC, and the AVP X Committee Members each disclaim beneficial ownership except to any pecuniary interest therein. The address of the ARCH Venture Partners is 8755 W. Higgins Road, Suite 1025, Chicago, IL 60631.
- (3) Consists of 2,881,666 shares held by Colt Erasca Partners, 1,002,671 shares held by Colt Second Erasca Partners, LLC, and 2,603,703 shares held by Colt Third Erasca Partners, LLC (collectively, the Colt Partners). Colt Ventures, Ltd. is the general partner of each of the Colt Partners. Darren Blanton serves as the managing partner of Colt Ventures, Ltd., and has sole voting and investment control over the shares held by the Colt Partners. Mr. Blanton disclaims beneficial ownership of such shares except to the extent of any pecuniary interest therein. The address of the Colt Partners, Colt Ventures, Ltd. and Mr. Blanton is 2101 Cedar Springs Suite 1230 Dallas, TX 75201.
- (4) Consists of 7,716,444 shares held by Cormorant Private Healthcare Fund II, LP. (Cormorant II), 1,728,710 shares held by Cormorant Global Healthcare Master Fund, LP (Cormorant Master Fund) and 110,400 shares held by CRMA SPV, LP. (CRMA, and, together with Cormorant Fund II and Cormorant Master Fund, the Cormorant Funds). Cormorant Global Healthcare GP, LLC (Global GP) is the general partner of Cormorant Master Fund and Cormorant Private Healthcare II GP, LLC (Private GP) is the general partner of Cormorant Fund II. Bihua Chen serves as the managing member of both Global GP and Private GP. Cormorant Asset Management LP serves as the investment manager to Cormorant Fund II, Cormorant Master Fund and CRMA, and Ms. Chen serves as the managing member of Cormorant Asset Management GP, LLC. Ms. Chen has sole voting and investment control over the shares held by the Cormorant Funds. Ms. Chen disclaims beneficial ownership of such shares except to the extent of any pecuniary interest therein. The address of the Cormorant Funds, Global GP, Private GP, Cormorant Asset Management LP, and Ms. Chen is 200 Clarendon Street, 52nd Floor, Boston, MA 02116.
- (5) Consists of 11,899,360 shares held by City Hill, LLC and 20,156,222 shares of common stock held by a family trust of Dr. Lim, for which he is a co-trustee, including 1,381,076 shares subject to repurchase by us within 60 days after June 30, 2021.
- (6) Includes 235,936 shares of common stock held by Dr. Chacko, including 51,389 shares subject to repurchase by us within 60 days after June 30, 2021, and 228,737 shares of common stock underlying options held by Dr. Chacko that are exercisable as of June 30, 2021 or that will become exercisable within 60 days after such date.
- (7) Includes 390,502 shares of common stock held by Mr. Yeung.
- (8) Includes 187,500 shares of common stock held by Dr. Bristol, including 76,824 shares subject to repurchase by us within 60 days after June 30, 2021.
- (9) Includes 337,500 shares of common stock held by Mr. Casdin, including 76,824 shares of common stock subject to repurchase by us within 60 days after June 30, 2021, and 750,000 shares of common stock held by Reneo Capital SPV IV LP (Reneo SPV). Reneo GP LLC (Reneo GP) is the general partner of Reneo SPV. Mr. Casdin is the managing member of Reneo GP. Mr. Casdin has sole voting and investment control over the shares held by Reneo SPV. Mr. Casdin disclaims beneficial ownership of such shares except to the extent of any pecuniary interest therein.
- (10) Consists of 9,555,554 shares held by entities affiliated with Cormorant Asset Management and 166,666 shares of common stock underlying options held by Dr. Chen exercisable as of June 30, 2021 or that will become exercisable within 60 days after such date.
- (11) Includes 166,666 shares of common stock underlying options held by Dr. Hambleton that are exercisable as of June 30, 2021 or that will become exercisable within 60 days after such date.
- (12) Includes 187,500 shares of common stock underlying options held by Dr. Harding-Start that are exercisable as of June 30, 2021 or that will become exercisable within 60 days after such date.
- (13) Includes 166,666 shares of common stock held by Dr. Multani, including 55,990 shares subject to repurchase by us within 60 days after June 30, 2021, and 20,833 shares of common stock underlying options held by Dr. Multani that are exercisable as of June 30, 2021 or that will become exercisable within 60 days after such date.
- (14) Includes 197,916 shares of common stock underlying options held by Dr. Varney that are exercisable as of June 30, 2021 or that will become exercisable within 60 days after such date.
- (15) Consists of shares of common stock and shares of common stock issuable upon exercise of outstanding options which are exercisable as of June 30, 2021 or that will become exercisable within 60 days after such date, as set forth in previous footnotes. Also includes 312,500 shares of common stock held by Dr. Lin, our Chief Medical Officer, including 312,500 shares subject to repurchase by us.

Description of capital stock

General

The following description summarizes some of the terms of our amended and restated certificate of incorporation and amended and restated bylaws, the stockholders agreement and of the Delaware General Corporation Law. Because it is only a summary, it does not contain all the information that may be important to you. For a complete description you should refer to our amended and restated certificate of incorporation, amended and restated bylaws and stockholders agreement, copies of which have been filed as exhibits to the registration statement of which this prospectus is a part.

Following the closing of this offering, our authorized capital stock will consist of 800,000,000 shares of common stock, \$0.0001 par value per share, and 80,000,000 shares of preferred stock, \$0.0001 par value per share.

Common stock

As of March 31, 2021, there were 97,392,968 shares of our common stock outstanding and held of record by 112 stockholders, including 3,254,259 shares of restricted common stock which are subject to forfeiture or our right of repurchase, after giving effect to the automatic conversion of all outstanding shares of our convertible preferred stock into 71,263,685 shares of common stock, which will automatically occur immediately prior to the closing of this offering. Based on the number of shares of common stock outstanding as of March 31, 2021, and further assuming the issuance by us of 18,750,000 shares of common stock in this offering, there will be 116,142,968 shares of common stock outstanding upon the closing of this offering. Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders, including the election of directors, and do not have cumulative voting rights. Accordingly, the holders of a majority of the outstanding shares of common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they so choose, other than any directors that holders of any preferred stock we may issue may be entitled to elect. Subject to the supermajority votes for some matters, other matters shall be decided by the affirmative vote of our stockholders having a majority in voting power of the votes cast by the stockholders present or represented and voting on such matter. Our amended and restated certificate of incorporation and amended and restated bylaws also provide that our directors may be removed only for cause and only by the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock entitled to vote thereon. In addition, the affirmative vote of the holders of at least two-thirds in voting power of the outstanding shares of capital stock entitled to vote thereon is required to amend or repeal, or to adopt any provision inconsistent with, several of the provisions of our amended and restated certificate of incorporation. See below in “—Anti-takeover effects of Delaware law and our certificate of incorporation and bylaws—Amendment of charter provisions.”

Subject to preferences that may be applicable to any then outstanding preferred stock, holders of common stock are entitled to receive ratably those dividends, if any, as may be declared by the board of directors out of legally available funds. In the event of our liquidation, dissolution or winding up, the holders of common stock will be entitled to share ratably in the assets legally available for distribution to stockholders after the payment of or provision for all of our debts and other liabilities, subject to the prior rights of any preferred stock then outstanding. Holders of common stock have no preemptive or conversion rights or other subscription rights and there are no redemption or sinking funds provisions applicable to the common stock. All outstanding shares of common stock are, and the common stock to be outstanding upon the closing of this offering will be, duly authorized, validly issued, fully paid and nonassessable. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred stock

Upon the closing of this offering, all of our previously outstanding shares of convertible preferred stock will have been converted into common stock, there will be no authorized shares of our previously outstanding convertible preferred stock, and we will have no shares of preferred stock outstanding. Under the terms of our amended and restated certificate of incorporation, which will become effective immediately prior to the closing of this offering, our board of directors has the authority, without further action by our stockholders, to issue up to 80,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the dividend, voting and other rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon, and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of the common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deterring or preventing a change in our control and may adversely affect the market price of the common stock and the voting and other rights of the holders of common stock. We have no current plans to issue any shares of preferred stock.

Options

As of March 31, 2021, options to purchase 10,030,681 shares of our common stock were outstanding, of which 1,364,949 were vested and exercisable as of that date. For additional information regarding the terms of our 2018 Plan, see “Executive and director compensation—Incentive award plans—2018 equity incentive plan.”

Registration rights

As of March 31, 2021, upon the closing of this offering holders of 71,263,685 shares of our common stock, which includes all of the shares of common stock issuable upon the automatic conversion convertible preferred stock immediately prior to the closing of this offering, will be entitled to the following rights with respect to the registration of such shares for public resale under the Securities Act, pursuant to a stockholders agreement by and among us and certain investors. The registration of shares of common stock as a result of the following rights being exercised would enable holders to trade these shares without restriction under the Securities Act when the applicable registration statement is declared effective.

Demand registration rights

Form S-1. If at any time beginning six months following the effective date of the registration statement of which this prospectus forms a part, the holders of a majority of the registrable securities request in writing that we effect a registration with respect to all or a part of the registrable securities then outstanding where the aggregate price to the public of the offering is \$20.0 million or more, we may be required to provide notice to all holders of registrable securities and to use commercially reasonable efforts to effect such registration; provided, however, that we will not be required to effect such a registration if, among other things, within the preceding 12 months, we have already effected two registrations for the holders of registrable securities in response to these demand registration rights.

Form S-3. If at any time we become entitled under the Securities Act to register our shares on Form S-3, the holders of the registrable securities request in writing that we effect a registration with respect to all or a part of the registrable securities then outstanding where the price to the public of the offering is \$5.0 million or

[Table of Contents](#)

more, we may be required to provide notice to all holders of registrable securities and to use commercially reasonable efforts to effect such registration; provided, however, that we will not be required to effect such a registration if, among other things, within the preceding 12 months, we have already effected two registrations on Form S-3 for the holders of registrable securities.

If the holders requesting registration intend to distribute their shares by means of an underwriting, the underwriter of such offering will have the right to limit the numbers of shares to be underwritten for reasons related to the marketing of the shares.

Piggyback registration rights

If at any time following the closing of this offering we propose to register any shares of our common stock under the Securities Act, subject to certain exceptions, the holders of registrable securities will be entitled to notice of the registration and to include their shares of registrable securities in the registration. If our proposed registration involves an underwriting, the managing underwriter of such offering will have the right to limit the number of shares to be underwritten for reasons related to the marketing of the shares.

Indemnification

Our stockholders agreement contains customary cross indemnification provisions, under which we are obligated to indemnify holders of registrable securities in the event of material misstatements or omissions in a registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

Expenses

Ordinarily, other than underwriting discounts and commissions, we will be required to pay all expenses incurred by us related to any registration effected pursuant to the exercise of these registration rights. These expenses may include all registration and filing fees, printing expenses, fees and disbursements of our counsel, reasonable fees and disbursements of a counsel for the selling securityholders, blue sky fees and expenses and the expenses of any special audits incident to the registration.

Termination of registration rights

The registration rights terminate five years after the closing of this offering.

Anti-takeover effects of Delaware law and our certificate of incorporation and bylaws

Some provisions of Delaware law, our amended and restated certificate of incorporation and our amended and restated bylaws contain provisions that could make the following transactions more difficult: an acquisition of us by means of a tender offer; an acquisition of us by means of a proxy contest or otherwise; or the removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions which provide for payment of a premium over the market price for our shares.

These provisions, summarized below, are intended to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors. We believe that the benefits of the increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

Undesignated preferred stock

The ability of our board of directors, without action by the stockholders, to issue up to 80,000,000 shares of undesignated preferred stock with voting or other rights or preferences as designated by our board of directors could impede the success of any attempt to change control of us. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of our company.

Stockholder meetings

Our amended and restated bylaws provide that a special meeting of stockholders may be called only by our chairman of the board of directors, chief executive officer or president, or by a resolution adopted by a majority of our board of directors.

Requirements for advance notification of stockholder nominations and proposals

Our amended and restated bylaws establish advance notice procedures with respect to stockholder proposals to be brought before a stockholder meeting and the nomination of candidates for election as directors, other than nominations made by or at the direction of the board of directors or a committee of the board of directors.

Elimination of stockholder action by written consent

Our amended and restated certificate of incorporation and amended and restated bylaws eliminate the right of stockholders to act by written consent without a meeting.

Staggered board of directors

Our amended and restated bylaws provides that our board of directors will be divided into three classes. The directors in each class will serve for a three-year term, with one class being elected each year by our stockholders. For more information on the classified board of directors, see “Management—Board composition and election of directors.” This system of electing directors may tend to discourage a third party from attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.

Removal of directors

Our amended and restated certificate of incorporation provides that no member of our board of directors may be removed from office except for cause and, in addition to any other vote required by law, upon the approval of not less than two-thirds of the total voting power of all of our outstanding voting stock then entitled to vote in the election of directors.

Stockholders not entitled to cumulative voting

Our amended and restated certificate of incorporation does not permit stockholders to cumulate their votes in the election of directors. Accordingly, the holders of a majority of the outstanding shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election, if they choose, other than any directors that holders of our preferred stock may be entitled to elect.

Delaware anti-takeover statute

We are subject to Section 203 of the Delaware General Corporation Law, which prohibits persons deemed to be “interested stockholders” from engaging in a “business combination” with a publicly held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an “interested stockholder” is a person

[Table of Contents](#)

who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock. Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by the board of directors.

Choice of forum

Our amended and restated certificate of incorporation provides that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (i) any derivative action or proceeding brought on our behalf; (ii) any action asserting a claim of breach of a fiduciary duty or other wrongdoing by any of our directors, officers, employees or agents to us or our stockholders, creditors or other constituents; (iii) any action asserting a claim against us arising pursuant to any provision of the General Corporation Law of the State of Delaware or our amended and restated certificate of incorporation or amended and restated bylaws; (iv) any action to interpret, apply, enforce or determine the validity of our certificate of incorporation or bylaws; or (v) any action asserting a claim governed by the internal affairs doctrine. The provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act. Furthermore, our amended and restated certificate of incorporation will also provide that unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States shall be the exclusive forum for the resolution of any complaint asserting a cause or causes of action arising under the Securities Act, including all causes of action asserted against any defendant to such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering. In any case, stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder. The enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable. Our amended and restated certificate of incorporation also provides that any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock will be deemed to have notice of and to have consented to this choice of forum provision.

Amendment of charter provisions

The amendment of any of the above provisions, except for the provision making it possible for our board of directors to issue preferred stock, would require approval by holders of at least two thirds of the total voting power of all of our outstanding voting stock.

The provisions of Delaware law, our amended and restated certificate of incorporation and our amended and restated bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in the composition of our board of directors and management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

Transfer agent and registrar

The transfer agent and registrar for our common stock will be the Computershare Trust Company, N.A. The transfer agent and registrar's address is 250 Royall Street, Canton, MA 02021.

The Nasdaq Global Select Market listing

Our common stock has been approved for listing on the Nasdaq Global Select Market under the symbol “ERAS.”

Limitations of liability and indemnification matters

For a discussion of liability and indemnification, see “Executive and director compensation—Limitations of liability and indemnification matters.”

Shares eligible for future sale

Immediately prior to this offering, there was no public market for our common stock. Future sales of substantial amounts of common stock in the public market, or the perception that such sales may occur, could adversely affect the market price of our common stock. Although our common stock has been approved for listing on Nasdaq, we cannot assure you that there will be an active public market for our common stock.

Based on the number of shares of our common stock outstanding as of March 31, 2021, and assuming (i) the issuance of 18,750,000 shares in this offering, (ii) the automatic conversion of all of our outstanding shares of convertible preferred stock into 71,263,685 shares of common stock and the related reclassification of the carrying value of the convertible preferred stock to permanent equity upon the closing of this offering, (iii) no exercise of the underwriters' option to purchase additional shares of common stock and (iv) no exercise of outstanding options, we will have outstanding an aggregate of 116,142,968 shares of common stock.

Of these shares, all shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except for any shares purchased by our "affiliates," as that term is defined in Rule 144 under the Securities Act. Shares purchased by our affiliates would be subject to the Rule 144 resale restrictions described below, other than the holding period requirement.

The remaining 97,392,968 shares of common stock will be "restricted securities," as that term is defined in Rule 144 under the Securities Act. These restricted securities are eligible for public sale only if they are registered under the Securities Act or if they qualify for an exemption from registration under Rule 144 or 701 under the Securities Act, each of which is summarized below. We expect that substantially all of these shares will be subject to the 180-day lock-up period under the lock-up agreements described below.

Lock-up agreements

We, our officers, directors and holders of substantially all of our security holders, have agreed with the underwriters that for a period of 180 days, after the date of this prospectus, among other things and subject to specified exceptions, we or they will not offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to sell, or otherwise dispose of or transfer any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock, request or demand that we file a registration statement related to our common stock or enter into any hedging, swap or other agreement that transfers to another, in whole or in part, directly or indirectly, the economic consequence of ownership of the common stock. Upon expiration of the lock-up period, certain of our stockholders will have the right to require us to register their shares under the Securities Act. See "—Registration rights" below and "Description of capital stock—Registration rights."

J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC and BofA Securities, Inc. may, in their sole discretion and at any time or from time to time before the termination of the lock-up period, in certain cases without public notice, release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our stockholders who will execute a lock-up agreement providing consent to the sale of shares prior to the expiration of the lock-up period.

Upon the expiration of the lock-up period, substantially all of the shares subject to such lock-up restrictions will become eligible for sale, subject to the limitations discussed above.

Rule 10b5-1 trading plans

Following the closing of this offering, certain of our officers, directors and significant stockholders may adopt written plans, known as Rule 10b5-1 trading plans, in which they will contract with a broker to buy or sell shares

of our common stock on a periodic basis to diversify their assets and investments. Under these 10b5-1 trading plans, a broker may execute trades pursuant to parameters established by the officer, director or stockholder when entering into the plan, without further direction from such officer, director or stockholder. Such sales would not commence until the expiration of the applicable lock-up agreements entered into by such officer, director or stockholder in connection with this offering.

Rule 144

Affiliate resales of restricted securities

In general, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, a person who is an affiliate of ours, or who was an affiliate at any time during the 90 days before a sale, who has beneficially owned shares of our common stock for at least six months would be entitled to sell in "broker's transactions" or certain "riskless principal transactions" or to market makers, a number of shares within any three-month period that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately 1,161,430 shares immediately after this offering; or
- the average weekly trading volume in our common stock on Nasdaq during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Affiliate resales under Rule 144 are also subject to the availability of current public information about us. In addition, if the number of shares being sold under Rule 144 by an affiliate during any three-month period exceeds 5,000 shares or has an aggregate sale price in excess of \$50,000, the seller must file a notice on Form 144 with the SEC and Nasdaq concurrently with either the placing of a sale order with the broker or the execution of a sale directly with a market maker.

Non-affiliate resales of restricted securities

In general, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, a person who is not an affiliate of ours at the time of sale, and has not been an affiliate at any time during the three months preceding a sale, and who has beneficially owned shares of our common stock for at least six months but less than a year, is entitled to sell such shares subject only to the availability of current public information about us. If such person has held our shares for at least one year, such person can resell under Rule 144(b)(1) without regard to any Rule 144 restrictions, including the 90-day public company requirement and the current public information requirement.

Non-affiliate resales are not subject to the manner of sale, volume limitation or notice filing provisions of Rule 144.

Rule 701

In general, under Rule 701, any of an issuer's employees, directors, officers, consultants or advisors who purchases shares from the issuer in connection with a compensatory stock or option plan or other written agreement before the effective date of a registration statement under the Securities Act is entitled to sell such shares 90 days after such effective date in reliance on Rule 144. An affiliate of the issuer can resell shares in reliance on Rule 144 without having to comply with the holding period requirement, and non-affiliates of the issuer can resell shares in reliance on Rule 144 without having to comply with the current public information and holding period requirements.

Equity plans

We intend to file one or more registration statements on Form S-8 under the Securities Act to register all shares of common stock subject to outstanding stock options and common stock issued or issuable under our equity incentive plans and employee stock purchase plan. We expect to file the registration statement covering shares offered pursuant to these stock plans shortly after the date of this prospectus, permitting the resale of such shares by non-affiliates in the public market without restriction under the Securities Act and the sale by affiliates in the public market subject to compliance with the resale provisions of Rule 144.

Registration rights

Upon the closing of this offering holders of 71,263,685 shares of our common stock, which includes all of the shares of common stock issuable upon the automatic conversion of our convertible preferred stock immediately prior to the closing of this offering, will be entitled to various rights with respect to the registration of these shares under the Securities Act upon the closing of this offering. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration, except for shares purchased by our affiliates. See "Description of capital stock—Registration rights" for additional information. Shares covered by a registration statement will be eligible for sale in the public market upon the expiration or release from the terms of the lock-up agreement.

Material United States federal income tax consequences to non-US holders

The following discussion is a summary of the material US federal income tax consequences to Non-US Holders (as defined below) of the purchase, ownership and disposition of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. The effects of other US federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-US tax laws are not discussed. This discussion is based on the US Internal Revenue Code of 1986, as amended (the Code), Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of the US Internal Revenue Service (the IRS), in each case in effect as of the date hereof. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a Non-US Holder of our common stock. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the purchase, ownership and disposition of our common stock.

This discussion is limited to Non-US Holders that hold our common stock as a “capital asset” within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all US federal income tax consequences relevant to a Non-US Holder’s particular circumstances, including the impact of the alternative minimum tax, the Medicare contribution tax on net investment income, or the special tax accounting rules under Section 451(b) of the Code. In addition, it does not address consequences relevant to Non-US Holders subject to special rules, including, without limitation:

- US expatriates and former citizens or long-term residents of the United States;
- persons holding our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- banks, insurance companies, and other financial institutions;
- brokers, dealers or traders in securities;
- “controlled foreign corporations,” “passive foreign investment companies,” and corporations that accumulate earnings to avoid US federal income tax;
- partnerships or other entities or arrangements treated as partnerships for US federal income tax purposes (and investors therein);
- tax-exempt organizations or governmental organizations;
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation;
- tax-qualified retirement plans; and
- “qualified foreign pension funds” as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds.

If an entity or arrangement treated as a partnership for US federal income tax purposes holds our common stock, the tax treatment of a partner in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding our

common stock and the partners in such partnerships should consult their tax advisors regarding the US federal income tax consequences to them of the purchase, ownership, and disposition of our common stock.

THIS DISCUSSION IS FOR INFORMATION PURPOSES ONLY AND IS NOT TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE US FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE US FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-US TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Definition of a non-US holder

For purposes of this discussion, a “Non-US Holder” is any beneficial owner of our common stock that is neither a “US person” nor an entity or arrangement treated as a partnership for US federal income tax purposes. A US person is any person that, for US federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation created or organized under the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is subject to US federal income tax regardless of its source; or
- a trust that (i) is subject to the primary supervision of a US court and the control of one or more “United States persons” (within the meaning of Section 7701(a)(30) of the Code), or (ii) has a valid election in effect to be treated as a United States person for US federal income tax purposes.

Distributions

As described in the section titled “Dividend policy,” we do not anticipate declaring or paying dividends to holders of our common stock in the foreseeable future. However, if we do make distributions of cash or property on our common stock, such distributions will constitute dividends for US federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under US federal income tax principles. Amounts not treated as dividends for US federal income tax purposes will constitute a return of capital and will first be applied against and reduce a Non-US Holder’s adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below in “—Sale or other taxable disposition.”

Subject to the discussion below on effectively connected income, backup withholding and Sections 1471 through 1474 of the Code (such Sections are commonly referred to as the Foreign Account Tax Compliance Act, or FATCA), dividends paid to a Non-US Holder of our common stock will be subject to US federal withholding tax at a rate of 30% of the gross amount of the dividends (or such lower rate specified by an applicable income tax treaty, provided the Non-US Holder furnishes a valid IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) certifying qualification for the lower treaty rate). If a Non-US Holder holds the stock through a financial institution or other agent acting on the Non-US Holder’s behalf, the Non-US Holder will be required to provide appropriate documentation to the agent, who then will be required to provide certification to the applicable withholding agent, either directly or through other intermediaries. A Non-US Holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-US Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

If dividends paid to a Non-US Holder are effectively connected with the Non-US Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-US Holder maintains a permanent establishment in the United States to which such dividends are attributable), the Non-US Holder will be exempt from the US federal withholding tax described above. To claim the exemption, the Non-US Holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI, certifying that the dividends are effectively connected with the Non-US Holder's conduct of a trade or business within the United States.

Any such effectively connected dividends will be subject to US federal income tax on a net income basis at the regular rates applicable to United States persons. A Non-US Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected dividends, as adjusted for certain items. Non-US Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

Sale or other taxable disposition

Subject to the discussions below regarding backup withholding and FATCA, a Non-US Holder will not be subject to US federal income tax on any gain realized upon the sale or other taxable disposition of our common stock unless:

- the gain is effectively connected with the Non-US Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-US Holder maintains a permanent establishment in the United States to which such gain is attributable);
- the Non-US Holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- our common stock constitutes a US real property interest, or USRPI, by reason of our status as a US real property holding corporation, or USRPHC, for US federal income tax purposes.

Gain described in the first bullet point above generally will be subject to US federal income tax on a net income basis at the regular rates applicable to United States persons. A Non-US Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on such effectively connected gain, as adjusted for certain items.

Gain described in the second bullet point above will be subject to US federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty), which may be offset by US source capital losses of the Non-US Holder (even though the Non-US Holder is not considered a resident of the United States), provided the Non-US Holder has timely filed US federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we currently are not, and do not anticipate becoming, a USRPHC. Because the determination of whether we are a USRPHC depends, however, on the fair market value of our USRPIs relative to the fair market value of our non-US real property interests and our other business assets, there can be no assurance we currently are not a USRPHC or will not become one in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition by a Non-US Holder of our common stock will not be subject to US federal income tax if our common stock is "regularly traded," as defined by applicable Treasury Regulations, on an established securities market, and such Non-US Holder owned, actually or constructively, 5% or less of our common stock throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the Non-US Holder's holding period.

Non-US Holders should consult their tax advisors regarding potentially applicable income tax treaties that may provide for different rules.

Information reporting and backup withholding

Payments of dividends on our common stock will not be subject to backup withholding, provided the applicable withholding agent does not have actual knowledge or reason to know the holder is a United States person and the holder either certifies its non-US status, such as by furnishing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any distributions on our common stock paid to the Non-US Holder, regardless of whether such distributions constitute dividends or whether any tax was actually withheld. In addition, proceeds of the sale or other taxable disposition of our common stock within the United States or conducted through certain US-related brokers generally will not be subject to backup withholding or information reporting, if the applicable withholding agent receives the certification described above and does not have actual knowledge or reason to know that such holder is a United States person, or the holder otherwise establishes an exemption. Proceeds of a disposition of our common stock conducted through a non-US office of a non-US broker generally will not be subject to backup withholding or information reporting.

Copies of information returns that are filed with the IRS may also be made available under the provisions of an applicable treaty or agreement to the tax authorities of the country in which the Non-US Holder resides or is established.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a Non-US Holder's US federal income tax liability, if any, provided the required information is timely furnished to the IRS.

Additional withholding tax on payments made to foreign accounts

Withholding taxes may be imposed under FATCA on certain types of payments made to non-US financial institutions and certain other non-US entities. Specifically, a 30% withholding tax may be imposed on dividends on, or subject to the proposed Treasury Regulations discussed below, gross proceeds from the sale or other disposition of, our common stock paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (i) the foreign financial institution undertakes certain diligence and reporting obligations, (ii) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (iii) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in clause (i) above, it must enter into an agreement with the US Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under the applicable Treasury Regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends on our common stock. While withholding under FATCA would also have applied to payments of gross proceeds from the sale or other disposition of stock on or after January 1, 2019, proposed Treasury Regulations eliminate FATCA withholding on payments of gross proceeds entirely. Taxpayers generally may rely on these proposed Treasury Regulations until final Treasury Regulations are issued.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock.

Underwriting

We are offering the shares of common stock described in this prospectus through a number of underwriters. J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC and BofA Securities, Inc. are acting as representatives of the underwriters. We have entered into an underwriting agreement with the underwriters. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, the number of shares of common stock listed next to its name in the following table:

Name	Number of shares
J.P. Morgan Securities LLC	5,250,000
Morgan Stanley & Co. LLC	4,875,000
BofA Securities, Inc.	3,750,000
Evercore Group L.L.C.	3,000,000
Guggenheim Securities, LLC	1,875,000
Total	18,750,000

The underwriters are committed to purchase all the shares of common stock offered by us if they purchase any shares. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated.

The underwriters propose to offer the common stock directly to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of \$0.672 per share. After the initial offering of the shares to the public, if all of the shares of common stock are not sold at the initial public offering price, the underwriters may change the offering price and the other selling terms. Sales of any shares made outside of the United States may be made by affiliates of the underwriters.

The underwriters have an option to buy up to 2,812,500 additional shares of common stock from us to cover sales of shares by the underwriters which exceed the number of shares specified in the table above. The underwriters have 30 days from the date of this prospectus to exercise this option to purchase additional shares. If any shares are purchased with this option to purchase additional shares, the underwriters will purchase shares in approximately the same proportion as shown in the table above. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriting fee is equal to the public offering price per share of common stock less the amount paid by the underwriters to us per share of common stock. The underwriting fee is \$1.12 per share. The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Without exercise of option to purchase additional shares	With exercise of full option to purchase additional shares
Per share	\$ 1.12	\$ 1.12
Total	\$ 21,000,000	\$ 24,150,000

[Table of Contents](#)

We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, will be approximately \$3.2 million. We have agreed to reimburse the underwriters for expenses relating to the clearance of this offering with the Financial Industry Regulatory Authority, Inc. in an amount up to \$40,000.

A prospectus in electronic format may be made available on the web sites maintained by one or more underwriters, or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters and selling group members that may make Internet distributions on the same basis as other allocations.

We have agreed that we will not, subject to certain exceptions, (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, hedge, lend, or otherwise transfer or dispose of, directly or indirectly, or submit to, or file with, the Securities and Exchange Commission a registration statement under the Securities Act relating to, any shares of our common stock or any securities convertible into or exercisable or exchangeable for any shares of our common stock, or (ii) enter into any swap, hedging, or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of any shares of common stock or any such other securities, or publicly disclose the intention to undertake any of the foregoing in clause (i) or (ii), (regardless of whether any of these transactions are to be settled by the delivery of shares of common stock or such other securities, in cash or otherwise), in each case without the prior written consent of J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC and BofA Securities, Inc. for a period of 180 days after the date of this prospectus, other than the shares of our common stock to be sold in this offering.

The restrictions on our actions, as described above, do not apply to certain transactions, including (i) the issuance of shares of common stock or securities convertible into or exercisable for shares of our common stock pursuant to the conversion or exchange of convertible or exchangeable securities or the exercise of warrants or options (including net exercise) or the settlement of RSUs (including net settlement), in each case outstanding on the date of the underwriting agreement and described in this prospectus, provided that such recipients enter into a lock-up agreement with the underwriters; (ii) grants of stock options, stock awards, restricted stock, RSUs, or other equity awards and the issuance of shares of common stock or securities convertible into or exercisable or exchangeable for shares of our common stock (whether upon the exercise of stock options or otherwise) to our employees, officers, directors, advisors, or consultants pursuant to the terms of an equity compensation plan in effect as of the closing date of this offering and described in this prospectus, provided that such recipients enter into a lock-up agreement with the underwriters; (iii) the issuance of up to 5% of the outstanding shares of common stock, or securities convertible into, exercisable for, or which are otherwise exchangeable for, common stock, immediately following the closing date of this offering, in acquisitions or other similar strategic transactions, provided that such recipients enter into a lock-up agreement with the underwriters; or (iv) the filing of any registration statement on Form S-8 relating to securities granted or to be granted pursuant to any plan in effect on the date of the underwriting agreement and described in this prospectus or any assumed benefit plan pursuant to an acquisition or similar strategic transaction.

Our directors and executive officers, and substantially all of our securityholders (such persons, the lock-up parties) have entered into lock-up agreements with the underwriters prior to the commencement of this offering pursuant to which each lock-up party, with limited exceptions, for a period of 180 days after the date of this prospectus (such period, the restricted period), may not and may not cause any of their direct or indirect affiliates to, without the prior written consent of J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC and BofA Securities, Inc., (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or

Table of Contents

exchangeable for our common stock (including without limitation, our common stock or such other securities which may be deemed to be beneficially owned by the lock-up party in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant) (collectively with the common stock, the lock-up securities), (ii) enter into any hedging, swap or other agreement or transaction that transfers, in whole or in part, any of the economic consequences of ownership of the lock-up securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of the lock-up securities, in cash or otherwise, (iii) make any demand for or exercise any right with respect to the registration of any the lock up securities, or (iv) publicly disclose the intention to do any of the foregoing.

Such persons or entities have further acknowledged that these undertakings preclude them from engaging from engaging in any hedging or other transactions or arrangements (including, without limitation, any short sale or the purchase or sale of, or entry into, any put or call option, or combination thereof, forward, swap or any other derivative transaction or instrument, however described or defined) designed or intended, or which could reasonably be expected to lead to or result in, a sale or disposition or transfer (whether by the lock-up party or any other person) of any economic consequences of ownership, in whole or in part, directly or indirectly, of any lock-up securities, whether any such transaction or arrangement (or instrument provided for thereunder) would be settled by delivery of lock-up securities, in cash or otherwise. Such persons or entities further confirm that they have furnished the representatives with the details of any transaction such persons or entities, or any of their respective affiliates, is a party to as of the date hereof, which transaction would have been restricted by the lock-up agreements if it had been entered into by such persons or entities during the restricted period.

The restrictions described in the immediately preceding paragraph and contained in the lock-up agreements between the underwriters and the lock-up parties do not apply, subject in certain cases to various conditions, to certain transactions, including:

(i) transfers of lock-up securities:

- (1) as bona fide gifts, or for bona fide estate planning purposes, provided that, such transfer shall not involve a disposition for value and each donee, devisee, transferee or distributee shall execute and deliver to the representatives a lock-up letter in the form of the lock-up agreements, provided further that, no filing by any party (donor, donee, devisee, transferor, transferee, distributor or distributee) under the Exchange Act, or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on a Form 5 made after the expiration of the restricted period);
- (2) by will, other testamentary document or intestacy, provided that, such transfer shall not involve a disposition for value and each donee, devisee, transferee or distributee shall execute and deliver to the representatives a lock-up letter in the form of the lock-up agreements, provided further that, no filing by any party (donor, donee, devisee, transferor, transferee, distributor or distributee) under the Exchange Act, or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on a Form 5 made after the expiration of the restricted period);
- (3) to any trust for the direct or indirect benefit of the lock-up party or the immediate family of the lock-up party, or if the lock-up party is a trust, to a trustor or beneficiary of the trust or to the estate of a beneficiary of such trust (for purposes of the lock-up agreement, "immediate family" shall mean any relationship by blood, current or former marriage, domestic partnership or adoption, not more remote than first cousin), provided that, such transfer shall not involve a disposition for value and each donee, devisee, transferee or distributee shall execute and deliver to the representatives a

Table of Contents

- lock-up letter in the form of the lock-up agreements, provided further that, no filing by any party (donor, donee, devisee, transferor, transferee, distributor or distributee) under the Exchange Act, or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on a Form 5 made after the expiration of the restricted period);
- (4) to a partnership, limited liability company or other entity of which the lock-up party and the immediate family of the lock-up party are the legal and beneficial owner of all of the outstanding equity securities or similar interests, provided that, such transfer shall not involve a disposition for value and each donee, devisee, transferee or distributee shall execute and deliver to the representatives a lock-up letter in the form of the lock-up agreements, provided further that, no filing by any party (donor, donee, devisee, transferor, transferee, distributor or distributee) under the Exchange Act, or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on a Form 5 made after the expiration of the restricted period);
- (5) to a nominee or custodian of a person or entity to whom a disposition or transfer would be permissible under clauses (1) through (4), provided that, such transfer shall not involve a disposition for value and each donee, devisee, transferee or distributee shall execute and deliver to the representatives a lock-up letter in the form of the lock-up agreements, provided further that, no filing by any party (donor, donee, devisee, transferor, transferee, distributor or distributee) under the Exchange Act, or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on a Form 5 made after the expiration of the restricted period);
- (6) if the lock-up party is a corporation, partnership, limited liability company, trust or other business entity, (A) to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate (as defined in Rule 405 promulgated under the Securities Act, as amended) of the lock-up party, or to any investment fund or other entity controlling, controlled by, managing or managed by or under common control with the lock-up party or affiliates of the lock-up party (including, for the avoidance of doubt, where the lock-up party is a partnership, to its general partner or a successor partnership or fund, or any other funds managed by such partnership), or (B) as part of a distribution, to members or shareholders of the lock-up party, provided that, such transfer shall not involve a disposition for value and each donee, devisee, transferee or distributee shall execute and deliver to the representatives a lock-up letter in the form of the lock-up agreements, provided further that, no filing by any party (donor, donee, devisee, transferor, transferee, distributor or distributee) under the Exchange Act, or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on a Form 5 made after the expiration of the restricted period);
- (7) by operation of law, such as pursuant to a qualified domestic order, divorce settlement, divorce decree or separation agreement, provided that, such transfer shall not involve a disposition for value and each donee, devisee, transferee or distributee shall execute and deliver to the representatives a lock-up letter in the form of the lock-up agreements, provided further that no public filing, report or announcement shall be voluntarily made and if any filing under Section 16(a) of the Exchange Act, or other public filing, report or announcement reporting a reduction in beneficial ownership of shares of common stock in connection with such transfer or distribution shall be legally required during the restricted period, such filing, report or announcement shall clearly indicate in the footnotes thereto the nature and conditions of such transfer

Table of Contents

- (8) to us from an employee upon death, disability or termination of employment, in each case, of such employee, provided that no public filing, report or announcement shall be voluntarily made and if any filing under Section 16(a) of the Exchange Act, or other public filing, report or announcement reporting a reduction in beneficial ownership of shares of common stock in connection with such transfer or distribution shall be legally required during the restricted period, such filing, report or announcement shall clearly indicate in the footnotes thereto the nature and conditions of such transfer;
 - (9) as part of a sale of lock-up securities acquired in this offering or in open market transactions after the closing date of this offering, provided that no filing by any party (donor, donee, devisee, transferor, transferee, distributor or distributee) under the Exchange Act, or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on a Form 5 made after the expiration of the restricted period);
 - (10) to us in connection with the vesting, settlement, or exercise of restricted stock units, options, warrants or other rights to purchase shares of common stock (including, in each case, by way of “net” or “cashless” exercise), including for the payment of exercise price and tax and remittance payments due as a result of the vesting, settlement, or exercise of such restricted stock units, options, warrants or rights, provided that any such shares of common stock received upon such exercise, vesting or settlement shall be subject to the terms of the lock-up agreement, provided further that any such restricted stock units, options, warrants or rights are held by the lock-up party pursuant to an agreement or equity awards granted under a stock incentive plan or other equity award plan, each such agreement or plan which is described in this prospectus, provided further that no filing by any party (donor, donee, devisee, transferor, transferee, distributor or distributee) under the Exchange Act, or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on a Form 5 made after the expiration of the restricted period), or
 - (11) pursuant to a bona fide third-party tender offer, merger, consolidation or other similar transaction that is approved by our board of directors and made to all holders of our capital stock involving a change of control (as defined in the lock-up agreement) of us, provided that in the event that such tender offer, merger, consolidation or other similar transaction is not completed, the lock-up securities shall remain subject to the provisions of the lock-up agreement;
- (ii) exercise outstanding options, settle restricted stock units or other equity awards or exercise warrants pursuant to plans described in this prospectus; provided that any lock-up securities received upon such exercise, vesting or settlement shall be subject to the terms of the lock-up agreement;
 - (iii) the conversion of outstanding preferred stock, warrants to acquire preferred stock or convertible securities into shares of common stock or warrants to acquire shares of common stock; provided that any such shares of common stock or warrants received upon such conversion shall be subject to the terms of the lock-up agreement; and
 - (iv) the establishment by lock-up parties of trading plans under Rule 10b5-1 under the Exchange Act for the transfer of the lock-up securities, provided that (1) such plan does not provide for the transfer of lock-up securities during the restricted period and (2) no filing by any party under the Exchange Act or other public announcement shall be required or made voluntarily in connection with such trading plan during the restricted period.

[Table of Contents](#)

J.P. Morgan Securities LLC, Morgan Stanley & Co. LLC and BofA Securities, Inc., in their sole discretion, may release the securities subject to any of the lock-up agreements with the underwriters described above, in whole or in part at any time.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act.

Our common stock has been approved for listing on the Nasdaq Global Select Market under the symbol "ERAS."

In connection with this offering, the underwriters may engage in stabilizing transactions, which involves making bids for, purchasing and selling shares of common stock in the open market for the purpose of preventing or retarding a decline in the market price of the common stock while this offering is in progress. These stabilizing transactions may include making short sales of common stock, which involves the sale by the underwriters of a greater number of shares of common stock than they are required to purchase in this offering, and purchasing shares of common stock on the open market to cover positions created by short sales. Short sales may be "covered" shorts, which are short positions in an amount not greater than the underwriters' option to purchase additional shares referred to above, or may be "naked" shorts, which are short positions in excess of that amount.

The underwriters may close out any covered short position either by exercising their option to purchase additional shares, in whole or in part, or by purchasing shares in the open market. In making this determination, the underwriters will consider, among other things, the price of shares available for purchase in the open market compared to the price at which the underwriters may purchase shares through the option to purchase additional shares. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market that could adversely affect investors who purchase in this offering. To the extent that the underwriters create a naked short position, they will purchase shares in the open market to cover the position.

The underwriters have advised us that, pursuant to Regulation M of the Securities Act, they may also engage in other activities that stabilize, maintain or otherwise affect the price of the common stock, including the imposition of penalty bids. This means that if the representatives of the underwriters purchase common stock in the open market in stabilizing transactions or to cover short sales, the representatives can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them.

These activities may have the effect of raising or maintaining the market price of the common stock or preventing or retarding a decline in the market price of the common stock, and, as a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them at any time. The underwriters may carry out these transactions on the Nasdaq, in the over-the-counter market or otherwise.

Prior to this offering, there has been no public market for our common stock. The initial public offering price was determined by negotiations between us and the representatives of the underwriters. In determining the initial public offering price, we and the representatives of the underwriters considered a number of factors including:

- the information set forth in this prospectus and otherwise available to the representatives;
- our prospects and the history and prospects for the industry in which we compete;
- an assessment of our management;

[Table of Contents](#)

- our prospects for future earnings;
- the general condition of the securities markets at the time of this offering;
- the recent market prices of, and demand for, publicly traded common stock of generally comparable companies; and
- other factors deemed relevant by the underwriters and us.

Neither we nor the underwriters can assure investors that an active trading market will develop for shares of our common stock, or that the shares will trade in the public market at or above the initial public offering price.

Directed share program

At our request, the underwriters have reserved up to 5% of the shares offered by this prospectus for sale at the initial public offering price to certain individuals through a directed share program, including our directors, officers, employees, business associates and related persons. The sales will be made at our direction by J.P. Morgan Securities LLC and its affiliates through a directed share program. The number of shares of our common stock available for sale to the general public in this offering will be reduced to the extent that such persons purchase such reserved shares. Any reserved shares not so purchased will be offered by the underwriters to the general public on the same terms as the other shares of common stock offered by this prospectus. Each participant in the directed share program will agree that any shares purchased through this program will be subject to a 180-day lock-up restriction. We have agreed to indemnify the underwriters against certain liabilities and expenses, including liabilities under the Securities Act, in connection with the sales of the shares reserved for the directed share program.

Other relationships

Certain of the underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

Selling restrictions

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

Notice to prospective investors in the European Economic Area

In relation to each Member State of the European Economic Area (each a Relevant State), no shares have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that the shares may be offered to the public in that Relevant State at any time:

- (i) to any legal entity which is a qualified investor as defined under Article 2 of the Prospectus Regulation;
- (ii) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- (iii) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares shall require us or any of the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an “offer to the public” in relation to shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

Notice to prospective investors in the United Kingdom

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares which has been approved by the Financial Conduct Authority, except that the shares may be offered to the public in the United Kingdom at any time:

- (i) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;
- (ii) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- (iii) in any other circumstances falling within Section 86 of the FSMA, provided that no such offer of the shares shall require the Issuer or any Manager to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation. For the purposes of this provision, the expression an “offer to the public” in relation to the shares in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression “UK Prospectus Regulation” means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

Notice to prospective investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

[Table of Contents](#)

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Notice to prospective investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (SIX) or on any other stock exchange or regulated trading facility in Switzerland. This document does not constitute a prospectus within the meaning of, and has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (CISA). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to prospective investors in the Dubai International Financial Centre

This document relates to an Exempt Offer in accordance with the Markets Rules 2012 of the Dubai Financial Services Authority (DFSA). This document is intended for distribution only to persons of a type specified in the Markets Rules 2012 of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus supplement nor taken steps to verify the information set forth herein and has no responsibility for this document. The securities to which this document relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the securities offered should conduct their own due diligence on the securities. If you do not understand the contents of this document you should consult an authorized financial advisor.

In relation to its use in the DIFC, this document is strictly private and confidential and is being distributed to a limited number of investors and must not be provided to any person other than the original recipient, and may not be reproduced or used for any other purpose. The interests in the securities may not be offered or sold directly or indirectly to the public in the DIFC.

Notice to prospective investors in the United Arab Emirates

The shares have not been, and are not being, publicly offered, sold, promoted or advertised in the United Arab Emirates (including the Dubai International Financial Centre) other than in compliance with the laws of the United Arab Emirates (and the Dubai International Financial Centre) governing the issue, offering and sale of

[Table of Contents](#)

securities. Further, this prospectus does not constitute a public offer of securities in the United Arab Emirates (including the Dubai International Financial Centre) and is not intended to be a public offer. This prospectus has not been approved by or filed with the Central Bank of the United Arab Emirates, the Securities and Commodities Authority or the Dubai Financial Services Authority.

Notice to prospective investors in Australia

This prospectus:

- does not constitute a disclosure document or a prospectus under Chapter 6D.2 of the Corporations Act 2001 (Cth) (the Corporations Act);
- has not been, and will not be, lodged with the Australian Securities and Investments Commission (ASIC), as a disclosure document for the purposes of the Corporations Act and does not purport to include the information required of a disclosure document for the purposes of the Corporations Act; and
- may only be provided in Australia to select investors who are able to demonstrate that they fall within one or more of the categories of investors, available under section 708 of the Corporations Act (Exempt Investors).

The shares may not be directly or indirectly offered for subscription or purchased or sold, and no invitations to subscribe for or buy the shares may be issued, and no draft or definitive offering memorandum, advertisement or other offering material relating to any shares may be distributed in Australia, except where disclosure to investors is not required under Chapter 6D of the Corporations Act or is otherwise in compliance with all applicable Australian laws and regulations. By submitting an application for the shares, you represent and warrant to us that you are an Exempt Investor.

As any offer of shares under this document will be made without disclosure in Australia under Chapter 6D.2 of the Corporations Act, the offer of those securities for resale in Australia within 12 months may, under section 707 of the Corporations Act, require disclosure to investors under Chapter 6D.2 if none of the exemptions in section 708 applies to that resale. By applying for the shares you undertake to us that you will not, for a period of 12 months from the date of issue of the shares, offer, transfer, assign or otherwise alienate those shares to investors in Australia except in circumstances where disclosure to investors is not required under Chapter 6D.2 of the Corporations Act or where a compliant disclosure document is prepared and lodged with ASIC.

Notice to prospective investors in Japan

The shares have not been and will not be registered pursuant to Article 4, Paragraph 1 of the Financial Instruments and Exchange Act. Accordingly, none of the shares nor any interest therein may be offered or sold, directly or indirectly, in Japan or to, or for the benefit of, any "resident" of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to or for the benefit of a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and any other applicable laws, regulations and ministerial guidelines of Japan in effect at the relevant time.

Notice to prospective investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (i) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong), or the SFO, of Hong Kong and any rules made thereunder; or (ii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding

Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong, or the CO, or which do not constitute an offer to the public within the meaning of the CO. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made thereunder.

Notice to prospective investors in Singapore

Each representative has acknowledged that this prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each representative has represented and agreed that it has not offered or sold any shares or caused the shares to be made the subject of an invitation for subscription or purchase and will not offer or sell any shares or cause the shares to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares, whether directly or indirectly, to any person in Singapore other than:

- (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time, or the SFA) pursuant to Section 274 of the SFA;
- (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA; or
- (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (i) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (ii) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

- (i) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4) (i)(B) of the SFA;
- (ii) where no consideration is or will be given for the transfer;
- (iii) where the transfer is by operation of law;
- (iv) as specified in Section 276(7) of the SFA; or
- (v) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

[Table of Contents](#)

Singapore SFA Product Classification—In connection with Section 309B of the SFA and the CMP Regulations 2018, unless otherwise specified before an offer of the shares, the Company has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the shares are “prescribed capital markets products” (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

Notice to prospective investors in Bermuda

Shares may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda. Additionally, non-Bermudian persons (including companies) may not carry on or engage in any trade or business in Bermuda unless such persons are permitted to do so under applicable Bermuda legislation.

Notice to prospective investors in Saudi Arabia

This document may not be distributed in the Kingdom of Saudi Arabia except to such persons as are permitted under the Offers of Securities Regulations as issued by the board of the Saudi Arabian Capital Market Authority, or CMA, pursuant to resolution number 2-11-2004 dated 4 October 2004 as amended by resolution number 1-28-2008, as amended. The CMA does not make any representation as to the accuracy or completeness of this document and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective purchasers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document, you should consult an authorized financial adviser.

Notice to prospective investors in the British Virgin Islands

The shares are not being, and may not be offered to the public or to any person in the British Virgin Islands for purchase or subscription by or on behalf of the Company. The shares may be offered to companies incorporated under the BVI Business Companies Act, 2004 (British Virgin Islands), or BVI Companies, but only where the offer will be made to, and received by, the relevant BVI Company entirely outside of the British Virgin Islands.

Notice to prospective investors in China

This prospectus will not be circulated or distributed in the PRC and the shares will not be offered or sold, and will not be offered or sold to any person for re-offering or resale directly or indirectly to any residents of the PRC except pursuant to any applicable laws and regulations of the PRC. Neither this prospectus nor any advertisement or other offering material may be distributed or published in the PRC, except under circumstances that will result in compliance with applicable laws and regulations.

Notice to prospective investors in Korea

The shares have not been and will not be registered under the Financial Investments Services and Capital Markets Act of Korea and the decrees and regulations thereunder, or the FSCMA, and the shares have been and will be offered in Korea as a private placement under the FSCMA. None of the shares may be offered, sold or delivered directly or indirectly, or offered or sold to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except pursuant to the applicable laws and regulations of Korea, including the FSCMA and the Foreign Exchange Transaction Law of Korea and the decrees and regulations thereunder, or the FETL. The shares have not been listed on any of the securities exchanges in the world including, without

limitation, the Korea Exchange in Korea. Furthermore, the purchaser of the shares shall comply with all applicable regulatory requirements (including but not limited to requirements under the FETL) in connection with the purchase of the shares. By the purchase of the shares, the relevant holder thereof will be deemed to represent and warrant that if it is in Korea or is a resident of Korea, it purchased the shares pursuant to the applicable laws and regulations of Korea.

Notice to prospective investors in Malaysia

No prospectus or other offering material or document in connection with the offer and sale of the shares has been or will be registered with the Securities Commission of Malaysia, or Commission, for the Commission's approval pursuant to the Capital Markets and Services Act 2007. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Malaysia other than (i) a closed end fund approved by the Commission; (ii) a holder of a Capital Markets Services License; (iii) a person who acquires the shares, as principal, if the offer is on terms that the shares may only be acquired at a consideration of not less than RM250,000 (or its equivalent in foreign currencies) for each transaction; (iv) an individual whose total net personal assets or total net joint assets with his or her spouse exceeds RM3 million (or its equivalent in foreign currencies), excluding the value of the primary residence of the individual; (v) an individual who has a gross annual income exceeding RM300,000 (or its equivalent in foreign currencies) per annum in the preceding twelve months; (vi) an individual who, jointly with his or her spouse, has a gross annual income of RM400,000 (or its equivalent in foreign currencies), per annum in the preceding twelve months; (vii) a corporation with total net assets exceeding RM10 million (or its equivalent in a foreign currencies) based on the last audited accounts; (viii) a partnership with total net assets exceeding RM10 million (or its equivalent in foreign currencies); (ix) a bank licensee or insurance licensee as defined in the Labuan Financial Services and Securities Act 2010; (x) an Islamic bank licensee or takaful licensee as defined in the Labuan Financial Services and Securities Act 2010; and (xi) any other person as may be specified by the Commission; provided that, in the each of the preceding categories (i) to (xi), the distribution of the shares is made by a holder of a Capital Markets Services License who carries on the business of dealing in securities. The distribution in Malaysia of this prospectus is subject to Malaysian laws. This prospectus does not constitute and may not be used for the purpose of public offering or an issue, offer for subscription or purchase, invitation to subscribe for or purchase any securities requiring the registration of a prospectus with the Commission under the Capital Markets and Services Act 2007.

Notice to prospective investors in Taiwan

The shares have not been and will not be registered with the Financial Supervisory Commission of Taiwan pursuant to relevant securities laws and regulations and may not be sold, issued or offered within Taiwan through a public offering or in circumstances which constitutes an offer within the meaning of the Securities and Exchange Act of Taiwan that requires a registration or approval of the Financial Supervisory Commission of Taiwan. No person or entity in Taiwan has been authorized to offer, sell, give advice regarding or otherwise intermediate the offering and sale of the shares in Taiwan.

Notice to prospective investors in South Africa

Due to restrictions under the securities laws of South Africa, no “offer to the public” (as such term is defined in the South African Companies Act, No. 71 of 2008 (as amended or re-enacted), or the South African Companies Act) is being made in connection with the issue of the shares in South Africa. Accordingly, this document does not, nor is it intended to, constitute a “registered prospectus” (as that term is defined in the South African Companies Act) prepared and registered under the South African Companies Act and has not been approved by, and/or filed with, the South African Companies and Intellectual Property Commission or any other regulatory authority in South Africa. The shares are not offered, and the offer shall not be transferred, sold, renounced or delivered, in South Africa or to a person with an address in South Africa, unless one or other of the following exemptions stipulated in section 96 (1) applies:

- Section 96 (1)(a) the offer, transfer, sale, renunciation or delivery is to:
- (i) persons whose ordinary business, or part of whose ordinary business, is to deal in securities, as principal or agent;
 - (ii) the South African Public Investment Corporation;
 - (iii) persons or entities regulated by the Reserve Bank of South Africa;
 - (iv) authorized financial service providers under South African law;
 - (v) financial institutions recognized as such under South African law;
 - (vi) a wholly-owned subsidiary of any person or entity contemplated in (c), (d) or (e), acting as agent in the capacity of an authorized portfolio manager for a pension fund, or as manager for a collective investment scheme (in each case duly registered as such under South African law); or
 - (vi) any combination of the person in (i) to (vi); or
- Section 96 (1) (b) the total contemplated acquisition cost of the securities, for any single addressee acting as principal is equal to or greater than ZAR1,000,000 or such higher amount as may be promulgated by notice in the Government Gazette of South Africa pursuant to section 96(2)(a) of the South African Companies Act.

Information made available in this prospectus should not be considered as “advice” as defined in the South African Financial Advisory and Intermediary Services Act, 2002.

Legal matters

The validity of the shares of common stock offered hereby will be passed upon for us by Latham & Watkins LLP, San Diego, California. The underwriters are being represented by Cooley LLP, San Diego, California.

Experts

The consolidated financial statements of Erasca, Inc. and subsidiaries as of December 31, 2019 and 2020, and for each of the years in the two-year period ended December 31, 2020, have been included herein and in the registration statement in reliance upon the report of KPMG LLP, independent registered public accounting firm, appearing elsewhere herein, and upon the authority of said firm as experts in accounting and auditing.

Where you can find more information

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of common stock offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information about us and the common stock offered hereby, we refer you to the registration statement and the exhibits and schedules filed thereto. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. Upon the closing of this offering, we will be required to file periodic reports, proxy statements and other information with the SEC pursuant to the Exchange Act. The SEC maintains an Internet website that contains reports, proxy statements and other information about registrants, like us, that file electronically with the SEC. The address of that site is www.sec.gov.

Upon the effectiveness of the registration statement of which this prospectus is a part, we will become subject to the information and periodic reporting requirements of the Exchange Act and, in accordance therewith, will file periodic reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information will be available at the website of the SEC referred to above. We maintain a website at www.erasca.com. Upon the closing of this offering, you may access our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The reference to our website address does not constitute incorporation by reference of the information contained on our website, and you should not consider the contents of our website in making an investment decision with respect to our common stock. We have included our website address as an inactive textual reference only.

Erasca, Inc.

Index to consolidated financial statements

	Page
Report of independent registered public accounting firm	F-2
Consolidated balance sheets	F-3
Consolidated statements of operations and comprehensive loss	F-4
Consolidated statements of convertible preferred stock and stockholders' deficit	F-5
Consolidated statements of cash flows	F-7
Notes to consolidated financial statements	F-8

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Erasca, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Erasca, Inc. and subsidiaries (the Company) as of December 31, 2019 and 2020, the related consolidated statements of operations and comprehensive loss, convertible preferred stock and stockholders' deficit, and cash flows for each of the years in the two-year period ended December 31, 2020, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2020, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2020, in conformity with US generally accepted accounting principles.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the US federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 2020.

San Diego, California

May 7, 2021, except for the fifth paragraph of Note 17, as to which the date is July 12, 2021

Erasca, Inc.

Consolidated balance sheets

(In thousands, except share and par value amounts)

	December 31,		March 31,
	2019	2020	2021
			(unaudited)
Assets			
Current assets:			
Cash and cash equivalents	\$ 29,583	\$ 65,376	\$ 169,989
Short-term investments	20,786	53,325	42,351
Prepaid expenses and other current assets	752	1,289	2,004
Total current assets	51,121	119,990	214,344
Long-term investments	—	—	5,000
Property and equipment, net	1,502	1,847	1,746
Operating lease assets	2,833	2,225	2,053
Restricted cash	—	312	408
Other assets	56	451	1,077
Total assets	<u>\$ 55,512</u>	<u>\$ 124,825</u>	<u>\$ 224,628</u>
Liabilities, Convertible Preferred Stock and Stockholders' Deficit			
Current liabilities:			
Accounts payable	\$ 1,381	\$ 878	\$ 1,042
Accrued expenses and other current liabilities	643	11,925	9,274
Operating lease liabilities	726	877	898
Total current liabilities	2,750	13,680	11,214
Operating lease liabilities, net of current portion	2,963	2,109	1,875
Preferred stock purchase right liability	—	1,615	—
Total liabilities	5,713	17,404	13,089
Commitments and contingencies (Note 12)			
Convertible Preferred Stock (Series A, B-1 and B-2), \$0.0001 par value; 45,135,500, 97,622,409 and 97,622,409 shares authorized as of December 31, 2019 and 2020 and March 31, 2021 (unaudited), respectively; 38,103,681, 69,584,682 and 85,516,454 shares issued and outstanding as of December 31, 2019 and 2020 and March 31, 2021 (unaudited), respectively; aggregate liquidation preference of \$63,519, \$230,924 and \$350,412 as of December 31, 2019 and 2020 and March 31, 2021 (unaudited), respectively	63,403	221,405	340,798
Stockholders' deficit:			
Common stock, \$0.0001 par value; 80,000,000, 147,027,681 and 156,000,000 shares authorized as of December 31, 2019 and 2020 and March 31, 2021 (unaudited), respectively; 22,629,158, 25,189,673 and 26,129,283 shares issued as of December 31, 2019 and 2020 and March 31, 2021 (unaudited), respectively, and 20,515,698, 21,923,173 and 22,875,024 shares outstanding as of December 31, 2019 and 2020 and March 31, 2021 (unaudited), respectively	3	3	3
Additional paid-in capital	124	1,413	4,156
Accumulated other comprehensive income	11	2	1
Accumulated deficit	(13,742)	(115,402)	(133,419)
Total stockholders' deficit	(13,604)	(113,984)	(129,259)
Total liabilities, convertible preferred stock and stockholders' deficit	<u>\$ 55,512</u>	<u>\$ 124,825</u>	<u>\$ 224,628</u>

See accompanying notes to consolidated financial statements.

Erasca, Inc.**Consolidated statements of operations and comprehensive loss**

(In thousands, except share and per share amounts)

	Year ended December 31,		Three months ended March 31,	
	2019	2020	2020	2021
	(unaudited)			
Operating expenses:				
Research and development	\$ 9,618	\$ 29,550	\$ 4,554	\$ 12,245
In-process research and development	—	71,745	17,670	3,680
General and administrative	3,676	7,957	1,611	3,682
Total operating expenses	<u>13,294</u>	<u>109,252</u>	<u>23,835</u>	<u>19,607</u>
Loss from operations	(13,294)	(109,252)	(23,835)	(19,607)
Other income (expense)				
Interest income	1,303	336	185	30
Other expense	(49)	(102)	(8)	(55)
Change in fair value of preferred stock purchase right liability	—	7,358	—	1,615
Total other income (expense), net	<u>1,254</u>	<u>7,592</u>	<u>177</u>	<u>1,590</u>
Net loss	<u>\$ (12,040)</u>	<u>\$ (101,660)</u>	<u>\$ (23,658)</u>	<u>\$ (18,017)</u>
Net loss per share, basic and diluted	<u>\$ (0.61)</u>	<u>\$ (4.83)</u>	<u>\$ (1.15)</u>	<u>\$ (0.81)</u>
Weighted-average shares of common stock used in computing net loss per share, basic and diluted	<u>19,826,574</u>	<u>21,037,540</u>	<u>20,631,590</u>	<u>22,233,422</u>
Other comprehensive income (loss):				
Unrealized gain (loss) on investments, net	11	(9)	(22)	(1)
Comprehensive loss	<u>\$ (12,029)</u>	<u>\$ (101,669)</u>	<u>\$ (23,680)</u>	<u>\$ (18,018)</u>

See accompanying notes to consolidated financial statements.

Erasca, Inc.

Consolidated statements of convertible preferred stock and stockholders' deficit

(In thousands, except share data)

	Convertible preferred stock		Common stock		Additional paid-in capital	Accumulated other comprehensive income (loss)	Accumulated deficit	Total stockholders' deficit
	Shares	Amount	Shares	Amount				
Balance at December 31, 2018	27,953,681	\$ 46,538	22,629,158	\$ 3	\$ 2	\$ —	\$ (1,702)	\$ (1,697)
Issuance of Series A convertible preferred stock for cash, net of \$55 in issuance costs	10,150,000	16,865	—	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	122	—	—	122
Net loss	—	—	—	—	—	—	(12,040)	(12,040)
Unrealized gain on short-term investments, net	—	—	—	—	—	11	—	11
Balance at December 31, 2019	38,103,681	\$ 63,403	22,629,158	\$ 3	\$ 124	\$ 11	\$ (13,742)	\$ (13,604)
Issuance of Series B-1 convertible preferred stock for cash, net of \$430 in issuance costs and preferred stock purchase right liability of \$8,973	27,481,001	128,002	—	—	—	—	—	—
Issuance of Series B-2 convertible preferred stock in connection with asset acquisition	4,000,000	30,000	—	—	—	—	—	—
Exercise of stock options	—	—	3,542,113	—	170	—	—	170
Vesting of early exercised stock options	—	—	—	—	322	—	—	322
Repurchases of early exercised stock options and restricted stock	—	—	(981,598)	—	—	—	—	—
Stock-based compensation expense	—	—	—	—	797	—	—	797
Net loss	—	—	—	—	—	—	(101,660)	(101,660)
Unrealized loss on short-term investments, net	—	—	—	—	—	(9)	—	(9)
Balance at December 31, 2020	69,584,682	\$ 221,405	25,189,673	\$ 3	\$ 1,413	\$ 2	\$ (115,402)	\$ (113,984)
Issuance of Series B-2 convertible preferred stock for cash, net of \$95 in issuance costs (unaudited)	15,931,772	119,393	—	—	—	—	—	—
Issuance of common stock in connection with asset acquisition (unaudited)	—	—	500,000	—	1,680	—	—	1,680

[Table of Contents](#)

	Convertible preferred stock		Common stock		Additional paid-in capital	Accumulated other comprehensive income (loss)	Accumulated deficit	Total stockholders' deficit
	Shares	Amount	Shares	Amount				
Exercise of stock options (unaudited)	—	—	439,610	—	94	—	—	94
Vesting of early exercised stock options (unaudited)	—	—	—	—	174	—	—	174
Stock-based compensation expense (unaudited)	—	—	—	—	795	—	—	795
Net loss (unaudited)	—	—	—	—	—	—	(18,017)	(18,017)
Unrealized loss on investments, net (unaudited)	—	—	—	—	—	(1)	—	(1)
Balance at March 31, 2021 (unaudited)	85,516,454	\$ 340,798	26,129,283	\$ 3	\$ 4,156	\$ 1	\$ (133,419)	\$ (129,259)

	Convertible preferred stock		Common stock		Additional paid-in capital	Accumulated other comprehensive income (loss)	Accumulated deficit	Total stockholders' deficit
	Shares	Amount	Shares	Amount				
Balance at December 31, 2019	38,103,681	\$ 63,403	22,629,158	\$ 3	\$ 124	\$ 11	\$ (13,742)	\$ (13,604)
Exercise of stock options (unaudited)	—	—	729,166	—	—	—	—	—
Stock-based compensation expense (unaudited)	—	—	—	—	105	—	—	105
Net loss (unaudited)	—	—	—	—	—	—	(23,658)	(23,658)
Unrealized loss on short-term investments, net (unaudited)	—	—	—	—	—	(22)	—	(22)
Balance at March 31, 2020 (unaudited)	38,103,681	\$ 63,403	23,358,324	\$ 3	\$ 229	\$ (11)	\$ (37,400)	\$ (37,179)

See accompanying notes to consolidated financial statements.

Erasca, Inc.

Consolidated statements of cash flows

(In thousands)

	Year ended December 31,		Three months ended March 31,	
	2019	2020	2020	2021
			(unaudited)	
Cash flows from operating activities:				
Net loss	\$ (12,040)	\$ (101,660)	\$ (23,658)	\$ (18,017)
Adjustments to reconcile net loss to net cash used in operating activities:				
Depreciation and amortization	310	540	121	149
Stock-based compensation expense	122	797	105	795
In-process research and development expenses	—	71,745	17,670	3,680
(Accretion) amortization on investments, net	(485)	(38)	(16)	13
Loss on asset disposal	2	2	—	—
Change in fair value of preferred stock purchase right liability	—	(7,358)	—	(1,615)
Changes in operating assets and liabilities:				
Prepaid expenses and other current and long-term assets	(69)	(932)	(45)	(1,158)
Accounts payable	1,172	(380)	(309)	175
Accrued expenses and other current liabilities	406	4,693	514	353
Operating lease assets and liabilities, net	204	(95)	8	(41)
Net cash used in operating activities	<u>(10,378)</u>	<u>(32,686)</u>	<u>(5,610)</u>	<u>(15,666)</u>
Cash flows from investing activities:				
Purchases of investments	(58,890)	(99,202)	—	(21,990)
Maturities of investments	38,600	66,692	7,550	27,950
In-process research and development	—	(37,745)	(6,000)	(6,000)
Purchases of property and equipment	(597)	(947)	(558)	(122)
Net cash (used in) provided by investing activities	<u>(20,887)</u>	<u>(71,202)</u>	<u>992</u>	<u>(162)</u>
Cash flows from financing activities:				
Proceeds from the exercise of stock options, net of repurchases	—	3,018	490	1,144
Proceeds from the issuance of convertible preferred stock, net of issuance costs	16,865	136,975	—	119,393
Net cash provided by financing activities	<u>16,865</u>	<u>139,993</u>	<u>490</u>	<u>120,537</u>
Net (decrease) increase in cash, cash equivalents and restricted cash	(14,400)	36,105	(4,128)	104,709
Cash, cash equivalents and restricted cash at beginning of year	43,983	29,583	29,583	65,688
Cash, cash equivalents and restricted cash at end of year	<u>\$ 29,583</u>	<u>\$ 65,688</u>	<u>\$ 25,455</u>	<u>\$ 170,397</u>
Supplemental disclosure of cash flow information:				
Cash paid for taxes	<u>\$ 13</u>	<u>\$ 69</u>	<u>\$ 35</u>	<u>\$ 65</u>
Supplemental disclosure of noncash investing and financing activities:				
Issuance of Series B-2 convertible preferred stock in connection with asset acquisition	<u>\$ —</u>	<u>\$ 30,000</u>	<u>\$ —</u>	<u>\$ —</u>
Issuance of common stock in connection with asset acquisition	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,680</u>
Amounts accrued for purchases of property and equipment	<u>\$ 134</u>	<u>\$ 74</u>	<u>\$ 186</u>	<u>\$ —</u>
Amounts accrued for in-process research and development expenses	<u>\$ —</u>	<u>\$ 4,000</u>	<u>\$ 11,670</u>	<u>\$ —</u>
Amounts accrued for deferred offering costs	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 108</u>	<u>\$ 183</u>
Vesting of early exercised options	<u>\$ —</u>	<u>\$ 322</u>	<u>\$ —</u>	<u>\$ 174</u>
Preferred stock purchase right liability	<u>\$ —</u>	<u>\$ 8,973</u>	<u>\$ —</u>	<u>\$ —</u>
Supplemental disclosure of noncash operating activities:				
Recognition of operating lease assets upon adoption of ASC 842	<u>\$ 1,893</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>
Operating lease assets obtained in exchange for lease obligation	<u>\$ 1,245</u>	<u>\$ 28</u>	<u>\$ —</u>	<u>\$ —</u>

See accompanying notes to consolidated financial statements.

Erasca, Inc.

Notes to consolidated financial statements

1. Organization and basis of presentation

Organization and nature of operations

Erasca, Inc. (Erasca or the Company) is a clinical-stage precision oncology company singularly focused on discovering, developing, and commercializing therapies for RAS/MAPK pathway-driven cancers. The Company has assembled a wholly-owned or controlled RAS/MAPK pathway-focused pipeline comprising 11 modality-agnostic programs aligned with its three therapeutic strategies of: (i) targeting key upstream and downstream signaling nodes in the RAS/MAPK pathway; (ii) targeting RAS directly; and (iii) targeting escape routes that emerge in response to treatment. The Company was incorporated under the laws of the State of Delaware on July 2, 2018, as Erasca, Inc., and is headquartered in San Diego, California. In September 2020, the Company established a wholly-owned Australian subsidiary, Erasca Australia Pty Ltd, in order to conduct clinical activities for its development candidates. In March 2021, the Company established a wholly-owned subsidiary, Erasca Ventures, LLC, to potentially make equity investments in early-stage biotechnology companies that are aligned with the Company's mission and strategy.

Since inception, the Company has devoted substantially all of its efforts and resources to organizing and staffing the Company, business planning, raising capital, identifying, acquiring and in-licensing the Company's product candidates, establishing its intellectual property portfolio, conducting research, preclinical studies, and clinical trials, establishing arrangements with third parties for the manufacture of its product candidates and related raw materials, and providing general and administrative support for these operations. As of December 31, 2020 and March 31, 2021 (unaudited), the Company had \$118.7 million and \$212.3 million in cash, cash equivalents, and short-term investments, respectively. As of December 31, 2020 and March 31, 2021 (unaudited), the Company had an accumulated deficit of \$115.4 million and \$133.4 million, respectively. The Company has incurred significant operating losses and negative cash flows from operations. From its inception through March 31, 2021 (unaudited), the Company's financial support has primarily been provided from the sale of its convertible preferred stock.

As the Company continues its expansion, it expects to use its cash, cash equivalents, and short-term investments to fund research and development, working capital, and other general corporate purposes. The Company does not expect to generate any revenues from product sales unless and until the Company successfully completes development and obtains regulatory approval for any of its product candidates, which will not be for at least the next several years, if ever. Accordingly, until such time as the Company can generate significant revenue from sales of its product candidates, if ever, the Company expects to finance its cash needs through equity offerings, debt financings, or other capital sources, including potential collaborations, licenses or other similar arrangements. However, the Company may not be able to secure additional financing or enter into such other arrangements in a timely manner or on favorable terms, if at all. The Company's failure to raise capital or enter into such other arrangements when needed would have a negative impact on the Company's financial condition and could force the Company to delay, limit, reduce or terminate its research and development programs or other operations, or grant rights to develop and market product candidates that the Company would otherwise prefer to develop and market itself. The Company believes its cash, cash equivalents, and short-term investments as of March 31, 2021 will be sufficient for the Company to fund operations for at least one year from the issuance date of these consolidated financial statements.

Basis of presentation

The accompanying consolidated financial statements have been prepared in accordance with US generally accepted accounting principles (US GAAP). Any reference in these notes to applicable guidance is meant to refer to US GAAP as found in the Accounting Standards Codification (ASC) and Accounting Standards Updates (ASU) promulgated by the Financial Accounting Standards Board (FASB).

Principles of consolidation and foreign currency transactions

The Company's consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, Erasca Australia Pty Ltd (Erasca Australia) and Erasca—ASN Product Development, Inc. (ASN). Erasca Australia was registered under the laws of Australia on September 1, 2020 and ASN was incorporated under the laws of the State of Delaware on November 23, 2020. On March 30, 2021, the Company formed Erasca Ventures, LLC, a wholly-owned subsidiary, under the laws of the State of Delaware. All intercompany balances and transactions have been eliminated. The functional currency of the Company and its wholly-owned subsidiaries is the US dollar. Assets and liabilities that are not denominated in the functional currency are remeasured into US dollars at foreign currency exchange rates in effect at the balance sheet date except for nonmonetary assets, which are remeasured at historical foreign currency exchange rates in effect at the date of transaction. Net realized and unrealized gains and losses from foreign currency transactions and remeasurement are reported in other income (expense), in the consolidated statements of operations and comprehensive loss and were not material for all periods presented.

2. Summary of significant accounting policies

Use of estimates

The preparation of the Company's consolidated financial statements in conformity with US GAAP requires the Company to make estimates and assumptions that impact the reported amounts of assets, liabilities, expenses, and the disclosure of contingent assets and liabilities in the consolidated financial statements and accompanying notes. Accounting estimates and management judgments reflected in the consolidated financial statements include, but are not limited to, the accrual of research and development expenses, fair value of common stock, preferred stock and freestanding instruments, stock-based compensation expense, and the incremental borrowing rate for determining the operating lease asset and liability. Management evaluates its estimates on an ongoing basis. Although estimates are based on the Company's historical experience, knowledge of current events, and actions it may undertake in the future, actual results may ultimately materially differ from these estimates and assumptions.

Unaudited interim financial information

The accompanying consolidated balance sheet as of March 31, 2021, and the consolidated statements of operations and comprehensive loss, convertible preferred stock and stockholders' deficit and cash flows for the three months ended March 31, 2020 and 2021 are unaudited. The unaudited consolidated interim financial statements have been prepared on the same basis as the audited annual consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary for the fair statement of the Company's consolidated financial position as of March 31, 2021 and the consolidated results of its operations and cash flows for the three months ended March 31, 2020 and 2021. The consolidated financial data and other information disclosed in these notes related to the three months ended March 31, 2020 and 2021 are unaudited. The consolidated results for the three months ended March 31, 2021 are not necessarily indicative of results to be expected for the year ending December 31, 2021, any other interim periods, or any future year or period.

Concentration of credit risk and off-balance sheet risk

Financial instruments which potentially subject the Company to significant concentration of credit risk consist of cash and cash equivalents and investments. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. The Company has not experienced any losses in such accounts, and management believes that the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held. The Company's investment policy includes guidelines for the quality of the related institutions and financial instruments and defines allowable investments that the Company may invest in, which the Company believes minimizes the exposure to concentration of credit risk.

Cash and cash equivalents

Cash and cash equivalents include cash in readily available checking and savings accounts, money market funds, commercial paper, and corporate debt securities. The Company considers all highly liquid investments with an original maturity of three months or less from the date of purchase to be cash equivalents.

Restricted cash

The Company had deposited cash of \$312,000 and \$408,000 as of December 31, 2020 and March 31, 2021 (unaudited), respectively, to secure a letter of credit in connection with the lease of the Company's facilities (see Note 11). The Company has classified the restricted cash as a noncurrent asset on its consolidated balance sheets. There was no restricted cash as of December 31, 2019.

Investments

The Company classifies all marketable securities as available-for-sale, as the sale of such securities may be required prior to maturity. Management determines the appropriate classification of its investments in debt securities at the time of purchase. Investments with original maturities beyond three months at the date of purchase and which mature at, or less than 12 months from, the balance sheet date are classified as short-term investments. Available-for-sale securities are carried at fair value, with the unrealized gains and losses reported as accumulated other comprehensive income (loss) until realized. The amortized cost of available-for-sale debt securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization and accretion are included in interest income. The Company regularly reviews all its investments for other-than-temporary declines in fair value. The review includes the consideration of the cause of the impairment, including the creditworthiness of the security issuers, the number of securities in an unrealized loss position, the severity and duration of the unrealized losses, whether the Company has the intent to sell the securities and whether it is more likely than not that the Company will be required to sell the securities before the recovery of their amortized cost basis. When the Company determines that the decline in fair value of an investment is below its accounting basis and the decline is other-than-temporary, the Company reduces the carrying value of the security it holds and records a loss for the amount of such decline. Realized gains and losses and declines in value judged to be other than temporary, if any, on available-for-sale securities are included in other income or expense. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available-for-sale are included in interest income.

Fair value measurements

Certain assets and liabilities are carried at fair value under US GAAP. Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly

[Table of Contents](#)

transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. Financial assets and liabilities carried at fair value are classified and disclosed in one of the following three levels of the fair value hierarchy, of which the first two are considered observable and the last is considered unobservable:

Level 1—Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

Level 2—Quoted prices for similar assets and liabilities in active markets, quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability.

Level 3—Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e., supported by little or no market activity).

Property and equipment, net

Property and equipment are stated at cost less accumulated depreciation. Depreciation and amortization are calculated using the straight-line method over the estimated useful lives of the respective assets, generally three to seven years. Leasehold improvements are amortized over the shorter of the estimated useful lives of the assets or the remaining lease term.

Impairment of long-lived assets

The Company continually evaluates long-lived assets for potential impairment when events or changes in circumstances indicate the carrying value of the assets may not be recoverable. Recoverability is measured by comparing the book values of the assets to the expected future net undiscounted cash flows that the assets are expected to generate. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the book values of the assets exceed their fair value. The Company did not recognize any impairment losses for the years ended December 31, 2019 and 2020 and the three months ended March 31, 2020 and 2021 (unaudited).

Leases

The Company leases real estate facilities and equipment under non-cancelable and cancelable operating leases with various expiration dates through fiscal year 2032. At the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on the unique facts and circumstances present, the existence of an identified asset(s), if any, and the Company's control over the use of the identified asset(s), if applicable.

The Company adopted ASU 2016-02, *Leases (Topic 842)* on January 1, 2019. The Company elected the package of practical expedients for transition under which the Company did not reassess its prior conclusions about lease identification, lease classification and initial direct costs. Additionally, the Company elected the hindsight and land easement practical expedients for transition under which conclusions around lease term, impairment and land easements will not be reassessed. The Company did not apply the portfolio approach to its lease agreements.

Operating leases are included in operating lease assets and in operating lease liabilities in the accompanying consolidated balance sheets. Operating lease assets represent the Company's right to use an underlying asset for the lease term, and lease liabilities represent the Company's obligation to make lease payments arising

from the lease. Operating lease liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term discounted based on the more readily determinable of (i) the rate implicit in the lease or (ii) the Company's incremental borrowing rate (which is the estimated rate the Company would be required to pay for a collateralized borrowing equal to the total lease payments over the term of the lease). Because the Company's operating leases generally do not provide an implicit rate, the Company estimates its incremental borrowing rate based on the information available at lease commencement date for borrowings with a similar term.

The Company's operating lease assets are measured based on the corresponding operating lease liability adjusted for (i) payments made to the lessor at or before the commencement date, (ii) initial direct costs incurred and (iii) tenant incentives under the lease. The Company does not assume renewals or early terminations unless it is reasonably certain to exercise these options at commencement. The Company elected the practical expedient which allows the Company to not allocate consideration between lease and non-lease components. Variable lease payments are recognized in the period in which the obligations for those payments are incurred. In addition, the Company elected the practical expedient such that it does not recognize lease assets or lease liabilities for leases with a term of 12 months or less of all asset classes. Operating lease expense is recognized on a straight-line basis over the lease term.

Research and development expense

Research and development expenses consist of external and internal costs associated with the Company's research and development activities, including its discovery and research efforts and the preclinical and clinical development of its product candidates. Research and development costs are expensed as incurred. The Company's research and development expenses include external costs, consisting of expenses incurred under arrangements with third parties, such as contract research organizations, contract manufacturers, consultants and its scientific advisors; and internal costs, consisting of employee-related expenses, including salaries, benefits, and stock-based compensation for those individuals involved in research and development efforts, the costs of laboratory supplies and acquiring, developing and manufacturing preclinical study materials, and facilities and depreciation, which include direct and allocated expenses for rent of facilities and depreciation of equipment.

The Company records accruals for estimated research and development costs, comprising payments for work performed by third party contractors, laboratories, and others. Some of these contractors bill monthly based on actual services performed, while others bill periodically based upon achieving certain contractual milestones. For the latter, the Company accrues the expenses as goods or services are used or rendered. Non-refundable advance payments for goods or services that will be used or rendered for future research and development activities are deferred and capitalized as prepaid expenses until the related goods are delivered or services are performed.

In-process research and development expense

The Company has acquired rights as part of asset acquisitions or in-licenses to develop and commercialize product candidates. Upfront payments that relate to the acquisition of a new drug compound, as well as pre-commercial milestone payments, are immediately expensed as in-process research and development (IPR&D) in the period in which they are incurred, provided that the new drug compound did not also include processes or activities that would constitute a "business" as defined under US GAAP, the drug has not achieved regulatory approval for marketing and, absent obtaining such approval, has no established alternative future use. The Company accounts for contingent consideration payable upon achievement of certain regulatory, development or sales milestones in such asset acquisitions when the underlying contingency is resolved.

[Table of Contents](#)

Milestone payments made to third parties subsequent to regulatory approval will be capitalized as intangible assets and amortized over the estimated remaining useful life of the related product.

Patent costs

The Company expenses all costs as incurred in connection with patent applications (including direct application fees, and the legal and consulting expenses related to making such applications) and such costs are included in general and administrative expenses in the consolidated statements of operations and comprehensive loss.

Deferred offering costs

The Company capitalizes certain legal, professional accounting and other third-party fees that are directly associated with in-process equity financings as deferred offering costs until such financings are consummated. After consummation of the equity financing, these costs are recorded in stockholders' deficit as a reduction of proceeds generated as a result of the offering. Should the in-process equity financing be abandoned, the deferred offering costs will be expensed immediately as a charge to operating expenses in the consolidated statements of operations and comprehensive loss. There were no deferred offering costs on the Company's consolidated balance sheets as of December 31, 2019 and 2020 and \$183,000 of deferred offering costs as of March 31, 2021 (unaudited) included in other assets on the Company's consolidated balance sheet.

Common stock valuation

Due to the absence of an active market for the Company's common stock, the Company utilized methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants' Audit and Accounting Practice Guide: *Valuation of Privately-Held Company Equity Securities Issued as Compensation* to estimate the fair value of its common stock. In determining the exercise prices for options granted, the Company has considered the fair value of the common stock as of the grant date. The fair value of the common stock has been determined based upon a variety of factors, including valuations of the Company's common stock performed with the assistance of independent third-party valuation specialists; the Company's stage of development and business strategy, including the status of research and development efforts of its product candidates, and the material risks related to its business and industry; the Company's business conditions and projections; the Company's results of operations and financial position, including its levels of available capital resources; the valuation of publicly traded companies in the life sciences and biotechnology sectors, as well as recently completed mergers and acquisitions of peer companies; the lack of marketability of the Company's common stock as a private company; the prices of the Company's convertible preferred stock sold to investors in arm's length transactions and the rights, preferences and privileges of its convertible preferred stock relative to those of its common stock; the likelihood of achieving a liquidity event for the holders of the Company's common stock, such as an initial public offering or a sale of the Company given prevailing market conditions; trends and developments in its industry; the hiring of key personnel and the experience of management; and external market conditions affecting the life sciences and biotechnology industry sectors. Significant changes to the key assumptions underlying the factors used could result in different fair values of common stock at each valuation date.

Stock-based compensation

The Company measures employee and nonemployee stock-based awards based on the fair value on the date of grant and records compensation expense on a straight-line basis over the requisite service period of the award. The Company records the expense for stock-based compensation awards subject to performance-based milestone vesting over the implied service period when management determines that achievement of the

[Table of Contents](#)

milestone is probable. Management evaluates when the achievement of a performance-based milestone is probable based on the expected satisfaction of the performance conditions at each reporting date. All stock-based compensation costs are recorded in the consolidated statements of operations and comprehensive loss based upon the underlying employees or nonemployee's roles within the Company. Forfeitures are accounted for as they occur.

The fair value of each stock option grant is estimated on the date of grant using the Black-Scholes options-pricing model, which requires inputs based on certain subjective assumptions, including the:

- *Fair value of common stock.* As there is no active market for the Company's common stock, the Company estimates the fair value of common stock on the date of grant based on the then current facts and circumstances.
- *Risk-free interest rate.* The risk-free interest rate is based on the US Treasury zero-coupon issues in effect at the time of grant for periods corresponding with the expected term of the options.
- *Expected volatility.* Given that the Company's common stock is privately held, there is no active trading market for its common stock. The Company derived the expected volatility from the average historical volatilities over a period approximately equal to the expected term of comparable publicly traded companies within its peer group that were deemed to be representative of future stock price trends. The Company will continue to apply this process until a sufficient amount of historical information regarding the volatility of its own stock price becomes available.
- *Expected term.* The expected term represents the period that the options granted are expected to be outstanding. The expected term of stock options issued is determined using the simplified method (based on the mid-point between the vesting date and the end of the contractual term) as the Company has concluded that its stock option exercise history does not provide a reasonable basis upon which to estimate expected term.
- *Expected dividend yield.* The Company has never paid dividends on its common stock and does not anticipate paying any dividends in the foreseeable future. Therefore, the Company used an expected dividend yield of zero.

The fair value of each restricted common stock award is estimated on the date of grant based on the fair value of the Company's common stock on that same date.

Classification and accretion of convertible preferred stock

The Company's convertible preferred stock is classified outside of stockholders' deficit on the consolidated balance sheets because the holders of such shares have liquidation rights in the event of a deemed liquidation that, in certain situations, are not solely within the control of the Company and would require the redemption of the then-outstanding convertible preferred stock. The convertible preferred stock is not redeemable, except in the event of a deemed liquidation (see Note 9). Because the occurrence of a deemed liquidation event is not currently probable, the carrying values of the convertible preferred stock are not being accreted to their redemption values. Subsequent adjustments to the carrying values of the convertible preferred stock would be made only when a deemed liquidation event becomes probable.

Preferred stock purchase right liabilities

The Company has entered into convertible preferred stock financings where, in addition to the initial closing, investors agree to buy, and the Company agrees to sell, additional shares of that convertible preferred stock at

[Table of Contents](#)

a fixed price in the event that certain conditions are met or agreed upon milestones are achieved. The Company evaluates this purchase right and assesses whether it meets the definition of a freestanding instrument and, if so, determines the fair value of the purchase right liability and records it on the balance sheet with the remainder of the proceeds raised allocated to convertible preferred stock. The preferred stock purchase right liability is revalued at each reporting period with changes in the fair value of the liability recorded as change in fair value of preferred stock purchase right liability in the consolidated statements of operations and comprehensive loss. The preferred stock purchase right liability is revalued at settlement and the resultant fair value, if any, is then reclassified to convertible preferred stock at that time.

Income taxes

The Company recognizes deferred tax assets and liabilities for the expected future tax consequences of events that have been recognized in the Company's consolidated financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on differences between the financial statement carrying amounts and the tax bases of the assets and liabilities using the enacted tax rates in effect in the years in which the differences are expected to reverse. A valuation allowance against deferred tax assets is recorded if, based on the weight of the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company accounts for uncertainty in income taxes recognized in the consolidated financial statements by applying a two-step process to determine the amount of tax benefit to be recognized. First, the tax position must be evaluated to determine the likelihood that it will be sustained upon external examination by the taxing authorities. If the tax position is deemed more-likely-than-not to be sustained, the tax position is then assessed to determine the amount of benefit to recognize in the consolidated financial statements. The amount of the benefit that may be recognized is the largest amount that has a greater than 50% likelihood of being realized upon ultimate settlement. The provision for income taxes includes the effects of any resulting tax reserves, or unrecognized tax benefits, that are considered appropriate as well as the related net interest and penalties. As of December 31, 2020, the Company's tax years since inception are subject to examination by taxing authorities due to the Company's unutilized net operating losses and tax credits.

Comprehensive income (loss)

The Company reports all components of comprehensive income (loss), including net loss, in the consolidated financial statements in the period in which they are recognized. Comprehensive income (loss) is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources, including unrealized gains and losses on investments. Other comprehensive income includes unrealized gains and losses on investments, which was the only difference between net loss and comprehensive loss for the applicable periods.

Net loss per share

The Company's net loss is equivalent to net loss attributable to common stockholders for all periods presented. Basic net loss per share is calculated by dividing the net loss by the weighted-average number of common shares outstanding during the period, without consideration of potentially dilutive securities. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of common shares and potentially dilutive securities outstanding for the period. For purposes of the diluted net loss per share calculation, the convertible preferred stock, options to purchase common stock and common stock subject to repurchase related to unvested restricted stock and options early exercised are considered to be potentially dilutive securities. Basic and diluted net loss per share is presented in conformity with the two-class method

[Table of Contents](#)

required for participating securities as the convertible preferred stock is considered a participating security because it participates in dividends with common stock. The Company also considers the shares issued upon the early exercise of stock options subject to repurchase to be participating securities because holders of such shares have non-forfeitable dividend rights in the event a dividend is paid on common stock. The Company's participating securities do not have a contractual obligation to share in the Company's losses. As such, the net loss was attributed entirely to common stockholders. As the Company has reported a net loss for all periods presented, diluted net loss per common share is the same as basic net loss per common share for those periods, since dilutive common shares are not assumed to have been issued if their effect is anti-dilutive.

Segments

The Company has determined that its chief executive officer is the chief operating decision maker (CODM). The Company operates and manages the business as one reporting and one operating segment, which is the business of discovering and developing precision medicines for the benefit of patients with cancer. The Company's CODM reviews financial information on an aggregate basis for purposes of allocating resources and evaluating financial performance. All of the Company's assets are located in the United States.

Recently adopted accounting pronouncements

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)* (ASU 2016-02), as subsequently amended which requires an entity to recognize assets and liabilities arising from a lease for both financing (formerly referred to as capital) and operating leases (ASC 842). ASU 2016-02 also requires new qualitative and quantitative disclosures to help investors and other financial statement users better understand the amount, timing, and uncertainty of cash flows arising from leases. ASU 2016-02 was effective for the Company in its annual reporting period beginning after December 15, 2021, with early adoption permitted. The Company adopted this ASU as of January 1, 2019 using the modified retrospective approach. In addition, the standard allows for certain practical expedients in transition to ASC 842, including the package of practical expedients. The Company elected to utilize the package of practical expedients which allowed the Company to not reassess the following: (i) whether any expired or existing contracts contained leases; (ii) the lease classification for any expired or existing leases; and (iii) the treatment of initial direct costs for any existing leases. Additionally, the Company elected the hindsight practical expedient for transition under which conclusions around lease term and impairment were not reassessed. ASU 2018-01, *Land Easement Practical Expedient for Transition to Topic 840* (ASU 2018-01) is effective for the Company upon adopting ASC 842. The Company adopted this ASU as of January 1, 2019 and will not reassess whether any land easements not previously accounted for as leases under Topic 840 meet the definition of a lease.

The adoption of this standard resulted in the recognition of operating lease liabilities and right-of-use assets of \$2.5 million and \$1.9 million, respectively, and the derecognition of a non-current liability of \$695,000 and a current asset of \$122,000, on the Company's consolidated balance sheet at adoption as of January 1, 2019.

In November 2016, the FASB issued ASU 2016-18, *Statement of Cash Flows, Restricted Cash* (ASU 2016-18). This ASU requires changes in restricted cash during the period to be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. If cash, cash equivalents and restricted cash are presented in more than one line item on the balance sheet, the new guidance requires a reconciliation of the total in the statement of cash flows to the related captions in the balance sheet. The Company elected to adopt ASU 2016-18 on January 1, 2019 and has reflected the adoption in its consolidated financial statements. A reconciliation of the cash, cash equivalents, and restricted cash

[Table of Contents](#)

reported within the consolidated balance sheets that sum to the total of the same amounts shown in the statement of cash flows is as follows (in thousands):

	<u>December 31,</u>		<u>March 31,</u>	
	<u>2019</u>	<u>2020</u>	<u>2020</u>	<u>2021</u>
			<u>(unaudited)</u>	
Cash and cash equivalents	\$29,583	\$65,376	\$25,455	\$169,989
Restricted cash	—	312	—	408
Total cash, cash equivalents and restricted cash as shown on the consolidated statements of cash flows	\$29,583	\$65,688	\$25,455	\$170,397

In August 2018, the FASB issued ASU 2018-13, *Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement*. The primary focus of the standard is to improve the effectiveness of the disclosure requirements for fair value measurements. The Company adopted this guidance on January 1, 2020, with no material impact on its consolidated financial statements or related disclosures.

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740)* (ASU 2019-12), which is intended to simplify the accounting for income taxes. The most significant impact of ASU 2019-12 is its removal of the exception to the incremental approach for intraperiod tax allocation when there is a loss from continuing operations. As a result of this change, the Company expects to experience a reduction in income statement volatility primarily due to the implications of this guidance on the accounting for unrealized gains and losses on investment securities classified as available-for-sale. The guidance is effective for annual periods beginning after December 15, 2020. Early adoption is permitted. Effective January 1, 2019, the Company adopted ASU 2019-12 and the adoption had an immaterial impact on its consolidated financial statements and related disclosures.

In August 2018, the FASB issued ASU 2018-15, *Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* (ASU 2018-15). The new standard will align the requirements for capitalizing implementation costs for hosting arrangements (services) with costs for internal-use software (assets). As a result, certain implementation costs incurred in hosting arrangements will be deferred and amortized. The Company adopted ASU 2018-15 on January 1, 2021, and the adoption had an immaterial impact on its consolidated financial statements and related disclosures.

Recently issued accounting pronouncements not yet adopted

From time to time, new accounting pronouncements are issued by the FASB or other standard setting bodies that the Company adopts as of the specified effective date. The Company qualifies as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 and has elected not to "opt out" of the extended transition related to complying with new or revised accounting standards, which means that when a standard is issued or revised and it has different application dates for public and nonpublic companies, the Company can adopt the new or revised standard at the time nonpublic companies adopt the new or revised standard and can do so until such time that the Company either (i) irrevocably elects to "opt out" of such extended transition period or (ii) no longer qualifies as an emerging growth company.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* (ASU 2016-13) and also issued subsequent amendments to the initial guidance: ASU 2018-19, ASU 2019-04, ASU 2019-05, and ASU 2019-11. The standard requires that credit losses be reported using an expected losses model rather than the incurred losses model that is currently used, and it establishes additional disclosure requirements related to credit risks. For available-for-sale debt securities with

[Table of Contents](#)

expected credit losses, this standard now requires allowances to be recorded instead of reducing the amortized cost of the investment. This guidance was originally effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years, and early adoption was permitted. In November 2019, the FASB subsequently issued ASU 2019-10, *Financial Instruments—Credit Losses (Topic 326), Derivatives and Hedging (Topic 815), and Leases (Topic 842): Effective Dates*, whereby the effective date of this standard for smaller reporting companies was deferred to fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, and early adoption is still permitted. The Company is currently evaluating the potential impact ASU 2016-13, and related updates, will have on its consolidated financial statements and related disclosures upon adoption.

In August 2020, the FASB issued ASU 2020-06, *Debt: Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40)* (ASU 2020-06), which simplifies the accounting for convertible instruments and contracts in an entity's own equity. This guidance is effective for the Company in its annual reporting period beginning after December 15, 2023, including interim periods within that reporting period, with early adoption permitted only as of annual reporting periods beginning after December 15, 2020. The Company is currently assessing the impact this standard will have on its consolidated financial statements and related disclosures upon adoption.

3. Fair value measurements

The following tables summarize the Company's financial assets and liabilities measured at fair value on a recurring basis and their respective input levels based on the fair value hierarchy (in thousands):

	December 31, 2019	Fair value measurements as of December 31, 2019 using		
		Quoted prices in active markets for identical assets (level 1)	Significant other observable inputs (level 2)	Significant unobservable inputs (level 3)
Assets:				
Money market funds ⁽¹⁾	\$ 28,478	\$ 28,478	\$ —	\$ —
Corporate debt securities ⁽¹⁾	700	—	700	—
US treasury securities ⁽²⁾	5,248	5,248	—	—
Corporate debt securities ⁽²⁾	12,348	—	12,348	—
Commercial paper ⁽²⁾	3,190	—	3,190	—
Total fair value of assets	\$ 49,964	\$ 33,726	\$ 16,238	\$ —

(1) Included as cash and cash equivalents on the consolidated balance sheets.

(2) Included as short-term investments on the consolidated balance sheets.

As of December 31, 2019, there were no financial liabilities measured at fair value on a recurring basis.

	December 31, 2020	Fair value measurements as of December 31, 2020 using		
		Quoted prices in active markets for identical assets (level 1)	Significant other observable inputs (level 2)	Significant unobservable inputs (level 3)
Assets:				
Money market funds ⁽¹⁾	\$ 57,238	\$ 57,238	\$ —	\$ —
Commercial paper ⁽¹⁾	900	—	900	—
US treasury securities ⁽²⁾	38,492	38,492	—	—
Corporate debt securities ⁽²⁾	3,793	—	3,793	—
Commercial paper ⁽²⁾	11,040	—	11,040	—
Total fair value of assets	\$ 111,463	\$ 95,730	\$ 15,733	\$ —
Liabilities:				
Preferred stock purchase right liability	1,615	—	—	1,615
Total fair value of liabilities	\$ 1,615	\$ —	\$ —	\$ 1,615

(1) Included as cash and cash equivalents on the consolidated balance sheets.

(2) Included as short-term investments on the consolidated balance sheets.

	March 31, 2021	Fair value measurements as of March 31, 2021 using		
		Quoted prices in active markets for identical assets (level 1)	Significant other observable inputs (level 2)	Significant unobservable inputs (level 3)
(unaudited)				
Assets:				
Money market funds ⁽¹⁾	\$ 160,127	\$ 160,127	\$ —	\$ —
US treasury securities ⁽²⁾	15,000	15,000	—	—
US government securities ⁽²⁾	5,075	—	5,075	—
Corporate debt securities ⁽²⁾	2,872	—	2,872	—
Commercial paper ⁽²⁾	17,881	—	17,881	—
Supranational debt securities ⁽²⁾	1,523	—	1,523	—
US government securities ⁽³⁾	5,000	—	5,000	—
Total fair value of assets	\$ 207,478	\$ 175,127	\$ 32,351	\$ —

(1) Included as cash and cash equivalents on the consolidated balance sheets.

(2) Included as short-term investments on the consolidated balance sheets.

(3) Included as long-term investments on the consolidated balance sheets.

As of March 31, 2021 (unaudited), there were no financial liabilities measured at fair value on a recurring basis.

The carrying amounts of the Company's financial instruments, including cash, prepaid and other current assets, accounts payable, and accrued expenses and other current liabilities, approximate fair value due to their short maturities. None of the Company's non-financial assets or liabilities are recorded at fair value on a non-recurring basis. No transfers between levels have occurred during the periods presented. There are uncertainties on the fair value measurement of the instrument classified under Level 3 due to the use of unobservable inputs and interrelationships between these unobservable inputs, which could result in higher or lower fair value measurements.

[Table of Contents](#)

Cash equivalents consist of money market funds, commercial paper and corporate debt securities, short-term investments consist of US treasury and government securities, corporate debt securities, commercial paper and supranational debt securities, and long-term investments consist of US government securities. The Company obtains pricing information from its investment manager and generally determines the fair value of investment securities using standard observable inputs, including reported trades, broker/dealer quotes, and bid and/or offers.

Preferred stock purchase right liability

As of December 31, 2020, the quantitative elements associated with the Company's Level 3 inputs impacting the fair value measurement of the preferred stock purchase right liability include the fair value per share of the underlying Series B-1 Preferred Stock, the expected term of the purchase right liability, risk-free interest rate, expected dividend yield and expected volatility of the price of the underlying preferred stock. The most significant assumption in the Black-Scholes option-pricing model impacting the fair value of the preferred stock purchase right liability was the fair value of the Company's convertible preferred stock as of each measurement date. The Company determined the fair value per share of the underlying preferred stock by taking into consideration its most recent sales of its convertible preferred stock as well as additional factors that the Company deemed relevant. The Company lacks company-specific historical and implied volatility information of its stock. Therefore, it estimated its expected preferred stock volatility based on the historical volatility of publicly traded peer companies for a term equal to the expected term of the purchase right liability. The risk-free interest rate was determined by reference to the US Treasury yield curve for time periods approximately equal to the expected term of the purchase right liability. The Company estimated a 0% dividend yield based on the expected dividend yield and the fact that the Company never paid or declared dividends. The change in fair value of the purchase right liability was a gain of \$7.4 million for the year ended December 31, 2020, included in other income (expense) within the consolidated statements of operations and comprehensive loss. Upon the issuance of the shares of the Company's Series B-2 convertible preferred stock in January 2021, the purchase right liability was revalued with the gain of \$1.6 million recorded in change in fair value of the purchase right liability for the three months ended March 31, 2021 (unaudited) within the consolidated statements of operations and comprehensive loss. Significant changes in the assumptions could have a material impact on the value of the preferred stock purchase right liability. The assumptions used in the Black-Scholes option pricing model to determine the fair value of the preferred stock purchase right liability at December 31, 2020 and settlement date were as follows:

	December 31, 2020	Settlement Date
		(unaudited)
Fair value of underlying preferred stock	\$ 6.11	\$ 6.11
Risk-free interest rate	0.08%	0.07%
Expected volatility	71.8%	74.4%
Expected term (in years)	0.08	0.00
Expected dividend yield	—%	—%

Table of Contents

The following table summarizes the activity of the financial instrument valued using Level 3 inputs (in thousands):

Balance as of January 1, 2020	\$ —
Issuance of preferred stock purchase right liability	8,973
Change in fair value	(7,358)
Balance as of December 31, 2020	\$ 1,615
Change in fair value (unaudited)	(1,615)
Balance as of March 31, 2021 (unaudited)	\$ —

4. Investments

The following tables summarize the Company's investments accounted for as available-for-sale securities (in thousands, except years):

		December 31, 2019			
	Maturity (in years)	Amortized cost	Unrealized losses	Unrealized gains	Estimated fair value
US treasury securities	1 or less	\$ 5,239	\$ —	\$ 9	\$ 5,248
Corporate debt securities	1 or less	12,349	(4)	3	12,348
Commercial paper	1 or less	3,187	—	3	3,190
Total		\$ 20,775	\$ (4)	\$ 15	\$ 20,786

		December 31, 2020			
	Maturity (in years)	Amortized cost	Unrealized losses	Unrealized gains	Estimated fair value
US treasury securities	1 or less	\$ 38,489	\$ —	\$ 3	\$ 38,492
Corporate debt securities	1 or less	3,794	(1)	—	3,793
Commercial paper	1 or less	11,040	—	—	11,040
Total		\$ 53,323	\$ (1)	\$ 3	\$ 53,325

		March 31, 2021			
	Maturity (in years)	Amortized cost	Unrealized losses	Unrealized gains	Estimated fair value
					(unaudited)
US treasury securities	1 or less	\$ 14,997	\$ —	\$ 3	\$ 15,000
US government securities	1 or less	5,075	—	—	5,075
Corporate debt securities	1 or less	2,873	(1)	—	2,872
Commercial paper	1 or less	17,881	—	—	17,881
Supranational debt securities	1 or less	1,523	—	—	1,523
US government securities	1-2	5,001	(1)	—	5,000
Total		\$ 47,350	\$ (2)	\$ 3	\$ 47,351

As of December 31, 2019, there were ten available-for-sale securities with an estimated fair value of \$9.0 million in gross unrealized loss positions, compared to six available-for-sale securities with an estimated fair value of \$15.8 million which were in gross unrealized loss positions as of December 31, 2020. As of March 31, 2021 (unaudited), there were five available-for-sale securities with an estimated fair value of \$12.9 million in gross unrealized loss positions. None had been in such position for greater than 12 months. Based on the

[Table of Contents](#)

Company's review of its investments, the Company believes that the unrealized losses were not other-than-temporary as of December 31, 2019 and 2020 and March 31, 2021 (unaudited).

5. Property and equipment, net

Property and equipment, net consisted of the following (in thousands):

	December 31,		March 31,
	2019	2020	2021
			(unaudited)
Construction in process	\$ 169	\$ —	\$ —
Leasehold improvements	510	795	795
Laboratory equipment	784	1,380	1,417
Furniture and fixtures	130	165	165
Office equipment	29	61	61
Software	—	70	70
Computer equipment	251	278	289
Property and equipment	1,873	2,749	2,797
Less accumulated depreciation and amortization	(371)	(902)	(1,051)
Property and equipment, net	\$1,502	\$1,847	\$ 1,746

Depreciation and amortization expense related to property and equipment was \$310,000, \$540,000, \$121,000 and \$149,000 for the years ended December 31, 2019 and 2020 and for the three months ended March 31, 2020 and 2021 (unaudited), respectively.

6. Accrued expenses and other current liabilities

Accrued expenses and other current liabilities consisted of the following (in thousands):

	December 31,		March 31,
	2019	2020	2021
			(unaudited)
Accrued research and development expenses	\$380	\$ 6,649	\$ 3,423
Accrued compensation	196	2,416	1,581
Unvested early exercised stock option liability	—	2,526	3,402
Accrued legal	20	194	511
Other accruals	47	140	357
Total	\$643	\$11,925	\$ 9,274

7. Asset acquisitions

The following purchased assets were accounted for as asset acquisitions as substantially all of the fair value of the assets acquired were concentrated in a group of similar assets, and the acquired assets did not have outputs or employees. Because the assets had not yet received regulatory approval, the fair value attributable to these assets was recorded as in-process research and development expenses in the Company's consolidated statements of operations and comprehensive loss for the year ended December 31, 2020, and for the three months ended March 31, 2021.

Asana BioSciences, LLC

In November 2020, the Company entered into an agreement and plan of merger with Asana and ASN Product Development, Inc. (the Asana Merger Agreement), pursuant to which ASN became its wholly-owned subsidiary. Asana and ASN had previously entered into a license agreement, which was amended and restated prior to the closing of the merger transaction (the Asana License Agreement, and collectively with the Asana Merger Agreement, the Asana Agreements), pursuant to which ASN acquired an exclusive, worldwide license to certain intellectual property rights relating to inhibitors of ERK1 and ERK2 owned or controlled by Asana to develop and commercialize ERAS-007 and certain other related compounds for all applications. The Company has the right to sublicense (through multiple tiers) the licensed rights under the Asana Agreements, subject to certain conditions. The foregoing license is subject to Asana's non-exclusive right to practice the licensed rights to research and conduct preclinical pharmacology activities with a specified combination of compounds, subject to certain specified conditions. Pursuant to the Asana License Agreement, neither Asana nor ASN can directly or indirectly exploit certain classes of competing products, subject to specified exceptions. In addition, the Company is required to use commercially reasonable efforts to develop and obtain regulatory approval for ERAS-007 in the United States, at least one major market country in Europe, and either China or Japan.

Under the Asana Merger Agreement, the Company made an upfront payment of \$20.0 million and issued 4,000,000 shares of its Series B-2 convertible preferred stock to Asana at a value of \$7.50 per share or a total fair value of \$30.0 million. The Company is obligated to make future development and regulatory milestone cash payments for a licensed product in an amount of up to \$90.0 million. Additionally, upon achieving a development milestone related to demonstration of successful proof-of-concept in a specified clinical trial, the Company will also be required to issue 3,888,889 shares of its common stock to Asana. The Company is not obligated to pay royalties on the net sales of licensed products. The Company recorded IPR&D expense of \$50.0 million in connection with the asset acquisition. As of December 31, 2020 and March 31, 2021 (unaudited), no milestones had been accrued as the underlying contingencies had not yet been resolved.

Upon the Company's payment to Asana of all merger consideration, including upfront cash and equity payments, the equity payment related to the proof-of-concept development milestone, and all other development milestone payments, with the exception of a specific milestone that does not need to be achieved at such time and will remain subject to payment in the event that such milestone is achieved at a later time, all licensed rights will become fully paid-up, perpetual, and irrevocable. The Asana License Agreement may be terminated by either Asana or the Company in the event of an uncured material breach by the other party. Asana also has the right to terminate the Asana License Agreement if the Company fails to engage in material activities in support of clinical development and commercialization of ERAS-007 for a period of 12 consecutive months, excluding reasons outside of its reasonable control and subject to certain limitations. However, Asana's right to terminate the Asana License Agreement for any reason ends once the Company has paid to Asana all merger consideration, or if Asana's equity interest in the Company becomes publicly traded and exceeds a certain threshold value. The Company may terminate the Asana License Agreement at any time upon the provision of prior written notice to Asana.

Emerge Life Sciences, Pte. Ltd. (unaudited)

In March 2021, the Company entered into an asset purchase agreement (ELS Purchase Agreement) with Emerge Life Sciences, Pte. Ltd. (ELS) wherein it purchased all rights, title, and interest (including all patent and other intellectual property rights) to EGFR antibodies directed against the EGFR domain II (EGFR-D2) and domain III (EGFR-D3) as well as a bispecific antibody where one arm is directed against EGFR-D2 and the other is directed against EGFR-D3 (the Antibodies). Under the terms of the ELS Purchase Agreement, the Company made an upfront payment of \$2.0 million and issued to ELS 500,000 shares of the Company's common stock at a value

of \$3.36 per share or a total fair value of \$1.7 million. Under the ELS Purchase Agreement, ELS is committed to performing certain studies on the applicable antibodies to assist in development activities, the costs of which shall be mutually agreed upon and for which the Company will be responsible. The Company recorded IPR&D expense of \$3.7 million in connection with the asset acquisition.

Pursuant to the ELS Purchase Agreement, at any time between 12 months and 36 months after the effective date of the ELS Purchase Agreement, if the Company reasonably determines that none of the Antibodies should be taken into human clinical trials due to safety, efficacy or CMC issues, then the Company has the option to select another antibody developed and solely owned by ELS that is not the subject of a license, collaboration, or option to a third party (the Option). If the Company elects to exercise the Option, then ELS will provide to the Company a list of all available antibodies that meet the aforementioned requirements, and the Company has the right to select one antibody from the list. Upon the Company's selection of an antibody, ELS will assign it all rights, title and interest to such antibody (including patent and other intellectual property rights) subject to any pre-existing obligations or restrictions. In the event that the Company wishes to have ELS conduct any studies on such optioned antibody, then after mutual agreement as to the scope of the studies, the Company will be responsible for the cost for such studies.

8. License agreements

NiKang Therapeutics, Inc.

In February 2020, the Company entered into a license agreement (the NiKang Agreement) with NiKang Therapeutics, Inc. (NiKang) under which the Company was granted an exclusive, worldwide license to certain intellectual property rights owned or controlled by NiKang related to certain SHP2 inhibitors to develop and commercialize ERAS-601 and certain other related compounds for all applications. The Company has the right to sublicense (through multiple tiers) its rights under the NiKang Agreement, subject to certain conditions, and is required to use commercially reasonable efforts to develop and commercialize licensed products. The parties are obligated to negotiate in good faith for a certain period of time to grant NiKang the exclusive commercial distribution rights in greater China once a licensed product reaches a certain development stage.

Under the NiKang Agreement, the Company made an upfront payment of \$5.0 million to NiKang and reimbursed NiKang \$0.4 million for certain initial manufacturing costs. In addition, the Company paid \$7.0 million in April 2020 related to the publication of a US patent application that covered the composition of matter of ERAS-601. The Company is also obligated to pay (i) development and regulatory milestone payments in an aggregate amount of up to \$16.0 million for the first licensed product and \$12.0 million for a second licensed product, and (ii) commercial milestone payments in an aggregate amount of up to \$157.0 million for the first licensed product and \$151.0 million for a second licensed product. The Company is also obligated to: (i) pay tiered royalties on net sales of all licensed products in the mid-single digit percentages, subject to certain reductions; and (ii) equally split all net sublicensing revenues earned under sublicense agreements that the Company enters into with any third party before commencement of the first Phase I clinical trial for a licensed product. As of December 31, 2020, the Company had accrued \$4.0 million related to a development milestone. The Company recorded IPR&D expense of \$16.0 million during the year ended December 31, 2020 related to the upfront payment and milestones. The Company recorded \$12.0 million and \$0 during the three months ended March 31, 2020 and 2021 (unaudited), respectively, related to the upfront payment and milestones.

The NiKang Agreement will expire upon the last to expire royalty term, which is determined on a licensed product-by-licensed product and country-by-country basis, and is the later of (i) ten years from the date of first commercial sale, (ii) the last to expire valid claim within the licensed patent rights covering such licensed product, or (iii) the expiration of all regulatory exclusivity for the licensed product in such country. Upon

[Table of Contents](#)

expiration of the NiKang Agreement, on a licensed product-by-licensed product and country-by-country basis, the Company will have a fully paid-up, non-exclusive license to conduct research and to develop and commercialize the licensed products.

The NiKang Agreement may be terminated in its entirety by NiKang in the event of the Company's uncured material breach, which includes its failure to use commercially reasonable efforts to satisfy certain specified clinical development diligence milestones. In addition, NiKang may terminate if the Company, directly or indirectly, commences a legal action challenging the validity or enforceability of any licensed patents. Further, if the Company acquires more than 50% of the equity or assets of a company that owns a competing small molecule that is designed to prevent the same target as set forth in the NiKang Agreement from switching to an enzymatically active state, then the Company must either divest such competing product or terminate the NiKang Agreement. The Company may terminate the NiKang Agreement at any time upon the provision of prior written notice to NiKang. Upon termination of the NiKang Agreement for any reason, all rights and licenses granted to the Company, as well as any sublicenses that the Company granted thereunder, will terminate. In addition, upon any termination (but not expiration) of the NiKang Agreement and upon NiKang's request, the parties are obligated to meet and negotiate in good faith the terms of a license from the Company to NiKang to allow NiKang's continued development, manufacture, and commercialization of the licensed products.

Katmai Pharmaceuticals, Inc.

In March 2020, the Company entered into a license agreement (the Katmai Agreement) with Katmai Pharmaceuticals, Inc. (Katmai) under which the Company was granted an exclusive, worldwide, royalty-bearing license to certain patent rights and know-how controlled by Katmai related to the development of small molecule therapeutic and diagnostic products that modulate EGFR and enable the identification, diagnosis, selection, treatment, and/or monitoring of patients for neuro-oncological applications to develop, manufacture, use, and commercialize ERAS-801 and certain other related compounds in all fields of use. The Company has the right to sublicense (through multiple tiers) its rights under the Katmai Agreement, subject to certain limitations and conditions, and is required to use commercially reasonable efforts to develop, manufacture, and commercialize licensed products and to meet certain specified development and launch milestones by certain dates. The Company is obligated to use commercially reasonable efforts to develop the licensed products first for use within the neuro-oncology field before expanding its development efforts to include other indications in the oncology field. Following the first achievement of a clinical proof-of-concept for any indication, the Company has the right to submit a non-binding offer to Katmai for (i) the purchase of all licensed patent rights, know-how, and other assets owned by Katmai that are necessary or useful for the exploitation of the licensed products or (ii) for the purchase of Katmai. Pursuant to the Katmai Agreement, neither Katmai nor the Company can directly or indirectly exploit certain specified classes of competing products.

The license granted under the Katmai Agreement is subject to The Regents of the University of California's reserved right to (i) use the licensed patent rights and know-how for educational and non-commercial research purposes, and to publish results arising therefrom, and (ii) grant licenses to the licensed know-how to third parties without notice because the licensed know-how is non-exclusively licensed to Katmai by The Regents of the University of California. Further, the license granted under the Katmai Agreement is subject to the rights of the United States government under the Bayh-Dole Act, including (i) a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced the invention claimed by the licensed patent rights throughout the world and (ii) the obligation that any licensed products used or sold in the United States be manufactured substantially in the United States.

Under the Katmai Agreement, the Company made an upfront payment of \$5.7 million and Katmai agreed to purchase shares of the Company's Series B-1 convertible preferred stock and Series B-2 convertible preferred

[Table of Contents](#)

stock having an aggregate value of \$2.7 million. In April 2020, Katmai purchased 356,000 shares of the Company's Series B-1 convertible preferred stock for \$1.8 million, and in January 2021, Katmai purchased 118,666 shares of the Company's Series B-2 convertible preferred stock for \$0.9 million. The Company is obligated to make future development and regulatory milestone payments of up to \$26.0 million and commercial milestone payments of up to \$101.0 million. The Company is also obligated to pay tiered royalties on net sales of each licensed product, at rates ranging from the mid- to high-single digit percentages, subject to a minimum annual royalty payment in the low six figures and certain permitted deductions. The Company recorded IPR&D expense of \$5.7 million in connection with the upfront payment made during the year ended December 31, 2020 and the three months ended March 31, 2020 (unaudited). No IPR&D expense was recorded for the three months ended March 31, 2021 (unaudited).

The Company's royalty obligations and the Katmai Agreement will expire, on a licensed product-by-licensed product and country-by-country basis, on the earlier of (i) the ten-year anniversary of the expiration of all valid claims included in the licensed patents covering the composition of matter or method of use of such licensed product in such country or (ii) the twentieth anniversary of the first commercial sale of such licensed product in such country. Upon the expiration of the Katmai Agreement, the Company will have a fully paid-up and irrevocable license.

The Katmai Agreement may be terminated in its entirety by either party (i) in the event of an uncured material breach by the other party or (ii) in the event the other party becomes subject to specified bankruptcy, insolvency, or similar circumstances. Provided that the Company is in full compliance with the Katmai Agreement, the Company may terminate the Katmai Agreement upon written notice to Katmai. Upon termination of the Katmai Agreement for any reason, all rights and licenses granted to the Company thereunder will terminate. Upon termination of the Katmai Agreement, the Company is obligated, among other things, to (i) grant an exclusive license to Katmai under all of the Company's right, title and interest in all inventions and know-how developed under the Katmai Agreement existing at the time of termination that are specific to the licensed compounds or products, including without limitation all data and results related to Katmai's exploitation and (ii) transfer to Katmai ownership and possession of all regulatory filings related to the licensed compounds and products. Unless the Katmai Agreement is terminated for the Company's material breach, the parties will negotiate in good faith the financial terms pursuant to which the foregoing actions will be conducted, provided that the Company's performance of such actions may not be conditioned upon the conduct or completion of such negotiations. If the parties are unable to agree upon such terms within the specified time period, then the parties will submit all unresolved matters for resolution by arbitration.

LifeArc

In April 2020, the Company entered into a license agreement with LifeArc (the LifeArc Agreement) under which the Company was granted an exclusive, worldwide license to certain materials, know-how, and intellectual property rights owned or controlled by LifeArc to develop, manufacture, use, and commercialize certain ULK inhibitors for all applications. The Company also has the right to sublicense (through multiple tiers) its rights under the LifeArc Agreement, subject to certain conditions. The foregoing license is subject to LifeArc's retained non-exclusive, irrevocable, worldwide, sublicensable (to its academic collaborators), royalty-free right to use the licensed intellectual property rights within all fields of use for LifeArc's own non-commercial, non-clinical academic research. Notwithstanding its retained rights, LifeArc will not seek to develop or undertake any other ULK1/2 therapeutic development programs either in-house or via third parties until April 2025. The Company is required to use diligent efforts to achieve certain development and regulatory milestones with respect to submission of an IND, initiation of clinical trials, submission of an NDA, and commencement of commercial sales.

[Table of Contents](#)

Under the LifeArc Agreement, the Company was granted the license at no upfront cost and a period of three months after the effective date to conduct experiments on LifeArc's compounds. Upon completion of this initial testing period, the Company had the option to continue the license and make a one-time license payment of \$75,000 to LifeArc, which payment was subsequently made. The Company is obligated to make future development milestone payments for a licensed product of up to \$11.0 million and sales milestone payments of up to \$50.0 million. The Company is also obligated to pay royalties on net sales of all licensed products, in the low-single digit percentages, subject to certain reductions. The Company recorded IPR&D expense of \$75,000 in connection with the license fee during the year ended December 31, 2020. No IPR&D expense was recorded during the three months ended March 31, 2020 and 2021 (unaudited).

The Company's royalty obligations and the LifeArc Agreement will expire, on a licensed product-by-licensed product and country-by-country basis, on the later of (i) ten years from the date of first commercial sale, (ii) when there is no longer a valid patent claim covering such licensed product, or (iii) expiration of regulatory exclusivity for the licensed product in such country. Upon expiration of the LifeArc Agreement, all rights and licenses granted to the Company and under the LifeArc Agreement will continue on a fully paid-up basis.

The LifeArc Agreement may be terminated in its entirety by either LifeArc or the Company in (i) the event of an uncured material breach by the other party or (ii) in the event the other party becomes subject to an order by a court of competent jurisdiction for winding-up or dissolution or similar circumstances. Further, LifeArc may terminate the LifeArc Agreement by giving written notice to the Company if (i) the Company fails to comply with its diligence obligations and fails to take remedial actions, (ii) the Company fails to agree on a mechanism to cure a persistent breach, or (iii) the Company fails to provide proof of the insurance coverage as required under the LifeArc Agreement. The Company may terminate the agreement at any time upon the provision of written notice to LifeArc.

Upon termination of the LifeArc Agreement for any reason, all rights and licenses granted to the Company, as well as any sublicenses the Company granted thereunder, will terminate. In addition, upon termination of the LifeArc Agreement for any reason other than its natural expiration or termination by the Company for LifeArc's material breach, LifeArc has an option to negotiate an exclusive, worldwide, sublicensable license to commercialize any patent rights, technical and clinical data, and any development results relating to the licensed products that are owned or controlled by the Company for the purpose of developing, manufacturing and commercializing the licensed products on terms to be negotiated between the parties.

University of California, San Francisco

In December 2018, the Company entered into a license agreement, as amended (the UCSF Agreement), with The Regents of the University of California, San Francisco (the Regents), under which the Company was granted an exclusive, worldwide, royalty-bearing license under certain patent rights claiming novel covalent inhibitors of GTP- and GDP-bound RAS for the development and commercialization of products covered by such patent rights for the prevention, treatment and amelioration of human cancers and other diseases and conditions. The UCSF Agreement was amended in May 2021. The Company has the right to sublicense (through multiple tiers) its rights under the UCSF Agreement, subject to certain conditions. The foregoing license is subject to various retained rights and restrictions, including (i) the Regents' reserved right to make, use and practice the licensed patent rights and any technology relating thereto for educational and research purposes, (ii) Howard Hughes Medical Institute's non-exclusive, fully paid-up, irrevocable worldwide license to use the licensed patent rights for research purposes, (iii) Howard Hughes Medical Institute's statement of policy on research tools, and (iv) the obligations to the US government under the Bayh-Dole Act, including the obligation to report on the utilization of the invention covered by the licensed patent rights and a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced such invention throughout the world. The Company is required to

use diligent efforts to proceed with the development and commercialization of licensed products including by achieving certain milestone events within the specified time periods.

Under the UCSF Agreement, the Company made upfront payments of \$50,000 to the Regents and pays the Regents an annual license maintenance fee during the term of the license, but such fee will not be due on any anniversary if, on that date, the Company is making royalty payments to the Regents. The Company is obligated to make future development and regulatory milestone payments of up to \$6.4 million and a sales milestone payment of \$2.0 million for either of the first two licensed products. The Company is also obligated to pay royalties on net sales of all licensed products in the low-single digit percentages, subject to a minimum annual royalty payment in the low six figures, commencing on the year of the first sale of a licensed product and continuing, on a licensed product-by-licensed product and country-by-country basis, until there are no valid claims of the licensed patent rights covering the licensed product in such country. Additionally, the Company is obligated to pay tiered sublicensing fees, with the first two tiers in the low-to-mid teen percentages and the third tier at 30%, on certain fees the Company receives from any sublicense that the Company grants, depending on the stage of development of a licensed product when such sublicense is granted. Prior to the execution of the amendment, the Company was obligated to make a cash payment to the Regents in the event of the Company's initial public offering, a change of control transaction or a reverse merger (the Corporate Milestone). In the amendment, the amount of the cash payment payable upon the Company's achievement of a Corporate Milestone was reduced and the Company agreed to issue the Regents 944,945 shares of the Company's common stock, which issuance is not contingent upon the achievement of a Corporate Milestone and occurred in May 2021. Under this agreement, the Company has recorded research and development expense of \$623,000 and \$98,000 during the years ended December 31, 2019 and 2020, respectively, and \$32,000 and \$29,000 during the three months ended March 31, 2020 and 2021 (unaudited), respectively.

The UCSF Agreement will expire upon the expiration of the last of the licensed patent rights. The UCSF Agreement may be terminated in its entirety by the Regents (i) for the Company's uncured breach; (ii) for the Company's bankruptcy; or (iii) if the Company challenges, directly or indirectly, the validity or enforceability of any licensed patents. Further, if the Company fails to satisfy any diligence milestones, the Regents has the right and option to either terminate the UCSF Agreement or modify the exclusive license granted thereunder to a non-exclusive license. The Company may terminate the UCSF Agreement in its entirety or on a country-by-country basis at any time upon the provision of written notice to the Regents. Upon termination of the UCSF Agreement for any reason, all rights and licenses granted to the Company thereunder will terminate.

9. Stockholders' deficit

Under its Amended and Restated Certificate of Incorporation dated April 15, 2020, the Company is authorized to issue 147,027,681 shares of its common stock, par value of \$0.0001 per share. In February 2021, the Company's Board of Directors increased the authorized number of shares of its common stock to 156,000,000 shares. The Company is authorized to issue 97,622,409 shares of its convertible preferred stock, par value of \$0.0001 per share, of which 38,103,681 shares are designated as Series A convertible preferred stock, 28,741,400 shares are designated as Series B-1 convertible preferred stock and 30,777,328 shares are designated as Series B-2 convertible preferred stock.

Convertible preferred stock

In 2018, the Company issued 27,953,681 shares of its Series A convertible preferred stock at \$1.667 per share. The Company received proceeds of approximately \$46.5 million, net of issuance costs.

In 2019, the Company issued 10,150,000 shares of its Series A convertible preferred stock at \$1.667 per share. The Company received proceeds of approximately \$16.9 million, net of issuance costs.

In April 2020, the Company entered into a Series B convertible preferred stock purchase agreement (the Series B Agreement) under which it issued 27,481,001 shares of its Series B-1 convertible preferred stock at various closing

[Table of Contents](#)

dates in 2020, for cash, at a price of \$5.00 per share, for net proceeds of \$137.0 million (the Series B-1 Closing). The Series B Agreement contained provisions that potentially obligates the Company to issue 13,175,191 shares of Series B-2 convertible preferred stock at \$7.50 per share in an additional closing to certain Series B-1 Closing purchasers, upon the achievement of certain milestones as defined in the Series B Agreement, which purchase right terminates on September 30, 2022 or at certain specified events, including an initial public offering of the Company, if any (the Series B-2 Closing). In the event that a Series B-1 Closing purchaser fails to purchase all of its required shares in the subsequent Series B-2 Closing, each of the Series B-1 convertible preferred shares held by such purchaser will automatically be converted into one-tenth of a share of the Company's common stock.

The Company determined its obligation to issue additional shares of the its Series B-2 convertible preferred stock in the Series B-1 Closing represented a freestanding financial instrument that required liability accounting. This freestanding preferred stock purchase right liability for the Series B-2 Closing was recorded at fair value and is remeasured at each reporting period. As of the Series B-1 Closing, the estimated fair value of the preferred stock purchase right liability was \$9.0 million. The Company records any changes in the fair value of the Series B-2 convertible preferred stock purchase right liability as changes in the fair value of convertible preferred stock purchase right liability in the accompanying consolidated statements of operations and comprehensive loss, and recorded a gain of \$7.4 million for the year ended December 31, 2020. To satisfy its obligation, in January 2021, the Company sold 13,175,191 shares of its Series B-2 convertible preferred stock and an additional 2,756,581 shares of its Series B-2 convertible preferred stock at a price of \$7.50 per share and received aggregate net proceeds of \$119.4 million.

Also in 2020, the Company issued 4,000,000 shares of its Series B-2 convertible preferred stock at \$7.50 per share in connection with an asset acquisition (see Note 7).

Convertible preferred stock consisted of the following (in thousands, except share data):

	December 31, 2019				
	Preferred shares authorized	Preferred shares issued and outstanding	Carrying value	Liquidation preference	Common stock issuable upon conversion
Series A preferred stock	45,135,500	38,103,681	\$ 63,403	\$ 63,519	31,753,064
Total	45,135,500	38,103,681	\$ 63,403	\$ 63,519	31,753,064

	December 31, 2020				
	Preferred shares authorized	Preferred shares issued and outstanding	Carrying value	Liquidation preference	Common stock issuable upon conversion
Series A preferred stock	38,103,681	38,103,681	\$ 63,403	\$ 63,519	31,753,064
Series B-1 preferred stock	28,741,400	27,481,001	128,002	137,405	22,900,819
Series B-2 preferred stock	30,777,328	4,000,000	30,000	30,000	3,333,333
Total	97,622,409	69,584,682	\$ 221,405	\$ 230,924	57,987,216

	March 31, 2021				
	Preferred shares authorized	Preferred shares issued and outstanding	Carrying value	Liquidation preference	Common stock issuable upon conversion
			(unaudited)		
Series A preferred stock	38,103,681	38,103,681	\$ 63,403	\$ 63,519	31,753,064
Series B-1 preferred stock	28,741,400	27,481,001	128,002	137,405	22,900,819
Series B-2 preferred stock	30,777,328	19,931,772	149,393	149,488	16,609,802
Total	97,622,409	85,516,454	\$ 340,798	\$ 350,412	71,263,685

[Table of Contents](#)

The holders of the Company's Series A, Series B-1, and Series B-2 convertible preferred stock (collectively, Preferred Stock) have the following rights, preferences and privileges:

Dividends: Holders of Preferred Stock are not entitled to receive any dividends except to the extent that dividends are paid on the Company's common stock. If dividends are paid on shares of common stock, holders of Preferred Stock are entitled to participate in such dividends on an as-converted basis.

Liquidation: Upon the liquidation, dissolution, or winding up of the Company, each holder of Preferred Stock is entitled to receive, prior and in preference to holders of common stock, on a pro rata basis an amount equal to the original issue price plus any declared and unpaid dividends. If the assets and funds to be distributed among the holders of Preferred Stock are insufficient to permit the payment to such holders, the entire assets and funds of the Company legally available for distribution will be distributed ratably among those holders. After payment to the holders of the Preferred Stock, the remaining legally available assets and funds of the Company will be distributed ratably to the holders of the common stock. Each holder of Preferred Stock shall be deemed to have converted such holder's shares of Preferred Stock to shares of common stock immediately prior to a liquidation event if as a result of such conversion, such holder would receive in the aggregate an amount greater than the amount that would be distributed if holder did not convert.

Voting: The holders of Preferred Stock are entitled to the number of votes equal to the number of shares of common stock into which such shares of Preferred Stock are then convertible (rounded up to the nearest whole share). The holders of Preferred Stock vote together with the holders of common stock and not as a separate class or series.

Protective Provisions: The holders of Preferred Stock have certain protective provisions whereby the Company cannot, without the consent of the majority of the Series A, Series B-1 or Series B-2 convertible preferred stock holders, increase or decrease the total respective authorized shares of Series A, Series B-1 or Series B-2 convertible preferred stock or authorize, create or issue any shares senior to the respective Series A, Series B-1 or Series B-2 convertible preferred stock.

Conversion: Each share of Preferred Stock is convertible, at the option of the holder, at any time into common stock, except for no share of Series B-1 convertible preferred stock is convertible into shares of common stock prior to the earlier of the (i) the consummation of the Series B-2 Closing and (ii) October 31, 2022, without the prior written consent of the holders of a majority of the outstanding shares of Series B-1 convertible preferred stock. Each share of Preferred Stock will automatically convert upon the earlier of the closing of the sale of shares of common stock in a public offering resulting in gross proceeds of at least \$40.0 million (a Qualified IPO) or the consent of the majority of the outstanding shares of Preferred Stock, voting as a single class on an as converted basis. The Preferred Stock is convertible into common stock on a one-to-one basis, subject to adjustment for stock splits, stock dividends and the like. If the Company sells or issues additional shares of common stock for consideration per share less than the then existing conversion price, then the then existing conversion price shall be reduced to a price determined in accordance with the Amended and Restated Articles of Incorporation.

Redemption: The holders of the Company's Preferred Stock have no voluntary rights to redeem shares, except in a deemed liquidation event (sale, lease, transfer, exclusive license or other disposition of substantially all of the assets of the Company) if the Company does not effect a dissolution of the Company with the General Corporation Law of the State of Delaware within 90 days after such deemed liquidation event. In such an event, the holders of the Preferred Stock have the right to require the redemption of the Preferred Stock if the majority of the Preferred Stock holders so request. The Company then will be required to use the consideration from the deemed liquidation event to redeem all outstanding shares of Preferred Stock at an amount equal to the original issue price plus any declared but unpaid dividends.

Common stock

The Company had 80,000,000 and 147,027,681 shares of its common stock authorized as of December 31, 2019 and 2020, respectively. The Company had 156,000,000 shares of its common stock authorized as of March 31, 2021 (unaudited). The Company had 22,629,158 and 25,189,673 shares of its common stock issued and 20,515,698 and 21,923,173 shares of common stock outstanding as of December 31, 2019 and 2020, respectively. The Company had 26,129,283 and 22,875,024 shares of its common stock issued and outstanding as of March 31, 2021 (unaudited), respectively. As of December 31, 2019 and 2020, the fair value of common stock was \$0.67 and \$3.36, respectively. As of March 31, 2021 (unaudited), the fair value of common stock was \$5.81.

The holder of each outstanding share of common stock is entitled to one vote on all matters submitted to a vote of the holders of common stock. Subject to the rights of the holders of any class of the Company's capital stock having any preference or priority over common stock, the holders of common stock are entitled to receive dividends that are declared by the Company's board of directors out of legally available funds. In the event of a liquidation, dissolution or winding-up, the holders of common stock are entitled to share ratably in the net assets remaining after payment of liabilities and the liquidation value of the Preferred Stock then outstanding. The common stock has no preemptive rights, conversion rights, redemption rights or sinking fund provisions, and there are no dividends in arrears or default. All shares of common stock have equal distribution, liquidation and voting rights, and have no preferences or exchange rights.

Shares of common stock subject to repurchase

During 2018, the Company issued 1,458,332 shares of restricted stock for cash at a price of \$0.0001 per share. The restricted stock vests 25% one year from the vesting commencement date and monthly thereafter over a three-year period and is subject to repurchase by the Company in the event of any voluntary or involuntary termination of services to the Company prior to vesting. Any shares subject to repurchase by the Company are not deemed, for accounting purposes, to be outstanding until those shares vest. As of December 31, 2019 and 2020, 941,841 shares and 577,259 shares of common stock, respectively, were subject to repurchase by the Company. As of March 31, 2021 (unaudited), 486,112 shares of common stock were subject to repurchase by the Company. The unvested stock liability related to these awards is immaterial for all periods presented. For the years ended December 31, 2019 and 2020, 516,491 and 364,582 shares vested, respectively. For each of the three months ended March 31, 2020 and 2021 (unaudited), 91,147 shares vested.

10. Stock-based compensation

In July 2018, the Company adopted the 2018 Equity Incentive Plan (the Plan), which expires ten years from its effective date. The Plan provides for the grant of incentive stock options, non-statutory stock options, restricted stock awards, restricted stock unit awards, and other stock awards to employees, consultants and directors of the Company. As of December 31, 2019 and 2020, a total of 9,166,666 and 13,212,511 shares of common stock, respectively, were authorized for issuance under the Plan. As of March 31, 2021 (unaudited), a total of 21,545,845 shares of common stock were authorized for issuance under the Plan.

Options granted under the Plan are exercisable at various dates as determined upon grant and will expire no more than ten years from their date of grant. Stock options generally vest over a four-year term. The exercise price of each option shall be determined by the Company's Board of Directors based on the estimated fair value of the Company's stock on the date of the option grant. The exercise price shall not be less than 100% of the fair market value of the Company's common stock at the time the option is granted. For holders of more than 10% of the Company's total combined voting power of all classes of stock, incentive stock options may not be

[Table of Contents](#)

granted at less than 110% of the fair market value of the Company's common stock on the date of grant and for a term that exceeds five years. Early exercise is permitted for certain grants.

Stock options

A summary of the Company's stock option activity under the Plan is as follows (in thousands, except share and per share data and years):

	Shares	Weighted-average exercise price	Weighted-average remaining contractual term (in years)	Aggregate intrinsic value
Outstanding at December 31, 2019	3,895,086	\$ 0.67	9.72	\$ —
Granted	6,286,737	1.23		
Exercised	(3,542,113)	1.09		141
Forfeited	(98,288)	0.67		
Outstanding at December 31, 2020	6,541,422	\$ 0.98	9.23	\$ 15,571
Granted (unaudited)	3,928,869	3.36		
Exercised (unaudited)	(439,610)	2.60		424
Outstanding at March 31, 2021 (unaudited)	10,030,681	\$ 1.84	9.31	\$ 39,793
Options exercisable at December 31, 2020	1,003,892	\$ 0.82	8.94	\$ 2,554
Options exercisable at March 31, 2021 (unaudited)	1,364,949	\$ 1.14	8.87	\$ 6,375

The weighted-average grant date fair value of options granted for the years ended December 31, 2019 and 2020 and the three months ended March 31, 2020 and 2021 (unaudited) was \$0.45, \$0.82, \$0.45 and \$2.37, respectively. As of December 31, 2020, the unrecognized compensation cost related to unvested stock option grants was \$5.2 million and is expected to be recognized as expense over approximately 3.56 years. As of March 31, 2021 (unaudited), the unrecognized compensation cost related to unvested stock option grants was \$13.9 million and is expected to be recognized as expense over approximately 3.66 years. The aggregate fair value of stock options that vested for the years ended December 31, 2019 and 2020 and the three months ended March 31, 2020 and 2021 (unaudited) was \$0, \$0.7 million, \$20,000 and \$0.4 million, respectively.

Certain individuals were granted the ability to early exercise their stock options. The shares of common stock issued from the early exercise of unvested stock options are restricted and continue to vest in accordance with the original vesting schedule. The Company has the option to repurchase any unvested shares at the original purchase price upon any voluntary or involuntary termination. The shares purchased by the employees and non-employees pursuant to the early exercise of stock options are not deemed, for accounting purposes, to be outstanding until those shares vest. The cash received in exchange for exercised and unvested shares related to stock options granted is recorded as a liability for the early exercise of stock options on the accompanying consolidated balance sheets and will be transferred into common stock and additional paid-in capital as the shares vest. As of December 31, 2019 and 2020, there were no shares and 2,131,510 shares subject to repurchase by the Company, respectively. As of March 31, 2021 (unaudited), there were 2,296,615 shares subject to repurchase by the Company. As of December 31, 2019 and 2020 and March 31, 2021 (unaudited), the Company recorded \$0, \$2.5 million and \$3.4 million of liabilities associated with shares issued with repurchase rights, respectively, which is recorded in accrued expenses and other current liabilities. During the years ended December 31, 2019 and 2020, the Company repurchased 0 and 807,987 unvested shares from the early

[Table of Contents](#)

exercise of stock options for \$0 and \$840,000. During the three months ended March 31, 2020 and 2021 (unaudited), the Company repurchased 0 unvested shares.

In January 2019, the Company granted 250,000 options that vest based on a performance milestone. As of December 31, 2020, the milestone for the performance-based options was not probable of achievement, and therefore, no compensation expense for performance-based options has been recognized. For the three months ended March 31, 2021 (unaudited), the Company recognized \$94,000 of stock-based compensation associated with the performance-based options as the performance milestone was determined to be probable as of March 31, 2021.

The assumptions used in the Black-Scholes option pricing model to determine the fair value of the employee and nonemployee stock option grants were as follows:

	Year ended December 31,		Three months ended March 31,	
	2019	2020	2020	2021
			(unaudited)	
Risk-free interest rate	1.51-1.81%	0.37-1.22%	1.22%	0.59-1.01%
Expected volatility	73.75-75.51%	74.72-77.81%	74.7%	83.4-83.9%
Expected term (in years)	6.25	6.02-6.25	6.25	6.08
Expected dividend yield	—%	—%	—%	—%

Restricted stock

The Company granted 1,795,827 shares of its restricted stock in 2018, which vest 25% one year from the vesting commencement date and monthly thereafter over a three-year period. The weighted-average grant date fair value of restricted stock granted in 2018 was \$0. No shares of restricted stock were granted during the years ended December 31, 2019 and 2020 and the three months ended March 31, 2020 and 2021 (unaudited). The restricted stock shares are subject to forfeiture upon the stockholders' termination of employment or service to the Company. Any shares subject to forfeiture are not deemed, for accounting purposes, to be outstanding until those shares vest. As such, the Company recognizes the measurement date fair value of the restricted stock over the vesting period as compensation expense. As of December 31, 2019 and 2020, 1,171,619 shares and 557,731 shares of common stock, respectively, were subject to forfeiture. As of March 31, 2021 (unaudited), 471,532 shares of common stock were subject to forfeiture.

The summary of the Company's restricted stock activity during the year ended December 31, 2020 and the three months ended March 31, 2021 (unaudited) is as follows:

	Number of restricted stock shares outstanding	Weighted- average grant date fair value
Nonvested at December 31, 2019	1,171,619	\$ 0.001
Vested	(440,277)	0.001
Forfeited	(173,611)	0.001
Nonvested at December 31, 2020	557,731	\$ 0.001
Vested (unaudited)	(86,199)	\$ 0.001
Nonvested at March 31, 2021 (unaudited)	471,532	\$ 0.001

At December 31, 2020 and March 31, 2021 (unaudited), the total unrecognized compensation related to unvested restricted stock awards granted was \$0.

[Table of Contents](#)**Stock-based compensation expense**

The allocation of stock-based compensation for all stock awards was as follows (in thousands):

	Year ended December 31,		Three months ended March 31	
	2019	2020	2020	2021
				(unaudited)
Research and development expense	\$ 53	\$ 348	\$ 69	\$ 491
General and administrative expense	69	449	36	304
Total	\$ 122	\$ 797	\$ 105	\$ 795

Common stock reserved for future issuance

Common stock reserved for future issuance consisted of the following as of December 31, 2019 and 2020 and March 31, 2021 (unaudited):

	December 31,		March 31,
	2019	2020	2021
			(unaudited)
Conversion of preferred stock outstanding	31,753,064	57,987,216	71,263,685
Conversion of preferred stock in future issuance (B-2)	—	10,979,319	—
Stock options issued and outstanding	3,895,086	6,541,422	10,030,681
Awards available for future grant	3,475,752	2,314,746	6,719,209
Total	39,123,902	77,822,703	88,013,575

11. Leases**Operating leases**

The Company has facility leases for office space under non-cancellable and cancelable operating leases with various expiration dates through 2032 and equipment under a non-cancellable operating lease with a term expiring in 2022. Operating lease cost was approximately \$1.0 million and \$1.3 million, including variable lease costs of \$267,000 and \$355,000, and short-term lease costs of \$74,000 and \$96,000 during the years ended December 31, 2019 and 2020, respectively. Operating lease cost was approximately \$339,000 and \$361,000, including variable lease costs of \$98,000 and \$105,000, and short-term lease costs of \$19,000 and \$29,000 during the three months ended March 31, 2020 and 2021 (unaudited), respectively. The Company paid \$581,000 and \$989,000 in cash for operating leases that were included in the operating activities section of the consolidated statements of cash flows for the years ended December 31, 2019 and 2020, respectively. The Company paid \$213,000 and \$268,000 in cash for operating leases that were included in the operating activities section of the consolidated statements of cash flows for the three months ended March 31, 2020 and 2021 (unaudited), respectively.

The Company has recorded an operating lease asset of \$2.8 million and \$2.2 million and a lease liability of \$3.7 million and \$3.0 million in the consolidated balance sheets as of December 31, 2019 and 2020, respectively. The weighted-average remaining lease term and the weighted-average discount rate of the Company's operating leases was 4.13 years and 7.8% at December 31, 2019 and 3.16 years and 7.8% at December 31, 2020, respectively. The weighted-average remaining lease term and the weighted-average discount rate of the Company's operating leases was 2.94 years and 7.8% at March 31, 2021 (unaudited). The weighted-average remaining lease term does not include any renewal options at the election of the Company.

[Table of Contents](#)

The Company's lease agreements do not contain any material residual value guarantees or material restrictive covenants.

Facility leases

In 2018, the Company entered into a lease agreement for approximately 11,000 square feet of office space in San Diego, California which was subsequently amended resulting in a total of approximately 16,153 square feet of office space leased. The amended space is accounted for as a separate lease. The non-cancellable operating leases expire in May 2024. The Company's lease payments consist primarily of fixed rental payments for the right to use the underlying leased assets over the lease terms. The Company is responsible for operating expenses over base operating expenses as defined in the original lease agreement.

In September 2020, the Company entered into a lease agreement for 59,407 square feet of laboratory and office space in San Diego, California (2020 Lease), which represented a portion of a new facility that is under construction. The construction and design of the asset is the primary responsibility of the lessor. The Company is involved in certain aspects of construction and design for certain interior features and leasehold improvements that will be beneficial to the Company to better suit its business needs and intended purpose of the space. The lease will be accounted for as an operating lease and has a target commencement date of August 2021. The lease has an initial term of 10.5 years and includes aggregate monthly payments to the lessor of approximately \$39.5 million beginning in January 2023 with a rent escalation clause, and a tenant improvement allowance of approximately \$13.4 million. The lease is cancellable at the Company's request after the 84th month with 12 months written notice and a lump-sum cancellation payment of \$1.9 million. As discussed in Note 2, the Company provided a letter of credit to the lessor for \$312,000, which expires October 31, 2031.

In March 2021, the Company entered into the first amendment to the 2020 Lease to expand the rented premises by 18,421 square feet for additional consideration of \$96,000 per month starting in January 2023 and to receive an additional \$3.4 million tenant improvement allowance. The payment associated with the option to cancel the lease after the 84th month was increased to \$2.5 million, and the letter of credit provided to the lessor was increased to \$408,000.

Future minimum lease payments under non-cancelable operating leases with initial lease terms in excess of one year as of December 31, 2020 are as follows (in thousands):

Year ending December 31,	
2021	\$1,073
2022	969
2023	937
2024	401
Total lease payments	3,380
Less: Amount representing interest	(394)
Lease liabilities	\$2,986

As of December 31, 2020, the Company had commitments of \$39.5 million for a cancelable operating lease of a new real estate facility that has not yet commenced, and therefore are not included in the operating lease assets or liabilities. This operating lease is expected to commence in 2021 with a lease term of 10.5 years.

12. Commitments and contingencies

Litigation

As of December 31, 2019 and 2020, and March 31, 2021 (unaudited), there was no litigation against the Company.

13. Income taxes

No provision for federal, state or foreign income taxes has been recorded for the years ended December 31, 2019 and 2020 other than \$2,000 and \$1,000, respectively, for the annual tax for C corporations paid to the state of California, and \$1,000 for foreign taxes in the year ended December 31, 2020. No provision for federal, state or foreign income taxes has been recorded for the three months ended March 31, 2020 and 2021 (unaudited), other than \$1,000 for the annual tax for C corporations due to the state of California in the three months ended March 31, 2020 (unaudited).

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities as of December 31, 2019 and 2020 were as follows (in thousands):

	December 31,	
	2019	2020
Deferred tax assets:		
Net operating loss carryforwards	\$ 3,622	\$ 11,365
Intangible assets	54	17,678
Research and development credits	209	657
Operating lease liabilities	1,032	745
Other, net	77	646
Total deferred tax assets	4,994	31,091
Deferred tax liabilities:		
Property and equipment	(182)	(293)
Operating lease assets	(793)	(555)
Total deferred tax liabilities	(975)	(848)
Valuation allowance	(4,019)	(30,243)
Net deferred tax assets	\$ —	\$ —

The Company has established a valuation allowance against net deferred tax assets due to the uncertainty that such assets will be realized. The Company periodically evaluates the recoverability of the deferred tax assets. At such time as it is determined that it is more likely than not that deferred tax assets will be realizable, the valuation allowance will be reduced. The Company has recorded a full valuation allowance of \$30.2 million as of December 31, 2020, as it does not believe it is more likely than not that the deferred tax assets will be realized primarily due to the generation of pre-tax book losses, the lack of feasible tax-planning strategies, the limited existing taxable temporary differences, and the subjective nature of forecasting future taxable income into the future. The Company increased its valuation allowance by \$26.2 million during the year ended December 31, 2020.

A reconciliation of the federal statutory income tax rate and the Company's effective income tax rate is as follows:

	Year ended December 31,	
	2019	2020
Federal statutory income tax rate	21.0%	21.0%
State income taxes, net of federal benefit	8.3	3.3
Change in valuation allowance	(29.3)	(25.8)
Fair value of purchase right liability	—	1.5
Other permanent differences	(0.1)	(0.1)
Other	0.1	0.1
Effective income tax rate	— %	— %

[Table of Contents](#)

At December 31, 2020, the Company had federal, California and other state net operating loss (NOL) carryforwards of \$49.1 million, \$13.0 million and \$2.4 million, respectively. The federal NOL carryforwards will carryforward indefinitely and can offset 80% of future taxable income each year, and the state NOL carryforwards begin to expire in 2038.

At December 31, 2020, the Company also had federal and California research tax credit carryforwards of approximately \$312,000 and \$658,000, respectively. The federal research tax credit carryforwards begin to expire in 2038, and the California research tax credit carryforward does not expire and can be carried forward indefinitely until utilized.

The above NOL carryforward and the research tax credit carryforwards are subject to an annual limitation under Section 382 and 383 of the Internal Revenue Code of 1986, as amended (IRC), and similar state provisions due to ownership change limitations that have occurred which will limit the amount of NOL and tax credit carryforwards that can be utilized to offset future taxable income and tax, respectively. In general, an ownership change, as defined by Section 382 and 383, results from transactions increasing ownership of certain stockholders or public groups in the stock of the corporation by more than 50 percentage points over a three-year period. The Company has not completed an IRC Section 382/383 analysis regarding the limitation of net operating loss and research and development credit carryforwards. If a change in ownership were to have occurred, additional NOL and tax credit carryforwards could be eliminated or restricted. If eliminated, the related asset would be removed from the deferred tax asset schedule with a corresponding reduction in the valuation allowance. Due to the existence of the valuation allowance, limitations created by future ownership changes, if any, related to the Company's operations in the United States will not impact the Company's effective tax rate.

On March 27, 2020, the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) was enacted in response to the COVID-19 pandemic. The CARES Act, among other things, permits NOL carryovers and carrybacks to offset 100% of taxable income for taxable years beginning before 2021. In addition, the CARES Act allows NOLs incurred in 2018, 2019, and 2020 to be carried back to each of the five preceding taxable years to generate a refund of previously paid income taxes. Due to the Company's history of net operating losses, the CARES Act did not have a material impact on the Company's income tax provision for the years ended December 31, 2019 and 2020.

The Company recognizes a tax benefit from an uncertain tax position when it is more likely than not that the position will be sustained upon examination, including resolutions of any related appeals or litigation processes, based on the technical merits. Income tax positions must meet a more likely than not recognition at the effective date to be recognized.

A reconciliation of the beginning and ending amount of unrecognized tax benefits for 2019 and 2020, excluding interest and penalties, is as follows (in thousands):

	Year ended December 31,	
	2019	2020
Balance at the beginning of the year	\$ —	\$ —
Increase (decrease) related to prior year positions	—	—
Increase related to current year positions	—	191
Balance at the end of the year	\$ —	\$ 191

Included in the balance of unrecognized tax benefits as of December 31, 2020 is \$175,000 that, if recognized, would reduce the Company's annual effective tax rate, subject to valuation allowance. The Company does not anticipate any significant changes to unrecognized tax benefits over the next 12 months.

[Table of Contents](#)

The Company files income tax returns in the United States, California and Massachusetts. The Company is not currently under examination in any of these jurisdictions, and all of the Company's tax years remain effectively open in all jurisdictions to examination due to net operating loss carryforwards. The Company's policy is to recognize interest expense and penalties related to income tax matters as tax expense. For the years ended December 31, 2019 and 2020, the Company has not recognized any interest or penalties related to income taxes.

14. Net loss per share

The following table summarizes the computation of basic and diluted net loss per share of the Company (in thousands, except share and per share data):

	Year ended December 31,		Three months ended March 31,	
	2019	2020	2020	2021
			(unaudited)	
Net loss	\$ (12,040)	\$ (101,660)	\$ (23,658)	\$ (18,017)
Weighted-average shares of common stock used in computing net loss per share, basic and diluted	19,826,574	21,037,540	20,631,590	22,233,422
Net loss per share, basic and diluted	\$ (0.61)	\$ (4.83)	\$ (1.15)	\$ (0.81)

The Company's potentially dilutive securities, which include its convertible preferred stock, options to purchase common stock and common stock subject to repurchase related to unvested restricted stock and options early exercised, have been excluded from the computation of diluted net loss per share as the effect would be to reduce the net loss per share. Therefore, the weighted-average number of common shares outstanding used to calculate both basic and diluted net loss per share is the same. The Company excluded the following potential common shares, presented based on amounts outstanding at each period end, from the computation of diluted net loss per share for the periods indicated because including them would have had an anti-dilutive effect:

	Year ended December 31,		Three months ended March 31,	
	2019	2020	2020	2021
			(unaudited)	
Convertible preferred stock issued	31,753,064	57,987,216	31,753,064	71,263,685
Conversion of convertible preferred stock in future issuance (B-2)	—	10,979,319	—	—
Options to purchase common stock	3,895,086	6,541,422	3,390,918	10,030,681
Restricted stock subject to future vesting	2,113,460	1,134,990	1,910,075	957,644
Options early exercised subject to future vesting	—	2,131,510	729,166	2,296,615
Total potentially dilutive shares	37,761,610	78,774,457	37,783,223	84,548,625

15. Retirement plan

The Company sponsors an employee savings plan that qualifies as a deferred salary arrangement under Section 401(k) of the IRC. Participating employees may defer up to the Internal Revenue Service annual contribution limit. The Company has not made any contributions for the years ended December 31, 2019 and 2020. Beginning in 2021, the Company provides a safe harbor contribution of 3.0% of the employee's compensation, not to exceed eligible limits. For the three months ended March 31, 2021 (unaudited), the Company incurred \$127,000 in expenses related to the safe harbor contribution.

16. COVID-19 pandemic

The current COVID-19 pandemic, which is impacting worldwide economic activity, poses the risk that the Company or its employees, contractors, suppliers, and other partners may be prevented from conducting business activities for an indefinite period of time, including due to shutdowns that may be requested or mandated by governmental authorities. During the year ended December 31, 2020, and the three months ended March 31, 2021 (unaudited), the Company has not experienced significant impact from the pandemic. The extent to which the COVID-19 pandemic will impact the Company's business will depend on future developments that are highly uncertain and cannot be predicted at this time.

17. Subsequent events

Subsequent events have been evaluated through June 9, 2021, which is the date the consolidated financial statements were issued, except for the reverse stock split discussed below.

UCSF Agreement amendment

In connection with the UCSF Agreement amendment, on May 25, 2021 (unaudited), the Company issued 944,945 shares of the Company's common stock to the Regents.

2021 Stock option grants

From April 1, 2021 through May 17, 2021 (unaudited), the Company granted options to purchase an aggregate 2,912,491 shares of its common stock to employees, members of the Board of Directors and a member of the Company's scientific advisory board at an exercise price of \$5.81.

Erasca Foundation

In May 2021 (unaudited), the Company established the Erasca Foundation. The Erasca Foundation will provide support such as direct research grants, hardship grants, patient advocacy, patient education in underserved populations, and funding for other initiatives to positively impact society.

Reverse stock split

On July 9, 2021, the Company effected a one-for-1.2 reverse stock split of its issued and outstanding shares of common stock and a proportional adjustment to the existing conversion ratios for each series of the Company's Preferred Stock. Accordingly, all share and per share amounts for all periods presented in the accompanying consolidated financial statements and notes thereto have been adjusted retroactively, where applicable, to reflect this reverse stock split and adjustment of the preferred stock conversion ratios. The par value and the number of authorized shares of the convertible preferred stock and common stock were not adjusted in connection with the reverse stock split.

18,750,000 shares



Common stock

Prospectus

J.P. Morgan

Morgan Stanley

BofA Securities

Evercore ISI

Guggenheim Securities

July 15, 2021