KINNATE BIOPHARMA

INSPIRING HOPE

to Those Battling Cancer

2022 Annual Report

KINNATE BIOPHARMA

Our mission is to inspire hope to those battling cancer by expanding on the promise of targeted therapies. We currently have two programs in the clinic, two IND-enabling studies and multiple undisclosed programs in research stage.

Advancing Multiple Ongoing Clinical, IND-Enabling and Discovery Programs

Target, Program	Study Name	Indications	Discovery	IND-Enabling	Phase 1a	Phase 1b	Phase 2/3	Anticipated Catalysts
Exarafenib RAF-Driven & Dependent	KN-8701	BRAF-Driven Advanced Adult Solid Tumors	**Monotherapy**					**Dose Expansion Data H1 in 2024**
		Advanced NRAS^{Mut} Melanoma	**Combination with Binimetinib**					**Expansion Dose Selection in H2 2023**
KIN-3248 FGFR2/3 Driven	KN-4802	Naïve + Pre-treated FGFR2/3 Driven Advanced Adult Solid Tumors						**Initial Clinical Data in H2 2023**
KIN-7136 Brain-Penetrant MEK		MAPK-Driven Advanced Adult Solid Tumors	**Monotherapy & Combination with Exarafenib**					**Expect to Enter Clinic in H2 2023**
KIN-8741 c-MET, Covers Acquired Resistance		c-Met-Driven Advanced Adult Solid Tumors						**Expect to Enter Clinic in H1 2024**
KIN-004 CDK12		Adult Solid Tumors						**Exploring Strategic Alternatives**
Multiple Undisclosed Leads in Research Stage, Goal of 1 IND a Year								

Dear Fellow Shareholders,

Each year I have the privilege of reporting on Kinnate's progress, and I am delighted to let you know that 2022 was exceptional in many ways. As the world around us continues to change, our mission of expanding on the promise of targeted cancer therapies remains the consistent driving force that provides clarity in our strategy and drives urgency in our actions.

When Kinnate was founded in 2018, our mission was to create a precision oncology company focusing on cancer mutations for which patients today either do not have treatment options or might not respond well to a given therapy. I am proud to report we continue to hit important milestones in realizing that vision. As we enter our fifth year of operations, our nearly 100 employees are working every day toward helping those battling cancer by advancing our pipeline of targeted therapy candidates developed by our own scientists.

Our progress is powered by the Kinnate Discovery Engine, a process that starts with the identification of an unmet need among validated oncogenic drivers, uses our deep expertise in medicinal chemistry and is rapidly scalable using our tailored external ecosystem of technology, academic and R&D partners. This strategy, which has allowed us to operate efficiently without the capital expense of managing traditional labs or manufacturing facilities, has also enabled our investment in a highly experienced team of internal drug hunters who have helped transform Kinnate from a small start-up to a publicly traded clinical-stage biopharmaceutical company advancing a pipeline with multiple potentially first- and best-in-class targeted cancer therapies.

Advancing Our Clinical Programs

For our RAF program, our lead product candidate exarafenib (KIN-2787) is an investigational pan-RAF inhibitor that continues to demonstrate its potential as a single agent, and in combination with a MEK inhibitor, in adults with BRAF-altered cancers and NRAS-mutated advanced or metastatic melanoma.

Exarafenib was designed with a compelling constellation of features that we believe are essential in delivering an optimized targeted therapy for BRAF-altered cancers: high potency and selectivity, the ability to cover the heterogeneous nature of RAS dependent subtypes, lack of clinically apparent paradoxical activation and the ability to achieve sustained high unbound exposures. Earlier this year, we presented details on these unique structural and physical properties that support this best-in-class profile.

Our first report of clinical monotherapy data from the global Phase 1 trial evaluating exarafenib (KN-8701) were featured in an oral presentation at the 2023 Annual Meeting of the American Association for Cancer Research (AACR). These monotherapy data continue to support our belief that alteration and tumor types predict sensitivity and show that exarafenib demonstrates promising tolerability with therapeutically meaningful exposures and a breadth of responses across BRAF and NRAS-altered cancers. The high exposures and tolerability profile observed to-date are two characteristics that have not been well-documented in the clinic previously with first-generation pan-RAF inhibitors.

At 300 milligrams twice a day, exarafenib has delivered a favorable overall response rate and high target coverage in patients and led to significant reductions in circulating tumor DNA (ctDNA) in our priority areas of focus – BRAF Class II and NRAS alterations.

> "As we enter our fifth year of operations, our nearly 100 employees are working every day toward helping those battling cancer by advancing our pipeline of targeted therapy candidates developed by our own scientists."
>
> **Nima Farzan,** President and Chief Executive Officer of Kinnate Biopharma Inc.

The tolerability profile and encouraging clinical signals for exarafenib have paved the way for the initiation of the dose expansion in KN-8701, which is currently ongoing. In dose expansion, we are testing exarafenib monotherapy in more sensitive tumor and alteration types, prioritizing patients with BRAF Class II alterations across solid tumors, primarily in melanoma and non-small cell lung cancer.

We anticipate sharing an update from the monotherapy dose expansion in the first half of 2024.

The exarafenib monotherapy tolerability and safety profile also provide compelling support for a pan-RAF backbone to rational combination approaches.

In the combination arm of the ongoing KN-8701 trial, we are evaluating exarafenib with the MEK inhibitor binimetinib, in our priority patient subtype, those with NRAS mutant melanoma – a type of cancer that currently has no approved targeted therapy.

The combination arm is also enrolling RAF pre-treated patients with a BRAF Class I alteration. We are excited to report that we're observing early, compelling activity with the combination in patients with NRAS mutant melanoma. We anticipate providing an update in the second half of 2023 on the combination dose that will be taken into dose expansion.

In addition to clinical milestones, we're making important achievements with key regulatory designations that may support the advancement of our programs.

In September 2022, the U.S. Food and Drug Administration (FDA) granted exarafenib Fast Track designation for the treatment of patients with BRAF Class II or Class III alteration-positive and/or NRAS mutation-positive stage IIb to IV malignant melanoma that is metastatic or unresectable. The FDA has also granted Orphan Drug Designation (ODD) for exarafenib in the treatment of people with stage IIb-IV melanoma. These designations serve as important achievements and help enable more frequent interactions with the FDA.

In April 2022 we also successfully began enrolling patients into our second clinical program, an ongoing global Phase 1 trial (KN-4802) evaluating KIN-3248, a Fibroblast Growth Factor Receptor inhibitor candidate for which we anticipate presenting initial dose escalation data in the second half of 2023. KIN-3248 has been designed to address primary FGFR2 and FGFR3 oncogenic alterations and those predicted to drive acquired resistance to current FGFR-targeted therapies, including gatekeeper, molecular brake, and activation loop mutations observed in cancers such as intrahepatic cholangiocarcinoma (ICC) and urothelial carcinoma (UC).

In early 2023, the FDA granted KIN-3248 Fast-Track designation for the treatment of patients with unresectable, locally advanced or metastatic cholangiocarcinoma (CCA) harboring FGFR2 gene fusions or other alterations who have received at least one prior systemic therapy.

Continued Investment in Innovation

We are proud of the growing portfolio of wholly owned programs we are building as a result of our capability-driven discovery engine. Our goal remains filing one Investigational New Drug application (IND) a year, focusing on highly selective drug candidates for validated oncogenic drivers that can address broad alteration coverage, overcome resistance mechanisms and/or achieve brain penetrance. We recently unveiled the addition of two new drug candidates to our development pipeline: KIN-7136, a next generation brain-penetrant mitogen-activated protein kinase (MEK) inhibitor for MAPK-driven advanced adult solid tumors, which is expected to enter the clinic in the second half of 2023, and KIN-8741, a highly selective mesenchymal epithelial transition (c-MET) inhibitor designed to cover acquired resistance to first generation c-MET inhibitors in non-small cell lung cancer and other advanced adult solid tumors, expected to enter the clinic in the first half of 2024.

Our consistent and disciplined use of capital is expected to enable Kinnate to continue our funding of scientific innovation and operations into early 2025 with existing cash.

Establishing Our Global Footprint

In the first quarter of 2023, we acquired complete ownership of Kinnjiu Biopharma, our joint venture in China, to give us greater control over our clinical development programs in PRC, where some of the highest incidence rates of cancer globally are present, as well as in Hong Kong, Macau and Taiwan.

Kinnjiu Biopharma, in collaboration with our team in the United States, will support the development and commercialization of our most advanced kinase inhibitors in PRC, Hong Kong, Macau, and Taiwan. This year, we announced the expansion of KN-8701 to this region, with trial sites now open in PRC and Taiwan.

Building a Diverse and Inclusive Organization

Critical to our growth is a commitment to continually improving and expanding our diversity, equity, inclusion and belonging (DEI&B) programs in the workplace. We believe that diversity of viewpoints, backgrounds, professional experiences, education and personal characteristics – including gender, race, ethnicity, national origin, age, sexual orientation, gender identity and other similar demographics – cultivate a cohesive and productive work environment.

I am pleased to report that we continue to make strides in meeting this commitment and are proud of the gender and ethnic diversity we have cultivated throughout the company to date. As of April 24, 2023, 59% of our employees are women and 52% of our Kinnate U.S. team are people of color. In addition, women comprise 31% of Kinnate's senior leadership team and 40% of our Board of Directors. In 2022, we proudly promoted ten employees, of whom 60% were women and 80% were people of color. We also created a new Executive Director leadership band, which provides a additional opportunity for advancement for our qualified employees.

Honoring Our Founding Chief Executive Officer

In closing, I'd like to honor Kinnate's co-founder and initial Chief Executive Officer Steve Kaldor, Ph.D., who, sadly, passed away in August of 2022. As a seasoned drug hunter and organic chemist, Steve understood the urgent need to build differentiated drugs based on foundational medicinal chemistry and chemical design and established our focus on building our programs around validated oncogenic drivers for "undruggable" cancer targets. Steve's energy and early work continue to inspire our team and propel our progress and we are honored to carry on his legacy of improving the lives of people living with cancer.

Thank you for your continued support and investment in Kinnate. We look forward to providing you with updates about our progress and growth in 2023.

Sincerely,

Nima Farzan,
President and Chief Executive Officer
Kinnate Biopharma Inc.

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2022
OR
☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from _____ to _____

Commission File Number: 001-39743

KINNATE BIOPHARMA INC.

(Exact name of Registrant as specified in its Charter)

Delaware	**82-4566526**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
103 Montgomery Street, Suite 150 **The Presidio of San Francisco** **San Francisco, CA**	**94129**
(Address of principal executive offices)	**(Zip Code)**

Registrant's telephone number, including area code: (858) 299-4699

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, $0.0001 par value per share	KNTE	**The Nasdaq Stock Market LLC** (The Nasdaq Global Select Market)

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES ☐ NO ☒

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. YES ☐ NO ☒

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES ☒ NO ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). YES ☒ NO ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of ''large accelerated filer,'' ''accelerated filer,'' ''smaller reporting company,'' and ''emerging growth company'' in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☒
Emerging growth company	☒		

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). YES ☐ NO ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant, based on the closing price of the shares of common stock on The Nasdaq Stock Market on June 30, 2022 (the last day of the Registrant's most recently completed second fiscal quarter) was approximately $367 million.

The number of shares of Registrant's Common Stock outstanding as of March 10, 2023 was 46,569,648.

Portions of the registrant's Definitive Proxy Statement relating to the registrant's Annual Meeting of Shareholders are incorporated by reference into Part III of this Annual Report on Form 10-K where indicated. Such Definitive Proxy Statement will be filed with the Securities and Exchange Commission within 120 days after the end of the registrant's 2022 fiscal year ended December 31, 2022.

Table of Contents

PART I

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements. All statements other than statements of historical facts contained in this Annual Report on Form 10-K, including statements regarding our future results of operations and financial position, business strategy, development plans, ongoing and planned future preclinical studies and clinical trials, future results of ongoing and planned clinical trials, expected research and development costs, regulatory strategy, timing and likelihood of success, as well as plans and objectives of management for future operations, are forward-looking statements. In some cases, investors can identify forward-looking statements by terms such as ''may,'' ''will,'' ''should,'' ''would,'' ''expect,'' ''plan,'' ''anticipate,'' ''could,'' ''intend,'' ''target,'' ''project,'' ''contemplate,'' ''believe,'' ''estimate,'' ''predict,'' ''potential'' or ''continue'' or the negative of these terms or other similar expressions. Forward-looking statements contained in this Annual Report on Form 10-K include, but are not limited to, statements about:

- the ability of our ongoing and planned future preclinical studies and ongoing and planned future clinical trials to demonstrate safety and efficacy of our product candidates, and other positive results;
- the timing, progress and results of ongoing and planned future preclinical studies and clinical trials for our current product candidates and other product candidates we may develop, including statements regarding the timing of initiation and completion of preclinical studies or clinical trials and related preparatory work, the period during which the results of the preclinical studies or clinical trials will become available, and our research and development programs;
- the timing, scope and likelihood of regulatory filings and approvals, including timing of INDs and final approval by the U.S Food and Drug Administration (FDA) of our current product candidates and any other future product candidates;
- the timing, scope or likelihood of foreign regulatory filings and approvals;
- our ability to develop and advance our current product candidates and programs into, and successfully complete, clinical trials;
- our manufacturing, commercialization, and marketing capabilities and strategy;
- our plans relating to commercializing our product candidates, if approved, including the geographic areas of focus and sales strategy;
- the need to hire additional personnel and our ability to attract and retain such personnel;
- the size of the market opportunity for our product candidates, including our estimates of the number of patients who suffer from the diseases we are targeting;
- our expectations regarding the approval and use of our product candidates in combination with other drugs;
- our competitive position and the success of competing therapies that are or may become available;
- our estimates of the number of patients that we will enroll in our clinical trials;
- the beneficial characteristics, and the potential safety, efficacy and therapeutic effects of our product candidates;
- our ability to obtain and maintain regulatory approval of our product candidates;
- our plans relating to the further development of our product candidates, including additional indications we may pursue;
- existing regulations and regulatory developments in the United States, Europe and other jurisdictions;
- our expectations regarding the impact of COVID-19, supply chain disruptions, inflation and other drivers of macroeconomic volatility on our business;
- our intellectual property position, including the scope of protection we are able to establish and maintain for intellectual property rights covering our current product candidates and other product

candidates we may develop, including the extensions of existing patent terms where available, the validity of intellectual property rights held by third parties, and our ability not to infringe, misappropriate or otherwise violate any third-party intellectual property rights;

- our continued reliance on third parties to conduct additional preclinical studies and planned clinical trials of our product candidates, and for the manufacture of our product candidates for preclinical studies and clinical trials;
- our ability to obtain, and negotiate favorable terms of, any collaboration, licensing or other arrangements that may be necessary or desirable to develop, manufacture or commercialize our product candidates;
- the pricing and reimbursement of our current product candidates and other product candidates we may develop, if approved;
- the rate and degree of market acceptance and clinical utility of our current product candidates and other product candidates we may develop;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our financial performance;
- the period over which we estimate our existing cash and cash equivalents will be sufficient to fund our future operating expenses and capital expenditure requirements;
- the impact of laws and regulations;
- our expectations regarding the period during which we will remain an emerging growth company under the JOBS Act; and
- our anticipated use of our existing resources.

We have based these forward-looking statements largely on our current expectations and projections about our business, the industry in which we operate and financial trends that we believe may affect our business, financial condition, results of operations and prospects, and these forward-looking statements are not guarantees of future performance or development. These forward-looking statements speak only as of the date of this Annual Report on Form 10-K and are subject to a number of risks, uncertainties and assumptions described in the section titled ‘‘Risk Factors’’ and elsewhere in this Annual Report on Form 10-K. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, investors 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. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events or otherwise.

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 Annual Report on Form 10-K, 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 investors are cautioned not to unduly rely upon these statements.

Item 1. Business

Overview

We are a clinical-stage precision oncology company focused on the discovery, design and development of small molecule kinase inhibitors for difficult-to-treat, genomically defined cancers. Our mission is to inspire hope for those battling cancer by expanding on the promise of targeted therapies. Our Kinnate Discovery Engine, which starts with the identification of an unmet need among validated oncogenic drivers, utilizes our deep expertise in medicinal chemistry and structure-based design, and the tailored ecosystems of our partners to develop our targeted therapies. We focus our discovery and development efforts on three patient populations: (1) those with cancers that harbor known oncogenic drivers (gene alterations that cause cancers) with no currently available targeted therapies, (2) those with genomically well-characterized tumors that have intrinsic resistance to currently available treatments (non-responders), and (3) those whose tumors have acquired resistance over the course of therapy to currently available treatments. Our Kinnate Discovery Engine, together with a biomarker-driven approach to our drug development strategy, our continual translational research and early global expansion in development, may enable us to develop drugs with an increased probability of clinical success while reducing the cost and risk of drug development.

Our lead product candidate is exarafenib (KIN-2787), which is a Rapidly Accelerated Fibrosarcoma (RAF) inhibitor in development for the treatment of patients with lung cancer, melanoma and other solid tumors. Unlike currently available treatments that target only B-Rapidly Accelerated Fibrosarcoma (BRAF) kinase Class I alterations, we have designed exarafenib to target BRAF Class II and Class III alterations, where it would be a first-line targeted therapy, in addition to covering BRAF Class I alterations. In April 2021, we filed an Investigational New Drug application (IND) for exarafenib with the FDA. In May 2021, the FDA cleared our IND for exarafenib and we initiated KN-8701, a Phase 1 clinical trial evaluating exarafenib. We began dosing exarafenib in humans in the second half of 2021. In 2022, we announced the addition of patients with NRAS mutant melanoma into KN-8701 both in monotherapy and in combination with a mitogen-activated protein kinase (MEK) inhibitor binimetinib. KN-8701 is currently ongoing. We anticipate disclosing exarafenib monotherapy and combination dose escalation data from this clinical trial in the first half of 2023. In the first quarter of 2023, we announced that we initiated enrollment of patients into the monotherapy dose expansion cohorts of KN-8701.

Our second product candidate is KIN-3248, a Fibroblast Growth Factor Receptors (FGFR) inhibitor, designed for the treatment of patients with intrahepatic cholangiocarcinoma (ICC), a cancer of the bile ducts in the liver, and urothelial carcinoma (UC), a cancer of the bladder lining, as well as other solid tumors. KIN-3248 is designed to address clinically observed kinase domain mutations in FGFR2 and FGFR3 that drive resistance to current therapies. In January 2022, the FDA cleared our IND for KIN-3248 and we initiated KN-4802, a Phase 1 clinical trial evaluating KIN-3248, in the first quarter of 2022. KIN-3248 has demonstrated proof of concept in preclinical models showing activity across both initial FGFR 2/3 genomic alterations and a broad range of common resistant variants that arise from first generation FGFR 2/3 targeted therapies. We anticipate initial dose escalation data from the ongoing KN-4802 clinical trial in the second half of 2023.

We are also advancing other small molecule research programs, including a Cyclin-Dependent Kinase 12 (CDK12) inhibitor in our KIN004 program for the treatment of ovarian carcinoma (OC), triple-negative breast cancer (TNBC) and metastatic castration-resistant prostate cancer (mCRPC).

In February 2023, we announced that we acquired the ownership stake of Kinnjiu Biopharma Inc. (Kinnjiu), the China joint venture that we established in May 2021, previously held by the Series A investors for $24.0 million, using a combination of $9.1 million in cash and 2.2 million shares of common stock of Kinnate. We retain Kinnjiu's cash, intellectual property and other assets, including key personnel and its legal entity structure. The transaction gives Kinnate greater control over its clinical development programs in the People's Republic of China, Hong Kong, Macau and Taiwan. Kinnjiu is now a wholly-owned subsidiary of Kinnate.

Precision medicine is predicated on the relationship between genomic alterations, protein dysfunctions and diseases, and aims to specifically and potently drug genomically validated target proteins (i.e., genomic variants potentially implicated in the biology of disease) while minimizing side effects. As genomic profiling of cancer patients becomes more commonplace, it is becoming increasingly clear that cancers developing in various sites throughout the body may share the same type of genomic alterations. As such, tumors may be identified and treated according to their distinctive genomic alterations, rather than focusing on simply the tissue of origin. Both

research and clinical data suggest that some tumors, while having multiple identifiable genomic alterations, are primarily dependent on an aberrantly activated kinase for their proliferation and survival. Kinases, which are cellular enzymes that regulate the biological activity of proteins through a ubiquitous process known as phosphorylation, play a central role in the formation and metastatic spread of many cancers and therefore are the focus of our drug development efforts. Kinase inhibition is a proven approach to fighting cancer, and for two decades, has addressed an increasing number of oncology indications. Mutated kinases can result in deregulated activity that results in cancerous cell proliferation. Currently-approved drugs that inhibit the activity of mutated oncogenic kinases (kinase inhibitors) have demonstrated significant clinical benefit to hundreds of thousands of patients with cancer globally.

The worldwide sales of small molecule kinase inhibitors in oncology were reported to be $23 billion in 2019 and are estimated to grow to more than $50 billion in 2024. However, because of the limitations of currently-approved drugs, it is estimated that only 10% of all patients with advanced or metastatic cancer today are eligible for these treatments. This low penetration of targeted therapies demonstrates a substantial unmet patient need and market opportunity. In the current RAF inhibitor landscape, no targeted therapies have been approved for BRAF Class II or Class III alteration-driven cancers. In the current FGFR inhibitor landscape, approved and clinical-phase FGFR inhibitors provide benefit, but the duration of response (DoR) of such inhibitors is limited due to acquired mutational resistance. Taken together, this represents a substantial opportunity for developing novel and potentially transformative drugs for underserved patient populations with difficult-to-treat, genomically defined cancers.

Our Approach

Our Kinnate Discovery Engine leverages our team's significant industry expertise to drive toward accelerated clinical development, regulatory review, and ultimately, potential new drug approval.

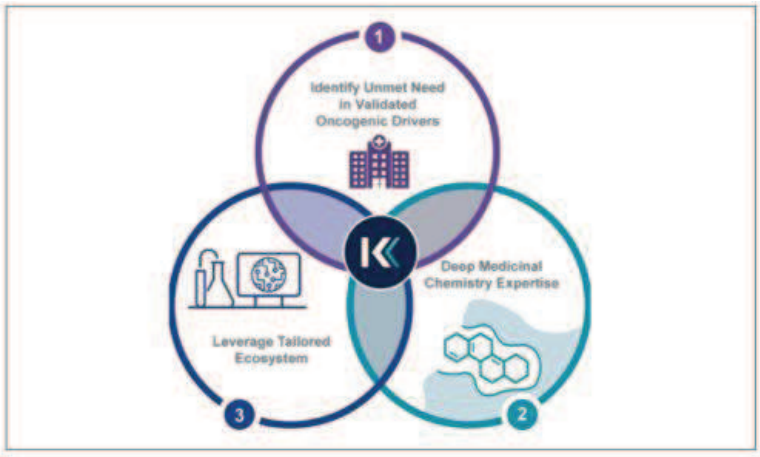
We are led by a management team of precision oncology experts with decades of collective experience in the discovery, development and commercialization of novel therapeutics who have held leadership positions at top global oncology companies: Amgen Inc., Merck & Co., Novartis AG, and Pfizer Inc. This expertise extends to our established collaborations with leaders at experienced precision medicine cancer centers and research institutions.

We believe our expertise and the foundational principles driving our Kinnate Discovery Engine and our focused drug development strategy offer an opportunity to identify and develop precision medicine solutions for populations that are currently underserved. Since our inception in 2018, our Kinnate Discovery Engine has led to the design of two product candidates now in Phase 1 clinical trials, exarafenib and KIN-3248, and is generating multiple additional research programs, with a goal to have one IND a year.

Our Kinnate Discovery Engine encompasses:

1. **Identifying Unmet Need in Validated Oncogenic Drivers.** Our relationships with prominent academic centers provide insight into the drug targets that are validated oncogenic drivers, along with innate or acquired resistance and new patient populations that represent the unmet need.
2. **Deep Medicinal Chemistry Expertise.** Through our internal expertise in structure based small molecule drug discovery, deep understanding of binding modes and biology, we identify compounds that have the potential to achieve a best-in-class product profile spanning alteration coverage including resistance mutations, selectivity, and pharmaceutical properties. For example, the proprietary co-crystal structure of exarafenib in the BRAF protein developed by our team has demonstrated what we believe is a unique and highly selective BRAF inhibitor.
3. **Leveraging Tailored Ecosystem of Partners**. We leverage an ecosystem of commercial and academic partners to provide scale to our discovery efforts. For example, we have a range of 35-70 medicinal chemists at contract research organizations (CROs) working on our pipeline and sponsored research agreements (SRAs) with prominent academic centers to advance the development of our targeted therapies. Further, we leverage a range of relevant technologies such as bioinformatics, crystallography, organoid and xenograft models for discovery and translational research.

Figure 1: Kinnate Discovery Engine



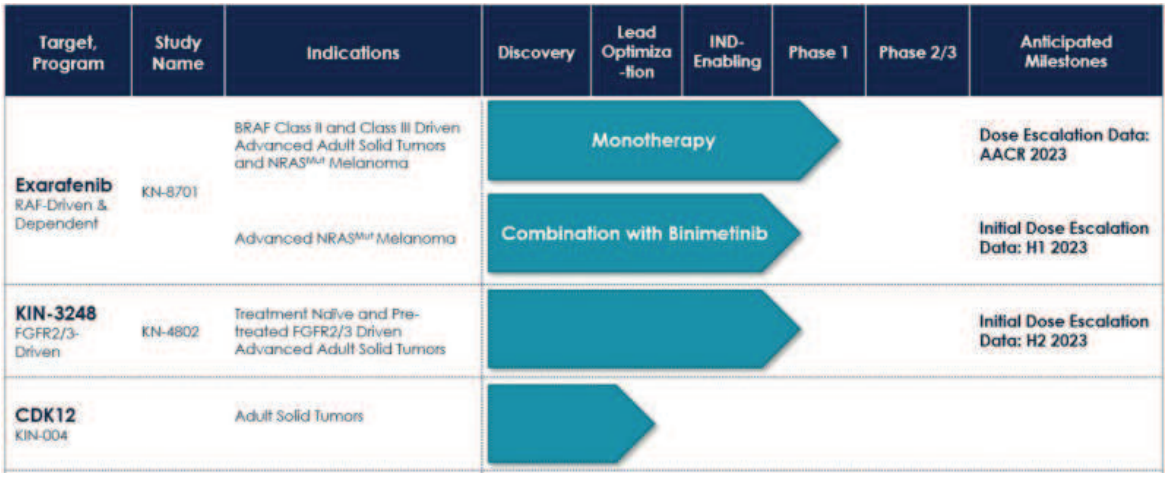
Our Drug Development Strategy

Our drug development strategy begins with a biomarker-driven approach and is paired with continual translational research and early global expansion. We are focused on the oncogenic driver as the biomarker and enriching for patient populations with the highest likelihood of response. We believe in continued investment in translational research throughout drug development to help identify new patient populations, responsive subsets and resistance mechanisms. For example, our collaborations with leaders at experienced precision medicine cancer centers enable us to perform extensive cellular testing in BRAF Class II and Class III alterations, including BRAF fusions and indels, and in profiling compounds in FGFR2 fusion-driven cancer cells that mimic secondary resistance mutations found in specific populations of patients. Together, these translational research programs have allowed us to develop a deep understanding of specific pathways and accelerate the progression of our programs into seminal cellular screening and *in vivo* efficacy studies. We are focused on expanding our clinical trials globally early in development.

Our Programs

We are currently advancing two clinical programs, exarafenib and KIN-3248. We are also advancing a number of other small molecule research programs, including a CDK12 inhibitor. We currently own worldwide development and commercial rights for all our programs. Our pipeline for our previously disclosed programs is summarized in Figure 2 below.

Figure 2: Advancing Multiple Ongoing Programs with Single Agent and Combination Opportunities



RAF Program: *Exarafenib*

In our most advanced program, we are developing exarafenib, a small molecule kinase inhibitor targeting specific classes of BRAF kinase alterations (BRAF Class II and Class III alterations) that characterize subsets of lung cancer, melanoma and other solid tumors. No targeted therapies are approved for BRAF Class II or Class III alteration-driven cancers, unlike the BRAF Class I alterations where three BRAF-targeted kinase inhibitor drugs have been approved by the FDA.

Patients with cancers driven by BRAF Class II or Class III alterations have not responded to existing targeted therapies and have few treatment options currently available to them. Initially, we plan to develop exarafenib for the treatment of patients with non-small cell lung cancer (NSCLC) and melanoma subpopulations with BRAF Class II or Class III alterations that include specific BRAF point mutations (other than BRAF V600E), BRAF insertions/deletions (indels) and BRAF gene fusion events, as well as other BRAF-altered advanced metastatic solid tumors. In addition, we plan to develop exarafenib for treatment of patients with NRAS-mutant melanoma, which is a RAF-dependent cancer. We believe exarafenib may provide substantial clinical benefit to these patients who are inadequately served by current therapies.

In our *in vitro* and *in vivo* preclinical studies evaluating exarafenib, we observed kinase inhibition selectivity and a reduction in the size of tumors from drug treated models of human cancer. In internal *in vitro* and *in vivo* head-to-head comparisons, we have seen improved kinase inhibition selectivity and pharmaceutical properties compared to a number of currently-approved and in-development drugs. Importantly, exarafenib demonstrated inhibition of RAF dimer signaling while minimizing mitogen-activated protein kinase (MAPK) paradoxical activation, potentially resulting in a broad therapeutic index.

In May 2021, we initiated KN-8701, a Phase 1 clinical trial for exarafenib, upon FDA clearance of our IND. We began dosing exarafenib in humans in the second half of 2021. KN-8701 is designed primarily to assess the safety and tolerability of exarafenib in patients with advanced or metastatic solid tumors driven by specific classes of BRAF alterations, which are known oncogenic drivers, while also characterizing pharmacological and anti-cancer properties of exarafenib. KN-8701 is currently ongoing and we anticipate disclosing detailed monotherapy dose escalation data from this clinical trial in the first half of 2023. In the first quarter of 2023, we announced that we initiated enrollment of patients into the monotherapy dose expansion cohorts of KN-8701.

Exarafenib has also demonstrated preclinical proof of concept in NRAS-mutant melanoma models as a single agent and in combination with binimetinib, a MEK inhibitor. Based on this preclinical proof of concept, in January 2022, we announced the addition of patients with NRAS-mutant melanoma into our ongoing KN-8701 clinical trial both as monotherapy and in combination with binimetinib. We initiated the combination portion of this clinical trial in the second quarter of 2022 and expect initial combination dose escalation data in the first half of 2023.

FGFR Program: KIN-3248

We are developing KIN-3248, a small-molecule kinase inhibitor targeting cancer-associated alterations in FGFR2 and FGFR3 genes, which (together with BRAF alterations) are among the most commonly identified oncogenic drivers detected in solid tumor cancers. KIN-3248 aims to address the initial alteration, and clinically-observed and predicted mutations in FGFR2 fusion gene-positive ICC and FGFR3-altered UC that drive resistance to current FGFR2- and FGFR3-targeted therapies. We believe this will translate to deeper, more sustained and more clinically impactful responses than those observed with the currently FDA-approved FGFR inhibitors, or other targeted drugs that, to our knowledge, are currently in development.

We are evaluating KIN-3248 for the treatment of patients with ICC and UC as well as other solid tumors. In preclinical studies, we have observed inhibitory activity across a broad range of clinically-relevant mutations in FGFR2 and FGFR3 that drive resistance to current therapies. Because our preclinical studies demonstrated our candidates' ability to cover the initial alterations and preemptively address these resistance mutations, we believe we may be able to meaningfully increase the DoR for certain patients by addressing these alterations. We plan to develop KIN-3248 initially for patients whose tumors have acquired resistance to therapies targeting FGFR2 or FGFR3 alterations, which limits the durability of response. As with other precision oncology approaches, addressing resistance mutations may also ultimately enable us to develop a first-line therapy. In this program, we will primarily focus on cancers that are driven by alterations in FGFR2 and FGFR3.

In January 2022, the FDA cleared our IND for KIN-3248 and we initiated KN-4802, a Phase 1 clinical trial for KIN-3248 in the first quarter of 2022. The Phase 1 clinical trial for KIN-3248 is designed to assess the safety and tolerability of KIN-3248 in patients with advanced or metastatic solid tumors driven by FGFR2 or FGFR3 alterations, both initial driver alterations as well as resistance mutations. This clinical trial is also designed to characterize pharmacological and anti-cancer properties of KIN-3248.

CDK12 Inhibitor Program (KIN004) and Other Research programs

Through the broad applicability of our Kinnate Discovery Engine, we are also advancing other small molecule research programs, including a CDK12 inhibitor in our KIN004 program. CDK12 is an essential regulator of DNA damage response and repair (DDR) genes for which no targeted therapies are currently approved or, to our knowledge, in clinical development. We expect to develop a CDK12 inhibitor candidate to target the treatment of OC, mCRPC and TNBC. CDK12 and our other small molecule research programs are aimed at addressing cancer cases not covered by existing targeted therapies.

Our Strategy

The key elements of our strategy are to:

- ***Rapidly advance the development of our lead targeted therapy RAF and FGFR candidates, exarafenib and KIN-3248, respectively***. Our lead product candidates are designed to address clinically validated cancer targets in patient populations with limited treatment options. Exarafenib is designed to address either BRAF Class II and Class III or NRAS alterations. KIN-3248 is designed to address FGFR2 and FGFR3 genomic alterations. We believe that these small molecule candidates offer the potential for substantial clinical benefit when administered as monotherapies. Additionally, because of their enhanced pharmacological properties, we believe there may be future opportunities for combination therapy development. If we are successful in achieving clinically meaningful anti-cancer activity in specific solid tumor types, we expect to engage with regulatory authorities to discuss whether we may qualify for any of the FDA's existing expedited regulatory approval pathways. Ultimately, the procedures and length of time that will be required to satisfy the FDA's review and approval are outside of our control
- ***Develop a pipeline of product candidates focused on overcoming the limitations of current targeted oncology therapeutics***. Currently, it is estimated that only 10% of all patients with advanced or metastatic cancer today are eligible for commercially available small molecule kinase inhibitors. Additionally, up to half of these patients may not respond to these treatments and up to half of those who do initially respond may develop resistance. Ultimately, it is estimated that only 2% to 3% of patients with advanced or metastatic cancer will have durable responses to currently available targeted therapeutics. We are therefore focused on developing drugs that can:
    - *Target known oncogenic drivers* (e.g., BRAF Class II or Class III alterations) in selected cancer types that are not currently addressed by approved therapies. Our BRAF-targeting small molecule kinase inhibitors exemplify this strategy. The successful development and FDA approval of three BRAF-targeted kinase inhibitor drugs for use in BRAF Class I alterations establish BRAF as a validated cancer drug target.
    - *Overcome acquired resistance mutations* to existing targeted therapies, potentially improving the durability of response. For example, in our FGFR program we seek to develop targeted therapies that cover initial genomic alterations and preemptively address acquired resistance mutations that arise with current targeted therapies.
    - *Treat non-responders* to currently-approved therapies where advancements in next generation sequencing have identified, and will continue to reveal, genomic drivers of intrinsic resistance. We expect to develop our CDK12 inhibitor and future programs that will target mechanisms of intrinsic resistance.
- ***Increase our probability of clinical success by prioritizing known oncogenic drivers for development, incorporating biomarkers into preclinical and clinical development and exploring continual***

translational research. Typically, drug development carries high attrition rates from the preclinical stage through FDA approval, with some studies showing that only approximately 10% of the candidates entering Phase 1 trials are ultimately approved. We aim to improve the probability of clinical success through several approaches:

- *Targeting known oncogenic drivers*. We attempt to select targets for drug development that behave as oncogenic drivers, which increases the likelihood of seeing objective measures of tumor responses early in clinical development. If we are successful in inhibiting these targets with our product candidates, we may increase the likelihood of achieving tumor responses. This approach has been successful for kinase inhibitors designed to treat patients with oncogenic alterations in lung cancer, melanoma, leukemia and other types of cancer.
- *Developing small molecule kinase inhibitors*. Small molecule kinase inhibitors are a proven modality that have demonstrated success in the past with multiple currently-approved drugs across many solid tumor and hematologic malignancy indications. By testing our molecules against *in vitro* and *in vivo* models utilized by previously approved drugs, we believe we can efficiently benchmark and optimize our compounds.
- *Incorporating biomarkers into our preclinical and clinical development*. By evaluating a wide range of biomarkers in our preclinical studies and our clinical trials, we can more rapidly determine patient populations that may or may not respond to our candidates. Continuing to use biomarkers in clinical trials potentially allows us to select defined patient populations that may demonstrate a stronger benefit and thereby ultimately increase our probability of success.
- *Continual translational research.* Through extensive translational research starting from preclinical studies through clinical development, we can potentially identify new patient populations, responsive subsets and resistance mechanisms to our candidates. This also provides input into combination strategies we may explore with our candidates. Further, investment in molecular landscape collaborations can also help us refine the unmet need for our candidates and outcomes of existing therapies.

  While we aim to improve our probability of clinical success by utilizing these strategies, any drug development program carries potential safety liabilities and uncertainty and there is no guarantee that any of our candidates will obtain regulatory approval.

- ***Leverage our existing relationships, collaborations and experience to efficiently develop and expand our product portfolio.*** Our team has extensive experience in identifying, discovering, developing and commercializing innovative cancer therapeutics. We are combining this broad oncology expertise with a network of collaborators to further develop our existing pipeline as well as to identify new research and development opportunities. We have established deep collaborations with leaders, with whom we have advisory agreements, at experienced precision medicine cancer centers and research institutions, including Massachusetts General Hospital Cancer Center and University of California, San Francisco, with whom we have sponsored research agreements, Memorial Sloan Kettering Cancer Center and Moores Cancer Center at UCSD. These collaborations allow us to explore the mechanistic understanding of the biology of our targets and sensitivity and resistance to our molecules. We also leverage our relationships of global external partners to advance our pipeline. For example, we have service agreements with academic and industrial partners who contribute highly enabling technologies and services that include: (1) approximately 35-70 medicinal chemists at leading CROs with whom we can modulate utilization based on our needs, (2) bioinformatics support for our translational research efforts, (3) crystallography and biophysical assay platforms to enable structure-based drug discovery, (4) biochemical and cell-based assays to guide lead generation and optimization, and (5) patient-derived organoid and xenograft models to translate our findings to the clinical setting. We use this external network of collaborations and partnerships in many aspects of preclinical development for our pipeline of candidates and anticipate further utilizing them in our clinical development efforts. Additionally, these collaborations and partnerships may allow us to accelerate identification of new opportunities, including new patient populations we may target to understand emerging mechanisms of resistance.
- ***Maximize the clinical impact and value of our portfolio.*** We retain global development and commercialization rights to our pipeline of candidates. We intend to build an integrated precision

oncology company that will manage all aspects of product development and commercialization globally. We may seek to develop rational combination therapy strategies among products within our own portfolio, while also maximizing portfolio value through selective co-development and/or commercialization collaborations. Further, we are focused on expanding globally early in clinical development to accelerate enrollment in geographies with high unmet need. Through Kinnjiu, we have the potential to accelerate enrollment of our programs through global clinical trial recruitment as well as retain commercial rights to our programs in People's Republic of China, Hong Kong, Taiwan and Macau.

Background

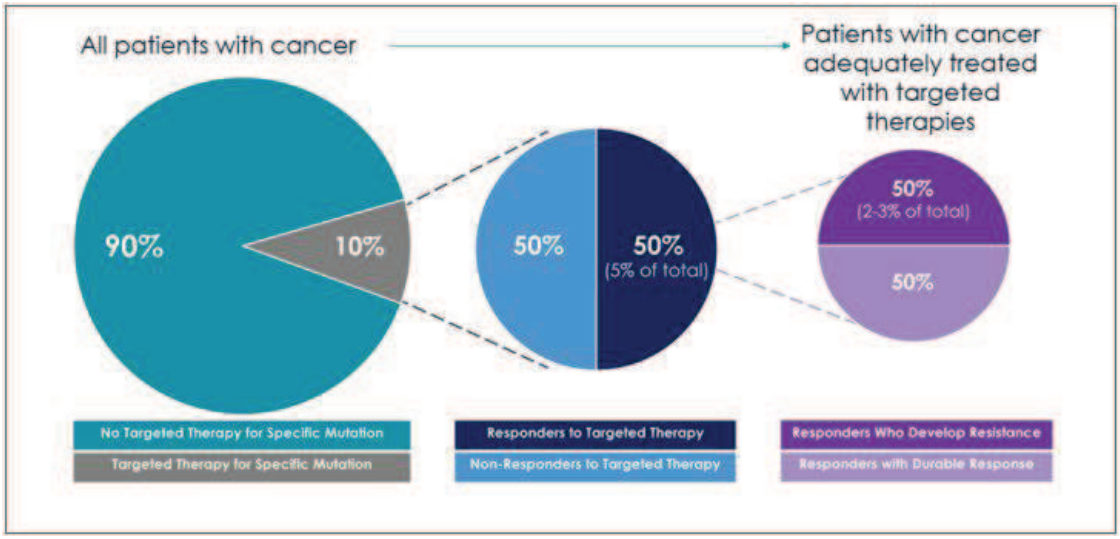
Cancer is a heterogeneous group of diseases that share the commonality of abnormal cell growth and proliferation and enhanced cellular survival. This unregulated cell replication is driven by the progressive accumulation of mutations in, and dysregulated gene expression of, critical genes that ordinarily tightly regulate processes of cellular growth and metabolism, survival, proliferation and cellular lifespan.

Over the last several years, as genomic profiling of cancer patients has become more commonplace and genomic sequencing technology has undergone key advancements, it has become increasingly clear that cancers developing in various sites throughout the body may share the same genomic alterations. Further, when evaluated in controlled experimental systems, these cancer-associated genomic alterations (oncogenes) represent critical genomic drivers for which these cancers are dependent for their growth and survival, a concept referred to as oncogene addiction. The ultimate validation of an oncogene as a true driver gene to which the cancer is addicted is achieved when selected cancer patients whose tumors carry the mutated oncogene gain substantial clinical benefit from treatment with specific and potent drugs that target the oncogene in question.

Research and clinical data suggest that some tumors, while having multiple identifiable genomic alterations, are primarily dependent on an aberrantly activated kinase for their proliferation and survival. Kinases, which are cellular enzymes that regulate the biological activity of proteins through a ubiquitous process known as phosphorylation, represent one of the largest classes of oncogenic drivers when aberrantly mutated or expressed in the cell. Kinase inhibition is a proven approach to fighting cancer and for nearly two decades has addressed an increasing number of oncology indications. Kinases represent the largest class of oncogenic drivers for which many targeted therapy cancer drugs have been successfully developed. Currently-approved kinase inhibitors have demonstrated significant clinical benefit to hundreds of thousands of cancer patients globally. It has been shown that patients with tumors driven by oncogenic kinases can demonstrate rapid and measurable tumor shrinkage when treated with the corresponding kinase inhibitor. Furthermore, while therapeutic benefit can often be significant and durable, tolerability is also frequently improved compared to conventional cancer treatments like chemotherapies. An example of this benefit has been seen when an epidermal growth factor receptor (EGFR) kinase inhibitor is administered to a lung cancer patient with a tumor-bearing activating EGFR kinase mutation. In many cases, such clinical responses and increases in patient tolerability can be dramatic enough to support expedited regulatory approval and commercialization of these targeted therapies.

Despite the advancement of precision medicine in oncology, a significant unmet need remains for the majority of cancer patients for whom no genomically targeted therapies exist or for which a resistance to targeted treatments has evolved. As depicted in Figure 3 below, we estimate that currently only 10% of all patients with advanced or metastatic cancer are eligible for targeted therapeutics, where a defined genomic driver is matched with a currently-approved targeted therapy. Of those patients, up to 50% (5% of all patients) will respond to the therapy (the responders), while the remainder gain no clinical benefit due to intrinsic resistance (the non-responders). Furthermore, among the responders, the majority (conservatively estimated at 50% to 80%) will eventually develop acquired resistance, lose their beneficial response to the therapy and experience disease progression despite continued treatment with the targeted therapy. Therefore, it is estimated that only 2% to 3% of current patients with advanced or metastatic cancer will have durable responses to currently available targeted therapeutics.

Figure 3: Expanding on the Promise of Targeted Oncology Therapies



Limitations of Current Targeted Oncology Therapies

RAF Inhibitors

RAF kinases are a family of proteins that are involved in growth signaling, and include ARAF, BRAF and CRAF. BRAF alterations, which increase signaling, are divided into three classes: alterations where BRAF signals as a monomer (Class I), as a dimer of BRAF molecules (Class II) and as a dimer of BRAF and CRAF molecules (Class III). BRAF alterations occur in approximately 6% of all human cancers but there are only three BRAF targeted kinase inhibitor drugs currently approved by the FDA for use in Class I BRAF mutation-driven cancers: Tafinlar (dabrafenib), Zelboraf (vemurafenib) and Braftovi (encorafenib) are used in mutated melanomas, Tafinlar (dabrafenib) is also used in mutated NSCLC, anaplastic thyroid cancer and metastatic solid tumors, and Braftovi (encorafenib) is also used in mutated colorectal cancer (CRC). BRAF Class I alterations activate the BRAF kinase as a monomer, an individual protein molecule, not depending on dimerization, which is the binding of two protein molecules, for increased kinase activity. These inhibitors produce objective responses in approximately 50% of melanoma patients, meaning approximately 50% of patients are non-responders. An even higher percentage of CRC, NSCLC and thyroid cancer patients do not respond to targeted therapies.

BRAF Class II and Class III alterations drive many cancers and have been historically more challenging to target. In collaboration with Guardant Health, we conducted a genomic landscape study of patients that had BRAF alterations. Among the nearly 150,000 samples of BRAF alteration-positive cancers, approximately 55% were found to be harboring BRAF Class II and III alterations in over 25 common adult solid tumors, including NSCLC, melanoma, CRC, prostate cancer and breast cancer. Therefore, a significant unmet medical need remains to develop new drugs that can effectively treat cancers driven by BRAF Class II and Class III alterations. Further, in another collaborative study with Tempus Labs looking at over 55,000 patients with tumor biopsies it was determined that patients with NSCLC and BRAF Class II or Class III alterations experienced shorter time to treatment discontinuation in first line and second line of therapy compared to patients with NSCLC and BRAF Class I alterations which is suggestive of inferior treatment outcomes.

FGFR Inhibitors

Genomic alterations in the FGFR gene family occur in approximately 7% of human cancers. Approximately 30% to 35% of patients with UC and ICC whose tumors are driven by FGFR-dependent driver genes will respond to currently-approved FGFR-targeting drugs, such as: Incyte Corporation's Pemazyre (pemigatinib), Janssen Biotech, Inc.'s Balversa (erdafitinib), and Taiho Oncology, Inc.'s Lytgobi (futibatinib). Of the responding patients, the majority only demonstrate partial responses (i.e., partial tumor shrinkage) and the median DoR is only five months for Balversa (erdafitinib) and nine months for Pemazyre (pemigatinib), presenting a substantial need to develop potent and selective next-generation FGFR-targeting agents that can drive deeper responses and longer lasting clinical benefit among responding patients. Most recently, the emergence of mutational resistance in

FGFR driver genes in 67% of drug-treated ICC patients who received clinical benefit from an FGFR inhibitor has highlighted the limitation of both currently-approved FGFR-targeting drugs and other clinical stage compounds. While this acquired mutational resistance in FGFR serves to further validate FGFR driver genes as drug targets, it also highlights both the need and the opportunity to develop potent, selective and specific FGFR-targeting agents which target existing mutational resistance and prevent emergence of new resistance mutations.

Our Programs

Our programs include small molecule inhibitors targeting specific classes of BRAF kinase alterations (BRAF Class II and Class III alterations) and RAF-dependent cancers, and specific alterations of FGFR2 and FGFR3 that aim to overcome the genomic resistance that commonly limits the efficacy of existing therapies. We are also advancing other undisclosed small molecule research programs, including a CDK12 inhibitor.

Our RAF Program: Exarafenib

Overview

Our most advanced product candidate is exarafenib, an orally administered, reversible small molecule RAF inhibitor. Exarafenib selectively targets RAF kinases and has demonstrated anti-cancer activity in sensitized cancer models driven by BRAF Class II fusions and BRAF homodimer-dependent indels and BRAF Class III alterations as well as NRAS-mutant melanoma. In our *in vivo* and *in vitro* preclinical studies evaluating exarafenib, we observed anti-tumor activity and kinase selectivity. Importantly, exarafenib demonstrated inhibition of RAF dimer signaling while minimizing MAPK paradoxical activation, potentially resulting in a broad therapeutic index.

In May 2021, we initiated a Phase 1 clinical trial for exarafenib (KN-8701) upon FDA clearance of our IND. We began dosing exarafenib in humans in the second half of 2021. KN-8701 is designed primarily to assess the safety and tolerability of exarafenib in patients with advanced or metastatic solid tumors driven by specific classes of BRAF alterations, which are known oncogenic drivers, while also characterizing pharmacological and anti-cancer properties of exarafenib. In January 2022, we announced the addition of patients with NRAS-mutant melanoma, a RAF-dependent cancer, into our ongoing Phase 1 clinical trial, KN-8701. In addition, we initiated a combination portion of KN-8701 with the MEK inhibitor binimetinib in patients with NRAS-mutant melanoma in the second quarter of 2022.

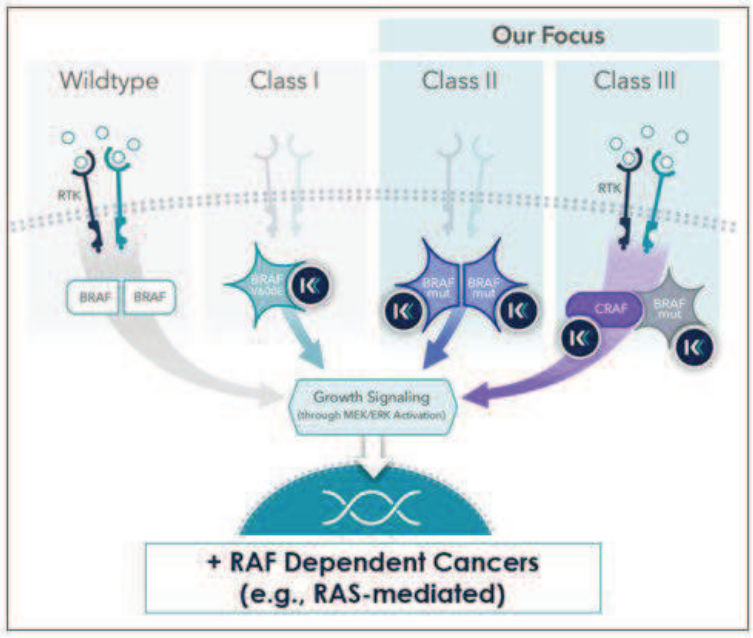
Background

BRAF alterations are found in multiple solid tumor cancer indications, including NSCLC, melanoma, CRC, ovarian cancer and thyroid cancer. BRAF alterations drive tumor growth by activating the MAPK pathway. BRAF alterations can be divided into three classes:

- Class I: BRAF alterations where BRAF monomers activate the MAPK signaling pathway.
- Class II: BRAF alterations that generate BRAF homodimers, where two BRAF molecules combine, which are RAS-independent and activate the MAPK pathway. These are frequently the result of point mutations, indels or gene fusions, in which the kinase domain of BRAF is aberrantly joined to a partner gene.
- Class III: BRAF alterations with minimal kinase activity that induce BRAF's dimerization to other RAF kinase family members (e.g., ARAF or CRAF), creating a RAF heterodimer with enhanced affinity to activated RAS and increased enzymatic activity and downstream signaling.

Currently-approved RAF inhibitors and many of those in clinical development target BRAF Class I mutations. Unlike currently available treatments that target only BRAF Class I kinase alterations, our RAF program is focused on developing potent and selective RAF kinase inhibitors that can address additional BRAF dimer-dependent Class II and Class III alterations, which represent cancer patient populations not currently treated by existing targeted therapeutics and where it would be a first-line targeted therapy, in addition to covering BRAF Class I alterations and NRAS-mutant melanoma.

Figure 4: Cellular Signaling of The Three Classes of BRAF Alterations in Human Cancers



BRAF alterations occur in approximately 6% of all human cancers, including solid tumors and hematologic malignancies. Currently, all approved RAF inhibitors target Class I mutations. We believe that a significant opportunity remains to develop novel kinase inhibitors that address patients with BRAF Class II and Class III alterations. The RAF market opportunity has grown due to recent advances in genomic profiling, allowing for the identification of BRAF Class II and Class III alterations that had not previously been possible. We believe there are patients with BRAF Class II and Class III alterations in a number of different cancers, including NSCLC, melanoma and CRC, as well as breast cancer, prostate cancer, ovarian cancer and thyroid cancer, among other tumors. As commercially available diagnostic panels covering BRAF Class II and Class III alterations are more widely accessible and adopted, we believe the BRAF market will continue to grow.

Further, we believe that there remains a significant opportunity to develop novel kinase inhibitors that address patients with RAF-dependent cancers, such as NRAS-mutant melanoma, where signaling is highly CRAF-dependent. Approved BRAF inhibitors that target BRAF Class I alterations are not effective in treating patients with NRAS-mutant melanoma. Currently there is no approved targeted therapy approved for this patient population.

Additionally, approximately 40-60% of patients are likely to progress on BRAF Class 1 inhibitors, of which about 20% may develop dimer-based resistance (BRAF KD Duplication, BRAF Splice Variants) that may be characterized as BRAF Class II or Class III alterations.

We believe alteration type and tumor type are likely good proxies for how sensitive patient will be to therapy. Figure 5 below illustrates the range of sensitivity to BRAF inhibition in BRAF and NRAS alteration driven cancers. For tumor types like CRC and alterations like Class III there is a higher likelihood of other drivers also being present – decreasing overall dependence on the RAF alteration.

Figure 5: Sensitivity to BRAF Inhibition in BRAF and NRAS Alteration-Driven Cancers

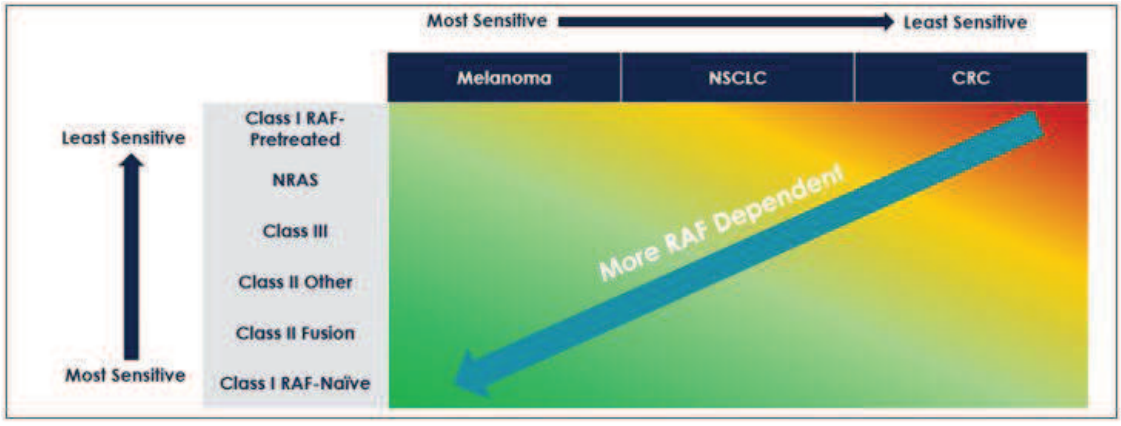
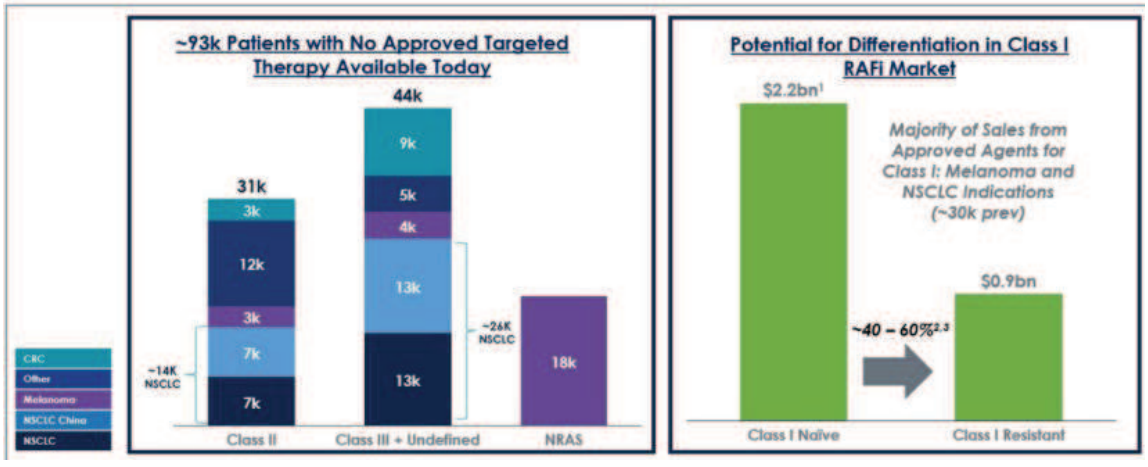


Illustration based on Kinnate pre-clinical data, prior clinical data from other pan-RAF inhibitors and publications

Figure 6 below reflects the estimated prevalence of advanced and metastatic patient populations for indications related to exarafenib in the United States, France, Germany, Spain and Italy (EU4), United Kingdom, Japan and China where noted.

Figure 6: Multiple Potential Commercial Opportunities for Exarafenib; >90K Patients with Potentially Addressable BRAF and NRAS Alterations in Major Markets



Notes: Kinnate calculations of prevalence; reflects approximate prevalence in U.S., EU4, UK, Japan (unless otherwise noted). Class I resistance includes BRAF KD Duplication and BRAF Splice Variants (dimer-based). Class III includes undefined oncogenes.

(1) 2021 sales of approved MEK/RAF products (Dabrafenib, Vemurafenib, Encorafenib, Trametinib, Cobimetinib, Binimetinib) based on Evaluate Pharma. (2) D.B. Johnson, et al., Acquired BRAF inhibitor resistance, Eur. J. Cancer 51 (18) (2015) 2792-2799. (3) K. Kemper, et al., Phenotype switching: tumor cell plasticity as a resistance mechanism and target for therapy, Cancer Res. 74 (21) (2014) 5937-5941.

Our Opportunity and Solution

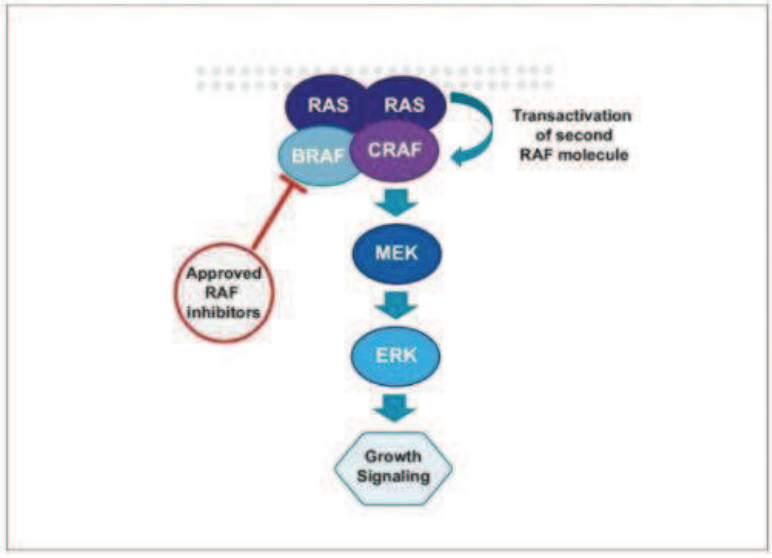
The lack of currently available therapies for BRAF Class II and Class III and NRAS kinase mutations presents a substantial need to develop potent inhibitors that can demonstrate inhibition of RAF dimer signaling while minimizing MAPK activation (paradoxical activation) for patients with lung cancer, melanoma and other solid tumors that harbor BRAF Class II and Class III alterations and/or oncogenic NRAS mutations.

Paradoxical activation

The paradoxical activation challenge

Currently-approved RAF inhibitor therapies do not inhibit both molecules in the dimer. Consequently, the non-inhibited molecule in the dimer is activated as depicted in the figure below. Therefore, instead of inhibiting the MAPK signaling pathway, the drug activates signaling, which is referred to as paradoxical activation. This paradoxical activation, which sometimes reaches levels that are significantly higher than the original signal, limits the RAF inhibitor's efficacy against cancer growth and often causes other unwanted effects such as spurring additional cancer growth in non-cancerous tissues. For example, patients with Class I alterations treated by Zelboraf (vemurafenib) have been shown to develop squamous cell carcinomas (SCCs) and skin hyperplasias (e.g., hyperkeratosis) because this paradoxical activation activates the MAPK signaling pathway in previously normal skin tissue.

Figure 7: Paradoxical Activation Is a Limitation of Approved RAF Kinase Inhibitors



In BRAF Class II alterations, the dimer is asymmetric and the active site of the second BRAF molecule is structurally distinct, making it difficult for current therapies to effectively inhibit RAF dimer dependent signaling. Furthermore, in BRAF Class III alterations, the second molecule of the dimer is often CRAF (see figure above), which emphasizes the requirement to bind and inhibit both BRAF and CRAF for effective signaling inhibition. To effectively block both molecules in these dimers, while avoiding paradoxical activation and maintaining anti-tumor efficacy in patients with BRAF Class II and Class III alterations, a compound needs to have activity across RAF isoforms while maintaining selectivity against other kinases.

Our solution to paradoxical activation

To address paradoxical activation, exarafenib is specifically designed to inhibit both molecules of the dimer simultaneously, regardless of RAF isoform type. By inhibiting both molecules simultaneously, we aim to overcome the challenges created by asymmetric molecules and the subsequent potential for paradoxical activation. We develop candidates using structure-based design and a screen with disease-relevant human cancer cell lines sensitive to paradoxical activation. Enzymatic (biochemical) assays, as opposed to cellular screens, cannot identify compounds that may be effective against both molecules of a dimer because dimer formation does not occur outside of a cellular context. Our approach allows us to develop small molecules that may bind to both sides of the RAF dimer.

Maintaining Target Coverage

The target coverage challenge

An additional factor to address when developing drugs for BRAF Class II or Class III alterations is the requirement to maintain high levels of target coverage between doses. Low drug concentration may trigger paradoxical activation as there may be insufficient coverage to inhibit both molecules of the RAF dimer.

Maintaining adequate target coverage at all times is critical to avoid rebound signaling. We believe that other product candidates in development for BRAF Class II or Class III alterations, such as Fore Biotherapeutics' PLX8394, Genentech / Hanmi Pharmaceutical co. ltd's belvarafenib (HM95573, RG6185), and Erasca's naporafenib, possess certain pharmaceutical properties that may have limited their target coverage. As a result, these product candidates have been dosed to high levels and/or combined with other drugs in clinical trials, which has the potential to lead to increased toxicity and treatment complexity, in an attempt to maintain inhibition of the pathway.

Our solution to maintain broad target coverage

Once we identify compounds that can bind to both molecules of the dimer, we focus on optimization of pharmaceutical properties to ensure sufficient coverage to inhibit both molecules of the RAF dimer, ultimately aiming to achieve optimal target coverage. Exarafenib is designed to have enhanced solubility, which has led to improved pharmacokinetic (PK) properties across animal models that result in improved anti-cancer activity. We believe that the pharmaceutical property enhancements of our candidate will afford better patient tolerability and more complete and effective coverage of the intended target. We anticipate this will translate to deeper and more sustained disease control and greater flexibility for rational combination therapy strategies in the future.

Exarafenib

We are focusing our clinical development efforts in BRAF Class II or Class III alteration-driven cancers, as well as NRAS-mutant melanoma, where patients do not respond to existing therapies or have few treatment options currently available to them. We plan to develop exarafenib for the treatment of patients with NSCLC and melanoma subpopulations with BRAF Class II or Class III alterations. These tumor types are especially dependent upon these BRAF alterations, creating promising opportunities to therapeutically target these genomic drivers. We also plan to develop exarafenib for the treatment of patients with NRAS-mutant melanoma and explore treatment of other tumor types.

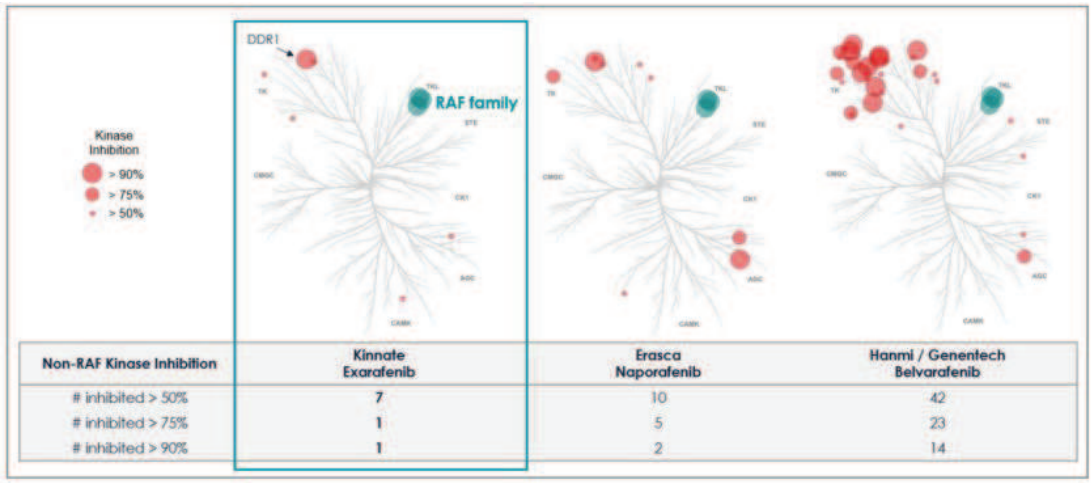
Preclinical Results

Our preclinical studies of exarafenib have demonstrated tumor regressions in specific cancer models representing our target patient populations that harbor tumors driven by BRAF Class II and Class III alterations where no approved targeted therapy currently exists. Exarafenib has also demonstrated improved pharmaceutical properties and human equivalent dose (HED) predictions compared to certain ongoing clinical development programs. These results support our belief that exarafenib has the potential to demonstrate therapeutic response by addressing challenges related to MAPK paradoxical activation and target coverage. Further, preclinical studies of exarafenib as a single agent, and in combination with binimetinib has shown both in vitro and in vivo activity in NRAS-mutant melanoma, including showing significant tumor regressions at clinically relevant doses of exarafenib and binimetinib. We have conducted 28-day good laboratory practice (GLP) oral toxicology studies for exarafenib using rat and cynomolgus monkey as relevant species for human risk assessment.

We are also developing related backup molecules that we would plan to advance into the clinic only if, following the initiation of clinical trials for exarafenib, we determine such molecules may have a superior safety or efficacy profile.

Based on evaluating more than 300 kinase assays, exarafenib displayed a highly selective kinome profile. These results were determined by radiometric kinase inhibition assays, a preferred standard for evaluating small molecule inhibitors. As depicted in the figure below, in this kinome profiling study, exarafenib substantially inhibited all three RAF kinases (ARAF, BRAF, CRAF) and partially inhibited few other (off-target) kinases. It therefore demonstrated a selective kinase profile relative to other pan-RAF inhibitors.

Figure 8: Selective RAF Kinase Enzymatic Inhibition as Demonstrated By Kinome Profiling of Exarafenib Relative to Erasca's Naporafenib and Roche/Hanmi's Belvarafenib



Non-RAF Kinase Inhibition	Kinnate Exarafenib	Erasca Naporafenib	Hanmi / Genentech Belvarafenib
# inhibited > 50%	7	10	42
# inhibited > 75%	1	5	23
# inhibited > 90%	1	2	14

Kinome tree depicting kinase selectivity for exarafenib relative to naporafenib and belvarafenib in internal head-to-head comparisons across 394 kinases in single dose (1000 nM), duplicate measurements in radiometric kinase assay format at Reaction Biology Corp. Percent (%) inhibition is relative to DMSO control. Kinases with >50% inhibition are shown with circle size indicating the relative potency. Kinome tree graphic was generated using CORAL (http://phanstiel-lab.med.unc.edu/CORAL/).

We performed additional studies to characterize the kinase inhibitory activity of exarafenib on kinases that were inhibited in the kinome profiling studies. As depicted in the table below, we measured the inhibitory activity of exarafenib on selected kinases typically inhibited by the RAF inhibitor class by utilizing an enzymatic (biochemical) assay. The drug concentrations that inhibited 50% of kinase activity are presented in nanomolar (nM) concentrations. We observed a highly selective kinome profile for exarafenib with greater than 867X inhibitory activity against RAF family kinases compared to the other notable off-target kinases, an exception is DDR1 (more than 15X higher IC50 than BRAF), which has a highly similar active site.

Figure 9: Inhibitory Concentrations 50% (IC50s) Determined from Dose-Response Inhibition Curves of Kinases Inhibited in the Kinome Profiling

Kinase	KIN-2787 IC_{50} (nM)
CRAF	**0.573**
BRAF ^{V600E}	**1.53**
ARAF	**2.41**
BRAF	**3.46**
DDR1	108
PDGFRB	445
p38alpha	1230
EPHA2	>3000
KDR	>3000
LCK	>3000
SRC	>3000

The selectivity of exarafenib was evaluated by comparing the inhibitory activity against ARAF, BRAF, and CRAF to off-target kinases discovered in the kinome profiling that was performed at a compound concentration of 1000 nM. Radiometric kinase assays were run at Km ATP concentration with compounds starting at 3000 nM. The half-maximal inhibitory concentrations (IC50) were determined using a four-parameter fit model from a

10-point dose response curve performed with 3 replicates at each drug concentration and are presented in nM concentrations. Common BRAF inhibitor off-targets (EPHA2, KDR, LCK, and SRC) are represented as greater than the top drug concentration tested (> 3000 nM).

As shown in the table below, exarafenib exhibited activity against BRAF Class II and Class III mutations in cellular settings as measured by inhibition of pathway signaling. In these studies, we utilized phosphorylation of extra-cellular signal-regulated kinase (ERK) as a sensitive measure of MAPK signaling inhibition. With exarafenib we observed much lower MAPK pathway inhibition in cells expressing WT BRAF as exemplified by the NCI-H358, CHL-1 and BJ normal fibroblast cells. Naporafenib and belvarafenib, development stage type II pan-RAF inhibitors, demonstrate similar profiles to exarafenib with greatest potencies in BRAF Class II and Class III mutant cells. In contrast, a representative MEK inhibitor, Mektovi (binimetinib), demonstrated inhibition across all evaluated cellular settings including BRAF WT relative to MEK inhibition. We believe this selectivity of BRAF mutant versus BRAF WT is a differentiator and advantage of exarafenib by avoiding pathway inhibition in normal cells.

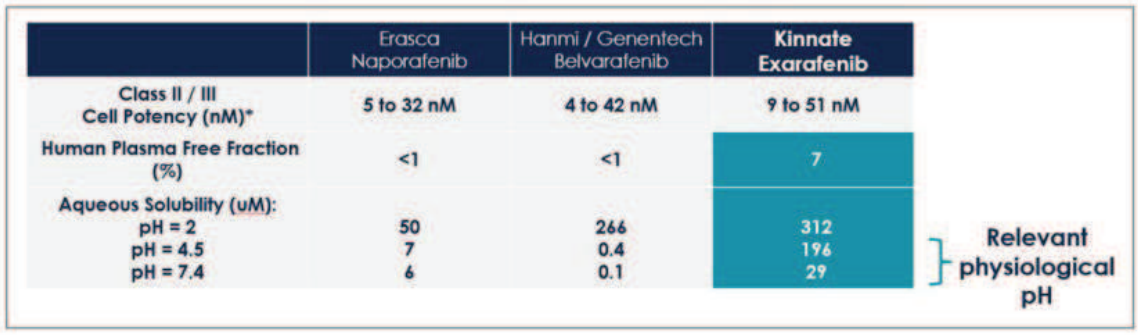
Figure 10: Half Maximal Effective Concentrations 50% (EC50s) of MAPK Signaling as Determined from Dose-Response Inhibition of Phosphorylation of ERK (Perk) in the Indicated Human Cancer Cell Lines

BRAF Status	Tumor Cell Line	Lineage	MAPK Pathway Alteration(s)	pERK Inhibition EC50 (nM)			
				Pfizer Binimetinib	Erasca Naporafenib	Hanmi / Genentech Belvarafenib	**Kinnate Exarafenib**
Class I	A-375	Melanoma	$BRAF^{V600E}$	7	171	67	**67**
	Colo800	Melanoma	$BRAF^{V600E}$	6	242	108	**112**
Class II	BxPC-3	Pancreatic	$BRAF^{Indel(VTAPTP)}$	3	32	42	**51**
	OV-90	Ovarian	$BRAF^{Indel(NVTAP)}$	4	24	22	**26**
	NCI-H2405	NSCLC	$BRAF^{Indel(LNVTAP)}$	6	5	8	**10**
Class III	WM3629	Melanoma	$BRAF^{D594G}$, $NRAS^{G12D}$	5	6	4	**9**
	CAL-12T	NSCLC	$BRAF^{G466V}$	3	19	41	**18**
Wild Type (WT)	NCI-H358	NSCLC	$BRAF^{WT}$, $KRAS^{G12C}$	1	153	303	351
	CHL-1	Melanoma	$BRAF^{WT}$, $NRAS^{WT}$	5	291	443	580
	BJ	Normal fibroblast	Wild type	31	4686	2923	7963

Cellular inhibitory activity for exarafenib compared to binimetinib, naporafenib and belvarafenib. More potent inhibition is reflected by a lower EC50 number presented in nM concentration. Cells were treated with the indicated compounds for 1 hour and pERK was measured in cell lysates using a homogenous time-resolved fluorescence assay. The compounds were run in 10-point, 3-fold serial dilution response starting at 10,000 nM to determine EC50 using a 4-parameter fit model. All samples were run in triplicate and represent an average of 3 or more independent experiments.

Enhancement of pharmaceutical properties was a major priority for our RAF inhibitor designs as traditional RAF inhibitors, both currently approved and in clinical development, have suffered from poor pharmaceutical properties including aqueous solubility. High aqueous solubility improves drug absorption, which enhances our ability to achieve greater target coverage *in vivo*. By modifying structural features that improve aqueous solubility while maintaining potency of RAF inhibition, we identified exarafenib which demonstrated an aqueous solubility greater than 100 micromolar (uM) at pH 4.5 and greater than 300 uM at pH 2.0. These are substantially improved aqueous solubilities as compared to naporafenib and belvarafenib, as shown in the table below. Further, exarafenib has shown greater than seven-fold more plasma free fraction (i.e., unbound drug) than naporafenib and belvarafenib. These improved pharmaceutical properties of exarafenib and increased drug exposure all enhance the likelihood that exarafenib may achieve greater target coverage in the clinical setting, which we anticipate may lead to enhanced anti-tumor activity.

Figure 11: Higher Human Plasma Free Fraction and Increased Aqueous Solubility Seen

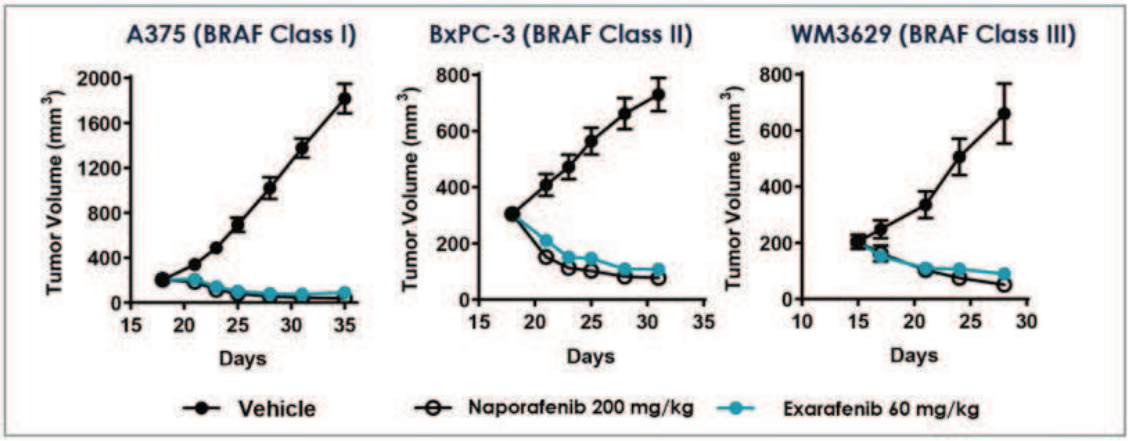


Exarafenib displayed higher human plasma protein binding free fraction and improved pH-dependent solubility as compared to naporafenib and belvarafenib in internal head-to-head comparisons.

Tumor regressions in internal head-to-head preclinical studies for exarafenib

Daily dosing of exarafenib was well tolerated in athymic nude mice bearing A375 (BRAF Class I mutation), BxPC-3 (BRAF Class II mutation) or WM3629 (BRAF Class III mutation) human tumor cell xenografts in doses up to 60 mg/kg/day. As shown in Figure 12, all three tumor models demonstrated tumor growth inhibition, as measured by mean tumor volume, at a dose of 60 mg/kg/day. For comparison, we treated cohorts of tumor-bearing animals with 200 mg/kg/day of naporafenib leading to similar inhibitory activity to 60 mg/kg of exarafenib. This 200 mg/kg/day dose of naporafenib represents more than a four-fold increased free drug exposure relative to the highest clinical dose (600 mg BID).

Figure 12: Anti-Tumor Activity in BRAF Class I (Left), Class II (Middle), and Class III (Right) Driven Cancer Models in Response to Exarafenib



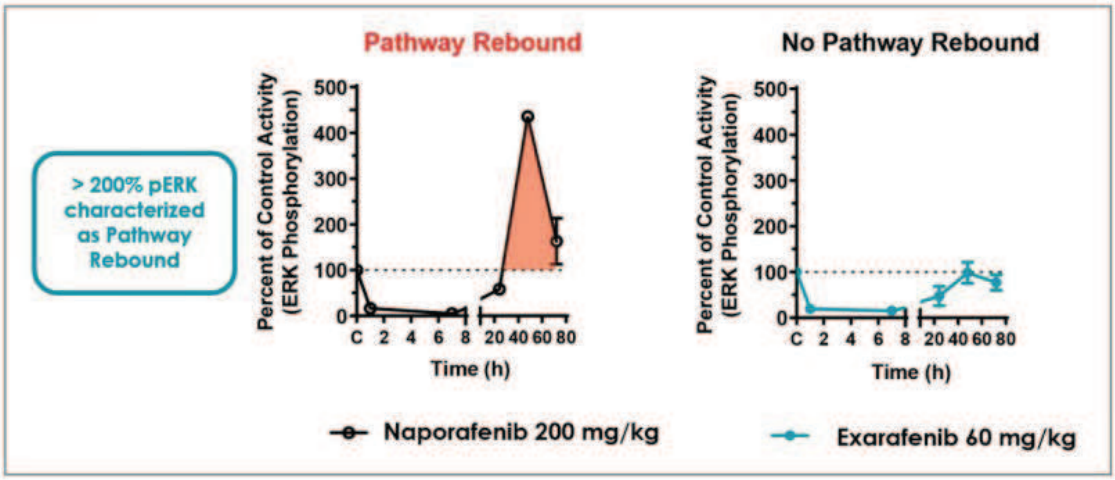
Tumor growth inhibition of A375 BRAFV600E melanoma (BRAF Class I), BxPC-3 indel ΔNVTAP pancreatic cancer (Class II), and WM3629 BRAFD594G/NRASG12D melanoma (Class III) xenografts in athymic nude mice. Exarafenib or naporafenib or vehicle control dosing was initiated when tumors reached >200 mm3 after tumor inoculation and was performed by oral administration once a day. Groups consisted of n=9 mice and represent the average of tumor measurements +/- standard error of the mean (SEM). The 60mg/kg dose of exarafenib reflects the freebase formulation.

PD Studies and Paradoxical Activation

In these studies, we measured phosphorylated ERK (pERK) as a sensitive marker of MAPK signaling in human WM3629 cancer cell line xenografts (BRAF Class III mutation) that were recovered from tumor-bearing mice after they had received a single dose of exarafenib. As depicted in the figure below, a single 60 mg/kg dose

demonstrated inhibition of ERK phosphorylation within 1 hour of treatment which was maintained through 7 hours post-treatment, while ERK phosphorylation partially recovered by 24 hours and returned to pre-treatment levels (100% of the control or baseline value) by 48 hours after treatment. Treatment with a single dose of naporafenib at 200 mg/kg led to paradoxical activation of ERK phosphorylation to levels above 400% at 48 hours post-treatment, as depicted by the area shaded in red above 100% in the figure on the left below. In contrast, as depicted in the figure on the right below, exarafenib did not demonstrate significant paradoxical activation in these studies in BRAF Class III mutant tumors.

Figure 13: Inhibition of RAF Kinase Activity in WM3629 BRAF Class III Mutant Tumors *In Vivo*



Inhibition of MAPK pathway signaling after treatment with naporafenib at 200 mg/kg (left) or exarafenib at 60 mg/kg (right) in WM3629 BRAFD594G/NRASG12D melanoma xenografts (BRAF Class III model) in athymic nude mice. All dosing performed by oral administration with n=3 tumors / time point. Tumors were measured for phosphorylated ERK (pERK) and represented as the average +/- SEM. C = control pERK levels from untreated tumors that serve as the reference for drug-treated tumor samples.

Exarafenib is designed to and has demonstrated the ability in preclinical studies to:

- inhibit RAF across both sides of the RAF dimer, which enables populations beyond BRAF Class I alterations to be targeted;
- enable large drug exposures *in vivo* for BRAF mutant target coverage while avoiding paradoxical activation; and
- target BRAF Class II and Class III alterations, which has been enabled by technological advances and increased access to genomic profiling.

To support translation of exarafenib into biomarker-defined clinical trials, we have established research programs with Massachusetts General Hospital Cancer Center and University of California, San Francisco. These programs evaluate exarafenib in BRAF Class II alterations and in patient-derived xenograft models of BRAF Class II and Class III alterations. Outcomes are focused on supporting PK and PD relationships in clinically relevant models of BRAF Class II and Class III alterations.

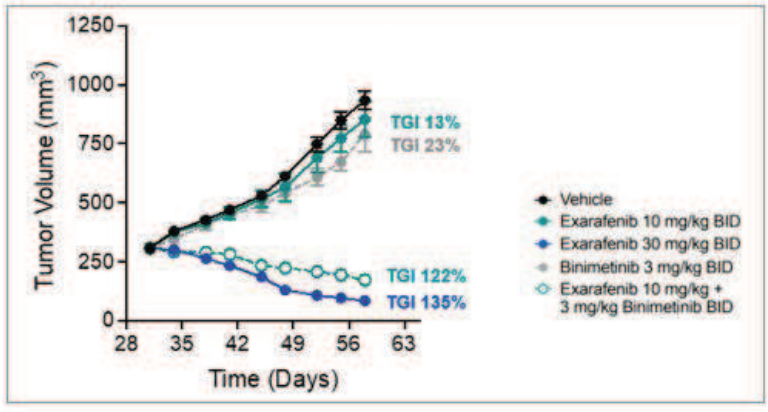
We have completed a 28-day GLP toxicology study in rats and a 28-day GLP toxicology study in cynomolgus monkeys that together define the anticipated first-in-human dose for exarafenib. All drug dose levels were well tolerated with no exposure-associated mortality, adverse clinical pathology observations, or substantive changes in vital measurements following completion of 28 days of dosing in both species. We believe exarafenib has a favorable therapeutic index as these GLP toxicology results demonstrated that the drug was well tolerated at levels that have shown anti-tumor activity in our other preclinical studies.

NRAS-mutant Melanoma Preclinical Proof of Concept

Exarafenib, as a single agent, and in combination with binimetinib, a MEK inhibitor, has shown activity in NRAS-mutant melanoma in preclinical studies. *In vitro* data indicates meaningful and synergistic combination

benefit of exarafenib with binimetinib in NRAS-mutant melanoma cells. In *in vivo* xenograft models of NRAS-mutant melanoma, treatment with exarafenib in combination with binimetinib was well tolerated and resulted in significant tumor growth inhibition, including tumor regressions at clinically relevant twice-daily (BID) doses of exarafenib and binimetinib, respectively.

Figure 14: Anti-tumor activity in NRAS-mutant melanoma driven cancer models (NRAS Q61R, BRAF WT) of exarafenib and binimetinib.



Tumor growth inhibition of SK-MEL-2 melanoma (NRAS_Q61R, BRAF WT)) xenografts in athymic nude mice. Either vehicle, exarafenib, binimetinib, or a combination of exarafenib plus binimetinib dosing was initiated when tumors reached >250 mm3 after tumor inoculation and was performed by oral administration twice a day (BID). Groups consisted of n=9 mice and represent the average of tumor measurements +/- standard error of the mean (SEM).

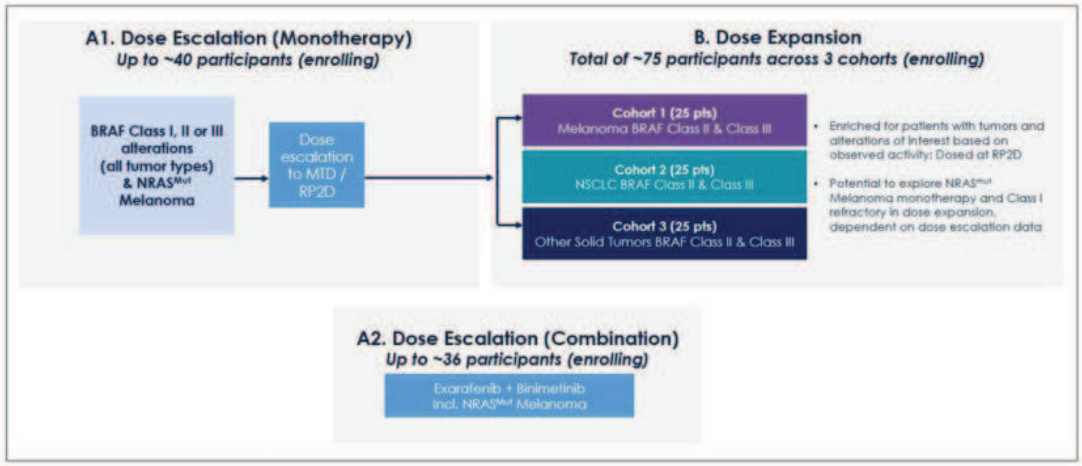
Clinical Development Plan: KN-8701

KN-8701 is designed as follows:

- **Part A1: Dose Escalation (Monotherapy)**: Patients with advanced or metastatic solid tumors bearing any BRAF Class I, Class II or Class III alteration (including NSCLC, melanoma, and other solid tumors) or NRAS-mutant melanoma will be enrolled in cohorts of 1 to 3 patients (modified 3+3 design) each to receive oral exarafenib monotherapy for up to 40 patients.
- **Part A2: Dose Escalation (Combination with Binimetinib):** Patients, including those with advanced or metastatic NRAS-mutant melanoma will be enrolled in cohorts of 3 patients (3+3 design) each to receive oral exarafenib in combination with binimetinib for up to approximately 36 patients.
- **Part B: Dose Expansion**: Patients with BRAF-altered cancers including lung cancer, melanoma and other solid tumors will be enrolled in one of a number of cohorts defined by cancer type or BRAF alteration of up to 20-30 patients per cohort to receive oral exarafenib as a single anti-cancer agent.

The objectives of this clinical trial are to (1) assess the safety and tolerability of exarafenib when administered to cancer patients, (2) understand the relationship between dose and schedule of drug with PK, PD, and changes in tumor-associated biomarkers, (3) determine a recommended Phase 2 dose and schedule, and (4) gain an initial understanding of single agent anti-cancer efficacy in defined cancer patient populations. Our primary efficacy measures include objective measures of tumor response using RECIST v1.1, including number of responding patients, response rate, depth of response and DoR, utilizing standardized tumor imaging assessments at pre-specified intervals. The figure below illustrates our current clinical development plan for KN-8701.

Figure 15: Clinical Development Plan for Exarafenib in Patients with BRAF-Altered Advanced Solid Tumors and NRAS Mutant Melanoma



In both Parts A and B, we leverage CLIA-compliant local tumor tissue or blood-based genomic profiling, such as MSK-IMPACT profiling, at Memorial Sloan Kettering Cancer Center, or tumor tissue or blood-based genomic analysis performed at a central commercial laboratory, such as Foundation Medicine, Inc., for detection and inclusion of patients with specific BRAF alteration-driven cancers or NRAS-mutant melanoma in KN-8701. We also biobank tumor tissue and blood specimens for central retrospective analysis which we believe will enable the assessment of primary genomic alterations and other exploratory analyses. The Phase 1 KN-8701 clinical trial is active at multiple sites globally. This clinical trial is designed to enroll a total of approximately 155 patients. Based on the totality of clinical data from KN-8701 and predicated upon an acceptable safety and tolerability profile and a strong positive efficacy signal, we then expect to engage with the FDA and other regulatory authorities to plan one or more Phase 2 potentially registration-enabling clinical trials in the United States and potentially other geographies. Where possible, we will explore applicable regulatory strategies pursued by other targeted therapy companies, for example orphan drug designation, Breakthrough Therapy, Fast Track designation, Priority Review and/or Accelerated Approval.

Growing Our RAF Franchise

Beyond development of exarafenib, we continue activities on chemotypes that are differentiated from exarafenib. Additionally, we are investigating potential next-generation candidates with the possibility of expanding the therapeutic index and enabling further precision medicine strategies. For example, we may target RAF 1 (CRAF protein) gene fusions that are known drivers in primary central nervous system (CNS) tumors, which remains a substantial unmet need. These programs are currently in preclinical research and we intend to develop them for future precision oncology clinical trials.

Our FGFR Program: KIN-3248

Overview

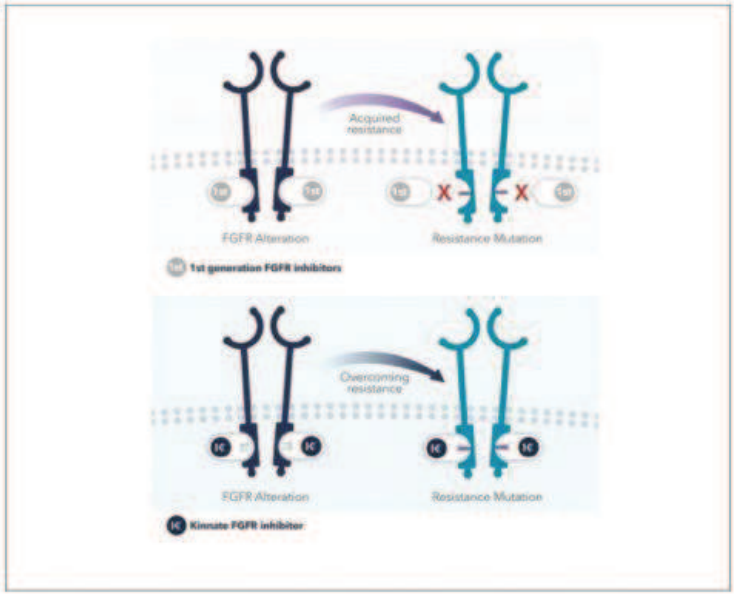
We are evaluating our FGFR inhibitor candidate, KIN-3248, for the treatment of patients with ICC and UC and other solid tumors. In preclinical studies, we have observed inhibitory activity across a broad range of clinically-relevant mutations in FGFR2 and FGFR3 that drive resistance to current therapies. Because our preclinical studies demonstrated our candidates' ability to cover the initial alterations and preemptively address these resistance mutations, we believe we may be able to meaningfully increase the DoR for certain patients by addressing these alterations. We plan to develop our candidates initially for patients whose tumors have acquired resistance to therapies targeting FGFR2 or FGFR3 alterations, which limits the durability of response. As with other precision oncology approaches, addressing resistance mutations may also ultimately enable us to develop a first-line therapy. In January 2022, the FDA cleared our IND for KIN-3248 and we initiated a Phase 1 clinical trial for KIN-3248 in the first quarter of 2022.

Background

Aberrations in FGFR signaling are an emerging opportunity for targeted therapy across multiple types of cancer, particularly UC and ICC and also gastric and breast cancers. Currently-approved FGFR inhibitors have demonstrated clinical benefit, but response rates and DoR are limited. For FDA-approved FGFR targeted drugs Balversa (erdafitinib), Pemazyre (pemigatinib), and Taiho Oncology Inc.'s, Lytgobi (futibatinib), , the response rate is approximately up to 40% among UC and ICC patients whose tumors are driven by FGFR-dependent driver genes. Further, the vast majority of those responding patients only demonstrate partial responses (i.e., partial tumor shrinkage) and the median DoR is only five months for Balversa (erdafitinib) and 9-10 months for Pemazyre (pemigatinib) and Lytgobi (futibatinib) These resistance profiles are often caused by gatekeeper and molecular brake variants that emerge within the FGFR driver gene. The figure below shows the sensitivity and resistance of various oncogenic FGFR2 and FGFR3 indels and fusion genes. This lack of a response for most patients and short DoR for others presents a substantial need to develop potent and selective next-generation FGFR-targeting agents that can drive deeper and longer-lasting clinical benefit among responding patients.

First-generation inhibitors including Balversa (erdafitinib), Pemazyre (pemigatinib) and Lytgobi (futibatinib), and our next-generation FGFR-targeting small molecules currently in development, effectively target non drug-resistant FGFR2 and FGFR3 driver genes. Among these, we believe only KIN-3248 has been shown in preclinical studies to effectively inhibit the full spectrum of clinically-described and predicted resistance mutations in FGFR cancer driver genes.

Figure 16: Kinnate's FGFR Inhibitors Retain Activity Against Common FGFR2 and FGFR3 Resistance Mutations

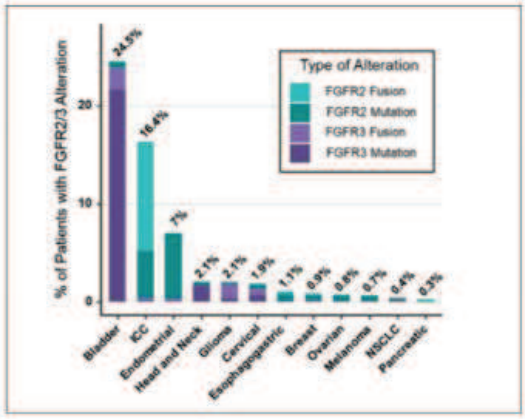


Hyperphosphatemia, an elevated level of phosphate in the blood, is a common, and typically manageable, adverse effect of FGFR-targeting drugs. This adverse event is driven by FGFR1-dependent inhibition of phosphate reabsorption in the kidney. Typically, hyperphosphatemia is managed by dietary modification and phosphate-binding medication. Many oncology drug developers have tried to select against FGFR1 instead of targeting 1, 2 or 3 specific FGFR isoforms, but given very high sequence similarity in the kinase domains of FGFR family members, it remains exceptionally challenging to retain potent FGFR2 and FGFR3 inhibition and avoid FGFR1 kinase inhibition. Based on our conversations with clinicians and key opinion leaders, we believe that broad coverage of primary FGFR2 and FGFR3 oncogenic driver alterations and the acquired, on-target resistance mutations is more important clinically than reducing hyperphosphatemia. Additionally, inhibition of FGFR1 may have clinical benefits.

Oncogenic FGFR2 gene fusions have been observed in 10% to 16% of patients with ICC, while oncogenic FGFR3 alterations are estimated to be found in approximately 15% to 20% of patients with UC. Given these populations and the significant percentage of patients who develop resistance to currently-approved FGFR

inhibitors, we believe there is a significant commercial opportunity to develop a next-generation FGFR inhibitor that will effectively cover the initial fusions or alterations and the common resistance alleles that may eventually develop.

Figure 17: Biomarker Prevalence of FGFR2/3 Alterations by Tumor Type



Biomarker prevalence on data generated from AACR GENIE Project Data: Version 10.0-public Powering Precision Medicine Through an International Consortium. Cancer Discov 7(8): 818-831, 2017

The Opportunity

The lack of a response for most patients and short DoR for others with respect to existing therapies presents a substantial need to develop potent and selective next-generation FGFR-targeting agents that can drive deeper and longer-lasting clinical benefit among responding patients.

Resistance Mutations

The challenge of resistance mutations

Most recently, the emergence of resistance mutations in FGFR driver genes (at or even prior to the emergence of clinical progression or relapse in drug-treated patients) has highlighted the limitation of both currently-approved FGFR-targeting drugs and other clinical stage compounds. While this acquired mutational resistance in FGFR serves to further validate FGFR driver genes as drug targets, it also highlights both the need and the opportunity to develop potent, selective, and specific FGFR-targeting agents that target existing mutational resistance and prevent emergence of new resistance mutations.

Common mechanisms driving this acquired resistance are referred to as gatekeeper mutations (V565F/I in FGFR2 and V555M in FGFR3) and molecular brake mutations (N550K/H in FGFR2 or N540S or K650M/E in FGFR3). The mutated gatekeeper amino acid influences binding site properties which can prevent binding of FGFR inhibitors to the target site (FGFR2 and FGFR3). Molecular brake mutations increase kinase activation, overcoming drug efficacy. Both gatekeeper and molecular brake mutations drive acquired resistance to current therapies.

Our solution to resistance mutations

We believe that selectively targeting the initial oncogenic alteration in addition to acquired gatekeeper and/or molecular brake alterations has the potential to overcome the challenges presented by resistance mutations. To improve DoR, our next-generation FGFR inhibitors, which are currently in development, target acquired resistance mutations identified in patients treated with FGFR targeted therapies. We are seeking to develop product candidates to inhibit the initial alteration or fusion in addition to the gatekeeper and molecular brake resistance mutations. Specifically, we have designed our candidates to address mutations, such as gatekeeper and molecular brake mutations, which we believe to be the most common acquired resistance mutations.

While we are initially pursuing this as a second-line treatment, we ultimately plan to explore first-line therapy as well, where coverage across both initial and acquired mutations may translate to longer DoR, displacing existing

FGFR2 and FGFR3 targeting drugs. This is analogous to the path taken in the successful development of Tagrisso (osimertinib), an EGFR-targeting small molecule drug that potently inhibits both WT and specific, critical gatekeeper EGFR mutations that confer resistance to first-generation EGFR-targeting drugs such as Tarceva (erlotinib).

Limited Coverage

The challenge with limited coverage

Isoform-selective FGFR inhibition may lead to activation of other FGFR kinases. This reactivation of FGFR1, FGFR2, or FGFR3 signaling represents a potential compensation mechanism that drives resistance to selective therapies. Evidence of this has already been seen with FGFR2-specific inhibitors that have resulted in the appearance of FGFR1 or FGFR3 oncogenic driver alterations. Without broad inhibition of the FGFR kinase family, DoR and response rates may be limited.

Our solution to overcoming limited coverage

Our next-generation FGFR inhibitor candidates are structurally designed to inhibit molecular brake and gatekeeper mutations while maintaining broad coverage across FGFR isoforms (i.e., FGFR1, FGFR2 and FGFR3). This broad-based approach may prevent compensatory mechanisms that would otherwise limit response rates or DoR.

FGFR1, FGFR2, and FGFR3 alterations are predominantly found in different tumor types. FGFR2 alterations are known oncogenic drivers in ICC and FGFR3 alterations are known oncogenic drivers in urothelial tumors. In addition, evidence suggests that FGFR1 alterations exist in breast cancer and may be oncogenic drivers. Therefore, a drug that broadly inhibits FGFR isoforms may be effective across multiple tumor types. In addition to covering broad FGFR isoforms, there is an opportunity to cover other potential escape routes by providing coverage of FGFR indels and single nucleotide variants (SNVs) beyond the fusions targeted by currently-approved therapies. Coverage across both the intrinsic and acquired resistance mechanisms may translate into more durable DoR, displacing existing FGFR2 and FGFR3 targeting drugs.

Our FGFR Program: KIN-3248

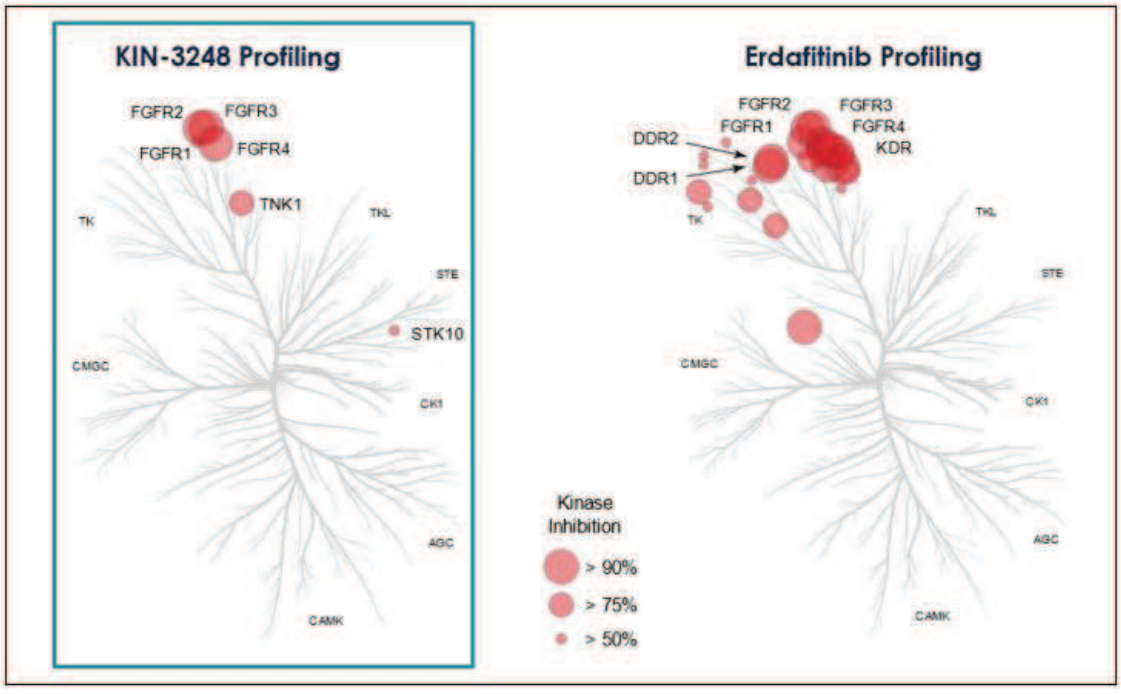
Our FGFR candidate, KIN-3248, is a covalent (irreversible) kinase inhibitor, designed to address clinically-observed mutations in FGFR2 and FGFR3 that drive resistance to current therapies. We are evaluating KIN-3248 for the treatment of patients with ICC and UC and may expand into other FGFR-driven solid tumors, such as breast cancer.

In preclinical studies we have observed inhibitory activity across a broad range of clinically relevant mutations that drive acquired resistance. We believe that by addressing these mutations and broadly covering FGFR isoforms, we may be able to meaningfully increase the DoR. We have completed in vitro and in vivo profiling of KIN-3248. We have conducted 28-day GLP oral toxicology studies for KIN-3248 using rat and dog as relevant species for human risk assessment. In January 2022, the FDA cleared our IND for KIN-3248 and we initiated a Phase 1 clinical trial for KIN-3248 in the first quarter of 2022.

Preclinical Results

Based on evaluating more than 300 kinase assays, KIN-3248 displayed a highly selective kinome profile. As depicted in the figure below, in this kinome profiling study, KIN-3248 substantially inhibited (> 90% kinase inhibition) three FGFR kinases (FGFR2, FGFR3, and FGFR4) and partially inhibited a few other (off-target) kinases including TNK1 and STK10. By comparison, the FDA-approved FGFR2/3 inhibitor erdafitinib (Balversa) inhibited the FGFR family of kinases but demonstrated off-target inhibition of several receptor tyrosine kinases (e.g., KDR, PDGFRalpha, KIT, CSF1R, DDR1, DDR2) that are known to be common off-targets for FGFR inhibitors. Therefore, KIN-3248 demonstrated an improved kinase selectivity profile relative to erdafitinib.

Figure 18: Selective FGFR Family Kinase Enzymatic Inhibition as Demonstrated by Kinome Profiling of KIN-3248 Compared to Erdafitinib



Kinome tree depicting kinase selectivity for KIN-3248 and erdafitinib across 322 kinases in single dose (1000 nM), duplicate measurements at Carna Biosciences Inc. Biochemical assays were measured by a shift in electrophoretic mobility of a peptide substrate upon phosphorylation with the designated kinase. Percent (%) inhibition is relative to DMSO control. Kinases with >50% inhibition are shown with circle size indicating the relative potency as depicted in the legend. Kinome tree graphic was generated using CORAL (http://phanstiel-lab. med.unc.edu/CORAL/).

As shown in the table below, initial preclinical study results for our FGFR inhibitor candidate, KIN-3248, showed improved inhibition of the gatekeeper mutations (FGFR2 V565F and FGFR3 V555M) when compared to FDA-approved FGFR inhibitors, Balversa (erdafitinib), Pemazyre (pemigatinib), and Lytgobi (futibatinib), in enzymatic assays.

Figure 19: Biochemical Inhibition of WT FGFR1, FGFR2, and FGFR3 and Selected FGFR2 and FGFR3 Resistance Mutations by Indicated FGFR-targeting Reference Compounds and KIN-3248

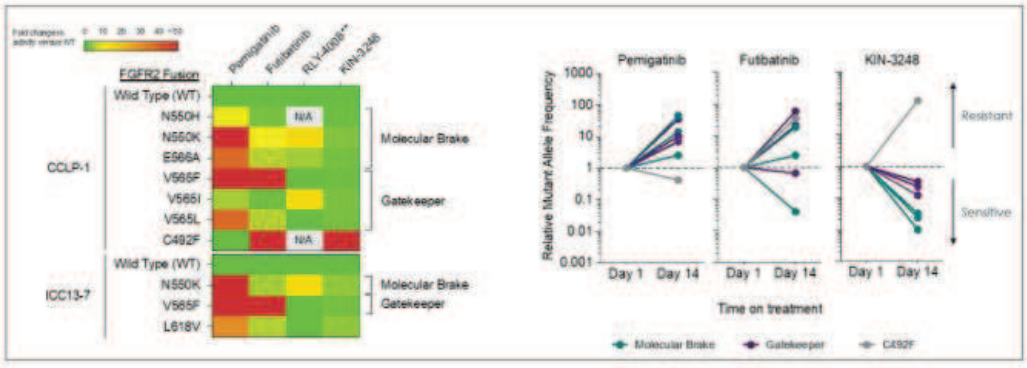
Kinase Domain	Kinase Domain Alteration	Janssen erdafitinib IC_{50} (nM)	Incyte pemigatinib IC_{50} (nM)	Taiho futibatinib IC_{50} (nM)	Kinnate KIN-3248 IC_{50} (nM)
FGFR1 WT	-	0.2	0.4	1.7	3.9
FGFR2 WT	-	0.15	0.5	2.2	5.3
FGFR2 V565F	Gatekeeper	330	492	>500	20.8
FGFR2 N550H	Mol. Brake	4.1	18.9	33.4	22.8
FGFR3 WT	-	0.7	1.4	5.6	9.7
FGFR3 V555M	Gatekeeper	137	494	408	24.3
FGFR3 K650M	Activ. Mut.	3.5	20	8.3	4.6
Ratios of Resistance Mutations Compared to Wild Type (WT) (Fold Difference in IC_{50})					
R2 V565F / WT	Gatekeeper	2200X	984X	227X	4X
R2 N550H / WT	Mol. Brake	27X	38X	15X	4X
R3 V555M / WT	Gatekeeper	188X	353X	73X	3X
R3 K650M / WT	Activ. Mut.	5X	14X	1.5X	0.5X

Enzymatic inhibitory activity of KIN-3248 against FGFR family kinases and common resistance mutations compared to Balversa (erdafitinib), Pemazyre (pemigatinib) and Lytgobi (futibatinib) in internal head-to-head comparisons. Biochemical activity is measured by a shift in electrophoretic mobility of a peptide substrate upon phosphorylation with the designated FGFR kinase. The potency of kinase inhibition is presented as the concentration of specified compound that inhibited 50% of the maximum kinase activity (IC50). Kinase inhibition assays were performed at 100 uM ATP concentration with no pre-incubation of the compounds with the kinase. In the lower section of the table, the relative inhibitory activity of the specified compound toward mutant versus respective WT kinase is displayed as fold differences in IC50 values. Ratios <10X (as highlighted by green text for KIN-3248) represent retained activity of either the resistance mutation or corresponding WT kinase. Ratios >10X (as highlighted by red text) represent a substantial loss of activity against the indicated resistance mutation compared to the corresponding WT kinase.

KIN-3248 similarly demonstrated inhibition of cell viability in patient-derived CCLP-1 cholangiocarcinoma cells engineered to express either unmutated FGFR2 gene fusions (WT) or comparable gene fusions that harbor secondary resistance mutations (e.g., V565F and N550K). Other FGFR-targeting compounds were assayed in the same studies and displayed significantly less inhibition of specific mutant FGFR2 alleles. For example, Pemazyre (pemigatinib) and Lytgobi (futibatinib) had EC50 values for the FGFR2 V565F mutation that were more than 6,000 nM and 129 nM, respectively. For example, Pemazyre (pemigatinib) and Lytgobi (futibatinib) had fold-difference in EC50 values for the FGFR2 V565F mutation relative to WT that were >1000x and >300x, respectively. This compares to 1.5x for KIN-3248. Fold-difference in EC50 values for specific FGFR2 mutant alleles compared to WT are presented in the figure / heatmap below (*left panel*).

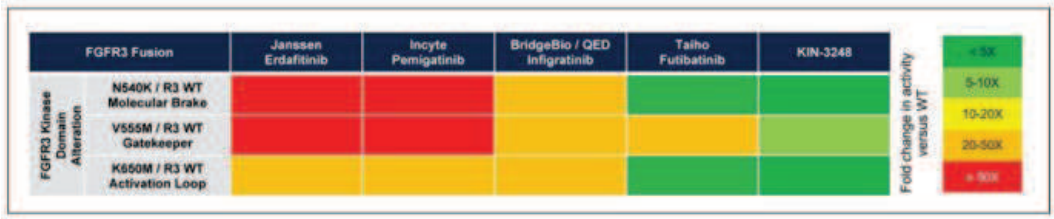
In addition to the acquired resistance mutations described above, there are other clinically relevant FGFR2 mutations, including additional gatekeeper (e.g., V565L and V565I), molecular brake / regulatory region (e.g., N550H and E566A), and activating mutations (e.g., K650M), as well as the corresponding FGFR3 mutations. These mutations may limit the potency of both approved FGFR inhibitors (e.g., pemigatinib) and FGFR therapies in clinical development, such as RLY-4008. Consistent with the biochemical data, KIN-3248 demonstrated a ratio less than 5-fold for these resistance mutations compared to the unmutated FGFR2 fusion in cell-based assays. This suggests that KIN-3248 has a unique ability to retain activity across V565L, V565I, and M538I, and therefore demonstrates a potential advantage in limiting the emergence of these resistance mutations in patients with FGFR2-driven cancers.

Figure 20: Cellular Inhibition of Primary Oncogenic FGFR2 Fusions (WT) and Selected Secondary FGFR2 Resistance Mutations in CCLP-1 and ICC 13-7 Patient-Derived Cholangiocarcinoma Cell Lines by KIN-3248and Other FGFR-Targeting Reference Compounds



The cellular activity of KIN-3248 compared to Pemazyre (pemigatinib) and Lytgobi (futibatinib), was evaluated in patient-derived FGFR2 fusion-positive cholangiocarcinoma cell lines, CCLP-1 and ICC13-7, engineered to express selected secondary FGFR2 resistance mutations. Inhibition of cell viability was measured by MTT assay following 3 or 10 days of treatment in multiple independent experiments. EC50 values were calculated using a dose-response regression curve fitting utilizing a 4-parameter analytical method. Relative inhibitory activity of the specified compound toward mutant versus WT FGFR2 kinase is displayed as fold differences in EC50 values (left panel). To evaluate clonal outgrowth (right panel), FGFR2 mutants were pooled and treated with KIN-3248 or the indicated FGFR inhibitors for 2 weeks. Clonal prevalence at the start and end of treatment was determined by droplet digital PCR and presented as relative mutant allele frequency. Data for RLY-4008 excerpted from Relay Therapeutics' public filings.

Figure 21: Cellular Inhibition of Primary Oncogenic FGFR3 Fusion (WT) and Selected Secondary FGFR3 Resistance Mutations in RT-112 Human Bladder Cancer Cell Line by KIN-3248 and Other FGFR-Targeting Reference Compounds

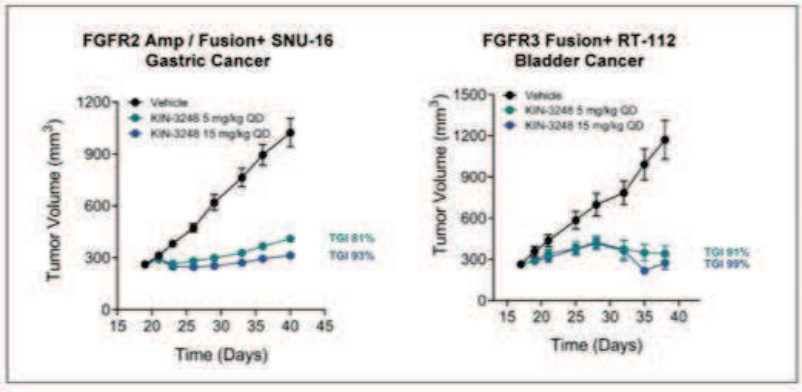


The cellular activity of KIN-3248 compared to Pemazyre (pemigatinib), Balversa (erdafitinib), infigratinib, Lytgobi (futibatinib)was evaluated in a human FGFR3 fusion-positive bladder cancer cell line, RT-112, engineered to express selected secondary FGFR3 resistance mutations. Inhibition of cell viability was measured following 5 days of treatment in multiple independent experiments. EC50 values were calculated using a dose-response regression curve fitting utilizing a 4-parameter analytical method. Relative inhibitory activity of the specified compound toward mutant versus WT FGFR3 kinase is displayed as fold differences in EC50 values.

Tumor regressions in internal head-to-head preclinical studies for KIN-3248 in Primary and Resistant FGFR2/3 oncogenic driver alterations in vivo

Continuous daily dosing of KIN-3248 was well tolerated in athymic nude mice bearing SNU-16 (FGFR2 amplified and fusion-positive gastric cancer), and RT-112 (FGFR3 fusion-positive bladder cancer) human tumor cell xenografts at doses up to 15 mg/kg/day. As shown in the figure below, both tumor models demonstrated tumor growth inhibition, as measured by mean tumor volume, at 5 and 15 mg/kg/day doses.

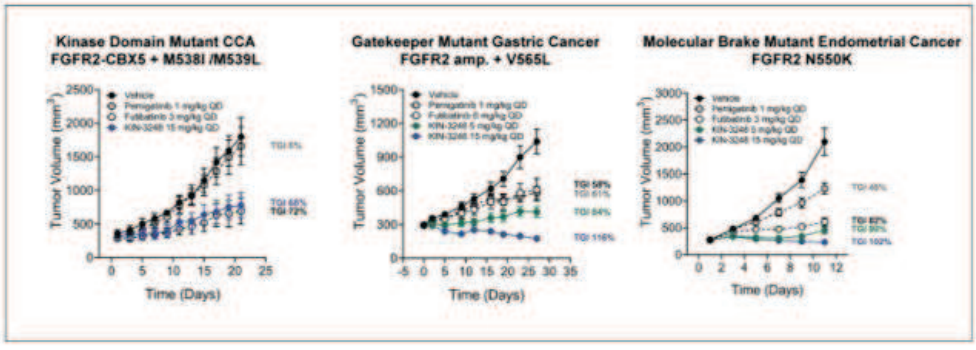
Figure 22: Anti-tumor Activity in FGFR2 Amplified / Fusion + Gastric Cancer and FGFR3 Fusion+ Urothelial Cancer



Tumor growth inhibition of SNU-16 gastric cancer (FGFR2 amplified and FGFR2-PDHX+) and RT-112 bladder cancer (FGFR3-TACC3+) xenografts in athymic nude mice. KIN-3248 or vehicle control dosing was initiated when tumors reached >200 mm3 and was performed by oral administration once a day. Groups consisted of n=9 mice and represent the average tumor volume +/- standard error of the mean (SEM).

Figure 23: Anti-tumor Activity of KIN-3248 Human Cancer Cell Line- and Patient-Derived Xenograft Models with FGFR2 Kinase Domain Resistance Mutations

The anti-tumor activity of KIN-3248 was next evaluated in cancer cell line (CDX)- and patient-derived (PDX) tumor xenograft models with FGFR2 resistance mutations. Treatment with KIN-3248 at 15 mg/kg/day led to 72%, 116%, and 102% tumor growth inhibition and regressions in models harboring M538I / M539L (activation loop), V565L (gatekeeper), and N550K (molecular brake) mutations associated with clinical resistance to FGFR inhibitors. In contrast, Pemazyre (pemigatinib) and Lytgobi (futibatinib) displayed a lack of or limited efficacy against these FGFR2 resistance mutations.



Tumor growth inhibition of a cholangiocarcinoma patient-derived xenograft, or PDX (FGFR2-CBX5 and M538I / M539L+), gastric cancer PDX (FGFR2 amplified and V565L+) and endometrial cell-derived xenograft (FGFR2 N550K+) in nude mice. KIN-3248, Pemazyre (pemigatinib, Lytgobi (futibatinib)or vehicle control dosing was initiated when tumors reached >200 mm3 and was performed by oral administration once a day. Groups consisted of n=6-12 mice and represent the average tumor volume +/- standard error of the mean (SEM).

The currently-approved FGFR inhibitors bind to the kinase active site in a reversible binding mode. By modifying small molecules with a reactive chemical warhead that irreversibly (covalently) reacts with a specific cysteine amino acid found in the active site of the kinase, we believe that FGFR inhibitors can achieve enhanced selectivity and potency across clinically-relevant secondary resistance mutations, including those that have been observed among Lytgobi (futibatinib)-treated patients.

Examples of approved kinase inhibitors that employ this irreversible binding mode include Imbruvica (ibrutinib) and Tagrisso (osimertinib), each of which covalently reacts with a specific cysteine found in the active sites of BTK and EGFR kinases, respectively. Similar to osimertinib's irreversible binding to EGFR while maintaining

activity against T790M gatekeeper mutations, our designs enable an irreversible interaction with the cysteine in the FGFR1, FGFR2, and FGFR3 kinase active site, while avoiding the hindrance of binding by gatekeeper mutations that was observed with Lytgobi (futibatinib).

We have completed a 28-day GLP toxicology study in rats and a 28-day GLP toxicology study in dogs that together define the anticipated first-in-human dose for KIN-3248. All drug dose levels were well tolerated with no exposure-associated mortality, adverse clinical pathology observations, or substantive changes in vital measurements following completion of 28 days of dosing in both species. We believe KIN-3248 has a favorable therapeutic index as these GLP toxicology results demonstrated that the drug was well tolerated at levels that have shown anti-tumor activity in our other preclinical studies.

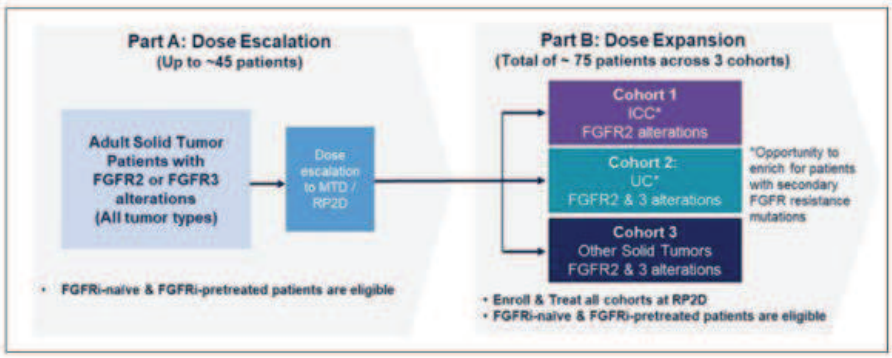
Clinical Development Plan: KN-4802

KN-4802 is designed as follows:

- **Part A: Dose Escalation:** Patients with advanced or metastatic solid tumors in both FGFR inhibitor naïve and pre-treated patient populations with molecularly-defined FGFR2- and/or FGFR3-alteration driven cancers, including a limited number of patients with FGFR2 or FGFR3 amplification-driven cancers. Patients will be enrolled in cohorts of 3 patients each to receive oral KIN-3248 as a single agent for up to 45 patients.
- **Part B: Dose Expansion:** Patients with advanced or metastatic solid tumors bearing with molecularly-defined FGFR2- and/or FGFR3-alteration driven cancers will be enrolled in one of a number of cohorts defined by disease or biomarker of up to 20 to 30 patients per cohort to receive oral KIN-3248 as a single agent. This would include both FGFR inhibitor naïve and pre-treated patient populations.

The objectives of this clinical trial are to (1) assess the safety and tolerability of KIN-3248 when administered to cancer patients, (2) understand the relationship between dose and schedule of drug with PK, PD and changes in tumor-associated biomarkers, (3) determine a recommended Phase 2 dose and schedule, and (4) gain an initial understanding of single agent anti-cancer efficacy in defined cancer patient cohorts. Our primary efficacy measures include objective measures of tumor response using RECIST v1.1, including number of responding patients, response rate, depth of response and DoR, utilizing standardized tumor imaging assessments at pre-specified intervals. The figure below illustrates our current clinical development plan.

Figure 24: Clinical Development Plan for KIN-3248 in Patients with FGFR2- and/or FGFR3-driven Advanced Solid Tumors



In both Parts A and B, we leverage CLIA-compliant local tumor tissue or blood-based genomic profiling, such as MSK-IMPACT profiling, at Memorial Sloan Kettering Cancer Center, or tumor or blood-based genomic analysis performed at a central commercial laboratory, such as Foundation Medicine, Inc., for detection and inclusion of specific FGFR2 or FGFR3 alterations. We also biobank tumor tissue and blood specimens for central retrospective analysis which we believe will enable the assessment of primary genomic alterations and other exploratory analyses.

Additional Research Programs

We are also advancing a number of other small molecule research programs, including a CDK12 inhibitor in our KIN004 program. CDK12 is an essential regulator of DDR genes and no approved CDK12-targeting therapies are currently available or, to our knowledge, in clinical development. We are developing a candidate to target the unmet clinical need in the treatment of OC, mCRPC and TNBC.

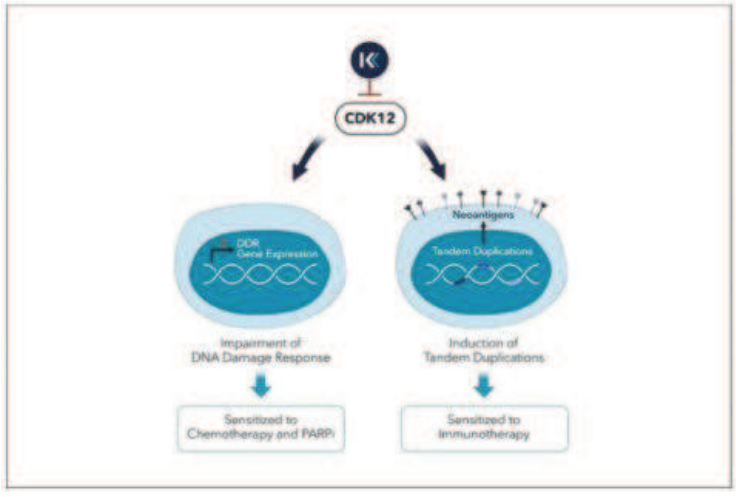
Despite the significant clinical benefits of approved poly ADP-Ribose polymerase (PARP) inhibitors in the treatment of eligible patients with advanced or metastatic OC and mCRPC, and immune checkpoint inhibitors (ICIs) (including PD-1 and PD-L1 targeting agents) for those with TNBC, acquired drug resistance remains a significant challenge in the majority of cases.

We believe that targeted CDK12 inhibition with a selective small molecule therapeutic offers the potential to:

- significantly augment the clinical benefits of PARP inhibitors, chemotherapeutic agents and ICIs in the subset of these cancer patients who are currently eligible to be treated with these drugs; and
- therapeutically sensitize cancers from expanded populations of OC, mCRPC and TNBC patients who are not currently eligible to receive PARP inhibitors or ICIs, and who yet may gain substantial benefit from combination therapy with either PARP inhibitors, conventional chemotherapies, or an ICI agent.

CDK12 is a critical regulator of both the DDR pathway and neoantigen formation in tumors. The figure below illustrates the CDK12 pathway regulating DDR gene transcription. We are developing selective CDK12 irreversible kinase inhibitors that are designed to induce DDR deficiencies in patients with DDR-proficient tumors.

Figure 25: Therapeutic CDK12 Inhibition Sensitizes Cancer Cells to Existing Cancer Therapies Through Two Distinct Mechanisms Which Operate in Parallel.



(Left) CDK12 inhibition significantly reduces expression of DDR genes through its selective impact on transcription of long genes, many of which encode regulators of the DNA damage pathway. This inhibition leads to dramatic sensitization of cancer cells to DNA damaging chemotherapy and PARP inhibitors (PARPi). (Right) CDK12 inhibition is expected to produce large tandem duplications in cellular DNA that express neoantigens that are subsequently presented on the cell surface. We expect that expression of these neoantigens provides a unique opportunity to synergize with immune checkpoint inhibitors (ICIs) to produce an enhanced anti-tumor immune response.

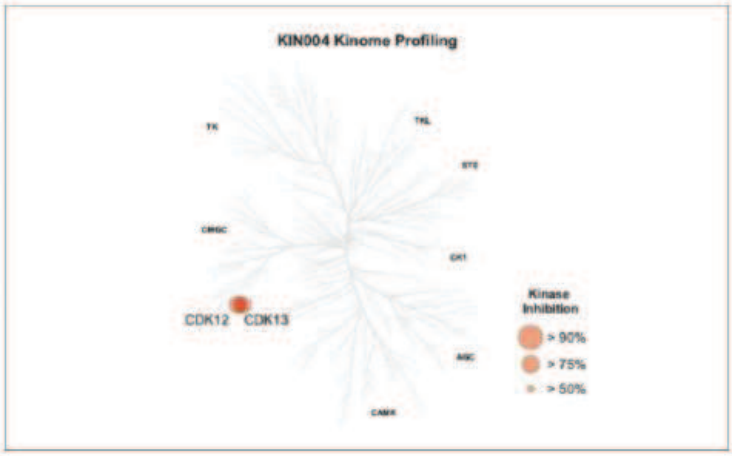
CDK12 inhibition sensitizes tumors to DNA damaging agents and induces synthetic lethality in both DDR-deficient and, more importantly, DDR-proficient tumors. Synthetic lethality is an approach in oncology drug development that is focused on identifying and selecting patient subgroups with specific genomic alterations in tumors that are most likely to benefit from these therapies and improving tolerability and reducing toxicity by not affecting normal, non-cancerous cells.

Our goal is to limit the expression of DDR genes including BRCA1 and BRCA2, among other DDR genes, to shift DDR-proficient tumors into a sensitized DDR-deficient state. This would enable a synthetic lethality approach in DDR-proficient tumors via combination therapy with currently-approved PARP inhibitors.

Additionally, in published third party preclinical studies, CDK12 inactivation induced formation of large tandem duplications that expressed as fusion-induced neoantigens and synergized with ICIs to augment an enhanced anti-tumor immune response, which we anticipate will translate to a deeper and more durable clinical benefit.

CDK12 has a novel cysteine in the active site of the enzyme, enabling specificity via an irreversible (covalent) binding mode as described for our FGFR program. We have employed structure-based drug discovery efforts from an early co-crystal structure that led to identification of highly specific small molecules that covalently bind to and inhibit CDK12, as shown by the kinome profile in the figure below.

Figure 26: Selective CDK12 Kinase Enzymatic Inhibition as Demonstrated by Kinome Profiling of KIN004



Kinome tree depicting kinase selectivity for KIN004 at 1000 nM across 275 kinases in single dose, duplicate measurements (272 kinases at Thermo Fisher Scientific and 3 kinases at Reaction Biology Europe GmbH). Percent (%) inhibition is relative to DMSO control. Kinases with >50% inhibition are shown with circle size indicating the relative potency as depicted in the legend. Kinome tree graphic was generated using CORAL (http://phanstiel-lab. Med.unc.edu/CORAL/).

Following kinome profiling, related CDK family members were tested in radiometric enzymatic assays and demonstrated a >40X selectivity of CDK12 compared to CDK7 and CDK9 and >50X selectivity of CDK12 compared to CDK2. These active sites are highly related among the CDK family members and these selectivity ratios enable specific targeting of CDK12 in vivo.

Figure 27: Inhibitory Concentrations 50% (IC50s) Determined from Dose-Response Inhibition Curves of Kinases Inhibited In the Kinome Profiling

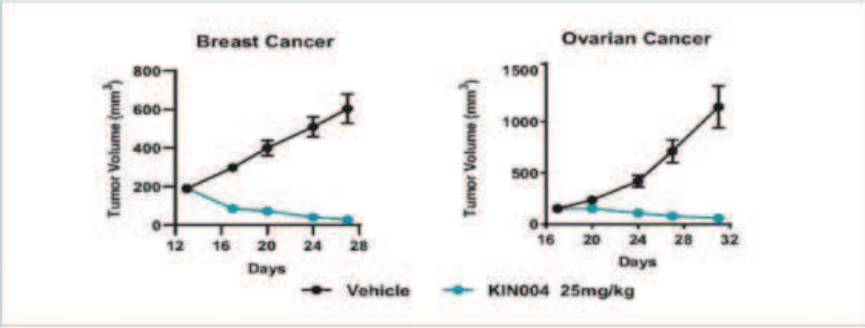
Kinase	KIN004 IC_{50} (nM)
CDK12	97
CDK2	5104
CDK7	3913
CDK9	3952
Ratios (Fold Difference in IC_{50})	
CDK12/CDK2	>50X
CDK12/CDK7	>40X
CDK12/CDK9	>40X

KIN004 follow-up 10-point dose response kinase assays demonstrated selective CDK12 inhibition compared to highly homologous CDK2, CDK7, and CDK9 family members. Results in the table represent IC50 averages (from

curves fitted with a 4-parameter analysis) of greater than 3 independent experiments for CDK7, CDK9, and CDK12, and 2 independent experiments for CDK2 performed at Reaction Biology Europe GmbH. All radiometric assays were performed for 30 minutes with an optimal ATP concentration for the respective kinase.

In our preclinical studies, selective CDK12 pharmacological inhibition via biweekly, intravenous administration of a compound in the KIN004 program demonstrated tumor regressions at 25 mg/kg in two independent BRCA1/2 WT breast (HCC70 tumors) and ovarian (OVCAR-3) tumors implanted in athymic nude mice shown in the figure below. This is important as DDR-deficient tumors (e.g., BRCA1 mutant) are hypersensitive to both CDK12 and PARP inhibition. This proof of concept suggests that CDK12 inhibition impacted DDR pathways and has the potential to expand into patient populations beyond those settings that are currently approved for treatment with PARP inhibitors.

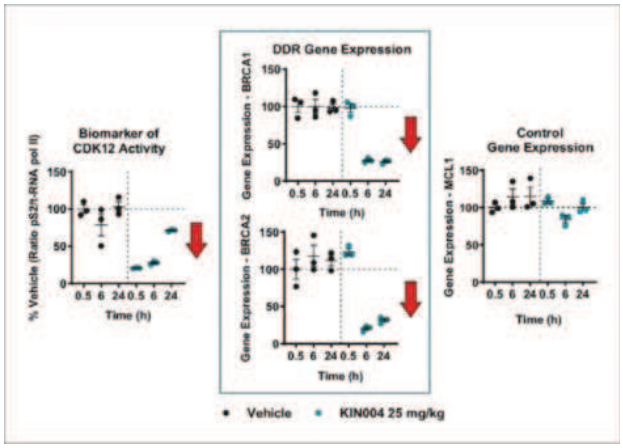
Figure 28: Anti-tumor Activity of KIN004 in DDR-proficient Breast and Ovarian Tumors *In Vivo*



HCC70 breast tumors (left) and OVCAR-3 ovarian tumors (right) represent BRCA1/2 WT cancers that were DDR-proficient and were not sensitized to PARP inhibitor treatment. KIN004 was dosed at 25 mg/kg twice per week by intravenous administration and tumor volumes represent averages of n=8 tumors / group +/-SEM.

Treatment of HCC70 tumor xenografts with 25 mg/kg KIN004 demonstrated a time-dependent inhibition of biomarkers known to be the target of CDK12 activity in the cell. The same HCC70 tumors demonstrated time-dependent inhibition of gene expression of known DDR genes including BRCA1 and BRCA2 shown in the central panel of the outlined figure below. As a control, MCL1 expression was measured as this gene is regulated by CDK7, and no change in expression was observed. The absence of any effect of KIN004 on gene expression of MCL1 confirmed the selective inhibition of CDK12 over CDK7 that was demonstrated in biochemical assays. This in vivo modulation of CDK12-regulated DDR genes in BRCA1/2 WT tumors further supports the mechanism by which DDR-proficient tumors are converted to a DDR-deficient state by selective pharmacological CDK12 irreversible inhibition.

Figure 29: CDK12 Inhibition Downregulated DDR Gene Expression *In Vivo* in Breast Tumors



(Left) HCC70 tumors treated with 25 mg/kg KIN004 demonstrated time-dependent inhibition of phosphorylation of RNA Polymerase II on serine 2. Middle (teal outlined cluster of 2 graphs): Treatment of HCC70 tumors with

25 mg/kg KIN004 decreased expression of BRCA1 and BRCA2 as expected since CDK12 activity is well-documented as regulating transcription of these and additional DNA damage response genes. (Right) KIN004 did not modulate MCL1 gene expression in vivo and signals selective CDK12 inhibition relative to CDK7 inhibition. CDK7 is known to regulate MCL1 gene expression, a proapoptotic gene, and lack of CDK7 inhibition is expected to leave MCL1 gene expression unaffected as depicted in the graph. All time points represent analysis of n=3 HCC70 tumors for each readout presented. In all figures above, black circles represent untreated tumors (Vehicle) for reference and teal circles represent tumors treated by intravenous administration with 25 mg/kg of KIN004.

We are currently optimizing an orally bioavailable compound series in the KIN004 program. Additionally, we are evaluating fusion-induced neoantigen generation with selective pharmacological CDK12 inhibition in mouse cancer models with intact immune systems. These ‘‘proof of mechanism’’ studies will enable combination efficacy experiments with immune checkpoint inhibitors (ICIs - e.g., anti-PD-1 monoclonal antibody) to understand the synthetic lethality potential of this combination approach. There is an evolving biological understanding of CDK12 inactivating mutations in prostate and ovarian cancers that produce fusion-induced neoantigens, sensitizing these tumors for combinations with ICIs. Currently ICIs are being tested clinically in patients with tumors with naturally occurring inactive CDK12.

Our Kinnate Discovery Engine is continuing to execute on target and lead identification to develop therapeutics that address oncogenic drivers in high unmet need populations. We are exploring intrinsic and acquired resistance mechanisms to drugs that are currently approved or in development to improve clinical benefit and response rates. To enable efficiency, we are leveraging our global collaborations with leaders at a variety of academic centers, respected industry partners, and key opinion leader networks, to identify additional development opportunities that complement our internal research and development efforts.

Competition

The pharmaceutical and biotechnology industries are characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. While we believe that our technology, the expertise of our team, and our development experience and scientific knowledge provide us with competitive advantages, we face increasing competition from many different sources, including pharmaceutical and biotechnology companies, academic institutions, governmental agencies and public and private research institutions. Product candidates that we successfully develop and commercialize may compete with existing therapies and new therapies that may become available in the future.

Many of our competitors, either alone or with their collaborators, have significantly greater financial resources, established presence in the market, and expertise in research and development, manufacturing, preclinical and clinical testing, obtaining regulatory approvals and reimbursement and marketing approved products than we do. These competitors also compete with us in 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, our programs. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. Additional mergers and acquisitions may result in even more resources being concentrated in our competitors.

Our commercial potential could be reduced or eliminated if our competitors develop and commercialize products that are safer or more effective, have fewer or less severe side effects, and are more convenient or less expensive than products that we may develop. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we can, which could result in our competitors establishing a strong market position before we are able to enter the market or could otherwise make our development more complicated. We believe the key competitive factors affecting the success of all of our programs are likely to be efficacy, including DoR and breadth of coverage, safety and patient convenience.

For our RAF program, there are currently three BRAF-targeted kinase inhibitor drugs approved for use in Class I BRAF mutations: Novartis AG’s Tafinlar (dabrafenib), Genentech’s, a member of the Roche Group, Zelboraf (vemurafenib) and Pfizer’s Braftovi (encorafenib) are used in BRAF mutated melanomas. Tafinlar (dabrafenib) is also used in mutated NSCLC, anaplastic thyroid cancer, and unresectable and metastatic solid tumors, and Braftovi (encorafenib) is also used in mutated CRC. FORE-8394 / PLX8394, a BRAF homodimer disruptor, is currently in Phase 2 clinical trials with Fore Biotherapeutics. Second-generation BRAF dimer signaling

inhibitors, such as naporafenib and belvarafenib (HM95573, RG6185) are designed to inhibit mitogen-activated protein kinase (MAPK) pathway signaling without causing paradoxical activation and are in Phase 1 or Phase 2 clinical trials with Erasca and Genentech / Hanmi Pharmaceutical co. ltd, respectively. Mapkure, LLC's BGB-3245 and Day One Pharmaceuticals' DAY101 are also currently in clinical development, along with other RAF inhibitors.

For our FGFR program, FDA-approved FGFR inhibitors include: Incyte Corporation's Pemazyre (pemigatinib), Janssen Biotech, Inc.'s, a Johnson & Johnson company, Balversa (erdafitinib), and Taiho Oncology, Inc.'s, an Otsuka Holdings Co., Ltd. company, Lytgobi (futibatinib). There are also a number of programs that are in development, including Relay Therapeutics, Inc.'s FGFR2-specific candidate, RLY-4008, Tyra Biosciences, Inc.'s FGFR3-specific candidate, TYRA-300, and Loxo Oncology at Lilly's FGFR3-specific candidate, LOXO-435.

Our Scientific Collaborations

To help advance our programs, we are working with Massachusetts General Hospital Cancer Center and University of California, San Francisco, leading clinical research institutions, and plan to enter into additional collaborations. Each of these collaborations is (or will be) focused on translational strategies to support the clinical study of our new therapy candidates. For example, we are working with these research organizations to:

- define emerging patient populations;
- demonstrate selective *in vitro* and *in vivo* activity and define dose-exposure pharmacodynamic relationships in clinically relevant models;
- test prioritized compounds against specific mutations and fusions;
- investigate mechanism of action-the specific biochemical interaction through which a drug substance produces its pharmacological effect-to support the refinement of strategies for patient selection and patient stratification for both monotherapy and rationale combinations; and
- develop biomarker-based development strategies that will drive patient selection in our clinical programs.

We have also established collaborations through service agreements with global contract manufacturing organizations (CMOs) and CROs, under which we utilize contracted professionals to provide scale and expertise in areas including, among others, research chemistry, chemical manufacturing, biology, pharmacology and toxicology, and clinical studies.

Intellectual Property

We strive to protect and enhance the proprietary technology, inventions and improvements that are commercially important to our business, including obtaining, maintaining and defending our patent rights. We own the patent applications relating to our lead and planned product candidates. Our policy is to seek to protect our proprietary position by, among other methods, filing patent applications and obtaining issued patents in the United States and in markets outside of the United States directed to our proprietary technology, inventions, improvements and product candidates that are important to the development and implementation of our business. 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 in the field of oncology. 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 proprietary protection for our technology, inventions, improvements and product candidates; to preserve the confidentiality of our trade secrets; to defend and enforce our proprietary rights, including any patents that we may own or license in the future; and to operate without infringing on the valid and enforceable patents and other proprietary rights of third parties.

Our patent portfolio consists of issued patents and pending patent applications that we own related to our small molecule kinase inhibitor programs, including our RAF, FGFR and CDK12 programs. In total, we own eight issued United States patents, 14 pending United States patent applications, 14 international patent applications filed under the Patent Cooperation Treaty (PCT application) and 116 pending patent applications in various markets outside of the United States, including Europe, China and Japan.

For exarafenib, we own one issued United States patent, one pending United States patent application, two international patent applications filed under the Patent Cooperation Treaty (PCT application) and 25 pending

patent applications in various markets outside of the United States, including Europe, China and Japan, with claims covering exarafenib as composition of matter, pharmaceutical compositions, and related methods of use. The issued United States patent covers exarafenib as composition of matter and pharmaceutical compositions and is expected to expire in October 2040, absent any patent term extensions for regulatory delay. Any patents that may issue from our pending patent applications related to exarafenib are expected to expire between October 2040 and April 2042, absent any patent term adjustments or patent term extensions for regulatory delay.

For KIN-3248, we own one issued United States patent, one pending United States patent application, two international patent applications filed under the Patent Cooperation Treaty (PCT application) and 23 pending patent applications in various markets outside of the United States, including Europe, China and Japan, with claims covering KIN-3248 as composition of matter, pharmaceutical compositions, and related methods of use. The issued United States patent covers KIN-3248 as composition of matter and pharmaceutical compositions and is expected to expire in June 2041, absent any patent term extensions for regulatory delay. Any patents that may issue from our pending patent applications related to KIN-3248 are expected to expire between June 2041 and December 2042, absent any patent term adjustments or patent term extensions for regulatory delay.

For KIN004, we own two issued United States patents, one pending United States patent application, and 29 pending patent applications in various markets outside of the United States, including Europe, China and Japan. The issued United States patent covers KIN004 as composition of matter and pharmaceutical compositions and is expected to expire in June 2039, absent any patent term extensions for regulatory delay. Any patents that may issue from our pending patent applications are expected to expire between June 2039 and December 2040, absent any patent term adjustments or patent term extensions for regulatory delay.

We also possess substantial know-how and trade secrets relating to the development and commercialization of our product candidates, including related manufacturing processes and technology.

With respect to our product candidates and processes that 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.

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 patent applications filed in the United States can provide exclusionary rights for 20 years from the earliest effective filing date. The term of United States patents may be extended by delays encountered during prosecution that are caused by the USPTO, also known as patent term adjustment. In addition, in certain instances, the term of an issued United States 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 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.

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 oncology has emerged in the United States. The relevant patent laws and their interpretation outside of the United States are 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 may 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.

Commercialization

We intend to retain significant development and commercial rights to our product candidates and, if marketing approval is obtained, to commercialize our product candidates on our own, or potentially with a partner, in the United States and other regions. We currently have no sales, marketing or commercial product distribution capabilities. We intend to build the necessary infrastructure and capabilities over time for 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 may all influence or alter our commercialization plans.

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 manufacturing if any of our product candidates obtain marketing approval. We also rely, and expect to continue to rely, on third parties to package, label, store and distribute our investigational product candidates, as well as 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 development of our product candidates.

To date, we have obtained for our product candidates active pharmaceutical ingredients (API) from Patheon API Services, Inc. and Shanghai STA Pharmaceutical Co. and drug product from Serán BioScience, Inc., Patheon, Inc., and BioDuro LLC, some of whom we currently rely on as single-source contract manufacturing organizations (CMOs).

As we advance our product candidates through development, we will explore adding backup suppliers for the API and drug product for each of our product candidates to protect against any potential supply disruptions.

We generally expect to rely on third parties for the manufacture of any companion diagnostics we may develop.

Government Regulation

Government authorities in the United States at the federal, state and local level and in other countries regulate, among other things, the research, development, testing, manufacture, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of drug and biological products. Generally, before a new drug can be marketed, considerable data demonstrating its quality, safety and efficacy must be obtained, organized into a format specific for each regulatory authority, submitted for review and approved by the regulatory authority.

U.S. Drug Development

In the United States, the FDA regulates drugs under the Food, Drug, and Cosmetic Act (FDCA). Drugs also are subject to other federal, state and local statutes and regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations requires

the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or post-market may subject an applicant to administrative or judicial sanctions. These sanctions could include, among other actions, the FDA's refusal to approve pending applications, withdrawal of an approval, a clinical hold, untitled or warning letters, product recalls or market withdrawals, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement and civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us.

Our product candidates are considered small molecule drugs and must be approved by the FDA through the NDA process before they may be legally marketed in the United States. The process generally involves the following:

- completion of extensive preclinical studies in accordance with applicable regulations, including studies conducted in accordance with GLP;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an independent IRB, or ethics committee at each clinical trial site before each clinical trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with applicable IND regulations, good clinical practice (GCP) requirements and other clinical trial-related regulations to establish substantial evidence of the safety and efficacy of the investigational product for each proposed indication;
- submission to the FDA of an NDA after completion of all pivotal clinical trials;
- determination by the FDA within 60 days of its receipt of an NDA to accept the filing for substantive review;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facility or facilities where the drug will be produced to assess compliance with cGMP requirements assuring that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity;
- potential FDA audit of the preclinical study and/or clinical trial sites that generated the data in support of the NDA filing;
- FDA review and approval of the NDA, including consideration of the views of any FDA advisory committee, prior to any commercial marketing or sale of the drug in the United States; and
- compliance with any post-approval requirements, including the potential requirement to implement a Risk Evaluation and Mitigation Strategy (REMS), and the potential requirement to conduct post-approval studies.

The data required to support an NDA are generated in two distinct developmental stages: preclinical and clinical. The preclinical and clinical testing and approval process requires substantial time, effort and financial resources, and we cannot be certain that any approvals for any current and future product candidates will be granted on a timely basis, or at all.

Preclinical Studies and IND

Preclinical studies include laboratory evaluation of product chemistry and formulation, as well as *in vitro* and animal studies to assess the potential for adverse events, which support subsequent clinical testing, and in some cases to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal regulations and requirements, including GLP regulations for safety/toxicology studies. An IND sponsor must submit the results of the preclinical studies, together with manufacturing information, analytical data, any available clinical data or literature, plans for clinical studies and a proposed clinical protocol, among other things, to the FDA as part of an IND. An IND is a request for authorization from the FDA to administer an investigational product to humans and must become effective before human clinical trials may begin. Some long-term preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity, may continue after the IND is submitted. An IND automatically becomes effective 30 days after receipt by the FDA,

unless before that time the FDA raises concerns or questions related to one or more proposed clinical trials and places the trial on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in the FDA allowing clinical trials to commence.

Clinical Trials

The clinical stage of development involves the administration of the investigational product to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the clinical trial sponsor's control, in accordance with GCP requirements, which include the requirement that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria and the parameters to be used to monitor subject safety and assess efficacy. Each protocol, and any subsequent amendments to the protocol, must be submitted to the FDA as part of the IND. Furthermore, each clinical trial must be reviewed and approved by an institutional review board (IRB) for each institution at which the clinical trial will be conducted to ensure that the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB must also approve the informed consent form that must be provided to each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. There also are requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries.

A sponsor who wishes to conduct a clinical trial outside of the United States may, but need not, obtain FDA authorization to conduct the clinical trial under an IND. If a foreign clinical trial is not conducted under an IND, the sponsor may submit data from the clinical trial to the FDA in support of an NDA. The FDA will generally accept a well-designed and well-conducted foreign clinical trial not conducted under an IND if the trial was conducted in accordance with the ethical principles contained in the Declaration of Helsinki pursuant to 21 CFR 312.120(c)(4), incorporating the 1989 version of the Declaration, or with the laws and regulations of the foreign regulatory authority where the trial was conducted, such as the European Medicines Agency (EMA), whichever provides greater protection of the human subjects, and with GCP and GMP requirements, and the FDA is able to validate the data through an onsite inspection, if deemed necessary, and the practice of medicine in the foreign country is consistent with the United States.

Clinical trials in the United States generally are conducted in three sequential phases, known as Phase 1, Phase 2 and Phase 3, and may overlap.

- Phase 1 clinical trials generally involve a small number of healthy volunteers or disease-affected patients who are initially exposed to a single dose and then multiple doses of the product candidate. The primary purpose of these clinical trials is to assess the metabolism, pharmacologic action, tolerability and safety of the drug.
- Phase 2 clinical trials involve studies in disease-affected patients to determine the dose and dosing schedule required to produce the desired benefits. At the same time, safety and further pharmacokinetic and pharmacodynamic information is collected, possible adverse effects and safety risks are identified, and a preliminary evaluation of efficacy is conducted.
- Phase 3 clinical trials generally involve a large number of patients at multiple sites and are designed to provide the data necessary to demonstrate the effectiveness of the product for its intended use and its safety in use, and to establish the overall benefit/risk relationship of the product and provide an adequate basis for product approval. These clinical trials may include comparisons with placebo and/or other comparator treatments. The duration of treatment is often extended to mimic the actual use of a product during marketing.

Post-approval clinical trials, sometimes referred to as Phase 4 clinical trials, are 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, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval of an NDA.

Progress reports detailing the results of the clinical trials, among other information, must be submitted at least annually to the FDA. The sponsor is also responsible for submitting written IND safety reports, including reports of serious and unexpected suspected adverse events, findings from other studies suggesting a significant risk to

humans exposed to the drug, findings from animal or *in vitro* testing that suggest a significant risk for human subjects, and any clinically significant increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure.

Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, if at all. The FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether a clinical trial may move forward at designated check-points based on access to certain data from the clinical trial.

Concurrent with clinical trials, companies usually complete additional animal safety studies and also must develop additional information about the chemistry and physical characteristics of the drug as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process, as performed by the manufacturing facility, must be capable of consistently producing quality batches of our product candidates. Additionally, appropriate packaging must be selected and tested, and stability studies must be conducted to demonstrate that our product candidates do not undergo unacceptable deterioration over their labeled shelf life.

We may be required to develop and implement additional clinical trial policies and procedures designed to help protect subjects from COVID-19 or other public health concerns. Since March 2020, the FDA has issued various COVID-19 related documents, including guidance on conducting clinical trials during the pandemic, Good Manufacturing Practices, remote interactive evaluations of drug manufacturing and bioresearch monitoring facilities, and drug product manufacturing and supply chain inspections, among others. Recently, President Biden announced that the administration intends to end the COVID-19 national and public health emergencies on May 11, 2023; however, the full impact of the termination of the public health emergencies on FDA and other regulatory policies and operations is unclear.

NDA Review Process

Following completion of the clinical trials, data is analyzed to assess whether the safety and efficacy of the investigational product has been demonstrated for the proposed indicated use or uses. The results of preclinical studies and clinical trials are then submitted to the FDA as part of an NDA, along with proposed labeling, chemistry and manufacturing information to ensure product quality and other relevant data. In short, the NDA is a request for approval to market the drug in the United States for one or more specified indications and must contain proof of safety and efficacy for a drug.

The application must include both negative and ambiguous results of preclinical studies and clinical trials, as well as positive findings. Data may come from company-sponsored clinical trials intended to test the safety and efficacy of a product's use or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and efficacy of the investigational product to the satisfaction of the FDA. FDA approval of an NDA must be obtained before a drug may be legally marketed in the United States.

Under the Prescription Drug User Fee Act (PDUFA), as amended, each NDA must be accompanied by a user fee. The FDA adjusts the PDUFA user fees on an annual basis. PDUFA also imposes an annual program fee for each marketed human drug. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on NDAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

The FDA reviews all submitted NDAs before it accepts them for filing and may request additional information rather than accepting the NDA for filing. The FDA must make a decision on accepting an NDA for filing within 60 days of receipt. Once the submission is accepted for filing, the FDA begins an in-depth review of the NDA. Under the goals and policies agreed to by the FDA under PDUFA, the FDA has 10 months, from the filing date,

in which to complete its initial review of a new molecular-entity NDA and respond to the applicant, and six months from the filing date of a new molecular-entity NDA designated for priority review. The FDA does not always meet its PDUFA goal dates for standard and priority NDAs, and the review process is often extended by FDA requests for additional information or clarification.

Before approving an NDA, the FDA will conduct a pre-approval inspection of the manufacturing facilities for the new product to determine whether they comply with cGMP requirements. The FDA will not approve the product 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. The FDA also may audit data from clinical trials to ensure compliance with GCP requirements. Additionally, the FDA may refer applications for novel drug products or drug products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions, if any. The FDA is not bound by recommendations of an advisory committee, but it considers such recommendations when making decisions on approval. The FDA likely will reanalyze the clinical trial data, which could result in extensive discussions between the FDA and the applicant during the review process. After the FDA evaluates an NDA, it will issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete, and the application will not be approved in its present form. A Complete Response Letter usually describes all of the specific deficiencies in the NDA identified by the FDA. The Complete Response Letter may require additional clinical data, additional pivotal Phase 3 clinical trial(s) and/or other significant and time-consuming requirements related to clinical trials, preclinical studies and/or manufacturing. If a Complete Response Letter is issued, the applicant may either resubmit the NDA, addressing all of the deficiencies identified in the letter, or withdraw the application. Even if such data and information are submitted, the FDA may decide that the NDA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive and the FDA's interpretation of data may differ from our interpretation.

Orphan Drugs

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biological product intended to treat a rare disease or condition, which is generally 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 and for which there is no reasonable expectation that the cost of developing and making the product available in the United States for this type of disease or condition will be recovered from sales of the product.

Orphan drug designation must be requested before submitting an NDA. After the FDA grants orphan drug designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan designation subsequently receives the first FDA approval for the disease or condition 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 to market the same drug for the same indication for seven years from the date of such approval, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity by means of greater effectiveness, greater safety or providing a major contribution to patient care or in instances of drug supply issues. However, competitors may receive approval of either a different product for the same indication or the same product for a different indication but that could be used off-label in the orphan indication. Orphan drug exclusivity also could block the approval of one of our products for seven years if a competitor obtains approval before we do for the same product, as defined by the FDA, for the same indication for which we are seeking approval, or if a product candidate is determined to be contained within the scope of the competitor's product for the same indication. If one of our products designated as an orphan drug receives marketing approval for an indication broader than that which is designated, it may not be entitled to orphan drug exclusivity. Orphan drug status in the European Union has similar, but not identical, requirements and benefits.

In *Catalyst Pharms., Inc. v. Becerra*, 14 F.4th 1299 (11th Cir. 2021), the court disagreed with the FDA's longstanding position that orphan drug exclusivity only applies to the approved use or indication within an eligible disease. In particular, the circuit court held that orphan-drug exclusivity for Catalyst's drug blocked FDA

approval of another drug for all uses or indications within the same orphan-designated disease, or Lambert-Eaton myasthenic syndrome (LEMS), even though Catalyst's drug was approved at that time only for use in the treatment of LEMS in adults. Accordingly, the court ordered the FDA to set aside the approval of a drug indicated for LEMS in children. This decision created uncertainty in the application of orphan drug exclusivity. On January 24, 2023, the FDA published a notice in the Federal Register to clarify that while the agency complies with the court's order in *Catalyst*, the FDA intends to continue to apply its longstanding interpretation of the regulations to matters outside of the scope of the *Catalyst* order – that is, the FDA will continue tying the scope of orphan-drug exclusivity to the uses or indications for which a drug is approved, which permits other sponsors to obtain approval of a drug for new uses or indications within the same orphan- designated disease or condition that have not yet been approved. It is unclear how future litigation, legislation, agency decisions, and administrative actions will impact the scope of the orphan drug exclusivity.

Expedited Development and Review Programs

The FDA has a fast track program that is intended to expedite or facilitate the process for reviewing new drugs that meet certain criteria. Specifically, new drugs are eligible for fast track designation if they are intended to treat a serious or life-threatening condition and preclinical or clinical data demonstrate the potential to address unmet medical needs for the condition. Fast track designation applies to both the product and the specific indication for which it is being studied. The sponsor can request the FDA to designate the product for fast track status any time before receiving NDA approval, but ideally no later than the pre-NDA meeting with the FDA.

Any product submitted to the FDA for marketing, including under a fast track program, may be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. Any product is eligible for priority review if it treats a serious or life-threatening condition and, if approved, would provide a significant improvement in safety and effectiveness compared to available therapies.

A product may also be eligible for accelerated approval if it treats a serious or life-threatening condition and generally provides a meaningful advantage over available therapies. In addition, it must demonstrate 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 (IMM), which is reasonably likely to predict an effect on IMM or other clinical benefit. As a condition of approval, the FDA may require that a sponsor of a drug receiving accelerated approval perform adequate and well-controlled post-marketing clinical trials. The FDA may withdraw drug approval or require changes to the labeled indication of the drug if confirmatory post-market clinical trials fail to verify clinical benefit or do not demonstrate sufficient clinical benefit to justify the risks associated with the drug. If the FDA concludes that a drug shown to be effective can be safely used only if distribution or use is restricted, it may require such post-marketing restrictions as it deems necessary to assure safe use of the product.

Additionally, a drug may be eligible for designation as a breakthrough therapy if the product is intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over currently-approved therapies on one or more clinically significant endpoints. The benefits of breakthrough therapy designation include the same benefits as fast track designation, plus intensive guidance from the FDA to ensure an efficient drug development program. Fast track designation, priority review, accelerated approval and breakthrough therapy designation 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 may decide that the time period for FDA review or approval will not be shortened.

FDA Regulation of Companion Diagnostics

A therapeutic product may rely upon an in vitro companion diagnostic for use in selecting the patients that will be more likely to respond to that therapy. If an in vitro diagnostic is essential to the safe and effective use of the therapeutic product and if the manufacturer wishes to market or distribute such diagnostic for use as a companion diagnostic, then the FDA will require separate approval or clearance of the diagnostic as a companion diagnostic to the therapeutic product. According to FDA guidance, an unapproved or uncleared companion diagnostic device used to make treatment decisions in clinical trials of a drug generally will be considered an investigational medical device unless it is employed for an intended use for which the device is already approved

or cleared. If used to make critical treatment decisions, such as patient selection, the diagnostic device generally will be considered a significant risk device under the FDA's Investigational Device Exemption, or IDE, regulations. The sponsor of the diagnostic device will be required to comply with the IDE regulations for clinical studies involving the investigational diagnostic device. According to the guidance, if a diagnostic device and a drug are to be studied together to support their respective approvals, both products can be studied in the same clinical trial, if the clinical trial meets both the requirements of the IDE regulations and the IND regulations. The guidance provides that depending on the details of the clinical trial protocol, the investigational product(s), and subjects involved, a sponsor may seek to submit an IDE alone (e.g., if the drug has already been approved by the FDA and is used consistent with its approved labeling), or both an IND and an IDE.

Pursuing FDA approval/clearance of an in vitro companion diagnostic would require either a pre-market notification, also called 510(k) clearance, or a pre-market approval, or PMA, or a de novo classification for that diagnostic. The review of companion diagnostics involves coordination of review with the FDA's Center for Devices and Radiological Health.

510(k) clearance process

To obtain 510(k) clearance, a pre-market notification is submitted to the FDA demonstrating that the proposed device is substantially equivalent to a previously cleared 510(k) device or a device that was in commercial distribution before May 28, 1976, for which the FDA has not yet required the submission of a PMA application. The FDA's 510(k) clearance process may take three to 12 months from the date the application is submitted and filed with the FDA, but may take longer if the FDA requests additional information, among other reasons. In some cases, the FDA may require clinical data to support substantial equivalence. In reviewing a pre-market notification submission, the FDA may request additional information, which may significantly prolong the review process. Notwithstanding compliance with all these requirements, clearance is never assured.

After a device receives 510(k) clearance, any subsequent modification of the device that could significantly affect its safety or effectiveness, or that would constitute a major change in its intended use, will require a new 510(k) clearance or require a PMA. In addition, the FDA may make substantial changes to industry requirements, including which devices are eligible for 510(k) clearance, which may significantly affect the process.

De novo classification process

If a new medical device does not qualify for the 510(k) pre-market notification process because no predicate device to which it is substantially equivalent can be identified, the device is automatically classified into Class III. The Food and Drug Administration Modernization Act of 1997 established a different route to market for low to moderate risk medical devices that are automatically placed into Class III due to the absence of a predicate device, called the ''Request for Evaluation of Automatic Class III Designation,'' or the de novo classification process. This process allows a manufacturer whose novel device is automatically classified into Class III to request down-classification of its medical device into Class I or Class II on the basis that the device presents low or moderate risk, rather than requiring the submission and approval of a PMA. If the manufacturer seeks reclassification into Class II, the manufacturer must include a draft proposal for special controls that are necessary to provide a reasonable assurance of the safety and effectiveness of the medical device. The FDA may reject the reclassification petition if it identifies a legally marketed predicate device that would be appropriate for a 510(k) or determines that the device is not low to moderate risk and requires PMA or that general controls would be inadequate to control the risks and special controls cannot be developed.

Obtaining FDA marketing authorization, de novo down-classification, or approval for medical devices is expensive and uncertain, and may take several years, and generally requires significant scientific and clinical data.

PMA process

The PMA process, including the gathering of clinical and nonclinical data and the submission to and review by the FDA, can take several years or longer. The applicant must prepare and provide the FDA with reasonable assurance of the device's safety and effectiveness, including 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 medical 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. In particular, for a diagnostic, the applicant must demonstrate that the diagnostic produces reproducible results. As part of the PMA review, the FDA will typically inspect the manufacturer's facilities for compliance with the Quality System Regulation, or QSR, which imposes extensive testing, control, documentation, and other quality assurance and GMP requirements.

Post-approval Requirements

Following approval of a new product, the manufacturer and the approved product are subject to continuing regulation by the FDA, including, among other things, monitoring and record-keeping requirements, requirements to report adverse events and comply with promotion and advertising requirements, which include restrictions on promoting drugs for unapproved uses or patient populations, known as ''off-label promotion,'' and limitations on industry-sponsored scientific and educational activities. Although physicians may prescribe legally available drugs for off-label uses, manufacturers may not market or promote such uses. Prescription drug promotional materials must be submitted to the FDA in conjunction with their first use. Further, if there are any modifications to the drug, including changes in indications, labeling or manufacturing processes or facilities, the applicant may be required to submit and obtain FDA approval of a new NDA or NDA supplement, which may require the development of additional data or preclinical studies and clinical trials.

The FDA may also place other conditions on approvals including the requirement for REMS, to assure the safe use of the product. A REMS 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. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Product approvals may be withdrawn for non-compliance with regulatory standards or if problems occur following initial marketing.

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 the product, complete withdrawal of the product from the market, or product recalls;
- fines, warning letters, or holds on post-approval clinical studies;
- refusal of the FDA to approve pending applications or supplements to approved applications;
- suspension or revocation of product approvals;
- product seizure or detention;
- refusal to permit the import or export of products; and
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications 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, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

Similar to post-approval regulatory requirements that apply to drug products, for any medical devices that we may develop in the future, after a medical device is placed on the market, numerous regulatory requirements apply. These include: the quality manufacturing requirements set forth in the Quality System Regulation, or QSR, labeling regulations, the FDA's general prohibition against promoting products for unapproved or ''off label'' uses, registration and listing, the Medical Device Reporting, or MDR, regulation (which requires that manufacturers report to the FDA if the device may have caused or contributed to a death or serious injury or malfunctioned in a way that would likely cause or contribute to a death or serious injury if the malfunction were to recur), and the Reports of Corrections and Removals regulation (which requires manufacturers to report recalls

and field actions to the FDA if initiated to reduce a risk to health posed by the device or to remedy a violation of the Federal Food, Drug, and Cosmetic Act). The FDA enforces these requirements by unannounced inspection, market surveillance and other means. If the FDA finds a violation, it can institute a wide variety of enforcement actions, ranging from an untitled regulatory letter or a warning letter, to more severe sanctions such as fines, injunctions and civil penalties; recall or seizure of products; operating restrictions, partial suspension or total shutdown of production; refusing requests for 510(k) clearance or PMA approval of new products; withdrawing 510(k) clearance or PMA approvals already granted; and criminal prosecution.

Other U.S. Regulatory Matters

Pharmaceutical manufacturers are subject to various healthcare laws, regulation, and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which they conduct their business. Our conduct, including those of our employees, as well as our business operations and relationships with third parties, including current and future arrangements with healthcare providers, third-party payors, customers, and others may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations, which may constrain the business or financial arrangements and relationships through which we research, as well as, sell, market, and distribute any products for which we obtain marketing approval. The applicable federal, state and foreign healthcare laws and regulations that may affect our ability to operate include, but are not limited to:

- The federal Anti-Kickback Statute, which makes it illegal for any person, including a prescription drug manufacturer (or a party acting on its behalf), to knowingly and willfully solicit, receive, offer or pay any remuneration that is intended to induce or reward referrals, including the purchase, recommendation, order or prescription of a particular drug, for which payment may be made under a federal healthcare program, such as Medicare or Medicaid. Moreover, the ACA provides that 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 false claims, including the civil False Claims Act that can be enforced by private citizens through civil whistleblower or qui tam actions, and civil monetary penalties prohibit individuals or entities from, among other things, knowingly presenting, or causing to be presented, to the federal government, claims for payment that are false or fraudulent or making a false statement to avoid, decrease or conceal an obligation to pay money to the federal government, and/or impose exclusions from federal health care programs and/or penalties for parties who engage in such prohibited conduct.
- The Federal Health Insurance Portability and Accountability Act of 1996 (HIPAA), prohibits, among other things, executing or attempting to execute a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters.
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, and their implementing regulations also impose obligations on covered entities such as health insurance plans, healthcare clearinghouses, and certain health care providers and their respective business associates, including mandatory contractual terms as well as their covered subcontractors, with respect to safeguarding the privacy, security and transmission of individually identifiable health information.
- The federal Physician Payments Sunshine Act requires applicable manufacturers of covered drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with specific exceptions, to annually report to Centers for Medicare & Medicaid Services (CMS), an agency within the U.S. Department of Health and Human Services (HHS), information regarding certain payments and other transfers of value to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain non-physician healthcare professionals (such as physician assistants and nurse practitioners, among others), and teaching hospitals, as well as information regarding ownership and investment interests held by physicians and their immediate family members;
- Analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws which may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental third-party payors, including private insurers, state laws that require biotechnology companies to comply with the biotechnology industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government; state and local laws that

require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures and require the registration of their sales representatives, state laws that require biotechnology companies to report information on the pricing of certain drug products, and state and foreign laws that govern the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Pricing and rebate programs must also comply with the Medicaid rebate requirements of the U.S. Omnibus Budget Reconciliation Act of 1990 and more recent requirements in the ACA. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. Manufacturing, sales, promotion and other activities also are potentially subject to federal and state consumer protection and unfair competition laws. In addition, the distribution of pharmaceutical products is subject to additional requirements and regulations, including extensive record-keeping, licensing, storage and security requirements intended to prevent the unauthorized sale of pharmaceutical products. Products must meet applicable child-resistant packaging requirements under the U.S. Poison Prevention Packaging Act as well as other applicable consumer safety requirements.

The failure to comply with any of these laws or regulatory requirements subjects firms to possible legal or regulatory action. Depending on the circumstances, failure to meet applicable regulatory requirements can result in significant civil, criminal and administrative penalties, including damages, fines, disgorgement, imprisonment, exclusion from participation in government funded healthcare programs, such as Medicare and Medicaid, integrity oversight and reporting obligations, contractual damages, reputational harm, diminished profits and future earnings, injunctions, requests for recall, seizure of products, total or partial suspension of production, denial or withdrawal of product approvals or refusal to allow a firm to enter into supply contracts, including government contracts.

U.S. Patent-term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of FDA approval of any future product candidates, some of our U.S. patents may be eligible for limited patent term extension under the Hatch-Waxman Act. The Hatch-Waxman Act permits restoration of the patent term of up to five years as compensation for patent term lost during product development and FDA regulatory review process. Patent-term restoration, however, cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date. The patent-term restoration period is generally one-half the time between the effective date of an IND or the issue date of the patent, whichever is later, and the submission date of an NDA plus the time between the submission date of an NDA or the issue date of the patent, whichever is later, and the approval of that application, except that the review period is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved drug is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. The USPTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may apply for restoration of patent term for our currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant NDA.

Market exclusivity provisions under the FDCA also can delay the submission or the approval of certain applications. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to gain 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 accept for review an abbreviated new drug application (ANDA), or a 505(b)(2) NDA submitted by another company for a generic version of such drug 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. The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) 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 conditions of use associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. 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 all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness or generate such data themselves.

European Union Drug Development

Similar to the United States, the various phases of preclinical and clinical research in the European Union are subject to significant regulatory controls. Although the EU Clinical Trials Directive 2001/20/EC has sought to harmonize the EU clinical trials regulatory framework, setting out common rules for the control and authorization of clinical trials in the EU, the EU Member States have transposed and applied the provisions of the Directive differently. This has led to significant variations in the member state regimes. Under the current regime, before a clinical trial can be initiated, it must be approved in each of the EU countries where the clinical trial is to be conducted by two distinct bodies: the National Competent Authority (NCA), and one or more Ethics Committees (ECs). Under the current regime all suspected unexpected serious adverse reactions to the investigated drug that occur during the clinical trial have to be reported to the NCA and ECs of the Member State where they occurred.

The EU clinical trials legislation currently is undergoing a transition process mainly aimed at harmonizing and streamlining clinical-trial authorization, simplifying adverse-event reporting procedures, improving the supervision of clinical trials and increasing their transparency. Recently enacted Clinical Trials Regulation EU No 536/2014, which entered into application on January 31, 2022, ensures that the rules for conducting clinical trials in the EU will be identical and simplifies the rules for clinical trial authorization and standards of performance.

European Union Drug Review and Approval

In the European Economic Area (EEA), which is comprised of the 27 Member States of the European Union and three European Free Trade Association States (Norway, Iceland and Liechtenstein), medicinal products can only be commercialized after obtaining a Marketing Authorization (MA). There are two types of marketing authorizations.

- The Community MA 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 EMA, and is valid throughout the entire territory of the EEA. The Centralized Procedure is mandatory for certain types of products, such as biotechnology medicinal products, orphan medicinal products, advanced-therapy medicines such as gene-therapy, somatic cell-therapy or tissue-engineered medicines and medicinal products containing a new active substance indicated for the treatment of HIV, AIDS, cancer, neurodegenerative disorders, diabetes, auto-immune and other immune dysfunctions and viral diseases. The Centralized Procedure is optional for products containing a new active substance not yet authorized in the EEA, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the EU.
- National MAs, which are issued by the competent authorities of the Member States of the EEA 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 a Member State of the EEA, this National MA can be recognized in another Member States 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 (RMS). The competent authority of the RMS prepares a draft assessment report, a draft summary of the product characteristics (SmPC), and a draft of the labeling and package leaflet, which are sent to the other Member States (referred to as the Member States Concerned) for their approval. If the Member States Concerned raise no objections, based on a potential serious risk to public health, to the assessment, SmPC, labeling or packaging proposed by the RMS, the product is subsequently granted a national MA in all the Member States (i.e., in the RMS and the Member States Concerned).

Under the above described procedures, before granting the MA, EMA or the competent authorities of the Member States of the EEA make an assessment of the risk-benefit balance of the product on the basis of

scientific criteria concerning its quality, safety and efficacy. Similar to the U.S. patent term-restoration, Supplementary Protection Certificates (SPCs) serve as an extension to a patent right in Europe for up to five years. SPCs apply to specific pharmaceutical products to offset the loss of patent protection due to the lengthy testing and clinical trials these products require prior to obtaining regulatory marketing approval.

Coverage and Reimbursement

Sales of our products, if approved, will depend, in part, on the extent to which our products will be covered by third-party payors, such as government health programs, commercial insurance and managed healthcare organizations. There is significant uncertainty related to third-party payor coverage and reimbursement of newly approved products. In the United States, for example, principal decisions about reimbursement for new products are typically made by CMS. CMS decides whether and to what extent a new product will be covered and reimbursed under Medicare, and private third-party payors often follow CMS's decisions regarding coverage and reimbursement to a substantial degree. However, no uniform policy of coverage and reimbursement for drug products exists. Accordingly, decisions regarding the extent of coverage and amount of reimbursement to be provided for any of our products will be made on a payor-by-payor basis.

Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. Further, such payors are increasingly challenging the price, examining the medical necessity and reviewing the cost effectiveness of medical product candidates. There may be especially significant delays in obtaining coverage and reimbursement for newly approved drugs. Third-party payors may limit coverage to specific product candidates on an approved list, known as a formulary, which might not include all FDA-approved drugs for a particular indication. We may need to conduct expensive pharmaco-economic studies to demonstrate the medical necessity and cost effectiveness of our products. 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 obtained.

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.

In addition, in most foreign countries, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing and reimbursement vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our products. Historically, products launched in the European Union do not follow price structures of the United States and generally prices tend to be significantly lower.

Healthcare Reform

The United States government, state legislatures and foreign governments have shown significant interest in implementing cost containment programs to limit the growth of government-paid healthcare costs, including price-controls, restrictions on reimbursement and requirements for substitution of generic products for branded prescription drugs. For example, the ACA substantially changed the way healthcare is financed by both the government and private insurers, and continues to significantly impact the U.S. pharmaceutical industry. The ACA contains provisions that may reduce the profitability of drug products through increased rebates for drugs reimbursed by Medicaid programs, extension of Medicaid rebates to Medicaid managed care plans, mandatory discounts for certain Medicare Part D beneficiaries and annual fees based on pharmaceutical companies' share of sales to federal health care programs. The Medicaid Drug Rebate Program requires pharmaceutical manufacturers to enter into and have in effect a national rebate agreement with the Secretary of HHS as a condition for states to receive federal matching funds for the manufacturer's outpatient drugs furnished to Medicaid patients. The ACA made several changes to the Medicaid Drug Rebate Program, including increasing pharmaceutical manufacturers'

rebate liability by raising the minimum basic Medicaid rebate on most branded prescription drugs from 15.1% of average manufacturer price (AMP), to 23.1% of AMP and adding a new rebate calculation for "line extensions" (i.e., new formulations, such as extended release formulations) of solid oral dosage forms of branded products, as well as potentially impacting their rebate liability by modifying the statutory definition of AMP. The ACA also expanded the universe of Medicaid utilization subject to drug rebates by requiring pharmaceutical manufacturers to pay rebates on Medicaid managed care utilization and by enlarging the population potentially eligible for Medicaid drug benefits. Additionally, for a drug product to receive federal reimbursement under the Medicaid or Medicare Part B programs or to be sold directly to U.S. government agencies, the manufacturer must extend discounts to entities eligible to participate in the 340B drug pricing program. The required 340B discount on a given product is calculated based on the AMP and Medicaid rebate amounts reported by the manufacturer.

Since its enactment, there have been executive, judicial and Congressional challenges to certain aspects of the ACA. The Bipartisan Budget Act of 2018 (the BBA), among other things, amended the ACA, effective January 1, 2019, to close the coverage gap in most Medicare Part D drug plans. In June 2021, the U.S. Supreme Court held that Texas and other challengers had no legal standing to challenge the ACA, dismissing the case on procedural grounds without specifically ruling on the constitutionality of the ACA. Thus, the ACA will remain in effect in its current form. In January 2021, President Biden issued an Executive Order that initiates a special enrollment period to allow people to obtain health insurance coverage through the ACA marketplace, and instructs certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, among others. It is possible that the ACA will be subject to judicial or Congressional challenges in the future. It is unclear how any such challenges and healthcare measures promulgated by the Biden administration will impact the ACA, our business, financial condition and results of operations. Complying with any new legislation or reversing changes implemented under the ACA could be time-intensive and expensive, resulting in a material adverse effect on our business.

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. These changes included aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, effective April 1, 2013, which, due to subsequent legislative amendments, will stay in effect through 2031, with the exception of a temporary suspension implemented under various COVID-19 relief legislation from May 1, 2020 through March 31, 2022, unless additional congressional action is taken. Under current legislation, the actual reduction in Medicare payments will vary from 1% in 2022 to up to 4% in the final fiscal year of this sequester. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These laws may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on customers for our drugs, if approved, and accordingly, our financial operations.

Additionally, there has been heightened governmental scrutiny recently over the manner in which drug 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 drug 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. For example, under the American Rescue Plan Act of 2021, effective January 1, 2024, the statutory cap on Medicaid Drug Rebate Program rebates that manufacturers pay to state Medicaid programs will be eliminated. Elimination of this cap may require pharmaceutical manufacturers to pay more in rebates than it receives on the sale of products, which could have a material impact on our business. In August 2022, Congress passed the Inflation Reduction Act of 2022, which includes prescription drug provisions that have significant implications for the pharmaceutical industry and Medicare beneficiaries, including allowing the federal government to negotiate a maximum fair price for certain high-priced single source Medicare drugs, imposing penalties and excise tax for manufacturers that fail to comply with the drug price negotiation requirements, requiring inflation rebates for all Medicare Part B and Part D drugs, with limited exceptions, if their drug prices increase faster than inflation, and redesigning Medicare Part D to reduce out-of-pocket prescription drug costs for beneficiaries, among other changes. The impact of these legislative, executive, and administrative actions and any future healthcare measures and agency rules implemented by the

Biden administration on us and the pharmaceutical industry as a whole is unclear. 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.

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. For example, a number of states are considering or have recently enacted state drug price transparency and reporting laws that could substantially increase our compliance burdens and expose us to greater liability under such state laws once we begin commercialization after obtaining regulatory approval for any of our products. We are unable to predict the future course of federal or state healthcare legislation in the United States directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. We cannot predict the likelihood, nature, or extent of health reform initiatives that may arise from future federal and state legislation or administrative action. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

Facilities

Our offices are located in San Francisco and San Diego, California. In San Francisco, we lease 5,698 square feet of office space, under a lease that expires on June 30, 2026, with an option to extend for an additional three years at the end of the initial term. In San Diego, we occupy 8,088 square feet of office space under a lease which commenced in March 2022 for an initial term of five years and four months. We believe that our facilities are sufficient to meet our current needs and that suitable additional space will be available as and when needed.

Corporate Responsibility

Overview

We believe it is our responsibility and duty to patients to utilize and expand our drug discovery capabilities and to create a broad portfolio of targeted oncology product candidates.

In 2022, we examined our environmental, social and governance (ESG) practices and with support from senior management and cross-functional contributions by human resources, legal department and investor relations/corporate communications personnel, we are advancing our efforts to mitigate relevant ESG risks appropriate for a company of our stage and size. Our board of directors and executive management team oversee our overall strategy, risk management and corporate governance and sustainability.

Social

We are committed to driving social impact through our product candidate pipeline and operating in a way that is respectful and inclusive of all stakeholders. As a clinical-stage precision oncology company, our product candidates have not achieved marketing authorizations in any global geography. In 2022, we spent $88.2 million on research and development activities—a 31% increase over 2021. We currently have two programs in the clinic and multiple undisclosed programs in research stage.

We believe our two clinical product candidates, exarafenib and KIN-3248, could help over 100,000 patients and their caregivers. For example, for exarafenib, patients with BRAF Class II or Class III alterations have no approved targeted therapy treatment options today and for KIN-3248, patients who have been treated with first-generation FGFR inhibitors often develop resistance to treatment, which shortens their duration of response. We estimate that each month of life extension for patients could lead to a risk-adjusted lifetime value for all patients of over $1 billion from both programs. Further, caregivers of patients with cancer typically need to significantly change their lives to provide care, which can lead to increased psychological morbidity and economic burden. Approximately 50% of caregivers experience severe decline of quality of life. Providing new treatment options for patients who are currently underserved could improve caregivers' quality of life.

Below are additional examples that demonstrate our commitment to social impact.

Drug Safety & Quality

The safety of patients in our clinical trials is a company-wide focus. We conduct ongoing assessments of the safety risk profile of our product candidates throughout all stages of development.

- Before entering clinical trials, our product candidates are subjected to preclinical testing to evaluate their potential for therapeutic benefit in humans. Preclinical tests include laboratory evaluations of product chemistry, stability, and formulation, as well as animal studies to assess the potential toxicity and biological activity. We are committed to the ethical use of animals in preclinical testing. Animal studies are carefully reviewed by an Institutional Animal Care and Use Committee (IACUC), which is charged with ensuring that a proposed preclinical study is essential. IACUC review is required by U.S. federal and state laws. Additionally, we adhere to the principles of the ''Three Rs''—Replacement, Reduction and Refinement—the ethical principles that are embedded in the conduct of animal-based science. Replacement refers to technologies or approaches that directly replace or avoid the use of animals in studies where they would otherwise have been used. Reduction refers to methods that minimize the number of animals used per study consistent with scientific aims. Refinement refers to methods that minimize the pain, suffering, distress or lasting harm that may be experienced by research animals, and which improve their welfare.
- Potential safety concerns are communicated to researchers, participants and regulators in compliance with FDA, EU and other global regulations and global industry Good Vigilance Practice (GVP). All pharmacovigilance activities are conducted under internal standard operating procedures or those of our contracted partners. All relevant staff undertake training on pharmacovigilance processes. We also monitor the quality of the safety work done by our partners and confirm adherence to regulations and guidelines. We do not own or operate manufacturing facilities for any of our product candidates. Instead, we rely on third-party CMOs to supply the required raw materials and finished products for our preclinical studies and clinical trials. These CMOs are required to comply with applicable FDA manufacturing requirements contained in the FDA's Current Good Manufacturing Practices (cGMP) regulations. The cGMP regulations require, among other things, quality control and quality assurance, as well as corresponding maintenance of records and documentation.

Clinical Trials

- We comply with Good Clinical Practice (GCP) for designing, conducting, recording and reporting clinical trials. GCP is an international ethical and scientific quality standard that is provided by the International Council on Harmonization. Compliance with this standard provides public assurance that the rights, safety and well-being of clinical trial patients are protected and that the clinical trial data are credible. For each of our clinical trials, an Informed Consent Form (ICF) template is developed and submitted to an Institutional Review Board/Ethics Committee for approval before adoption. The ICF provides information regarding the rights of clinical trial patients and includes relevant contact information in the event of a concern or complaint.
- We are currently conducting Phase 1 clinical trials for two of our programs. Patients may participate in these clinical trials if they meet certain enrollment criteria.

Human Capital: Employee Recruitment, Development & Retention

We rely on skilled, innovative, and passionate employees to conduct our research, development and business activities. We are committed to fostering a workplace community that attracts, motivates and keeps our team of high achieving professionals, which is critical to the continued success of our business and operating within the highly competitive biopharmaceutical industry.

To do so, we offer competitive compensation and benefits, a collaborative work environment, ongoing professional development initiatives, attractive career advancement opportunities, and a culture that values diversity, equity, inclusion and belonging (DEI&B).

As of December 31, 2022, we had 84 full-time employees, including 63 employees engaged in research and development, of which 30 hold an MD, PhD or PharmD.

- Our competitive compensation and comprehensive benefits package is available to full-time employees and includes:
  - Potential equity grants, such as stock options and restricted stock units (RSUs);
  - Cash-incentive plans, such as performance-based bonuses;
  - Employee Stock Purchase Plan, a benefit we believe will help to further incentivize employees to contribute to the company's success;
  - Retirement savings plan, with company contributions;
  - Medical, dental and vision plans with no to low-cost options for employees;
  - Employee referral program for certain employees;
  - Employee assistance program, which offers no-cost counseling and other resources;
  - Flexible spending for healthcare and dependent care;
  - Company paid life, short and long-term disability insurance;
  - Voluntary insurance for life-illness-accident, auto, pet, home, identity theft protection, personal excess liability, legal service;
  - Work/life balance benefits, including unlimited paid time off (vacation and sick leave), annual paid ''refresher'' days, annual massage days, healthy lifestyle reimbursement programs, home office reimbursement programs, gym access/reimbursement;
  - Commuter benefits; and
  - Company-wide events to support and encourage relationship development, teamwork and collaboration.
- Our employees are encouraged to voice their opinions and stretch themselves professionally. We offer the opportunity to learn and grow professionally alongside talented colleagues who are committed to helping those battling cancer and to perform to the best of their abilities to achieve our objectives. This includes:
  - Performance reviews: all employees are eligible for annual performance reviews and mid-year check-ins with their managers;
  - Individual development plans: All employees participate in creating their individual development plans designed to support long-term skill and professional development;
  - 360 assessments: Certain employees participate in assessments that provide feedback for their future development and growth; and
  - Engagement survey: we conduct an annual employee-wide, anonymous survey to assess our performance on metrics including innovation, teamwork, ownership, work-life balance, collaboration and leadership.
- In 2022, we proudly promoted ten employees, of whom 60% were women and 80% were people of color. In addition, in 2022, we created a new leadership band level, Executive Director, as an opportunity for advancement for qualified employees; 50% of our Executive Directors are people of color.

Human Capital: Diversity, Equity, Inclusion & Belonging (DEI&B)

- We are in the early days of our growth and are committed to improving our DEI&B strategies and performance. We are proud of the gender and ethnic diversity we have cultivated throughout the company thus far. We intend to continue to develop and improve our DEI&B practices, including nurturing a culture where all employees feel empowered to be their authentic selves. We believe that

diversity of viewpoints, backgrounds, professional experiences, education and personal characteristics, including gender, race, ethnicity, national origin, age, sexual orientation, gender identity and other similar demographics cultivate a cohesive and productive work environment.

- We currently have 89 full-time employees and are proud to employ a diverse workforce that is 51% people of color and 60% women. In addition, women comprise 29% of our leadership team and 40% of our board of directors.
- Substantially all our employees are based in San Diego, California and San Francisco, California. None of our employees are represented by labor unions or covered by collective bargaining agreements. We consider our relationship with our employees to be good.

Human Capital: Occupational Health & Safety

- We are committed to providing a healthy and safe work environment for our employees, partners and consultants.
- In 2022, following the peak of the COVID-19 pandemic and subsequent surges, we moved toward having more of our workforce onsite, and implemented a two-day in-office policy. To ensure the health, safety and well-being of our employees while onsite, we enforced a vaccine mandate for all employees and others visiting our offices (subject to applicable law), in addition to adopting state-mandated protocols in the event an employee was exposed to or tested positive for the COVID-19 virus.
- We offer our employees free face masks, COVID-19 tests and an Employee Assistance Program that includes no-cost resources and confidential counseling for employees and their household members.

Environmental

We are committed to minimizing the environmental impacts of our business. We currently do not operate laboratory facilities and therefore have limited hazardous waste. We encourage all employees to reduce waste and emissions through recycling and other energy conservation measures. The following are a few of the initiatives that demonstrate our commitment to environmental impact:

- Our employees are required to promptly report any known or suspected violations of environmental laws or any events that may result in a discharge or emission of hazardous materials.
- We have recycling in our offices.
- We minimize use of disposable bottles and printing of paper.
- Our facility in San Diego is LEED certified. LEED (Leadership in Energy and Environmental Design) is the most widely used green building rating system in the world.
- We have commuter benefits programs in place that encourage employees to walk, bike or utilize public transportation instead of cars for their commutes.
- We encourage video conferencing for non-essential meetings to reduce travel and commute emissions.

Governance

We are committed to transparent, efficient and fair business practices and have established a robust governance infrastructure to facilitate this. We expect everyone working for and with us to always act with integrity.

- Our board of directors is currently chaired by an independent Chair. As a general policy, our board of directors believes that separation of the positions of Chair of our board of directors and Chief Executive Officer reinforces the independence of our board of directors from management, creates an environment that encourages objective oversight of management's performance and enhances the effectiveness of our board of directors as a whole. As such, our Chief Executive Officer serves in that role (in addition to serving as our President) while the Chair of our board of directors serves in that role but is not an officer. We currently expect the positions of Chair of our board of directors and Chief Executive Officer to continue to be held by two individuals in the future.
- We review and, where relevant, enhance our policies to ensure we continue to adhere to the highest standards of ethics and compliance. Our principles regarding fair, ethical and honest business dealings,

compliance with applicable laws and the expected standard of behavior governing all our employees are outlined in our Code of Business Conduct and Ethics. The topics covered in our Code of Conduct and Ethics include corporate ethics, bribery and corruption, whistleblower policies, political involvement and other dimensions of corporate ethics.

- At the start of employment, each of our employees is required to review and acknowledge a variety of company policies, including our =Code of Business Conduct and Ethics and Insider Trading Policy, and complete anti-harassment training.
- In the event of an ethical concern, our personnel can approach their manager, approach our General Counsel or use our anonymous compliance hotline. Retaliation in any form against any employee who in good faith complains of an issue, who reports a compliant or who cooperates in the investigation of a complaint is strictly prohibited and may itself be cause for appropriate disciplinary action.
- We have adopted policies and procedures and conduct training to ensure appropriate management of data privacy and cybersecurity risks. We also have an information security incident response plan that defines our process for investigating, reporting and managing cybersecurity incidents and/or data breaches. Our cybersecurity and privacy programs are overseen by our General Counsel.

Corporate Information

We were incorporated in Delaware in January 2018. Our principal executive offices are located 103 Montgomery Street, Suite 150, The Presidio of San Francisco, San Francisco, CA 94129. We also have offices at 12830 El Camino Real, Suite 150, San Diego, CA 92130. Our telephone number is (858) 299-4699. Our website address is www.kinnate.com. Information contained on the website is not incorporated by reference into this Annual Report on Form 10-K or any other filings we make with the SEC.

We may announce material information to the public through filings with the SEC, our website, press releases, public conference calls, and public webcasts. We use these channels, as well as social media, to communicate with the public about Kinnate, its product candidates and other matters. As such, investors, the media and others are encouraged to review the information disclosed through our social media and other channels listed above as such information could be deemed to be material information. Please note that this list may be updated from time to time. We also make available on or through our website certain reports and amendments to those reports that we file with or furnish to the SEC in accordance with the Securities Exchange Act of 1934, as amended (Exchange Act). These include our Annual Reports on Form 10-K, our quarterly reports on Form 10-Q, and our 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. We make this information available on or through our website free of charge as soon as reasonably practicable after we electronically file the information with, or furnish it to, the SEC.

We use the Kinnate logo and other marks as trademarks in the United States and other countries. This periodic report contains references to our trademarks and service marks and to those belonging to other entities. Solely for convenience, trademarks and trade names referred to in this periodic report, including logos, artwork and other visual displays, may appear without the TM symbol, but such references are not intended to indicate in any way that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other entities' trade names, trademarks or service marks to imply a relationship with, or endorsement or sponsorship of us by, any other entity.

Item 1A. Risk Factors

Investors should carefully consider the risks described below, as well as the other information in this Annual Report on Form 10-K, including our consolidated financial statements and the related notes and the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations," and in our other public filings in evaluating our business. The occurrence of any of the events or developments described below could harm our business, financial condition, results of operations, and growth prospects. In such an event, the market price of our common stock could decline. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations and the market price of our common stock.

Risk Factor Summary

Our business operations are subject to numerous risks and uncertainties, including those outside of our control, that could cause our actual results to be harmed, including risks related to the following:

Risks Related to our Financial Position and Need for Additional Capital

- We are early in our development efforts and have a limited operating history and no products approved for commercial sale.
- We have incurred significant net losses and expect to continue to incur significant net losses for the foreseeable future.
- Our ability to generate revenue and achieve profitability depends on our ability to achieve our objectives relating to discovery, development and commercialization of our product candidates.
- Changing circumstances and market conditions, some of which may be beyond our control, could impair our ability to access our existing cash and cash equivalents and investments and to timely pay key vendors and others.
- We will require substantial additional capital to finance our operations.

Risks Related to the Discovery, Development and Commercialization of our Product Candidates

- We are substantially dependent on our RAF and FGFR programs.
- Our preclinical studies and clinical trials may fail to demonstrate the safety and efficacy of our product candidates.
- Our discovery and development activities are focused on the development of therapeutics in an evolving area of science.
- The outcome of testing and early clinical trials may not be predictive of the success of later clinical trials.
- In addition to our RAF and FGFR programs, our prospects depend in part upon discovering, developing and commercializing product candidates from our CDK12 and other research programs.
- Our approach to the discovery and development of product candidates is unproven.
- The regulatory approval processes of regulatory authorities are lengthy, time consuming and unpredictable.
- We have limited experience as a company in conducting clinical trials.
- We may not be able to file INDs on the timelines we expect.
- Our product candidates may cause significant adverse events, toxicities or other undesirable side effects.
- Data from our preclinical studies and clinical trials may change as more data become available and are subject to verification.
- We could experience delays or difficulties in the enrollment or maintenance of patients in clinical trials.

- COVID-19 or other public health concerns could adversely impact our business.
- We face substantial competition which may result in others discovering, developing or commercializing products before us.
- The manufacture of drugs is complex, and third-party manufacturers may encounter production difficulties.
- Our product candidates may not achieve adequate market acceptance among the medical community.
- The market opportunities for our product candidates may be limited to certain smaller patient subsets.
- Our product candidates may become subject to unfavorable third-party coverage and reimbursement practices.
- Our business entails a significant risk of product liability.

Risks Related to Regulatory Approval and Other Legal Compliance Matters

- We may be unable to obtain regulatory approval and be unable to commercialize our product candidates.
- We may develop our product candidates with other therapies, which would expose us to additional risks.
- We have never commercialized a product candidate as a company and currently lack the resources to do so on our own or with others.
- Regulatory authorities may not accept data from clinical trials conducted in locations outside of their jurisdiction.
- Obtaining regulatory approval in one jurisdiction does not mean we will be successful in other jurisdictions.
- Any product candidates that receive regulatory approval will be subject to post-marketing regulations.
- Regulatory authorities actively enforce the laws and regulations prohibiting the promotion of off-label uses.
- Failure to obtain approval of a required companion diagnostic test, will prevent commercialization of the product candidate.
- Where appropriate, we plan to secure approval from regulatory authorities through accelerated registration pathways. If we are unsuccessful, we may be required to conduct additional preclinical studies or clinical trials.
- We may seek, but not obtain, additional Fast Track designations from the FDA for our product candidates.
- A Breakthrough Therapy designation by the FDA may not lead to a faster review or approval process.
- We may not be able to obtain orphan drug designation or maintain orphan drug exclusivity for one or more of our product candidates.
- We may face difficulties from changes to current regulations and future legislation.
- Our relationships with healthcare professionals, clinical investigators, CROs and third-party payors may be subject to reporting requirements and various laws.
- We must comply with regulations governing the use, processing and cross-border transfer of personal information.
- Our employees, service providers, suppliers and vendors may engage in misconduct or other improper activities.
- Our business activities may be subject to the U.S. Foreign Corrupt Practices Act (FCPA) and similar foreign laws, as well as U.S. and foreign export controls, trade sanctions, and import laws and regulations.
- If we fail to comply with California laws or Nasdaq rules governing the diversity of our board of directors, we could be exposed to financial penalties and suffer reputational harm.

Risks Related to Employee Matters, Managing Our Growth and Other Risks Related to Our Business

- Our success is highly dependent on our ability to attract, hire and retain highly skilled executive officers and employees.
- We will need to grow the size and capabilities of our organization, and we may experience difficulties in managing growth.
- Our internal computer systems, or those of any of our service providers, may fail or suffer security or data privacy breaches or incidents.
- Many of our research and preclinical activities are conducted by third parties outside of the United States, including in China.
- Our operations are vulnerable to interruption by natural disasters, war, terrorist activity, pandemics and other events.
- If we are unable to establish sales or marketing capabilities or enter into agreements with third parties to sell or market our product candidates, we may not be able to successfully sell or market our product candidates that obtain regulatory approval.
- A variety of risks associated with marketing our product candidates internationally could adversely affect our business.
- Our ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.
- The stock-based compensation expense related to our RSUs and other outstanding equity awards will result in increases in our expenses in future periods.
- Changes in tax laws or in their implementation may adversely affect our business and financial condition.
- Inflation could negatively impact our business and results of operations.

Risks Related to Our Intellectual Property

- Our success depends on our ability to protect our intellectual property and our proprietary technologies.
- The scope of our patent protection may not be sufficiently broad, or we could lose patent protection.
- Intellectual property rights do not necessarily address all potential threats to our competitive advantage.
- Our commercial success depends on our operating without infringing the patents and other proprietary rights of third parties.
- We may not be successful in obtaining or maintaining rights to our future product candidates.
- We may be involved in lawsuits to protect or enforce our patents or our future licensors' patents.
- The outcome of derivation proceedings may require us to cease using or attempt to license the related technology.
- Patent reform legislation may increase uncertainties and costs of prosecuting patent applications and enforcing issued patents.
- Changes in patent law could increase uncertainties and costs of prosecuting patent applications and enforcing issued patents or diminish the value of patents in general.
- We may be subject to claims challenging the inventorship or ownership of our patents and other intellectual property.
- Patent terms may be inadequate to protect our competitive position on our product candidates.
- If we do not obtain patent term extension for our product candidates, our business may be materially harmed.
- We may not be able to protect our intellectual property rights throughout the world.

Risks Related to Our Dependence on Third Parties

- We rely on third parties to conduct our preclinical studies and clinical trials, and they may not perform satisfactorily.
- We contract with third parties for the manufacture of our product candidates for preclinical studies and clinical trials and expect to continue to do so for additional preclinical studies, clinical trials and ultimately for commercialization.
- Our manufacturing process needs to comply with FDA regulations relating to the quality and reliability of such processes.
- If we engage in future acquisitions or strategic partnerships, this may increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities, and subject us to other risks.
- If our manufacturers use hazardous materials in a manner that causes injury or violates law, we may be liable for damages.
- If we decide to establish collaborations, we may have to alter our development and commercialization plans.

Risks Related to the Securities Markets and Ownership of Our Common Stock

- The market price of our common stock is volatile, which could result in substantial losses for investors.
- If securities analysts do not publish research or reports about our business, or if they publish adverse reports regarding us, our stock price and trading volume could decline.
- If we identify material weaknesses or otherwise fail to maintain an effective system of internal controls, we may not be able to accurately or timely report our financial condition or results of operations.
- Delaware law and provisions in our charter documents might prevent a change in control of our company or changes in our management, depressing the market price of our common stock.
- Our charter documents provide exclusive forums for disputes between us and our stockholders, limiting their ability to obtain a favorable judicial forum.

Risks Related to our Financial Position and Need for Additional Capital

We are very early in our development efforts, have a limited operating history, have limited experience initiating and have not completed any clinical trials, have no products approved for commercial sale and have not generated any revenue, which may make it difficult for investors to evaluate our current business and likelihood of success and viability.

We are a clinical-stage precision oncology company and have a limited operating history upon which investors can evaluate our business and prospects. We commenced operations as a company in January 2018. In May 2021, we initiated KN-8701, a Phase 1 clinical trial evaluating exarafenib. We began dosing exarafenib in humans in the second half of 2021. In the first quarter of 2022, we initiated KN-4802, a Phase 1 clinical trial evaluating KIN-3248. We began dosing KIN-3248 in humans in the second quarter of 2022. However, we have never completed any clinical trials, have no products approved for commercial sale and have never generated any revenue. Drug development is a highly uncertain undertaking and involves a substantial degree of risk. To date, we have devoted substantially all of our resources to research and development activities, including with respect to our RAF inhibitor and FGFR inhibitor programs and our CDK12 and other research programs, business planning, establishing and maintaining our intellectual property portfolio, hiring personnel, raising capital and providing general and administrative support for these operations.

We have limited experience initiating clinical trials and have not yet demonstrated our ability to successfully complete a clinical trial, obtain marketing approvals, manufacture a commercial-scale product or arrange for a third party to do so on our behalf, or conduct sales and marketing activities necessary for successful product commercialization. As a result, it may be more difficult for investors or others to accurately predict our likelihood of success and viability than it could be if we had a longer operating history.

In addition, we may encounter unforeseen expenses, difficulties, complications, delays and other known and unknown factors and risks frequently experienced by early-stage biopharmaceutical companies in rapidly

evolving fields. We also expect that, as we advance our product candidates, we will need to transition from a company with a research and development focus to a company capable of supporting commercial activities. We have not yet demonstrated an ability to successfully overcome such risks and difficulties, or to make such a transition. If we do not adequately address these risks and difficulties or successfully make such a transition, our business will suffer.

We have incurred significant net losses in each period since our inception, and we expect to continue to incur significant net losses for the foreseeable future.

We have incurred significant net losses in each reporting period since our inception, have not generated any revenue to date and have financed our operations principally through issuances of our common stock, including in our initial public offering (IPO), and private placements of our convertible preferred stock. Our consolidated net loss was $116.3 million for the year ended December 31, 2022, and as of December 31, 2022, we had an accumulated deficit of $259.4 million. We are still in the early stages of development of our product candidates. We have initiated our first two clinical trials for exarafenib and KIN-3248 and commenced dosing in humans in each clinical trial. However, we have not yet completed any clinical trials. As a result, we expect that it will be several years, if ever, before we have a commercialized product and generate revenue from product sales. Even if we succeed in receiving marketing approval for and commercializing one or more of our product candidates, we expect that we will continue to incur substantial research and development and other expenses in order to discover, develop and market additional potential products.

We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. The net losses we incur may fluctuate significantly from quarter to quarter such that a period-to-period comparison of our results of operations may not be a good indication of our future performance. The size of our future net losses will depend, in part, on the rate of future growth of our expenses and our ability to generate revenue. Our prior losses and expected future losses have had and will continue to have an adverse effect on our working capital, our ability to fund the development of our product candidates and our ability to achieve and maintain profitability and the performance of our stock.

Our ability to generate revenue and achieve profitability depends significantly on our ability to achieve our objectives relating to the discovery, development and commercialization of our product candidates.

We rely on our team's expertise in structure-based drug discovery, translational research and patient-driven precision medicine, which we collectively refer to as our Kinnate Discovery Engine, to develop our product candidates. Our business depends significantly on the success of this engine and the development and commercialization of the product candidates that we discover with this engine. We have no products approved for commercial sale and do not anticipate generating any revenue from product sales for the next several years, if ever. Our ability to generate revenue and achieve profitability depends significantly on our ability to achieve several objectives, including:

- successful and timely completion of clinical development of product candidates from our RAF and FGFR programs and preclinical and clinical development of product candidates from our CDK12 and other research programs, and any other future programs;
- establishing and maintaining relationships with CROs and clinical sites for the clinical development of product candidates from our RAF and FGFR programs, our CDK12 and other research programs, and any other future programs;
- timely receipt of marketing approvals from applicable regulatory authorities for any product candidates for which we successfully complete clinical development;
- developing an efficient and scalable manufacturing process for our product candidates, including obtaining finished products that are appropriately packaged for sale;
- establishing and maintaining commercially viable supply and manufacturing relationships with third parties that can provide adequate, in both amount and quality, products and services to support clinical development and meet the market demand for our product candidates, if approved;
- successful commercial launch following any marketing approval, including the development of a commercial infrastructure, whether in-house or with one or more collaborators;

- a continued acceptable safety profile following any marketing approval of our product candidates;
- commercial acceptance of our product candidates by patients, the medical community and third-party payors;
- satisfying any required post-marketing approval commitments to applicable regulatory authorities;
- identifying, assessing and developing new product candidates;
- obtaining, maintaining and expanding patent protection, trade secret protection and regulatory exclusivity, both in the United States and internationally;
- defending against third-party interference or infringement claims, if any;
- entering into, on favorable terms, any collaboration, licensing or other arrangements that may be necessary or desirable to develop, manufacture or commercialize our product candidates;
- obtaining coverage and adequate reimbursement by third-party payors for our product candidates;
- addressing any competing therapies and technological and market developments; and
- attracting, hiring and retaining qualified personnel.

We may never be successful in achieving our objectives and, even if we do, may never generate revenue that is significant or large enough to achieve profitability. 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 would decrease the value of our company and could impair our ability to maintain or further our research and development efforts, raise additional necessary capital, grow our business and continue our operations.

Changing circumstances and market conditions, some of which may be beyond our control, could impair our ability to access our existing cash and cash equivalents and investments and to timely pay key vendors and others.

Changing circumstances and market conditions, some of which may be beyond our control, could impair our ability to access our existing cash and cash equivalents and investments and to timely pay key vendors and others. For example, on March 10, 2023, Silicon Valley Bank (SVB) was placed into receivership with the Federal Deposit Insurance Corporation (FDIC), which resulted in all funds held at SVB, including our funds held at SVB, being temporarily inaccessible by SVB's customers. If other banks and financial institutions with whom we have banking relationships enter receivership or become insolvent in the future in response to financial conditions affecting the banking system and financial markets, we may be unable to access, and we may lose, some or all of our existing cash and cash equivalents and investments to the extent those funds are not insured or otherwise protected by the FDIC. In addition, in such circumstances we might not be able to timely pay key vendors and others. We regularly maintain cash balances that are not insured or are in excess of the FDIC's insurance limit. Any delay in our ability to access our cash and cash equivalents and investments (or the loss of some or all of such funds) or to timely pay key vendors and others could have a material adverse effect on our operations and cause us to need to seek additional capital sooner than planned.

We will require substantial additional capital to finance our operations. If we are unable to raise such capital when needed, or on acceptable terms, we may be forced to delay, reduce or eliminate one or more of our research and drug development programs, future commercialization efforts, product development or other operations.

Since our inception, we have used substantial amounts of cash to fund our operations, and our expenses will increase substantially in the foreseeable future in connection with our ongoing activities, particularly as we continue the research and development of, initiate clinical trials of, and seek marketing approval for, our product candidates. Developing pharmaceutical products, including conducting preclinical studies and clinical trials, is a very time-consuming, expensive and uncertain process that takes years to complete. Even if one or more of our product candidates or any future product candidates that we develop is approved for commercial sale, we anticipate incurring significant costs associated with sales, marketing, manufacturing and distribution activities. Our expenses could increase beyond expectations if we are required by the FDA, the European Medicines Agency (EMA) or other regulatory authorities to perform clinical trials or preclinical studies in addition to those that we currently anticipate. Other unanticipated costs may also arise. Because the design and outcome of our

planned and anticipated clinical trials are highly uncertain, we cannot reasonably estimate the actual amount of resources and funding that will be necessary to successfully complete the development and commercialization of our product candidates or any future product candidates that we develop. We are not permitted to market or promote any product candidate before we receive marketing approval from the FDA. We also expect to continue to incur additional costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in order to continue our operations.

Based on our current operating plan, we believe that our existing cash and cash equivalents and short-term and long-term investments as of the date of this Annual Report on Form 10-K will be sufficient to fund our operating expenses and capital expenditures into mid-2024. Advancing the development of our RAF and FGFR programs and our CDK12 and other research programs will require a significant amount of capital. Our existing cash and cash equivalents 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 estimate as to how long we expect our existing cash and cash equivalents and short-term and long-term investments to fund our operations is based on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Changing circumstances, some of which may be beyond our control, could cause us to consume capital significantly faster than we currently anticipate, and we may need to seek additional funds sooner than planned.

We will be required to obtain further funding through public or private equity financings, debt financings, collaborative agreements, licensing arrangements or other sources of financing, which may dilute our stockholders or restrict our operating activities. We do not have any committed external source of funds. Adequate additional financing may not be available to us on acceptable terms, or at all. To the extent that we raise additional capital through the sale of equity or convertible debt securities, investors' ownership interests will be diluted, and the terms may include liquidation or other preferences that adversely affect their rights as stockholders. Debt financing may result in imposition of debt covenants, increased fixed payment obligations or other restrictions that may affect our business. If we raise additional funds through upfront payments or milestone payments pursuant to strategic collaborations with third parties, we may have to relinquish valuable rights to our product candidates or grant licenses on terms that are not favorable to us. 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.

Our failure to raise capital as and when needed or on acceptable terms would have a negative impact on our financial condition and our ability to pursue our business strategy, and we may have to delay, reduce the scope of, suspend or eliminate one or more of our research or drug development programs, clinical trials or future commercialization efforts.

Risks Related to the Discovery, Development and Commercialization of our Product Candidates

We are very early in our development efforts and are substantially dependent on our RAF and FGFR programs. If we are unable to advance any product candidates from our RAF or FGFR programs through clinical development, obtain regulatory approval and ultimately commercialize such product candidates, or experience significant delays in doing so, our business will be materially harmed.

We are very early in our development efforts. While we have initiated a Phase 1 clinical trial for exarafenib for our RAF program and a Phase 1 clinical trial for KIN-3248 for our FGFR program, we have limited experience dosing exarafenib and KIN-3248 in humans. Additionally, all of our other product candidates are still in preclinical development and have never been tested in humans. Our ability to generate product revenue, which we do not expect will occur for many years, if ever, will depend heavily on the successful clinical development and eventual commercialization of one or more product candidates from our RAF or FGFR programs. We are not permitted to market or promote any product candidate before we receive marketing approval from the FDA, EMA or any other comparable foreign regulatory authorities, and we may never receive such marketing approvals.

The success of our RAF and FGFR programs will depend on several factors, including the following:

- approval of INDs for our planned clinical trials and future clinical trials;
- addressing any potential delays resulting from factors related to COVID-19 or other public health concerns;
- successful initiation and completion of clinical trials;
- successful and timely patient selection and enrollment in and completion of clinical trials;
- maintaining and establishing relationships with CROs and clinical sites for the clinical development of our product candidates both in the United States and internationally;
- the frequency and severity of adverse events in clinical trials;
- demonstrating efficacy, safety and tolerability profiles that are satisfactory to the FDA, EMA or any other comparable foreign regulatory authority for marketing approval;
- the timely receipt of marketing approvals from applicable regulatory authorities;
- the timely identification, development and approval of companion diagnostic tests, if required;
- the extent of any required post-marketing approval commitments to applicable regulatory authorities;
- the maintenance of existing or the establishment of new supply arrangements with third-party drug product suppliers and manufacturers for clinical development and, if approved, commercialization of our product candidates;
- obtaining and maintaining patent protection, trade secret protection and regulatory exclusivity, both in the United States and internationally;
- the protection of our rights in our intellectual property portfolio;
- the successful launch of commercial sales following any marketing approval;
- a continued acceptable safety profile following any marketing approval;
- commercial acceptance by patients, the medical community and third-party payors; and
- our ability to compete with other therapies.

We do not have complete control over many of these factors, including certain aspects of preclinical and clinical development and the regulatory submission process, potential threats to our intellectual property rights and the manufacturing, marketing, distribution and sales efforts of any future collaborator. If we are not successful with respect to one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize any product candidates from our lead programs, which would materially harm our business. If we do not receive marketing approvals for such product candidates, we may not be able to continue our operations.

Our preclinical studies and clinical trials may fail to adequately demonstrate the safety and efficacy of any of our product candidates, which would prevent or delay development, regulatory approval and commercialization.

Before obtaining marketing approval from the FDA, EMA or other comparable foreign regulatory authorities for the sale of our product candidates, we must demonstrate safety and efficacy of our product candidates for use in each target indication through lengthy, complex and expensive preclinical studies and clinical trials. Preclinical and clinical testing is expensive, difficult to design and implement, can take many years to complete and its ultimate outcome is uncertain. Failure can occur at any time during the preclinical study and clinical trial processes, and, because our product candidates are in an early stage of development, there is a high risk of failure and we may never succeed in developing marketable products.

We may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent receipt of marketing approval or our ability to commercialize our product candidates, including:

- failure of our product candidates in preclinical studies or clinical trials to demonstrate safety and efficacy;
- receipt of feedback from regulatory authorities that requires us to modify the design of our clinical trials;
- negative or inconclusive clinical trial results that may require us to conduct additional clinical trials or abandon certain research and/or drug development programs;
- the number of patients required for clinical trials being larger than anticipated, enrollment in these clinical trials being slower than anticipated or participants dropping out of these clinical trials at a higher rate than anticipated;
- third-party contractors failing to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- the suspension or termination of our clinical trials for various reasons, including non-compliance with regulatory requirements or a finding that our product candidates have undesirable side effects or other unexpected characteristics or risks;
- the cost of clinical trials of our product candidates being greater than anticipated;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates being insufficient or inadequate; and
- regulators revising the requirements for approving our product candidates.

If we are required to conduct additional clinical trials or other testing of our product candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our product candidates or other testing in a timely manner, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, we may incur unplanned costs, be delayed in seeking and obtaining marketing approval, if we receive such approval at all, receive more limited or restrictive marketing approval, be subject to additional post-marketing testing requirements or have the drug removed from the market after obtaining marketing approval.

Our discovery and preclinical development activities are focused on the development of targeted therapeutics for patients with genomically defined cancers, which is a rapidly evolving area of science, and the approach we are taking to discover and develop drugs is novel and may never lead to approved or marketable products.

The discovery and development of targeted therapeutics for patients with genomically defined cancers is an emerging field, and the scientific discoveries that form the basis for our efforts to discover and develop product candidates are relatively new. The scientific evidence to support the feasibility of developing product candidates based on these discoveries is both preliminary and limited. Although we believe, based on our preclinical work, that the genomic alterations targeted by our programs are oncogenic drivers, clinical results may not confirm this hypothesis or may only confirm it for certain alterations or certain tumor types. The patient populations for our product candidates are limited to those with specific target alterations and may not be completely defined but are substantially smaller than the general treated cancer population, and we will need to screen and identify these patients with targeted alterations. Successful identification of patients is dependent on several factors, including achieving certainty as to how specific alterations respond to our product candidates and the ability to identify such alterations. Furthermore, even if we are successful in identifying patients, we cannot be certain that the resulting patient populations for each alteration will be large enough to allow us to successfully obtain approval for each alteration type and commercialize our product candidates and achieve profitability. In addition, even if our approach is successful in showing clinical benefit for Class II or III BRAF alteration-driven cancers for our RAF program, or FGFR2 and FGFR3 alteration-driven cancers for our FGFR program, we may never successfully identify additional oncogenic alterations in putative cancer driver genes. Therefore, we do not know if our approach of treating patients with genomically defined cancers will be successful, and if our approach is unsuccessful, our business will suffer.

The outcome of preclinical testing and early clinical trials may not be predictive of the success of later clinical trials, and the results of our clinical trials may not satisfy the requirements of the FDA, EMA or other comparable foreign regulatory authorities.

We will be required to demonstrate the safety and efficacy of our product candidates in a diverse population with substantial evidence through well-controlled clinical trials before we can seek marketing approvals for their commercial sale. Preclinical and clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the preclinical study and clinical trial processes, and, because our product candidates are in an early stage of development, there is a high risk of failure and we may never succeed in developing marketable products.

The results of preclinical studies may not be predictive of the results of clinical trials of our product candidates, and the results of early clinical trials may not be predictive of the results of later-stage clinical trials. Although product candidates may demonstrate promising results in preclinical studies and early clinical trials, they may not prove to be safe or effective in subsequent clinical trials. Favorable results from certain animal studies may not accurately predict the results of other animal preclinical studies or of human clinical trials, due to the inherent biologic differences in species, the differences between testing conditions in animal preclinical studies and human clinical trials, and the particular goals, purposes, and designs of the relevant preclinical studies and clinical trials. We have, for example, seen consistency in the pharmacokinetic properties of exarafenib in preclinical studies with rats and with mice, and between these studies, but variability in these properties in certain of our preclinical studies with cynomolgus monkeys. These preclinical studies, regardless of the degree that they are consistent, may or may not be predictive of the pharmacokinetic properties of exarafenib in human clinical trials.

There is typically an extremely high rate of attrition from the failure of product candidates proceeding through preclinical studies and clinical trials. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy profile despite having progressed through preclinical studies and initial clinical trials. Likewise, early, smaller-scale clinical trials may not be predictive of eventual safety or effectiveness in large-scale pivotal clinical trials. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval of their drugs. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy, insufficient durability of efficacy or unacceptable safety issues, notwithstanding promising results in earlier trials. Most product candidates that commence preclinical studies and clinical trials are never approved as products. The development of our product candidates and our stock price may also be impacted by inferences, whether correct or not, that are drawn between the success or failure of preclinical studies or clinical trials of our competitors or other companies in the biopharmaceutical industry, in addition to our own preclinical studies and clinical trials.

In some instances, there can be significant variability in safety and efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in clinical trial protocols, differences in size and type of the patient populations, differences in and adherence to the dose and dosing regimen and other clinical trial protocols and the rate of dropout among clinical trial participants. Patients treated with our product candidates may also be undergoing surgical, radiation and chemotherapy treatments and may be using other approved products or investigational new drugs, which can cause side effects or adverse events that are unrelated to our product candidates. As a result, assessments of efficacy can vary widely for a particular patient, and from patient to patient and site to site within a clinical trial. This subjectivity can increase the uncertainty of, and adversely impact, our clinical trial outcomes.

Any preclinical studies or clinical trials that we conduct may not demonstrate the safety and efficacy necessary to obtain regulatory approval to market our product candidates. If the results of our ongoing or future preclinical studies and clinical trials are inconclusive with respect to the safety and efficacy of our product candidates, if we do not meet the clinical endpoints with statistical and clinically meaningful significance, or if there are safety concerns associated with our product candidates, we may be prevented or delayed in obtaining marketing approval for such product candidates. In some instances, there can be significant variability in safety or efficacy results between different preclinical studies and clinical trials of the same product candidate due to numerous factors, including changes in clinical trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the clinical trial protocols and the rate of dropout among clinical trial participants.

We do not know whether any clinical trials we may conduct will demonstrate consistent or adequate efficacy and safety sufficient to obtain approval to market any of our product candidates.

In addition to our RAF and FGFR programs, our prospects depend in part upon discovering, developing and commercializing product candidates from our CDK12 and other research programs, which may fail in development or suffer delays that adversely affect their commercial viability.

Our future operating results are dependent on our ability to successfully discover, develop, obtain regulatory approval for and commercialize product candidates from our research programs, such as our CDK12 program, in addition to our lead RAF and FGFR programs. A research candidate can unexpectedly fail at any stage of development. The historical failure rate for research candidates is high due to risks relating to safety, efficacy, clinical execution, changing standards of medical care and other unpredictable variables. The results from preclinical testing or early clinical trials of a product candidate may not be predictive of the results that will be obtained in later stage clinical trials of the product candidate.

The success of other research candidates we may develop will depend on many factors, including the following:

- generating sufficient data to support the initiation or continuation of preclinical studies and clinical trials;
- addressing any potential delays resulting from factors related to COVID-19 or other public health concerns;
- obtaining regulatory permission to initiate clinical trials;
- contracting with the necessary parties to conduct clinical trials;
- successful enrollment of patients in, and the completion of, clinical trials on a timely basis;
- the timely manufacture of sufficient quantities of a product candidate for use in clinical trials; and
- adverse events in clinical trials.

Even if we successfully advance any research candidates into preclinical and clinical development, their success will be subject to all of the preclinical, clinical, regulatory and commercial risks described elsewhere in this ‘‘Risk Factors’’ section. Accordingly, there can be no assurance that we will ever be able to discover, develop, obtain regulatory approval of, commercialize or generate significant revenue from any product candidates.

Our approach to the discovery and development of product candidates is unproven, and we may not be successful in our efforts to use and expand our Kinnate Discovery Engine to build a pipeline of product candidates with commercial value.

A key element of our strategy is to use and expand our Kinnate Discovery Engine to build a pipeline of product candidates and progress these product candidates through clinical development. Although our research and development efforts to date have resulted in the discovery, preclinical development and clinical development of product candidates in our RAF and FGFR programs, such product candidates, and any other product candidates we may develop, may not be safe or effective as cancer therapeutics, and we may not be able to develop any other product candidates. Our Kinnate Discovery Engine is evolving and may not reach a state at which building a pipeline of product candidates is possible. For example, we may not be successful in identifying additional genomic alterations which are oncogenic and are targeted for patient populations or identifying acquired and intrinsic resistance mutations that present sufficient commercial opportunities. Even if we are successful in building a pipeline of product candidates, the potential product candidates that we identify may not be suitable for clinical development or generate acceptable clinical data, including as a result of being shown to have unacceptable toxicity or other characteristics that indicate that they are unlikely to be product candidates that will receive marketing approval from the FDA, EMA or other regulatory authorities or achieve market acceptance. If we do not successfully develop and commercialize product candidates, we will not be able to generate product revenue in the future, which likely would result in significant harm to our financial position and adversely affect our business.

The regulatory approval processes of the FDA, EMA and other comparable foreign regulatory authorities are lengthy, time consuming and inherently unpredictable. If we are ultimately unable to obtain regulatory approval of our product candidates, we will be unable to generate product revenue and our business will be substantially harmed.

Obtaining approval by the FDA, EMA and other comparable foreign regulatory authorities is unpredictable, typically takes many years following the commencement of clinical trials and depends upon numerous factors, including the type, complexity and novelty of the product candidates involved. In addition, approval policies, regulations or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions, which may cause delays in the approval or the decision not to approve an application. Regulatory authorities have substantial discretion in the approval process and may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical, clinical or other data. For example, the FDA's Oncology Center of Excellence initiated Project Optimus to reform the dose optimization and dose selection paradigm in oncology drug development and Project FrontRunner to help develop and implement strategies to support approvals in the early clinical setting, among other goals. How the FDA plans to implement those goals and their impact on specific clinical programs and the industry are unclear. Even if we eventually complete clinical testing and receive approval for our product candidates, the FDA, EMA and other comparable foreign regulatory authorities may approve our product candidates for a more limited indication or a narrower patient population than we originally requested or may impose other prescribing limitations or warnings that limit the product candidate's commercial potential. We have not submitted for, or obtained, regulatory approval for any product candidate, and it is possible that none of our product candidates will ever obtain regulatory approval. Further, development of our product candidates and/or regulatory approval may be delayed for reasons beyond our control.

Applications for our product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA, EMA or other comparable foreign regulatory authorities may disagree with the design, implementation or results of our clinical trials;
- the FDA, EMA or other comparable foreign regulatory authorities may determine that we have not demonstrated the safety and efficacy of our product candidates, or that they have undesirable or unintended side effects, toxicities or other characteristics that preclude our obtaining marketing approval or prevent or limit commercial use;
- the population studied in the clinical trial may not be sufficiently broad or representative to assure efficacy and safety in the full population for which we seek approval;
- the FDA, EMA or other comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- we may be unable to demonstrate to the FDA, EMA or other comparable foreign regulatory authorities that a product candidate's risk-benefit ratio for its proposed indication is acceptable;
- the FDA, EMA or other comparable foreign regulatory authorities may fail to approve the manufacturing processes, test procedures and specifications or facilities of third-party manufacturers with which we contract for clinical and commercial supplies;
- the FDA, EMA or other comparable regulatory authorities may fail to approve companion diagnostic tests required for our product candidates; and
- the approval policies or regulations of the FDA, EMA or other comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

This lengthy approval process, as well as the unpredictability of the results of clinical trials, may result in our failing to obtain regulatory approval to market any of our product candidates, which would significantly harm our business, results of operations and prospects.

We have limited experience as a company in conducting clinical trials.

Although we recently initiated Phase 1 clinical trials and began dosing in humans for both exarafenib (our RAF program) and KIN-3248 (our FGFR program), we have no experience as a company in conducting clinical trials to completion. In part because of this lack of experience as a company and our limited infrastructure, we cannot be certain that our ongoing preclinical studies and clinical trials will be completed on time or that our planned preclinical studies and clinical trials will begin or be completed on time, if at all. Large-scale clinical trials would require significant additional financial and management resources and reliance on third-party clinical investigators, CROs, and consultants. Relying on third-party clinical investigators, CROs and consultants may force us to encounter delays that are outside of our control. We may be unable to identify and contract with sufficient investigators, CROs and consultants on a timely basis or at all. There can be no assurance that we will be able to negotiate and enter into any necessary services agreements with CROs on terms that are acceptable to us on a timely basis or at all.

We may not be able to file INDs to commence clinical trials on the timelines we expect, and even if we are able to, the FDA may not permit us to proceed.

In April 2021, we filed an IND for exarafenib with the FDA. The FDA cleared our IND for exarafenib in May 2021, and we initiated KN-8701, a Phase 1 clinical trial for exarafenib and began dosing exarafenib in humans in the second half of 2021. In January 2022, the FDA cleared our IND for KIN-3248 and we initiated KN-4802, a Phase 1 clinical trial for KIN-3248 in the first quarter of 2022 and began dosing KIN-3248 in humans in the second quarter of 2022. However, we may not be able to file an IND for other current or future product candidates on the timelines we expect. For example, we may experience manufacturing delays or other delays with IND enabling studies. Moreover, we cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate clinical trials. Additionally, even if the FDA agrees with the design and implementation of the clinical trials set forth in an IND, we cannot guarantee that it will not change its requirements in the future. These considerations also apply to new clinical trials we may submit as amendments to existing INDs or to a new IND. Any failure to file INDs on the timelines we expect or to obtain regulatory approvals for our ongoing and planned future clinical trials may prevent us from initiating or completing our clinical trials or commercializing our product candidates on a timely basis, if at all.

Our product candidates may cause significant adverse events, toxicities or other undesirable side effects when used alone or in combination with other approved products or investigational new drugs that may result in a safety profile that could delay or prevent regulatory approval or market acceptance, or even if approval is received, require them to be taken off the market, include new safety warnings, contraindications or precautions, or otherwise limit their commercial potential or result in significant negative consequences.

If our product candidates are associated with undesirable side effects or have unexpected characteristics in preclinical studies or clinical trials when used alone or in combination with other approved products or investigational new drugs we may need to interrupt, delay or abandon their development or limit 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. Treatment-related side effects could also affect patient recruitment or the ability of enrolled subjects to complete the clinical trial or result in potential product liability claims. Any of these occurrences may prevent us from achieving or maintaining market acceptance of the affected product candidate and may harm our business, financial condition and prospects significantly. For example, while we have not observed similar results in toxicology studies for exarafenib, during toxicology studies in cynomolgus monkeys for one of our prior generation RAF product candidates, moribund terminations of two monkeys in our high dose cohorts occurred. Although we have initiated Phase 1 clinical trials for our RAF and FGFR programs, we have limited experience dosing exarafenib and KIN-3248 in humans, we have not yet initiated clinical trials for any of our other product candidates, and it is likely that there will be side effects associated with use of our product candidates as is typically the case with oncology drugs. Our Phase 1 KN-8701 clinical trial evaluating exarafenib includes dose escalation, which could include the occurrence of adverse events in the clinical trial. Similar risks could be present in our other current or future clinical trials. Moreover, results of our preclinical studies or clinical trials could reveal a high and unacceptable severity and prevalence of these or other side effects or adverse events. In such an event, our clinical trials could be suspended or terminated and the FDA, EMA or comparable foreign regulatory authorities could order us to cease further development of or deny approval of our product candidates for any or all targeted indications.

Drug-related side effects could also affect patient recruitment or the ability of enrolled patients to complete the clinical trial or result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

In addition, our product candidates may be used in populations for which safety concerns may be particularly scrutinized by regulatory authorities. In addition, our product candidates may be studied in combination with other therapies, which may exacerbate adverse events associated with the therapy. 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 candidate 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 to be enrolled in our ongoing and planned future clinical trials will die or experience major clinical events either during the course of our clinical trials or after participating in such clinical trials for non-treatment related reasons.

If significant adverse events or other side effects are observed in any of our ongoing or planned future clinical trials, we may have difficulty recruiting patients to the clinical trials, patients may drop out of our clinical trials, or we may be required to abandon the clinical trials or our development efforts of that product candidate altogether. We, the FDA, EMA, other comparable foreign regulatory authorities or an institutional review board (IRB) may suspend clinical trials of a product candidate at any time for various reasons, including a belief that subjects in such clinical trials are being exposed to unacceptable health risks or adverse side effects. Some potential therapeutics developed in the biotechnology industry that initially showed therapeutic promise in early-stage clinical trials have later been found to cause side effects that prevented their further development. Even if the side effects do not preclude the product candidate from obtaining or maintaining marketing approval, undesirable side effects may inhibit market acceptance due to its tolerability versus other therapies, resulting in marketing approval with restrictive label warnings or for a limited patient population, or result in potential product liability claims. Any of these developments could materially harm our business, financial condition and prospects. Further, if any of our product candidates obtains marketing approval, toxicities associated with such product candidates previously not seen during clinical testing may also develop after such approval and lead to a requirement to conduct additional clinical safety trials, additional contraindications, warnings and precautions being added to the drug label, significant restrictions on the use of the product or the withdrawal of the product from the market. No regulatory agency has made any determination that any of our product candidates or discovery programs is safe or effective for use by the general public for any indication. We cannot predict whether our product candidates will cause toxicities in humans that would preclude or lead to the revocation of regulatory approval based on preclinical studies or early stage clinical trials.

Interim, topline and preliminary data from our preclinical studies and clinical trials that we announce or publish from time to time may change as more 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 preliminary, interim or topline data from our preclinical studies and clinical trials. These interim updates are based on a preliminary analysis of then-available data, and the results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular preclinical study or clinical trial. For example, we may report responses in certain patients that are unconfirmed at the time and which do not ultimately result in confirmed responses to treatment after follow-up evaluations. 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 topline results that we report may differ from future results of the same preclinical studies or clinical trials, or different conclusions or considerations may qualify such results once additional data have been received and fully evaluated. Topline 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, topline data should be viewed with caution until the final data are available. In addition, we may report interim analyses of only certain endpoints rather than all endpoints. 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 changes between interim data and final data could significantly harm our business and prospects. Further, additional disclosure of interim data by us or by our competitors in the future could result in volatility in the price of our common stock.

In addition, the information we choose to publicly disclose regarding a particular preclinical study or clinical trial is typically selected from a more extensive amount of available information. Investors 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 product candidate or our business. If the preliminary or topline data that we report differ from late, final or actual results, or if others, including regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, any of our product candidates may be harmed, which could harm our business, financial condition, results of operations and prospects.

Delays or difficulties in the enrollment or maintenance of patients in our clinical trials could result in our regulatory submissions or receipt of necessary marketing approvals being delayed or prevented.

We may not be able to initiate or continue clinical trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these clinical trials to such clinical trial's conclusion as required by the FDA, EMA or other comparable foreign regulatory authorities. Patient enrollment is a significant factor in the timing of clinical trials. Our ability to enroll eligible patients may be limited or may result in slower enrollment than we anticipate. In our RAF and FGFR programs, we utilize genomic profiling of patients' tumors to identify suitable patients for recruitment into our clinical trials. We cannot be certain (i) how many patients will have the requisite alterations for inclusion in our clinical trials, (ii) that the number of patients enrolled in each program will suffice for regulatory approval or (iii) whether each specific BRAF alteration or FGFR alteration will be included in the approved drug label. If our strategies for patient identification and enrollment prove unsuccessful, we may have difficulty enrolling or maintaining patients appropriate for our product candidates.

Our ability to activate our clinical trial sites or enroll patients may also be significantly delayed by COVID-19 or other public health concerns and we do not know the extent and scope of such delays at this point. For example, initial site activation for the KN-8701 clinical trial was slower than expected due to the COVID-19 pandemic. In addition, patients may not be able or willing to visit clinical trial sites for dosing or data collection purposes due to limitations on travel and physical distancing imposed or recommended by federal or state governments or patients' reluctance to visit the clinical trial sites during the pandemic. These factors resulting from COVID-19 or other public health concerns could delay our clinical trials and our regulatory submissions.

Patient enrollment may be affected if our competitors have ongoing clinical trials for programs that are under development for the same indications as our product candidates, and patients who would otherwise be eligible for our clinical trials instead enroll in clinical trials of our competitors' programs. Patient enrollment for our current or any future clinical trials may be affected by other factors, including:

- size and nature of the patient population;
- severity of the disease under investigation;
- availability and efficacy of approved drugs for the disease under investigation;
- patient eligibility criteria for the clinical trial in question as defined in the protocol, including biomarker-driven identification and/or certain highly-specific criteria related to stage of disease progression, which may limit the patient populations eligible for our clinical trials to a greater extent than competing clinical trials for the same indication that do not have biomarker-driven patient eligibility criteria;
- perceived risks and benefits of the product candidate under study;
- clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including any new products that may be approved or other product candidates being investigated for the indications we are investigating;
- clinicians' willingness to screen their patients for biomarkers to indicate which patients may be eligible for enrollment in our clinical trials;
- patient referral practices of physicians;
- the ability to monitor patients adequately during and after treatment;
- proximity and availability of clinical trial sites for prospective patients; and
- the risk that patients enrolled in clinical trials will drop out of the clinical trials before completion or, because they may be late-stage cancer patients, will not survive the full terms of the clinical trials.

Our inability to enroll a sufficient number of patients for our clinical trials would result in significant delays or may require us to abandon one or more clinical trials altogether. Enrollment delays in our clinical trials may result in increased development costs for our product candidates and jeopardize our ability to obtain marketing approval for the sale of our product candidates. Furthermore, even if we are able to enroll a sufficient number of patients for our clinical trials, we may have difficulty maintaining participation in our clinical trials through the treatment and any follow-up periods.

COVID-19 could adversely impact our business, including our ongoing and planned future preclinical studies and clinical trials.

In December 2019, COVID-19 was reported to have surfaced in Wuhan, China. Since then, the virus has spread across the world, including all 50 states within the United States, resulting in the World Health Organization characterizing COVID-19 as a pandemic. As a result of measures imposed by the governments in affected regions, many commercial activities, businesses and schools have been suspended or altered as part of quarantines and other measures intended to contain this pandemic.

COVID-19 continues to affect populations around the globe, notwithstanding the availability of vaccines for some people, we may experience challenges or disruptions that could severely impact our business and clinical trials, including:

- delays or difficulties in clinical site initiation, such as our experience with our KN-8701 clinical trial, including difficulties in recruiting clinical site investigators and clinical site staff;
- delays or difficulties in enrolling and retaining patients in any clinical trials, particularly elderly subjects, who are at a higher risk of severe illness or death from COVID-19;
- difficulties interpreting data from our clinical trials due to the possible effects of COVID-19 on patients;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of clinical trials;
- interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel imposed or recommended by federal or state governments, employers and others;
- interruption or delays in the operations of the FDA, EMA or other regulatory authorities, which may impact review and approval timelines;
- limitations in resources that would otherwise be focused on the conduct of our business, our preclinical studies or our clinical trials, including because of sickness or the desire to avoid contact with large groups of people or as a result of government-imposed ‘‘shelter in place’’ or similar working restrictions;
- interruptions, difficulties or delays arising in our existing operations and company culture as a result of our employees including those hired during the COVID-19 pandemic, working from home or in a hybrid model;
- delays in receiving approval from regulatory authorities to initiate our clinical trials;
- delays in clinical sites receiving the supplies and materials needed to conduct our clinical trials; interruptions in preclinical studies due to restricted or limited operations at the CROs conducting such studies;
- interruption in global freight and shipping that may affect the transport of clinical trial materials, such as investigational drug product to be used in our clinical trials;
- changes in regulations as part of a response to COVID-19 which may require us to change the ways in which our clinical trials are to be conducted, or to discontinue the clinical trials altogether, or which may result in unexpected costs;
- delays in necessary interactions with regulators, ethics committees and other important agencies and contractors due to limitations in employee resources or forced furlough of government or contractor personnel; and
- refusal of the FDA, EMA or other regulatory authorities to accept data from clinical trials in affected geographies outside of their respective jurisdictions.

The COVID-19 pandemic has affected our business operations since early 2020, and we continue to assess the impact that COVID-19 may continue to have on our ability to effectively conduct our business operations as planned. There can be no assurance that we will be able to avoid a material impact on our business from the continued existence of COVID-19 or its consequences, including disruption to our business and downturns in business sentiment generally or in our industry or due to additional shutdowns that may be requested or mandated by federal, state and local governmental authorities. As a result of the COVID-19 pandemic, between March 2020 and June 2021 our employees worked almost exclusively from home. Since June 2021, our employees have been working in a hybrid model both in our offices and also from home. Although many governmental orders and guidelines have terminated or are now less restrictive than when originally implemented, depending on the continued persistence or future spread of COVID-19, we may need to adjust our working model from time to time, which may impact certain of our operations over the near term and long term. Additionally, President Biden announced that the administration intends to end the COVID-19 national and public health emergencies on May 11, 2023. The full impact of the termination of the public health emergencies on FDA and other regulatory policies and operations is unclear.

Additionally, certain third parties with whom we engage or may engage, including collaborators, contract organizations, third-party manufacturers, suppliers, clinical trial sites, regulators and other third parties, are similarly adjusting their operations and assessing their capacity in light of COVID-19. If these third parties experience shutdowns or continued business disruptions, our ability to conduct our business in the manner and on the timelines presently planned could be materially and negatively impacted. For example, as a result of COVID-19, there could be delays in the procurement of materials or manufacturing supply chain for one or more of our product candidates, which could delay or otherwise impact our preclinical studies and our ongoing or planned future clinical trials. Additionally, all of our preclinical studies are conducted by CROs, which could be discontinued or delayed as a result of COVID-19. It is also likely that the disproportionate impact of COVID-19 on hospitals and clinical sites will have an impact on recruitment and retention for our ongoing and planned future clinical trials. In addition, certain clinical trial sites for product candidates similar to ours have experienced, and others may experience in the future, delays in collecting, receiving and analyzing data from patients enrolled in clinical trials due to limited staff at such sites, limitation or suspension of on-site visits by patients, or patients' reluctance to visit the clinical trial sites during the pandemic and we may experience similar delays if and when we begin clinical trials. CROs have also made certain adjustments to the operation of such clinical trials in an effort to ensure the monitoring and safety of patients and minimize risks to clinical trial integrity during the pandemic in accordance with the guidance issued by the FDA and may need to make further adjustments in the future that could impact the timing or enrollment of our clinical trials. Many of these adjustments are new and untested, may not be effective, may increase costs, and may have unforeseen effects on the enrollment, progress and completion of these clinical trials and the findings from these clinical trials. While we are currently continuing our preclinical activities and progressing with our ongoing clinical trials and in our plans for planned future clinical trials, we may experience delays in the completion of our preclinical studies, the continuation of our ongoing clinical trials, the initiation of our planned future clinical trials, patient selection or enrollment or in the progression of our activities related to our ongoing and planned future clinical trials, may need to suspend our clinical trials if and when commenced, and may encounter other negative impacts to such clinical trials due to the effects of COVID-19.

Since March 2020, the FDA has issued various COVID-19 guidance documents, including guidance on conducting clinical trials during the pandemic, remote interactive evaluations of drug manufacturing and bioresearch monitoring facilities, and manufacturing, supply chain, and drug and biological product inspections, among others. Changes to existing policies and regulations can increase our compliance costs or delay our clinical plans.

While the full extent of the impact of COVID-19, both direct and indirect impact, on our business and financial results is uncertain, a continued and prolonged public health crisis such as the COVID-19 pandemic could have a material negative impact on our business, financial condition and operating results.

To the extent COVID-19 adversely affects our business, financial condition and operating results, it may also have the effect of heightening many of the risks described in this ''Risk Factors'' section.

We have limited resources and are currently focusing our efforts on our RAF and FGFR programs for development in particular indications and advancing our research programs. As a result, we may fail to capitalize on other indications or product candidates that may ultimately have proven to be more profitable.

We are currently focusing our resources and efforts on our RAF and FGFR programs for particular indications and advancing our research programs, such as our CDK12 program. As a result, because we have limited resources, we may forgo or delay pursuit of opportunities for other indications or with other product candidates that may have greater commercial potential. In addition, while we currently have multiple product candidates in our RAF and FGFR programs, we are focusing our efforts on select product candidates from each of these programs to develop as lead product candidates in each program. 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 activities for our RAF and FGFR programs and our research programs may not yield any commercially viable products. If we do not accurately evaluate the commercial potential or target markets for our RAF and FGFR programs and our research programs, or the product candidates we are currently developing in these programs, we may relinquish valuable rights to our product candidates or programs through collaboration, licensing or other strategic arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate or program.

We face substantial competition which may result in others discovering, developing or commercializing products before or more successfully than we do.

The pharmaceutical and biotechnology industries are characterized by rapidly 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 product candidates are currently under development, and may become commercially available in the future, for the treatment of conditions for which we may attempt to develop product candidates. In addition, our product candidates may need to compete with drugs physicians use off-label to treat the indications for which we seek approval. This may make it difficult for us to replace existing therapies with our product candidates.

In particular, there is intense competition in the field of oncology. We have competitors both in the United States and internationally, including major multinational pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies, emerging and start-up companies, universities and other research institutions. We also compete with these organizations to recruit and retain qualified scientific and management 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 and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs.

We expect to face competition from existing products and products in development for each of our programs. For our RAF program, there are currently three BRAF-targeted kinase inhibitor drugs approved for use in Class I BRAF mutations: Novartis AG's Tafinlar (dabrafenib), Genentech's, a member of the Roche Group, Zelboraf (vemurafenib) and Pfizer's Braftovi (encorafenib) are used in BRAF mutated melanomas, Tafinlar (dabrafenib) is also used in mutated NSCLC, anaplastic thyroid cancer, and unresectable and metastatic solid tumors, Braftovi (encorafenib) is also used in mutated CRC. FORE-8394 / PLX8394, a BRAF homodimer disruptor, is currently in Phase 2 clinical trials with Fore Biotherapeutics. Second-generation BRAF dimer signaling inhibitors, such as naporafenib and belvarafenib (HM95573, RG6185), designed to inhibit mitogen-activated protein kinase (MAPK) pathway signaling without causing pathway rebound, are in Phase 1 or Phase 2 clinical trials with Erasca and Genentech / Hanmi Pharmaceutical co. ltd, respectively. Mapkure, LLC's BGB3245 and Day One Pharmaceuticals' DAY101 are also currently in clinical development, along with other RAF inhibitors.

For our FGFR program, FDA approved FGFR inhibitors include: Incyte Corporation's Pemazyre (pemigatinib), Janssen Biotech, Inc.'s Balversa (erdafitinib), and Taiho Oncology, Inc.'s Lytgobi (futibatinib). There are also a number of programs that are in development, including Relay Therapeutics, Inc.'s FGFR2-specific (RLY4008), Tyra Biosciences, Inc.'s FGFR3-specific preclinical candidate (TYRA-300) and FGFR2-specific candidate, and Loxo Oncology at Lilly's FGFR3-specific preclinical candidate (LOXO-435).

Many of our competitors, either alone or with their collaborators, have significantly greater financial resources, established presence in the market, and expertise in research and development, manufacturing, preclinical and clinical testing, obtaining regulatory approvals and reimbursement and marketing approved products than we do. Large pharmaceutical and biotechnology companies, in particular, have extensive experience in clinical testing, obtaining regulatory approvals, recruiting patients and manufacturing biotechnology product candidates. These companies also have significantly greater research and marketing capabilities than we do and may also have product candidates that have been approved or are in late stages of development, and collaborative arrangements in our target markets with leading companies and research institutions. Established pharmaceutical and biotechnology companies may also invest heavily to accelerate discovery and development of novel compounds or to in-license novel compounds that could make the product candidates that we develop obsolete. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies, as well as in acquiring technologies complementary to, or necessary for, our programs. As a result of all of these factors, our competitors may succeed in obtaining approval from the FDA, EMA or other comparable foreign regulatory authorities or in discovering, developing and commercializing product candidates in our field before we do.

Our potential commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient, have a broader label, are marketed more effectively, are more widely reimbursed or are less expensive than any products that we may develop. Our competitors also may obtain marketing approval from the FDA, EMA or other comparable foreign regulatory authorities for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market or make our development more complicated. Even if the product candidates we develop achieve marketing approval, they may be priced at a significant premium over competitive products if any have been approved by then, resulting in reduced competitiveness.

Technological advances or products developed by our competitors may render our technologies or product candidates obsolete, less competitive or not economical. 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. For additional information regarding our competition, see the section of this Annual Report on Form 10-K, titled ‘‘Business—Competition.’’

The manufacture of drugs is complex, and our third-party manufacturers or suppliers may encounter difficulties in production or with their supply chains. If any of our third-party manufacturers or suppliers encounter such difficulties, our ability to provide adequate supply of our product candidates for clinical trials or our products for patients, if approved, could be delayed or prevented.

Manufacturing drugs, especially in large quantities, is complex and may require the use of innovative technologies. Each lot of an approved drug product must undergo thorough testing for identity, strength, quality, purity and potency. Manufacturing drugs requires facilities specifically designed for and validated for this purpose, as well as sophisticated quality assurance and quality control procedures. Slight deviations anywhere in the manufacturing process, including filling, labeling, packaging, storage and shipping and quality control and testing, may result in lot failures, product recalls or spoilage. When changes are made to the manufacturing process, we may be required to provide preclinical and clinical data showing the comparable identity, strength, quality, purity or potency of the products before and after such changes. If microbial, viral or other contaminations are discovered at the facilities of our manufacturer, such facilities may need to be closed for an extended period of time to investigate and remedy the contamination, which could delay clinical trials and adversely harm our business. The use of biologically derived ingredients can also lead to allegations of harm, including infections or allergic reactions, or closure of product facilities due to possible contamination.

In addition, for the portion of our ongoing KN-8701 clinical trial to study exarafenib in combination with binimetinib, we procure binimetinib from third parties who may be unable to produce, or obtain elsewhere, an adequate supply of binimetinib for our current or future clinical trials or our products for patients, if approved. In such situations, we may be unable to procure binimetinib from other sources in sufficient amounts, at reasonable cost, or at all.

If our third-party manufacturers or suppliers are unable to produce, or provide us with, sufficient quantities for clinical trials or for commercialization as a result of these challenges, or otherwise, 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.

Changes in methods of product candidate manufacturing or formulation may result in additional costs or delay.

As product candidates progress through preclinical and clinical trials to marketing approval and commercialization, it is common that various aspects of the development program, such as manufacturing methods and formulation, are altered along the way in an effort to optimize yield and manufacturing batch size, minimize costs and achieve consistent quality and results. For example, we may introduce an alternative formulation of one or more of our product candidates during the course of our ongoing or planned future clinical trials. Such changes carry the risk that they will not achieve these intended objectives. Any of these changes could cause our product candidates to perform differently and affect the results of ongoing and planned future clinical trials or other future clinical trials conducted with the altered materials. This could delay completion of clinical trials, require the conduct of bridging clinical trials or the repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidates and jeopardize our ability to commercialize our product candidates, if approved, and generate revenue.

Our product candidates may not achieve adequate market acceptance among physicians, patients, healthcare payors and others in the medical community necessary for commercial success.

Even if our product candidates receive regulatory approval, they may not gain adequate market acceptance among physicians, patients, third-party payors and others in the medical community. The degree of market acceptance of any of our approved product candidates will depend on a number of factors, including:

- the efficacy and safety profile as demonstrated in clinical trials compared to alternative treatments;
- the timing of market introduction of the product candidate as well as competitive products;
- the clinical indications for which a product candidate is approved;
- restrictions on the use of product candidates in the labeling approved by regulatory authorities, such as boxed warnings or contraindications in labeling, or a risk evaluation and mitigation strategy, if any, which may not be required of alternative treatments and competitor products;
- the potential and perceived advantages of our product candidates over alternative treatments;
- the cost of treatment in relation to alternative treatments;
- the availability of coverage and adequate reimbursement by third-party payors, including government authorities;
- the availability of an approved product candidate for use as a combination therapy;
- relative convenience and ease of administration;
- the willingness of the target patient population to try new therapies and undergo required diagnostic screening to determine treatment eligibility and of physicians to prescribe these therapies and diagnostic tests;
- the effectiveness of sales and marketing efforts;
- unfavorable publicity relating to our product candidates; and
- the approval of other new therapies for the same indications.

If any of our product candidates are approved but do not achieve an adequate level of acceptance by physicians, hospitals, healthcare payors and patients, we may not generate or derive sufficient revenue from that product candidate and our financial results could be negatively impacted.

The market opportunities for any product candidates we develop, if approved, may be limited to certain smaller patient subsets and may be smaller than we estimate them to be.

When cancer is detected early (referred to as localized disease), conventional treatments which include chemotherapy, hormone therapy, surgery and radiation therapy and/or selected targeted therapies, may be adequate to cure the patient in many cases. However, once cancer has spread to other areas (advanced or metastatic disease), cancer treatments may not be sufficient to provide a cure but often can significantly prolong life without curing the cancer. First-line therapies designate treatments that are initially administered to patients with advanced or metastatic disease, while second- and third-line therapies are administered to patients when the prior therapies lose their effectiveness. The FDA, EMA and other comparable regulatory bodies often approve cancer therapies for a particular line of treatment. Typically, drug approvals are initially granted for use in later lines of treatment, but with additional evidence of significant efficacy from clinical trials, biopharmaceutical companies can successfully seek and gain approval for use in earlier lines of treatment.

We plan to initially seek approval of our product candidates in most instances at least as a second- or third-line therapy, for use in patients with advanced or metastatic cancer where at least one prior therapy has limited clinical benefit or has lost its effectiveness. For those product candidates for which we demonstrate safety and efficacy, if any, we would expect to seek approval as a second-line therapy and potentially ultimately as a first line therapy. There is no guarantee that our product candidates, even if approved as a second, third or subsequent line of therapy, would be approved for an earlier line of therapy, and prior to any such approvals we may have to conduct additional clinical trials that may be costly, time-consuming and subject to risk.

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 a particular line of 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 scientific literature, surveys of clinics, patient foundations or market research, and may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of the cancers that we are targeting. The potentially addressable patient population for our product candidates may be limited or may not be amenable to treatment with our product candidates. Consequently, even if our product candidates are approved, the number of patients that may be eligible for treatment with our product candidates may turn out to be much lower than expected. In addition, we have not yet conducted market research to determine how treating physicians would expect to prescribe a product that is approved for multiple tumor types if there are different lines of approved therapies for each such tumor type. Even if we obtain significant market share for our products, if approved, if the potential target populations are small, we may never achieve profitability without obtaining regulatory approval for additional indications.

Any product candidates we develop may become subject to unfavorable third-party coverage and reimbursement practices, as well as pricing regulations.

The availability and extent of coverage and adequate reimbursement by third-party payors, including government health administration authorities, private health coverage insurers, managed care organizations and other third-party payors is essential for most patients to be able to afford expensive treatments. Sales of any of our product candidates that receive marketing approval will depend substantially, both in the United States and internationally, on the extent to which the costs of such product candidates will be covered and reimbursed by third-party payors. If reimbursement is not available, or is available only to limited levels, we may not be able to successfully commercialize our product candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize an adequate return on our investment. Coverage and reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. If coverage and reimbursement are not available or reimbursement is available only to limited levels, we may not successfully commercialize any product candidate for which we obtain marketing approval.

There is significant uncertainty related to third-party payor coverage and reimbursement of newly approved products. In the United States, for example, principal decisions about reimbursement for new products are typically made by The Centers for Medicare & Medicaid Services (CMS). CMS decides whether and to what extent a new product will be covered and reimbursed under Medicare, and private third-party payors often follow CMS's decisions regarding coverage and reimbursement to a substantial degree. However, one third-party payor's determination to provide coverage for a product candidate does not assure that other payors will also provide coverage for the product candidate. As a result, the coverage determination process is often time-consuming and

costly. This process will require us to provide scientific and clinical support for the use of our products to each third-party payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

As federal and state governments implement additional health care cost containment measures, including measures to lower prescription drug pricing, we cannot be sure that our products, if approved, will be covered by private or public payors, and if covered, whether the reimbursement will be adequate or competitive with other marketed products. Legislative, executive, administrative and other actions by federal and state governments and health plans may put additional downward pressure on pharmaceutical pricing and health care costs, which could negatively impact coverage and reimbursement for our products if approved, our revenue, and our ability to compete with other marketed products and to recoup the costs of our research and development. For further discussion, please see the risk factor below titled, "*We may face difficulties from changes to current regulations and future legislation. Healthcare legislative measures aimed at reducing healthcare costs may have a material adverse effect on our business and results of operations.*"

Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. Further, such payors are increasingly challenging the price, examining the medical necessity and reviewing the cost effectiveness of medical product candidates. There may be especially significant delays in obtaining coverage and reimbursement for newly approved drugs. Third-party payors may limit coverage to specific product candidates on an approved list, known as a formulary, which might not include all FDA-approved drugs for a particular indication. We may need to conduct expensive pharmaco-economic studies to demonstrate the medical necessity and cost effectiveness of our products. Nonetheless, our product candidates may not be considered medically necessary or cost effective. We cannot be sure that coverage and reimbursement will be available for any product that we commercialize and, if reimbursement is available, what the level of reimbursement will be.

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. Additionally, if any companion diagnostic provider is unable to obtain reimbursement or is inadequately reimbursed, that may limit the availability of such companion diagnostic, which would negatively impact prescriptions for our product candidates, if approved.

Outside the United States, the commercialization of therapeutics is generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost containment initiatives in Europe, Canada and other countries has and will continue to put pressure on the pricing and usage of therapeutics such as our product candidates. In many countries, particularly the countries of the EU, medical product prices are subject to varying price control mechanisms as part of national health systems. In these countries, pricing negotiations with governmental authorities can take considerable time after a product receives marketing approval. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. In general, product prices under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for 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 product candidates. 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.

If we are unable to establish or sustain coverage and adequate reimbursement for any product candidates from third-party payors, the adoption of those products and sales revenue will be adversely affected, which, in turn, could adversely affect the ability to market or sell those product candidates, if approved. Coverage policies and third-party payor reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Our business entails a significant risk of product liability and if we are unable to obtain sufficient insurance coverage such inability could have an adverse effect on our business and financial condition.

Our business exposes us to significant product liability risks inherent in the development, testing, manufacturing and marketing of therapeutic treatments. Product liability claims could delay or prevent completion of our development programs. If we succeed in marketing products, such claims could result in an FDA, EMA or other regulatory authority investigation of the safety and effectiveness of our products, our manufacturing processes and facilities or our marketing programs. FDA, EMA or other regulatory authority investigations could potentially lead to a recall of our products or more serious enforcement action, limitations on the approved indications for which they may be used or suspension or withdrawal of approvals. Regardless of the merits or eventual outcome, liability claims may also result in decreased demand for our products, injury to our reputation, costs to defend the related litigation, a diversion of management's time and our resources and substantial monetary awards to clinical trial participants or patients. We will need to obtain appropriate levels of product liability insurance prior to advancing our product candidates into clinical trials or marketing any of our product candidates, if approved. Any insurance we have or may obtain may not provide sufficient coverage against potential liabilities. Furthermore, clinical trial and product liability insurance is becoming increasingly expensive. As a result, we may be unable to obtain sufficient insurance at a reasonable cost to protect us against losses caused by product liability claims that could have an adverse effect on our business and financial condition.

Risks Related to Regulatory Approval and Other Legal Compliance Matters

We may be unable to obtain U.S. or foreign regulatory approval and, as a result, may be unable to commercialize our product candidates.

Our product candidates are and will continue to be subject to extensive governmental regulations relating to, among other things, research, testing, development, manufacturing, safety, efficacy, approval, recordkeeping, reporting, labeling, storage, packaging, advertising and promotion, pricing, marketing and distribution of drugs. Rigorous preclinical testing and clinical trials and an extensive regulatory approval process must be successfully completed in the United States and in many foreign jurisdictions before a new drug can be approved for marketing. Satisfaction of these and other regulatory requirements is costly, time consuming, uncertain and subject to unanticipated delays. We cannot provide any assurance that any product candidate we may develop will progress through required clinical testing and obtain the regulatory approvals necessary for us to begin selling them.

We have not conducted, managed or completed large-scale or pivotal clinical trials nor managed the regulatory approval process with the FDA, EMA or any other regulatory authority. The time required to obtain approvals from the FDA, EMA and other comparable regulatory authorities is unpredictable and requires successful completion of extensive clinical trials which typically takes many years, depending upon the type, complexity and novelty of the product candidate. The standards that the FDA and its foreign counterparts use when evaluating clinical trial data can, and often does, change during drug development, which makes it difficult to predict with any certainty how they will be applied. We may also encounter unexpected delays or increased costs due to new government regulations, including future legislation or administrative action, or changes in applicable FDA, EMA or other regulatory policy during the period of drug development, clinical trials and regulatory review.

Applications for our product candidates could fail to receive regulatory approval for many reasons, including the following:

- the FDA, EMA or other comparable foreign regulatory authorities may disagree with the design, implementation or results of our clinical trials;
- the FDA, EMA or other comparable foreign regulatory authorities may determine that we have not demonstrated the safety and efficacy of our product candidates, or that they have undesirable or unintended side effects, toxicities or other characteristics that preclude our obtaining marketing approval or prevent or limit commercial use;
- the population studied in the clinical trial may not be sufficiently broad or representative to assure efficacy and safety in the full population for which we seek approval;
- the FDA, EMA or other comparable foreign regulatory authorities may disagree with our interpretation of data from preclinical studies or clinical trials;
- we may be unable to demonstrate to the FDA, EMA or other comparable foreign regulatory authorities that our product candidate's risk-benefit ratio for its proposed indication is acceptable;
- the FDA, EMA or other comparable foreign regulatory authorities may fail to approve the manufacturing processes, test procedures and specifications or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA, EMA or other comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

Any delay or failure in seeking or obtaining required approvals would have a material and adverse effect on our ability to generate revenue from any particular product candidates we are developing and for which we are seeking approval. Furthermore, any regulatory approval to market a drug may be subject to significant limitations on the approved uses or indications for which we may market, promote and advertise the drug or the labeling or other restrictions. In addition, the FDA has the authority to require a Risk Evaluation and Mitigation Strategy (REMS) plan as part of approving a New Drug Application (NDA), or after approval, which may impose further requirements or restrictions on the distribution or use of an approved drug. These requirements or restrictions might include limiting prescribing to certain physicians or medical centers that have undergone specialized training, limiting treatment to patients who meet certain safe-use criteria and requiring treated patients to enroll in a registry. These limitations and restrictions may significantly limit the size of the market for the drug and affect reimbursement by third-party payors.

We are also subject to numerous foreign regulatory requirements governing, among other things, the conduct of clinical trials, manufacturing and marketing authorization, pricing and third-party reimbursement. The foreign regulatory approval process varies among countries, and generally includes all of the risks associated with FDA approval described above as well as risks attributable to the satisfaction of local regulations in foreign jurisdictions. Moreover, the time required to obtain approval may differ from that required to obtain FDA approval.

We may develop our current or future product candidates in combination with other therapies, which would expose us to additional risks.

We may develop our current or future product candidates in combination with one or more currently-approved cancer therapies or therapies in development. For example, in January 2022, we announced the addition of patients with NRAS-mutant melanoma into our ongoing KN-8701 clinical trial both in monotherapy and in combination with binimetinib. We initiated the combination portion of the clinical trial in the second quarter of 2022. Even if any of our current or future product candidates were to receive marketing approval or be commercialized for use in combination with other existing therapies, we would continue to be subject to the risks that the FDA, EMA or other comparable foreign regulatory authorities could revoke approval of the therapy used in combination with any of our product candidates, or safety, efficacy, manufacturing or supply issues could arise with these existing therapies. In addition, it is possible that existing therapies with which our product candidates are approved for use could themselves fall out of favor or be relegated to later lines of treatment. This could result in the need to identify other combination therapies for our product candidates or our own products being removed from the market or being less successful commercially.

We may also evaluate our current or future product candidates in combination with one or more other cancer therapies that have not yet been approved for marketing by the FDA, EMA or comparable foreign regulatory authorities. We will not be able to market and sell any product candidate in combination with any such unapproved cancer therapies that do not ultimately obtain marketing approval.

If the FDA, EMA or other comparable foreign regulatory authorities do not approve or withdraw their approval of these other therapies, or if safety, efficacy, commercial adoption, manufacturing or supply issues arise with the therapies we choose to evaluate in combination with any of our current or future product candidates, we may be unable to obtain approval of or successfully market any one or all of the current or future product candidates we develop. Additionally, if the third-party providers of therapies or therapies in development used in combination with our current or future product candidates are unable to produce sufficient quantities for clinical trials or for commercialization of our current or future 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.

We have never commercialized a product candidate as a company before and currently lack the necessary expertise, personnel and resources to successfully commercialize any products on our own or together with suitable collaborators.

We have never commercialized a product candidate as a company. We may license certain rights with respect to our product candidates to collaborators, and, if so, we will rely on the assistance and guidance of those collaborators. For product candidates for which we retain commercialization rights and marketing approval, we will have to develop our own sales, marketing and supply organization or outsource these activities to one or more third parties.

Factors that may affect our ability to commercialize our product candidates, if approved, on our own include recruiting and retaining adequate numbers of effective sales and marketing personnel, developing adequate educational and marketing programs to increase public acceptance of our approved product candidates, ensuring regulatory compliance of our company, employees and third parties under applicable healthcare laws, and other unforeseen costs associated with creating an independent sales and marketing organization. Developing a sales and marketing organization will be expensive and time-consuming and could delay the launch of our product candidates upon approval. We may not be able to build an effective sales and marketing organization. If we are unable to build our own distribution and marketing capabilities or to find suitable partners for the commercialization of our product candidates, we may not generate revenues from them or be able to reach or sustain profitability.

The FDA, EMA and other comparable foreign regulatory authorities may not accept data from clinical trials conducted in locations outside of their jurisdiction.

We are initially conducting clinical trials of our product candidates in the United States and we anticipate we may choose to conduct our clinical trials internationally as well. The acceptance of clinical trial data by the FDA, EMA or other comparable foreign regulatory authority from clinical trials conducted outside of their respective jurisdictions may be subject to certain conditions. In cases where data from United States clinical trials are intended to serve as the basis for marketing approval in the foreign countries outside the United States, the standards for clinical trials and approval may be different. There can be no assurance that any United States or foreign regulatory authority would accept data from clinical trials conducted outside of its applicable jurisdiction. If the FDA, EMA or any applicable foreign regulatory authority does not accept such data, it would result in the need for additional clinical trials, which would be costly and time-consuming and delay aspects of our business plan, and which may result in our product candidates not receiving approval or clearance for commercialization in the applicable jurisdiction.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of our product candidates in other jurisdictions.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction. For example, even if the FDA or EMA grants marketing approval of a product candidate, comparable regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion and reimbursement of the product candidate in those countries. However, a failure or delay in obtaining regulatory approval in one jurisdiction may

have a negative effect on the regulatory approval process in others. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from those in the United States, including additional preclinical studies or clinical trials as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval.

Obtaining foreign regulatory approvals and establishing and maintaining compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. If we or any future collaborator fail to comply with the regulatory requirements in international markets or fail to receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our potential product candidates will be harmed.

Even if our product candidates receive regulatory approval, they will be subject to significant post-marketing regulatory requirements and oversight.

Any regulatory approvals that we may receive for our product candidates will require the submission of reports to regulatory authorities and on-going surveillance to monitor the safety and efficacy of the product candidate, may contain significant limitations related to use restrictions for specified age groups, warnings, precautions or contraindications, and may include burdensome post-approval clinical trial or risk management requirements and regulatory inspection. For example, the FDA may require a REMS in order to approve our product candidates, which could entail requirements for a medication guide, physician training and 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, EMA or foreign regulatory authorities approve our product candidates, the manufacturing processes, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion, import, export and recordkeeping for our product candidates 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 on-going compliance with current good manufacturing practices (cGMPs) and good clinical practices (GCPs) for any clinical trials that we conduct post-approval. In addition, manufacturers of drug products and their facilities are subject to continual review and periodic, unannounced inspections by the FDA, EMA and other comparable regulatory authorities for compliance with cGMP regulations and standards. If we or a regulatory authority discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facilities where the product is manufactured, a regulatory authority may impose restrictions on that product, the manufacturing facility or us, including requiring recall or withdrawal of the product from the market or suspension of manufacturing. In addition, failure to comply with FDA, EMA and other comparable foreign regulatory requirements may subject our company to administrative or judicially imposed sanctions, including:

- delays in or the rejection of product approvals;
- restrictions on our ability to conduct clinical trials, including full or partial clinical holds on ongoing or planned clinical trials;
- restrictions on the products, manufacturers or manufacturing process;
- warning or untitled letters;
- civil and criminal penalties;
- injunctions;
- suspension or withdrawal of regulatory approvals;
- product seizures, detentions or import bans;
- voluntary or mandatory product recalls and publicity requirements;
- total or partial suspension of production;
- imposition of restrictions on operations, including costly new manufacturing requirements;

- revisions to the labeling, including limitation on approved uses or the addition of additional warnings, contraindications or other safety information, including boxed warnings;
- imposition of a REMS, which may include distribution or use restrictions; and
- requirements to conduct additional post-market clinical trials to assess the safety of products.

The FDA, EMA and other comparable 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 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. 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 lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

We may be required to develop and implement additional clinical trial policies and procedures designed to help protect subjects from COVID-19 or other public health concerns. Since March 2020, the FDA issued various COVID-19 related documents for clinical trial sponsors and manufacturers. If new guidance and policies are promulgated by the FDA that require changes in our clinical protocol or clinical development plans, our anticipated timelines and regulatory approval may be delayed or materially impacted. For additional risk factors related to the potential impact of the COVID-19 pandemic, please see the risk factor above titled, "*The COVID-19 pandemic could adversely impact our business, including our ongoing and planned future preclinical studies and clinical trials.*"

Moreover, the FDA strictly regulates the promotional claims that may be made about drug products. In particular, a product may not be promoted in the United States for uses that are not approved by the FDA as reflected in the product's approved labeling, or in other jurisdictions for uses that differ from the labeling or uses approved by the applicable regulatory authorities. While physicians may prescribe products for off-label uses, the FDA, EMA and other comparable regulatory authorities actively enforce laws and regulations that prohibit the promotion of off-label uses by companies, including promotional communications made by companies' sales force with respect to off-label uses that are not consistent with the approved labeling, and a company that is found to have improperly promoted off-label uses may be subject to significant civil, criminal and administrative penalties. The occurrence of any event or penalty described above may inhibit our ability to commercialize our product candidates, if approved, and generate revenue.

The FDA, EMA and other comparable regulatory authorities 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, EMA and other comparable regulatory authorities strictly regulate the promotional claims that may be made about prescription products, such as our product candidates, if approved. If we are found to have promoted such off-label uses, we may become subject to significant liability. The U.S. 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.

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

If we are required by the FDA, EMA or comparable regulatory authority to obtain approval of a companion diagnostic test in connection with approval of any of our product candidates, such companion diagnostic test would be used during our more advanced phase clinical trials as well as in connection with the commercialization of our product candidates. To be successful in developing and commercializing product candidates in combination with these companion diagnostics, we or our collaborators will need to address a

number of scientific, technical, regulatory and logistical challenges. 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 at the same time the product candidate is approved. To date, the FDA has required marketing approval of all companion diagnostic tests for cancer therapies. Various foreign regulatory authorities also regulate *in vitro* companion diagnostics as medical devices and, under those regulatory frameworks, will likely require the conduct of clinical trials to demonstrate the safety and effectiveness of our current diagnostics and any future diagnostics we may develop, which we expect will require separate regulatory clearance or approval prior to commercialization.

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 certain biomarkers or the specific genomic alteration that the companion diagnostic was developed to detect. If the FDA, EMA or a comparable regulatory authority requires approval of a companion diagnostic for any of our product candidates, whether before or concurrently with approval of the product candidate, we, and/or future collaborators, may encounter difficulties in developing and obtaining approval for these companion diagnostics. 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 our related product candidates. Further, in April 2020, the FDA issued new guidance on developing and labeling companion diagnostics for a specific group of oncology therapeutic products, including recommendations to support a broader labeling claim rather than individual therapeutic products. We will continue to evaluate the impact of this guidance on our companion diagnostic development and strategy. This guidance and future issuances from the FDA, EMA and other comparable regulatory authorities may impact our development of a companion diagnostic for our product candidates and result in delays in regulatory approval. We may be required to conduct additional clinical trials to support a broader claim. Also, to the extent other approved diagnostics are able to broaden their labeling claims to include our approved drug products, we may be forced to abandon our companion diagnostic development plans or we may not be able to compete effectively upon approval, which could adversely impact our ability to generate revenue from the sale of our approved products and our business operations.

Additionally, we may rely on third parties for the design, development and manufacture of companion diagnostic tests for our product candidates that may require such tests. If we enter into such collaborative agreements, we will be dependent on the sustained cooperation and effort of our future collaborators in developing and obtaining approval for these companion diagnostics. It may be necessary to resolve issues such as selectivity/specificity, analytical validation, reproducibility, or clinical validation of companion diagnostics during the development and regulatory approval processes. Moreover, even if data from preclinical studies and early clinical trials appear to support development of a companion diagnostic for a product candidate, data generated in later clinical trials may fail to support the analytical and clinical validation of the companion diagnostic. We and our future collaborators may encounter difficulties in developing, obtaining regulatory approval for, manufacturing and commercializing companion diagnostics similar to those we face with respect to our product candidates themselves, including issues with achieving regulatory clearance or approval, production of sufficient quantities at commercial scale and with appropriate quality standards, and in gaining market acceptance. If we are unable to successfully develop companion diagnostics for our product candidates, or experience delays in doing so, the development of our product candidates may be adversely affected, our product candidates may not obtain marketing approval, and we may not realize the full commercial potential of any of our product candidates that obtain marketing approval. As a result, our business, results of operations and financial condition could be materially harmed. In addition, a diagnostic company with whom we contract may decide to discontinue selling or manufacturing the companion diagnostic test that we anticipate using in connection with development and commercialization of product candidates or our relationship with such diagnostic company may otherwise terminate. We may not be able to enter into arrangements with another diagnostic company to obtain supplies of an alternative diagnostic test for use in connection with the development and commercialization of our product candidates or do so on commercially reasonable terms, which could adversely affect and/or delay the development or commercialization of our product candidates.

Where appropriate, we plan to secure approval from the FDA, EMA or comparable foreign regulatory authorities through the use of accelerated registration pathways. If we are unable to obtain such approval, we may be required to conduct additional preclinical studies or 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, EMA or comparable regulatory authorities, if our confirmatory clinical trials do not verify clinical benefit, or if we do not comply with rigorous post-marketing requirements, the FDA, EMA or such other regulatory authorities may seek to withdraw accelerated approval.

Where possible, we plan to pursue accelerated development strategies in areas of high unmet need. We may seek an accelerated approval pathway for one or more of our product candidates from the FDA, EMA or comparable foreign regulatory authorities. Under the accelerated approval provisions in the Federal Food, Drug, and Cosmetic Act, and the FDA's implementing regulations, 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 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 clinical trials to verify and describe the drug's clinical benefit. If such post-approval clinical trials fail to confirm the drug's clinical benefit, the FDA may withdraw its approval of the drug. Further, in December 2022, the Consolidated Appropriations Act, 2023, including the Food and Drug Omnibus Reform Act (FDORA), was signed into law. FDORA made several changes to the FDA's authorities and its regulatory framework, including, among other changes, reforms to the accelerated approval pathway, such as requiring the FDA to specify conditions for post-approval study requirements and setting forth procedures for the FDA to withdraw a product on an expedited basis for non-compliance with post-approval requirements.

Prior to seeking accelerated approval, we will seek feedback from the FDA, EMA or comparable foreign regulatory authorities and will otherwise evaluate our ability to seek and receive such 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 for accelerated approval or any other form of expedited development, review or approval. Similarly, there can be no assurance that after subsequent feedback from the FDA, EMA or comparable foreign regulatory authorities, we will continue to pursue or apply for accelerated approval or any other form of expedited development, review or approval, even if we initially decide to do so. Furthermore, if we decide to submit an application for accelerated approval or under another expedited regulatory designation (e.g., Fast Track designation, Breakthrough Therapy designation or orphan drug designation), 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, EMA or other comparable foreign regulatory authorities could also require us to conduct further clinical trials 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, could increase the cost of development of such product candidate and could harm our competitive position in the marketplace.

We may seek additional Fast Track designations from the FDA for our product candidates. Even if our product candidates receive Fast Track designations, we may be unable to obtain or maintain the benefits associated with such Fast Track designations.

Fast Track designation is designed to facilitate the development and expedite the review of therapies for serious conditions and fill an unmet medical need. Programs with Fast Track designation may benefit from early and frequent communications with the FDA, potential priority review and the ability to submit a rolling application for regulatory review. Fast Track designation applies to both the product candidate and the specific indication for which it is being studied. If any of our product candidates receive Fast Track designation (like we have for exarafenib for the treatment of patients with BRAF Class II or III alteration-positive and/or NRAS

mutation-positive stage IIb to IV malignant melanoma that is metastatic or unresectable) but do not continue to meet the criteria for Fast Track designation, or if our clinical trials are delayed, suspended or terminated, or put on clinical hold due to unexpected adverse events or issues with clinical supply, we will not receive the benefits associated with the Fast Track program. Furthermore, Fast Track designation does not change the standards for approval. Fast Track designation alone does not guarantee qualification for the FDA's priority review procedures.

A Breakthrough Therapy designation by the FDA, even if granted for any of our product candidates, may not lead to a faster development or regulatory review or approval process and it does not increase the likelihood that our product candidates will receive marketing approval.

We may seek Breakthrough Therapy designation for one or more of our current or future product candidates. A breakthrough therapy is defined as a drug or biologic that is intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening disease or condition and preliminary clinical evidence indicates that the drug or biologic may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For product candidates that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the clinical trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Drugs designated as breakthrough therapies by the FDA may also be eligible for other expedited approval programs, including accelerated approval.

Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if we believe one of our product candidates meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation. In any event, the receipt of a Breakthrough Therapy designation for a product candidate may not result in a faster development process, review or approval compared to candidate products considered for approval under non-expedited FDA review procedures and does not assure ultimate approval by the FDA. In addition, even if one or more of our product candidates qualify as breakthrough therapies, the FDA may later decide that the product no longer meets the conditions for qualification. Thus, even though we may seek Breakthrough Therapy designation for one or more of our current or future product candidates, there can be no assurance that we will receive Breakthrough Therapy designation.

We may not be able to obtain orphan drug designation or obtain or maintain orphan drug exclusivity for our product candidates and, even if we do, that exclusivity may not prevent the FDA, EMA or other comparable foreign regulatory authorities, from approving competing products.

Regulatory authorities in some jurisdictions, including the United States and the EU, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a product candidate as an orphan drug if it is a drug intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals annually in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. Our target indications may include diseases with large patient populations or may include orphan indications. However, there can be no assurances that we will be able to obtain orphan designations for our product candidates.

In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages and user-fee waivers. In addition, 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 candidate is entitled to orphan drug exclusivity. Orphan drug exclusivity in the United States provides that the FDA may not approve any other applications, including a full NDA, to market the same drug for the same indication for seven years, except in limited circumstances. The applicable exclusivity period is 10 years in Europe. The European exclusivity period can be reduced to six years if a drug no longer meets the criteria for orphan drug designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified.

Even if we obtain orphan drug designation for a product candidate (like we have for exarafenib for the treatment of stage IIb-IV melanoma), we may not be able to obtain or maintain orphan drug exclusivity for that product candidate. We may not be the first to obtain marketing approval of any product candidate for which we have obtained orphan drug designation for the orphan-designated indication due to the uncertainties associated with

developing pharmaceutical products. In addition, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan-designated indication or may be lost if the FDA later determines that the request for designation was materially defective or if we are unable to ensure that we will be able to manufacture sufficient quantities of the product to meet the needs of patients with the rare disease or condition. Further, even if we obtain orphan drug exclusivity for a product, that exclusivity may not effectively protect the product from competition because different drugs with different active moieties may be approved for the same condition. Even after an orphan drug is approved, the FDA can subsequently approve the same drug with the same active moiety for the same condition if the FDA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care or the manufacturer of the product with orphan exclusivity is unable to maintain sufficient product quantity. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the product candidate any advantage in the regulatory review or approval process or entitles the product candidate to priority review.

We may face difficulties from changes to current regulations and future legislation. Healthcare legislative measures aimed at reducing healthcare costs may have a material adverse effect on our business and results of operations.

Existing regulatory policies may change, and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We 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. 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 lose any marketing approval that we may have obtained, and we may not achieve or sustain profitability.

For example, in March 2010, the Patient Protection and Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the ACA), was passed, which substantially changed the way healthcare is financed by both the government and private insurers, and continues to significantly impact the U.S. pharmaceutical industry. Since its enactment, there have been executive, judicial and Congressional challenges to certain aspects of the ACA, including legal and constitutional challenges in the Fifth Circuit Court and the Supreme Court of the United States. In June 2021, the Supreme Court of the United States held that Texas and other challengers had no legal standing to challenge the ACA, dismissing the case without specifically ruling on the constitutionality of the ACA. Accordingly, the ACA remains in effect in its current form. It is unclear how this Supreme Court decision, future litigation, or healthcare measures promulgated by the Biden administration will impact our business, financial condition and results of operations. Complying with any new legislation or changes in healthcare regulation could be time consuming and expensive, resulting in a material adverse effect on our business.

In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted. These changes included aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, effective April 1, 2013, which, due to subsequent legislative amendments, will stay in effect through 2031, with the exception of a temporary suspension that was in effect from May 1, 2020, through March 31, 2022. Under current legislation, the actual reduction in Medicare payments will vary from 1% in 2022 to up to 4% in the final fiscal year of this sequester. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, reduced Medicare payments to several providers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. These laws as well as future legislation and executive actions may result in additional reductions in Medicare and other healthcare funding, which could have a material adverse effect on customers for our drugs, if approved, and accordingly, our financial operations.

Moreover, there has been heightened governmental scrutiny recently over the manner in which drug 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 drug products. Under the American Rescue Plan Act of 2021, effective January 1, 2024, the statutory cap on Medicaid Drug Rebate Program rebates that manufacturers pay to state Medicaid programs will be eliminated. Elimination of this cap may require pharmaceutical manufacturers to pay more in rebates than it receives on the sale of products, which could have a material impact

on our business. Further, based on a recent executive order, the Biden administration expressed its intent to pursue certain policy initiatives to reduce drug prices. The HHS has released a Comprehensive Plan for Addressing High Drug Prices that outlines principles for drug pricing reform and potential legislative policies that Congress could pursue to advance these principles. In August 2022, Congress passed the Inflation Reduction Act of 2022, which includes prescription drug provisions that have significant implications for the pharmaceutical industry and Medicare beneficiaries, including allowing the federal government to negotiate a maximum fair price for certain high-priced single source Medicare drugs, imposing penalties and excise tax for manufacturers that fail to comply with the drug price negotiation requirements, requiring inflation rebates for all Medicare Part B and Part D drugs, with limited exceptions, if their drug prices increase faster than inflation, and redesigning Medicare Part D to reduce out-of-pocket prescription drug costs for beneficiaries, among other changes. The impact of these legislative, executive, and administrative actions and any future healthcare measures and agency rules implemented by the Biden administration on us and the pharmaceutical industry as a whole is unclear. The implementation of cost containment measures, including the prescription drug provisions under the Inflation Reduction Act, as well as other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our product candidates if approved. Complying with any new legislation and regulatory changes could be time-intensive and expensive, resulting in a material adverse effect on our business.

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. Additionally, a number of states are considering or have recently enacted drug price transparency and reporting laws that could substantially increase our compliance burdens and expose us to greater liability under such state laws once we begin to commercialize any of our product candidates, if approved.

We are unable to predict the future course of federal or state healthcare legislation in the United States directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. These and any further changes in the law or regulatory framework that reduce our revenue or increase our costs could also have a material and adverse effect on our business, financial condition and results of operations. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect:

- the demand for our product candidates if we obtain regulatory approval;
- our ability to set a price that we believe is fair for our products;
- our ability to obtain coverage and reimbursement approval for a product;
- our ability to generate revenue and achieve or maintain profitability;
- the level of taxes that we are required to pay; and
- the availability of capital.

We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in 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.

Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for biotechnology products. We cannot be sure whether additional legislative changes will be enacted, or whether FDA regulations, guidance or interpretations will be changed, or what the impact of such changes on the marketing approvals of our product candidates, if any, may be. In addition, increased scrutiny by Congress of the FDA's approval process may significantly delay or prevent marketing approval, as well as subject us to more stringent product labeling and post-marketing testing and other requirements.

Additionally, the collection and use of health data in the EU is governed by the General Data Protection Regulation (GDPR), which extends the geographical scope of EU data protection law to non-EU entities under

certain conditions and imposes substantial obligations upon companies and new rights for individuals, as discussed in the risk factor below titled, "*Data collection is governed by restrictive regulations governing the use, processing and cross-border transfer of personal information.*"

Finally, state and foreign laws may apply generally to the privacy and security of information we maintain, and may differ from each other in significant ways, thus complicating compliance efforts. For example, the California Consumer Privacy Act of 2018 (CCPA), which took effect on January 1, 2020, gives California residents expanded rights to access and require deletion of their personal information, opt out of certain personal information sharing, and receive detailed information about how their personal information is used. In addition, the CCPA allows enforcement by the California Attorney General, with fines set at $2,500 per violation (i.e., per person) or $7,500 per intentional violation, and authorizes private lawsuits to recover statutory damages for certain data breaches. While it exempts some data regulated by the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and certain clinical trials data, the CCPA, to the extent applicable to our business and operations, may increase our compliance costs and potential liability with respect to other personal information we collect about California residents. Some observers note that the CCPA could mark the beginning of a trend toward more stringent privacy legislation in the U.S., which could increase our potential liability and adversely affect our business. For example, Virginia, Utah, Colorado, and Connecticut have enacted comprehensive privacy statutes that have become, or will become, effective in 2023. Additionally, a new privacy law, the California Privacy Rights Act (CPRA), was approved by California voters in the November 3, 2020 election. The CPRA significantly modifies the CCPA. It became effective January 1, 2023, and enforcement is expected to commence July 1, 2023. The U.S. federal government also is contemplating federal privacy legislation. The CPRA and these other laws create further uncertainty and may require us to incur additional costs and expenses.

Inadequate funding for the FDA, the SEC and other U.S. government agencies or the EMA or comparable foreign regulatory authorities could hinder their ability to hire and retain key leadership and other personnel, prevent new products and services from being developed or commercialized in a timely manner or otherwise prevent those agencies from performing normal business functions on which the operation of our business may rely, which could negatively impact our business.

The ability of the FDA, EMA or comparable foreign regulatory authorities to review and approve new products can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory, and policy changes. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of the SEC and other government agencies on which our operations may rely, including those that fund research and development activities, is subject to the political process, which is inherently fluid and unpredictable. Disruptions at the FDA, EMA and other comparable regulatory authorities may also slow the time necessary for new drugs to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. For example, in 2018 and 2019, the U.S. government shut down several times and certain regulatory authorities, such as the FDA and the SEC, had to furlough critical employees and stop critical activities. In response to COVID-19, since March 2020 when foreign and domestic inspections of facilities were largely placed on hold, the FDA has been working to resume routine surveillance, bioresearch monitoring and pre-approval inspections on a prioritized basis. In 2020 and 2021, a number of companies announced receipt of complete response letters due to the FDA's inability to complete required inspections for their applications. While the FDA has largely caught up with domestic preapproval inspections, it continues to work through its backlog of foreign inspections. Regulatory authorities outside the U.S. may adopt similar restrictions or other policy measures in response to COVID-19 and may experience delays in their regulatory activities. If a prolonged government shutdown or other disruption to normal operations occurs, including delays or disruptions due to COVID-19, travel restrictions, and staffing shortages, it could significantly impact the ability of the FDA to timely review, provide feedback to our clinical trials and process our regulatory submissions, which could have a material adverse effect on our business. Further, in our operations as a public company, future government shutdowns could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

Our relationships with healthcare professionals, clinical investigators, CROs and third-party payors in connection with our current and future business activities may be subject to federal and state healthcare fraud and abuse laws, false claims laws, transparency laws, government price reporting, and health information privacy and security laws, which could expose us to significant losses, including, among other things, criminal sanctions, civil penalties, contractual damages, exclusion from governmental healthcare programs, reputational harm, administrative burdens and diminished profits and future earnings.

Healthcare providers and third-party payors play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our current and future arrangements with healthcare professionals, clinical investigators, CROs, third-party payors and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we research, as well as market, sell and distribute our product candidates for which we obtain marketing approval.

The laws that may affect our ability to operate include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual, or the purchase, lease, order or recommendation 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 the Medicare and Medicaid programs. 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. Violations are subject to civil and criminal fines and penalties for each violation, plus up to three times the remuneration involved, imprisonment, and exclusion from government healthcare programs. 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 False Claims Act (FCA). There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, but the exceptions and safe harbors are drawn narrowly and require strict compliance in order to offer protection;
- federal civil and criminal false claims laws, including the FCA, which can be enforced through civil ‘‘qui tam’’ or ‘‘whistleblower’’ actions, and civil monetary penalty laws, impose criminal and civil penalties against individuals or entities for, among other things, knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid, or other federal health care programs that are false or fraudulent; knowingly making or causing a false statement material to a false or fraudulent claim or an obligation to pay money to the federal government; or knowingly concealing or knowingly and improperly avoiding or decreasing such an obligation. Manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to ‘‘cause’’ the submission of false or fraudulent claims. The FCA also permits a private individual acting as a ‘‘whistleblower’’ to bring actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery. When an entity is determined to have violated the federal civil FCA, the government may impose civil fines and penalties for each false claim, plus treble damages, and exclude the entity from participation in Medicare, Medicaid and other federal healthcare programs;
- HIPAA, which created additional federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity can be found guilty of violating HIPAA without actual knowledge of the statute or specific intent to violate it;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH), and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses and their respective business

associates that perform services for them that involve the use, or disclosure of, individually identifiable health information as well as their covered subcontractors, relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions;

- the federal Physician Payments Sunshine Act, created under the ACA and its implementing regulations, which require applicable manufacturers of covered drugs, devices, biologicals or medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) to report annually to HHS information related to payments or other transfers of value made in the previous year to covered recipients, including physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain non-physician healthcare professionals (such as physician assistants and nurse practitioners, among others) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members; and
- analogous state and foreign laws and regulations, such as state and foreign anti-kickback, false claims, consumer protection and unfair competition laws which may apply to pharmaceutical business practices, including but not limited to, research, distribution, sales and marketing arrangements as well as submitting claims involving healthcare items or services reimbursed by any third-party payor, including commercial insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government that otherwise restricts payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to file reports with states regarding pricing and marketing information, such as the tracking and reporting of gifts, compensations and other remuneration and items of value provided to healthcare professionals and entities; state and local laws requiring the registration of pharmaceutical sales representatives; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

We may also be subject to federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers.

Efforts to ensure that our current and future business arrangements with third parties will comply with applicable healthcare and data privacy laws and regulations will involve on-going substantial costs. Because of the breadth of these laws and the narrowness of the statutory exceptions and safe harbors available, it is possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations, agency guidance 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 the federal and state healthcare laws described above or any other governmental regulations that apply to us, our employees, or contractors who conduct business on our behalf or for us, we may be subject to penalties, including without limitation, civil, criminal and/or administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government programs, such as Medicare and Medicaid, injunctions, private ''qui tam'' actions brought by individual whistleblowers in the name of the government, exclusion, debarment or refusal to allow us to enter into government contracts, contractual damages, reputational harm, administrative burdens, diminished profits and future earnings, additional reporting requirements and/or oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of 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 programs.

Data collection is governed by restrictive regulations governing the use, processing and cross-border transfer of personal information.

In conducting and/or enrolling patients in our current or future clinical trials, we are subject to restrictions relating to privacy, data protection and data security and may be subject to additional restrictions as our clinical operations expand. For example, the collection, use, storage, disclosure, transfer, or other processing of personal data regarding individuals in the EU, including personal health data, is subject to the GDPR. The GDPR is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches (initially to supervisory authorities and, if the breach is serious enough, to individuals), and taking certain measures when engaging third-party processors. The GDPR also imposes strict rules on the transfer of personal data to countries outside the EU, including the United States, and permits data protection authorities to impose large penalties for violations of the GDPR, including potential fines of up to €20 million or 4% of annual global revenues, whichever is greater, for the most serious of violations. 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. In addition, the GDPR includes restrictions on cross-border data transfers. Certain aspects of cross-border data transfers under the GDPR are uncertain as the result of legal proceedings in the EU, including a July 2020 decision by the Court of Justice for the European Union (CJEU) that invalidated the EU-U.S. Privacy Shield and called into question the efficacy and legality of using standard contractual clauses (SCCs). To address certain concerns of the CJEU, the European Commission issued revised SCCs in June 2021. Regulatory guidance and other developments relating to cross-border personal data transfers, including the necessity of putting in place those revised SCCs and the UK SCCs, as discussed below, may increase the complexity of transferring personal data across borders and may require us to engage in additional contractual negotiations and to modify our policies and practices relating to the transfer and other processing of personal data. The GDPR increased our responsibility and liability in relation to personal data that we process where such processing is subject to the GDPR, and we may be required to put in place additional mechanisms to ensure compliance with the GDPR, including as implemented by individual countries.

Further, the exit of the United Kingdom (UK) from the EU has created uncertainty with regard to data protection regulation in the UK. The Data Protection Act of 2018 implements and complements the GDPR and is effective in the UK along with a version of the GDPR referred to as the UK GDPR. Collectively, the Data Protection Act of 2018 and the UK GDPR authorize significant fines, up to the greater of £17.5 million or 4% of global turnover, and expose us to two parallel regimes and other potentially divergent enforcement actions for certain violations. Further, aspects of data protection in the UK remain uncertain. On June 28, 2021, the European Commission issued an adequacy decision under the GDPR and the Law Enforcement Directive, pursuant to which personal data generally may be transferred from the EU to the UK without restriction; however, this adequacy decision is subject to a four-year ''sunset'' period, after which the European Commission's adequacy decision may be renewed, and this decision may be revoked or modified in the interim. Additionally, on February 2, 2022, the UK's Information Commissioner's Office issued new standard contractual clauses to support personal data transfers out of the UK (UK SCCs), which came into effect March 21, 2022, and we may, in addition to other impacts, experience additional costs associated with increased compliance burdens and be required to engage in new contract negotiations with third parties that aid in processing personal data on our behalf or localize certain personal data.

Other jurisdictions also increasingly maintain laws and regulations addressing privacy, data protection, and information security. For example, on August 20, 2021, the Personal Information Protection Law, or PIPL, was adopted in the PRC and it went into effect on November 1, 2021. The PIPL shares similarities with the GDPR, including extraterritorial application, data minimization, data localization, and purpose limitation requirements, and obligations to provide certain notices and rights to citizens of the PRC. The PIPL allows for fines of up to 50 million renmibi or 5% of a covered company's revenue in the prior year.

We may incur liabilities, expenses, costs, and other operational losses under the GDPR and local laws of applicable EU member states, the UK, and other regions in connection with any measures we take to comply with them. Working to comply with the GDPR and other laws and regulations to which we are subject in Europe and other regions outside the United States relating to privacy, data protection, and information security will be a

rigorous and time-intensive process that may increase our cost of doing business or require us to change our business practices, and despite those efforts, there is a risk that we may be subject to fines and penalties, litigation, and reputational harm in connection with our activities in those regions.

In addition, in California the CCPA creates new individual privacy rights for California consumers (as defined in the law) and places increased privacy and security obligations on entities handling personal data of consumers or households. The CCPA requires covered companies to provide new disclosure to consumers about such companies' data collection, use and sharing practices, provide such consumers new ways to opt-out of certain sales or transfers of personal information, and provide consumers with additional causes of action in data breach situations. The CCPA went into effect on January 1, 2020, and the California Attorney General commenced enforcement actions for violations on July 1, 2020. Moreover, the CPRA was approved by California voters in the November 3, 2020 election. The CPRA significantly modifies the CCPA. It became effective January 1, 2023, and enforcement is expected to commence July 1, 2023. The CPRA creates further uncertainty and may require us to incur additional costs and expenses. The CCPA and CPRA could mark the beginning of a trend toward more stringent privacy legislation in the United States. The CCPA has prompted a number of proposals for federal and state privacy legislation. For example, Virginia, Utah, Colorado, and Connecticut have enacted the comprehensive privacy statutes that became, or will become effective in 2023 and share similarities with the CCPA. These and other new laws that may be proposed or enacted could increase our potential liability and adversely affect our business.

Compliance with U.S. 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, or in some cases, impact our ability to operate in certain jurisdictions. Any actual or alleged failure to comply with U.S. or international laws and regulations relating to privacy, data protection, and data security could result in governmental investigations, proceedings and enforcement actions (which could include civil or criminal penalties), private litigation or adverse publicity, harm to our reputation, 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 or impose other obligations or restrictions in connection with our use, retention and other processing of information, and we may otherwise face contractual restrictions applicable to our use, retention, and other processing of 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 and could result in adverse publicity that could harm our business.

Our employees, independent contractors, consultants, commercial collaborators, principal investigators, CROs, suppliers 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, independent contractors, consultants, commercial collaborators, principal investigators, CROs, suppliers and vendors may engage in misconduct or other improper activities. Misconduct by these parties could include failures to comply with FDA, EMA or comparable foreign regulatory authority regulations, provide accurate information to the FDA, EMA or comparable foreign regulatory authorities, comply with federal and state health care fraud and abuse laws and regulations, accurately report financial information or data or disclose unauthorized activities to us. In particular, research, sales, marketing and business arrangements in the health care industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Misconduct by these parties could also involve the improper use of information obtained in the course of clinical trials, which could result in regulatory sanctions and serious harm to our reputation. We have adopted a code of conduct, but it is not always possible to identify and deter misconduct by these 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 comply with these laws or regulations. 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, including the imposition of significant penalties, including civil,

criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government funded healthcare programs, such as 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.

Our business activities may be subject to the U.S. Foreign Corrupt Practices Act (FCPA) and similar anti-bribery and anti-corruption laws of other countries in which we operate, as well as U.S. and certain foreign export controls, trade sanctions, and import laws and regulations. Compliance with these legal requirements could limit our ability to compete in foreign markets and subject us to liability if we violate them.

Our business activities may be subject to the FCPA and similar anti-bribery or anti-corruption laws, regulations or rules of other countries in which we operate. Anti-corruption and anti-bribery laws generally prohibit companies and their employees, agents, representatives, business partners and third-party intermediaries from offering, promising, giving or authorizing others to give anything of value, either directly or indirectly, improper payments or benefits to recipients in the public or private sector. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls. Our business is heavily regulated and therefore involves significant interaction with public officials, including officials of non-U.S. governments. Additionally, in many other countries, hospitals are owned and operated by the government, and doctors and other hospital employees would be considered foreign officials under the FCPA. We sometimes leverage third parties to conduct our business abroad. We, our employees, agents, representatives, business partners and third-party intermediaries may have direct or indirect interactions with officials and employees of government agencies or state-owned or affiliated entities and we may be held liable for the corrupt or other illegal activities of these employees, agents, representatives, business partners or third-party intermediaries even if we do not explicitly authorize such activities. Recently, the SEC and DOJ have increased their FCPA enforcement activities with respect to biotechnology and pharmaceutical companies.

While we have policies and procedures to address compliance with such laws, we cannot assure you that none of our employees, agents, representatives, business partners and third-party intermediaries will take actions in violation of our policies or applicable laws and regulations, particularly given the high level of complexity of these laws. Any allegations or violations of these laws and regulations could result in whistleblower complaints, adverse media coverage, investigations, prosecutions, settlements, enforcement actions, fines, damages, severe criminal or civil sanctions, disgorgement, loss of export privileges, suspension or debarment from government contracts and other sanctions and remedial measures, and prohibitions on the conduct of our business. Any such allegations or violations could have an adverse impact on our reputation, our brand, our international activities, our ability to attract and retain employees and our business, prospects, operating results and financial condition. Responding to any investigation or action will likely result in a materially significant diversion of management's attention and resources and significant defense costs and other professional fees.

In addition, our products may be subject to U.S. and foreign export controls, trade sanctions and import laws and regulations. Governmental regulation of the import or export of our products, or our failure to obtain any required import or export authorization for our products, when applicable, could harm our international or domestic sales and adversely affect our revenue. Compliance with applicable regulatory requirements regarding the export of our products may create delays in the introduction of our products in international markets or, in some cases, prevent the export of our products to some countries altogether. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain products and services to countries, governments, and persons targeted by U.S. sanctions. If we fail to comply with export and import regulations and such economic sanctions, penalties could be imposed, including fines and/or denial of certain export privileges. Moreover, any new export or import restrictions, new legislation or shifting approaches in the enforcement or scope of existing regulations, or in the countries, persons, or products targeted by such regulations, could result in decreased use of our products by, or in our decreased ability to export our products to, existing or potential customers with international operations. Any decreased use of our products or limitation on our ability to export or sell our products would likely adversely affect our business.

If we fail to comply with California laws or Nasdaq rules governing the diversity of our board of directors, we could be exposed to financial penalties and suffer reputational harm.

In September 2018, California's Senate Bill 826 was signed into law (though subsequently ruled unconstitutional as described below). Senate Bill 826 generally requires public companies with principal executive offices in California to have a minimum number of females on its board of directors. As of December 31, 2021, each public company was required to have at least two females on its board of directors if the company had at least five directors, and at least three females on its board of directors if the company had at least six directors as of December 31, 2021. Additionally, on September 30, 2020, Assembly Bill 979 was signed into law (though subsequently ruled unconstitutional as described below). Assembly Bill 979 generally requires public companies with principal executive offices in California to include specified numbers of directors from ''underrepresented communities.'' A director from an ''underrepresented community'' means a director who self-identifies as Black, African American, Hispanic, Latino, Asian, Pacific Islander, Native American, Native Hawaiian, Alaska Native, gay, lesbian, bisexual or transgender. As of December 31, 2021, each public company with principal executive offices in California was required to have at least one director from an underrepresented community. By December 31, 2022, a public company with more than four but fewer than nine directors was required to have a minimum of two directors from underrepresented communities, and a public company with nine or more directors was required to have a minimum of three directors from underrepresented communities. These laws do not provide a transition period for newly listed companies. On April 1, 2022, a California state court held that Assembly Bill 979 violates the equal protection clause of the California Constitution, thereby precluding California from using taxpayer funds to implement Assembly Bill 979. Similarly, on May 13, 2022, a California state court held that Senate Bill 826 violates the equal protection clause of the California Constitution. The State of California has appealed the decisions with respect to Senate Bill 826 and Assembly Bill 979. As a result, it is uncertain whether we will have to continue to comply with either piece of legislation. We continue to monitor developments in both of the cases.

In addition, in August 2021, the SEC announced that it had approved Nasdaq's proposed rule change to advance board diversity and enhance transparency of board diversity statistics through new listing requirements. Under these new listing rules, Nasdaq-listed companies are required, subject to certain exceptions, to annually disclose diversity statistics regarding their directors' voluntary self-identified characteristics and include on their boards of directors at least two ''Diverse'' directors or publicly disclose why their boards do not include such ''Diverse'' directors. Under the phase-in period for these new listing rules, for companies listed on the Nasdaq Global Select Market, this disclosure requirement regarding the existence of at least one ''Diverse'' director applies starting on the later of August 7, 2023, or the date that the company files its proxy statement for its annual shareholder meeting during 2023, and regarding the existence of at least two ''Diverse'' directors applies starting on the later of August 6, 2025, or the date that the company files its proxy statement for its annual shareholder meeting during 2025. Under these new listing rules, a ''Diverse'' director is someone who self-identifies either as (i) female or (ii) Black or African American, Hispanic or Latinx, Asian, Native American or Alaska Native, Native Hawaiian or Pacific Islander, or two or more races or ethnicities, or (iii) lesbian, gay, bisexual, transgender or a member of the queer community. The SEC's approval of Nasdaq's rule change is subject to ongoing litigation, the outcome of which remains uncertain.

Our board of directors currently includes four female directors, and two directors from ''underrepresented communities.'' As of December 31, 2022, we were in compliance with Senate Bill 826 and Assembly Bill 979. However, if the composition of our board of directors changes in the future, we may be out of compliance with Senate Bill 826 or Assembly Bill 979 (in either case, if applicable). An initial violation of either law can result in a fine from the California Secretary of State in the amount of $100,000, with each subsequent violation resulting in a fine of $300,000. In addition, if our current or future female or other ''Diverse'' directors no longer serve on our board of directors prior to the applicable dates under the phase-in period for the new Nasdaq listing rules, we could be out of compliance with these new Nasdaq listing rules. We cannot assure that we can recruit, attract and/or retain qualified members of the board and meet gender and diversity requirements under California law (if applicable) or Nasdaq listing rules, which may expose us to financial penalties and adversely affect our reputation.

Risks Related to Employee Matters, Managing Our Growth and Other Risks Related to Our Business

Our success is highly dependent on our ability to attract, hire and retain highly skilled executive officers and employees.

We currently have a small team focused on research and development of small molecule kinase inhibitors. To succeed, we must recruit, hire, retain, manage and motivate qualified clinical, scientific, technical and management personnel, and we face significant competition for experienced personnel. We are highly dependent on the principal members of our management and scientific and medical staff. If we do not succeed in attracting and retaining qualified personnel, particularly at the management level, it could adversely affect our ability to execute our business plan and harm our operating results. In particular, the loss of one or more of our executive officers could be detrimental to us if we cannot recruit suitable replacements in a timely manner. We could in the future have difficulty attracting and retaining experienced personnel and may be required to expend significant financial resources in our employee recruitment and retention efforts.

Many of the other biotechnology companies that we compete against for qualified personnel have greater financial and other resources, different risk profiles and a longer history in the industry than we do. They also may provide higher compensation, more diverse opportunities and better prospects for career advancement. Some of these characteristics may be more appealing to high-quality candidates than what we have to offer. If we are unable to continue to attract and retain high-quality personnel, the rate and success at which we can discover, develop and commercialize our product candidates will be limited and the potential for successfully growing our business will be harmed.

Additionally, we rely on our scientific experts and other scientific and clinical advisors and consultants to assist us in formulating our research, development and clinical strategies. These advisors and consultants are not our employees and may have commitments to, or consulting or advisory contracts with, other entities that may limit their availability to us. In addition, these advisors and consultants typically will not enter into non-compete agreements with us. If a conflict of interest arises between their work for us and their work for another entity, we may lose their services. Furthermore, our advisors may have arrangements with other companies to assist those companies in developing products or technologies that may compete with ours. In particular, if we are unable to maintain consulting or employment relationships with our scientific experts and other scientific and clinical advisors and consultants, or if they provide services to our competitors, our development and commercialization efforts will be impaired and our business will be significantly harmed.

Many of our research and preclinical activities are conducted by third parties outside of the United States, including in China. A significant disruption in the operations of those third parties, a trade war or political unrest in China or other areas in which these third parties are located could materially adversely affect our business, financial condition and results of operations.

We conduct many of our research and preclinical activities with contracted third parties located outside of the United States, including in China. In February 2023, we announced that we acquired the ownership stake of Kinnjiu previously held by the Series A investors for $24.0 million, using a combination of $9.1 million in cash and 2.2 million shares of common stock of Kinnate. We retain Kinnjiu's cash, intellectual property and other assets, including key personnel and its legal entity structure. Kinnjiu enables the potential development and commercialization of certain targeted oncology product candidates across People's Republic of China, Hong Kong, Taiwan and Macau. Any disruption in the operations of such third parties or in their ability to meet our needs, whether as a result of (i) operational challenges, such as delays or disruptions in supply chains, difficulties in hiring and retaining key employees and other service providers, or changes in or failure to successfully execute development, commercialization or other strategic plans, (ii) regulatory obstacles caused by changes in or newly adopted applicable rules and regulations of governing entities, (iii) adverse global or regional economic conditions or geopolitical conflicts, such as the ongoing conflict between Ukraine and Russia, including the sanctions imposed by the United States, the European Union and others on Russia and other related parties, (iv) a natural disaster or public health emergency, such as the COVID-19 pandemic, or (v) other causes, could impair our ability to operate our business on a day-to-day basis and to continue development of our programs. Furthermore, since many of these third parties and Kinnjiu are located in China, we are exposed to the possibility of disruption and increased costs in the event of changes in the foreign policies of the United States government or the domestic or foreign policies of the government of China, political unrest or unstable economic

conditions in China. For example, a trade war between the United States and China could lead to tariffs on the chemical intermediates used in our product candidates. Any of these matters could materially and adversely affect our development timelines, business and financial condition.

We will need to grow the size and capabilities of our organization, and we may experience difficulties in managing this growth.

As of December 31, 2022, we had 84 full-time employees, including 63 employees engaged in research and development, of which 30 hold an MD, PhD or PharmD. In order to successfully implement our development and commercialization plans and strategies, and as we transition into operating as a public company, we expect to need significant additional managerial, operational, sales, marketing, financial and other personnel. Future growth will impose significant added responsibilities on members of management, including:

- identifying, recruiting, integrating, maintaining, retaining and motivating our current and additional employees;
- managing our internal development efforts effectively, including the preclinical, clinical, FDA, EMA and other comparable foreign regulatory authorities' review process for our RAF and FGFR programs and our other product candidates, while complying with any contractual obligations to contractors and other third parties;
- managing increasing operational and managerial complexity; and
- improving our operational, financial and management controls, reporting systems and procedures.

Our future financial performance and our ability to successfully develop and, if approved, commercialize product candidates developed from our RAF and FGFR programs and other product candidates will depend, in part, on our ability to effectively manage any future growth, and our management may also have to divert a disproportionate amount of its attention away from day-to-day activities in order to devote a substantial amount of time to managing these growth activities.

We currently rely, and for the foreseeable future will continue to rely, in substantial part on certain independent organizations, advisors and consultants to provide certain services, including key aspects of research, clinical development and manufacturing. There can be no assurance that the services of independent organizations, advisors and consultants will continue to be available to us on a timely basis when needed, or that we can find qualified replacements. In addition, if we are unable to effectively manage our outsourced activities or if the quality or accuracy of the services provided by third-party service providers is compromised for any reason, our preclinical studies and clinical trials may be extended, delayed or terminated, and we may not be able to obtain marketing approval for any of our product candidates or otherwise advance our business. There can be no assurance that we will be able to manage our existing third-party service providers or find other competent outside contractors and consultants on economically reasonable terms, or at all.

If we are not able to effectively expand our organization by hiring new employees and/or engaging additional third-party service providers, we may not be able to successfully implement the tasks necessary to further develop and commercialize our RAF and FGFR programs and any of our other product candidates and, accordingly, may not achieve our research, development and commercialization goals.

Our internal computer systems, or those of any of our CROs, manufacturers, other contractors or consultants or potential future collaborators, may fail or suffer actual or suspected security or data privacy breaches or incidents or other unauthorized or improper access to, use of, or destruction of our proprietary or confidential data, employee data, or personal data, which could result in additional costs, loss of revenue, significant liabilities, harm to our brand and material disruption of our operations, and potentially significant delays in our delivery to market.

Despite the implementation of security measures in an effort to protect systems that store our information, given their size and complexity and the increasing amounts of information maintained on our internal information technology systems and external processing and storage systems (e.g., cloud), and those of our third-party CROs, other contractors (including sites performing our current or future clinical trials) and consultants and other third-party service providers, these systems are potentially vulnerable to breakdown or other damage or interruption. Our systems and the systems of third parties who support our operations are vulnerable to service interruptions, system malfunction, natural disasters, terrorism, war (such as the ongoing conflict between Ukraine

and Russia) and telecommunication and electrical failures, as well as security breaches and incidents arising from or caused by inadvertent or intentional actions by our employees, contractors, consultants, business partners, and/or other third parties, or from cyber-attacks by malicious third parties (including the deployment of harmful malware, ransomware, denial-of-service attacks, social engineering and other means to affect service reliability and threaten the confidentiality, integrity and availability of information), which may compromise our system infrastructure or lead to unauthorized access to or disruption of our or third-party systems used in our business and the unauthorized access to, misuse, disclosure, loss, destruction, alteration or dissemination of, or damage to, our data, including trade secrets or other confidential information, intellectual property, proprietary business information, and personal information. For example, companies have experienced an increase in phishing and social engineering attacks from third parties in recent years. Between March 2020 and June 2021 our employees worked almost exclusively from home. Since June 2021, our employees have been working in a hybrid model in our offices and from home. Depending on public health concerns, we may need to adjust our working model from time to time. As a result, we have increased cyber security and data security risks, due to increased use of home wi-fi networks and virtual private networks, as well as increased disbursement of physical machines. While we implement controls to reduce the risk of a resulting cyber security or data security incident or breach, we may experience data security incidents, and there is no guarantee that the measures we have implemented will be adequate to safeguard all systems and data, especially with an increased number of employees working from home or in a hybrid model where it is more difficult for us to monitor our employees.

Any disruption, security incident, or security breach resulting in any loss, destruction, unavailability, alteration or dissemination of, or damage to, our data (including confidential information) or other data we or any of our CROs, other contractors or consultants or potential future collaborators or other third-party service providers maintain or otherwise process, or our applications, or for it to be believed or reported that any of these occurred, could result in us incurring liability and reputational damage and the development and commercialization of our product candidates could be delayed. For example, if a security incident were to cause interruptions in our operations, it could result in a material disruption of our programs and the development of our product candidates could be delayed. In addition, the loss or unavailability of clinical trial data for our product candidates could result in delays in our marketing approval efforts and significantly increase our costs to recover or reproduce the data. Furthermore, disruptions of our internal information technology systems or those of third parties used in our business, or security breaches or incidents impacting us or any of our CROs, other contractors or consultants or potential future collaborators or other third-party service providers, could result in the loss, misappropriation, and/or unauthorized access, use, or disclosure of, or the inability to access, data (including trade secrets or other confidential information, intellectual property, proprietary business information, and personal information), which could result in financial, legal, business, and reputational harm to us. Unauthorized access, use, or disclosure of personal information, including personal information regarding our clinical trial subjects or employees, could harm our reputation directly, compel us to notify individuals or regulators under data breach notification laws, cause us to incur costs related to investigation of the incident (including legal expenses, forensic examination costs, and remediation costs), subject us to mandatory corrective action, and otherwise subject us to liability under laws and regulations that protect the privacy and security of personal information, which could result in significant legal and financial exposure and reputational damages that could potentially have an adverse effect on our business. Our preclinical studies in China could increase our risk to such disruptions.

We expect to incur significant costs in an effort to detect, prevent, and respond to security incidents. We also rely on third parties to manufacture our product candidates, and similar events relating to their systems could also have a material adverse effect on our business. There have been and may continue to be significant supply chain attacks and operational technology attacks globally, and we cannot guarantee that our systems or those of third-party service providers or other third parties that support us or our operations have not been breached or that they do not contain exploitable defects or bugs that could result in a security incident or breach of, or other disruption to, our systems and the systems of third parties that support us and our operations. To the extent that any disruption or security incident were to result in a loss, destruction or alteration of, or damage to, our data, or inappropriate disclosure of confidential or proprietary information, we could be exposed to litigation and governmental investigations, the further development and commercialization of our product candidates could be delayed, and we could be subject to significant fines or penalties for any noncompliance with certain state, federal and/or international laws relating to privacy, data protection, and information security. Litigation and governmental investigations could force us to spend money in defense or settlement, divert management's time

and attention, increase our costs of doing business, and/or adversely affect our reputation. We could be required to fundamentally change our business activities and practices in response to such litigation or investigations, which could have an adverse effect on our business. Any actual or perceived inability to adequately protect data in our possession, custody or control could have a material adverse effect upon our reputation, business, operations, or financial condition.

Our insurance policies may not be adequate to compensate us for the potential losses arising from any such disruption in or, failure or security breach of, or incident impacting, our systems or third-party systems where information important to our business operations or commercial development is stored. In addition, such insurance may not be available to us in the future on economically reasonable terms, or at all. Further, our insurance may not cover all claims made against us and could have high deductibles in any event, and defending a suit, regardless of its merit, could be costly and divert management attention.

Our operations are vulnerable to interruption by flood, fire, earthquakes, power loss, telecommunications failure, terrorist activity, pandemics and other events beyond our control, which could harm our business.

Our office facilities are located in California. We have not undertaken a systematic analysis of the potential consequences to our business and financial results from a major flood, fire, earthquake, power loss, telecommunications failure, terrorist activity, pandemics or other disasters and do not have a recovery plan for such disasters. In addition, we do not carry sufficient insurance to compensate us for actual losses from interruption of our business that may occur, and any losses or damages incurred by us could harm our business. The occurrence of any of these business disruptions could seriously harm our operations and financial condition and increase our costs and expenses.

If we are unable to establish sales or marketing capabilities or enter into agreements with third parties to sell or market our product candidates, we may not be able to successfully sell or market our product candidates that obtain regulatory approval.

We currently do not have and have never had a marketing or sales team. In order to commercialize any product candidates, if approved, we must build marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services for each of the territories in which we may have approval to sell or market our product candidates. We may not be successful in accomplishing these required tasks.

Establishing an internal sales or marketing team with technical expertise and supporting distribution capabilities to commercialize our product candidates will be expensive and time-consuming and will require significant attention of our executive officers to manage. Any failure or delay in the development of our internal sales, marketing and distribution capabilities could adversely impact the commercialization of any of our product candidates that we obtain approval to market if we do not have arrangements in place with third parties to provide such services on our behalf. Alternatively, if we choose to collaborate, either globally or on a territory-by-territory basis, 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 will be required to negotiate and enter into arrangements with such third parties relating to the proposed collaboration and such arrangements may prove to be less profitable than commercializing the product on our own. If we are unable to enter into such arrangements when needed, on acceptable terms or at all, we may not be able to successfully commercialize any of our product candidates that receive regulatory approval, or any such commercialization may experience delays or limitations. If we are unable to successfully commercialize our approved product candidates, either on our own or through collaborations with one or more third parties, our future product revenue will suffer, and we may incur significant additional losses.

A variety of risks associated with marketing our product candidates internationally could materially adversely affect our business.

We may seek regulatory approval of our product candidates outside of the United States and, accordingly, we expect that we will be subject to additional risks related to operating in foreign countries if we obtain the necessary approvals, including:

- differing regulatory requirements and reimbursement regimes in foreign countries, such as the lack of pathways for accelerated drug approval, may result in foreign regulatory approvals taking longer and being more costly than obtaining approval in the United States;
- foreign regulatory authorities may disagree with the design, implementation or results of our clinical trials or our interpretation of data from preclinical studies or clinical trials;
- approval policies or regulations of foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval;
- unexpected changes in tariffs, trade barriers, price and exchange controls and other regulatory requirements;
- economic weakness, including inflation, or political instability in particular foreign economies and markets;
- compliance with legal requirements applicable to privacy, data protection, information security and other matters;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- difficulties staffing and managing foreign operations;
- complexities associated with managing multiple payor reimbursement regimes and government payors in foreign countries;
- workforce uncertainty in countries where labor unrest is more common than in the United States;
- potential liability under the FCPA or comparable foreign regulations;
- challenges enforcing our contractual and intellectual property rights, especially in those foreign countries that do not respect and protect intellectual property rights to the same extent as the United States;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad (such as the ongoing conflict between Ukraine and Russia, including the sanctions imposed by the United States, the European Union and others on Russia and other related parties); and
- business interruptions resulting from geo-political actions, including war and terrorism, trade policies, treaties and tariffs.

These and other risks associated with international operations may materially adversely affect our ability to attain or maintain profitable operations.

Our ability to utilize our net operating loss carryforwards and certain other tax attributes to offset future taxable income may be limited.

Our federal net operating loss (NOL) carryforwards may be unavailable to offset future taxable income because of restrictions under U.S. tax law. Under tax legislation commonly referred to as the Tax Cuts and Jobs Act (Tax Act) as amended by the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), our federal NOL carryforwards may be carried forward indefinitely, but for taxable years beginning after December 31, 2020, the deductibility of federal NOL carryforwards generated in tax years beginning after December 31, 2017 is limited to 80% of our current year taxable income. As of December 31, 2022, we had available federal NOL

carryforwards of $155.9 million. We also have available California NOL carryforwards of approximately $25.0 million as of December 31, 2022, which begin to expire in 2038. This may require us to pay U.S. federal income taxes in future years despite generating a loss for U.S. federal income tax purposes in prior years. Limitations under state law may differ. We have established a valuation allowance against the carrying value of these deferred tax assets.

In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (Code), if a corporation undergoes an ''ownership change'' (generally defined as a cumulative change in the corporation's ownership by ''5-percent shareholders'' that exceeds 50 percentage points over a rolling three-year period), the corporation's ability to use its pre-change NOL carryforwards and certain other pre-change tax attributes to offset its post-change taxable income may be limited. Similar rules may apply under state tax laws. We may have experienced such ownership changes in the past, and we may experience ownership changes in the future as a result of shifts in our stock ownership, some of which are outside our control. We have not conducted any studies to determine annual limitations, if any, that could result from such changes in ownership. There is also a risk that due to regulatory changes, such as suspensions on the use of NOL carryforwards, or other unforeseen reasons, our existing NOL carryforwards, including state NOL carryforwards, could expire or otherwise be unavailable to offset future income tax liabilities. Because our ability to utilize our NOL carryforwards and certain other tax attributes could be limited as described above, we may not be able to utilize a material portion of our NOL carryforwards and certain other tax attributes, which could have a material adverse effect on our cash flows and results of operations.

The stock-based compensation expense related to our RSUs and other outstanding equity awards will result in increases in our expenses in future periods and we may also expend substantial funds to satisfy a portion of our tax withholding and remittance obligations that arise upon the vesting and/or settlement of certain of our RSUs, which may have an adverse effect on our financial condition and results of operations.

We have granted RSUs to our employees, which vest upon the satisfaction of service-based vesting conditions occurring before the award's expiration date. The service-based vesting period is generally satisfied by the award holder providing services to us over a four-year period. As of September 1, 2022, we began recognizing stock-based compensation expense for such RSUs.

Additionally, we may expend substantial funds in connection with the tax withholding and remittance obligations that arise upon the vesting and/or settlement of our outstanding RSUs. Under U.S. tax laws, employment and income tax withholding and remittance obligations for RSUs arise in connection with the vesting and settlement of the RSUs. To fund the employment and income tax withholding and remittance obligations arising in connection with the vesting and settlement of vested RSUs, we will either (i) withhold shares of our common stock that would otherwise be issued with respect to such vested RSUs and pay the relevant tax authorities in cash to satisfy such tax obligations or (ii) have the holders of such vested RSUs use a broker or brokers to sell a portion of such shares into the market, with the proceeds of such sales to be delivered to us for us to remit to the relevant taxing authorities, in order to satisfy such employment and income tax withholding and remittance obligations. Any such expenditures by us of substantial funds to satisfy a portion of our tax withholding and remittance obligations that arise upon the vesting and/or settlement of RSUs may have an adverse effect on our financial condition and results of operations.]

Changes in tax laws or in their implementation or interpretation may adversely affect our business and financial condition.

We are or may become subject to income- and non-income-based taxes in the United States under federal, state and local jurisdictions and in certain foreign jurisdictions in which we operate. Tax laws, regulations and administrative practices in these jurisdictions may be subject to significant change, with or without advance notice. For example, on January 1, 2022, a provision of the Tax Act went into effect that eliminates the option to deduct domestic research and experimental costs in the year incurred and instead requires U.S. research and experimental costs to be capitalized and amortized ratably over a five-year period. Any such costs attributable to research conducted outside the U.S. must be capitalized and amortized over a 15-year period. In addition, the United States has recently enacted the Inflation Reduction Act, which includes a 1% excise tax on stock buybacks and the imposition of an alternative minimum tax on adjusted financial statement income. Further, many countries, and organizations such as the Organization for Economic Cooperation and Development, have proposed implementing changes to existing tax laws, including a proposed 15% global minimum tax. Such changes may adversely affect our effective tax rates, cash flows and general business condition.

Inflation could negatively impact our business and results of operations.

Inflation in the U.S. and other geographies has risen beyond levels experienced in recent decades. Inflation in the prices for our clinical trial drug supply, costs of CROs and CMOs, and rising salaries could negatively impact our business by increasing our operating expenses. The U.S. Federal Reserve has also recently raised the federal funds rate several times in an effort to control inflationary pressures, and could do so again, which may have additional adverse effects on the economy, and may adversely affect our business, financial condition and results of operations.

Risks Related to Our Intellectual Property

Our success depends on our ability to protect our intellectual property and our proprietary technologies.

Our commercial success depends in part on our ability to obtain and maintain patent protection and trade secret protection for our product candidates, proprietary technologies and their uses as well as our ability to operate without infringing upon the proprietary rights of others. We generally seek to protect our proprietary position by filing patent applications in the United States and abroad related to our product candidates, proprietary technologies and their uses that are important to our business. We also seek to protect our proprietary position by acquiring or in-licensing relevant issued patents or pending applications from third parties.

Pending patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless, and until, patents issue from such applications, and then only to the extent the issued claims cover the technology. There can be no assurance that our patent applications or the patent applications of our future licensors will result in patents being issued or that issued patents will afford sufficient protection against competitors with similar technology, nor can there be any assurance that the patents issued will not be infringed, designed around or invalidated by third parties.

Even issued patents may later be found invalid or unenforceable or may be modified or revoked in proceedings instituted by third parties before various patent offices or in courts. The degree of future protection for our and our licensors' proprietary rights is uncertain. Only limited protection may be available and may not adequately protect our rights or permit us to gain or keep any competitive advantage. These uncertainties and/or limitations in our ability to properly protect the intellectual property rights relating to our product candidates could have a material adverse effect on our financial condition and results of operations.

We cannot be certain that the claims in our U.S. pending patent applications, corresponding international patent applications and patent applications in certain foreign territories, or those of our future licensors, will be considered patentable by the United States Patent and Trademark Office (USPTO), courts in the United States or by the patent offices and courts in foreign countries, nor can we be certain that the claims in our future issued patents will not be found invalid or unenforceable if challenged.

The patent application process is subject to numerous risks and uncertainties, and there can be no assurance that we or any of our potential future collaborators will be successful in protecting our product candidates by obtaining and defending patents. These risks and uncertainties include the following:

- the USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process, the noncompliance with which can result in abandonment or lapse of a patent or patent application, and partial or complete loss of patent rights in the relevant jurisdiction;
- patent applications may not result in any patents being issued;
- patents may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable or otherwise may not provide any competitive advantage;
- our competitors, many of whom have substantially greater resources than we do and many of whom have made significant investments in competing technologies, may seek or may have already obtained patents that will limit, interfere with or eliminate our ability to make, use and sell our potential product candidates;
- there may be significant pressure on the U.S. government and international governmental bodies to limit the scope of patent protection both inside and outside the United States for disease treatments that prove successful, as a matter of public policy regarding worldwide health concerns; and

- countries other than the United States may have patent laws less favorable to patentees than those upheld by U.S. courts, allowing foreign competitors a better opportunity to create, develop and market competing product candidates.

The patent prosecution process is also expensive and time-consuming, and we and any future licensors may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner or in all jurisdictions where protection may be commercially advantageous. It is also possible that we or any future licensors will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection.

In addition, although we enter into non-disclosure and confidentiality agreements with parties who have access to patentable aspects of our research and development output, such as our employees, outside scientific collaborators, CROs, third-party manufacturers, consultants, advisors and other third parties, any of these parties may breach such agreements and disclose such output before a patent application is filed, thereby jeopardizing our ability to seek patent protection.

Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such 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.

If the scope of any patent protection we obtain is not sufficiently broad, or if we lose any of our patent protection, our ability to prevent our competitors from commercializing similar or identical product candidates would be adversely affected.

The patent position of biopharmaceutical 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 pending and future patent applications and those of our future licensors may not result in patents being issued which protect our product candidates or which effectively prevent others from commercializing competitive product candidates.

Moreover, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and its scope can be reinterpreted after issuance. Even if patent applications we own or in-license in the future 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 that we own or in-license may be challenged or circumvented by third parties or may be narrowed or invalidated as a result of challenges by third parties. Consequently, we do not know whether our product candidates will be protectable or remain protected by valid and enforceable patents. Our competitors or other third parties may be able to circumvent our patents or the patents of our future licensors 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.

The issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents or the patents of our future licensors 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 USPTO, or become involved in opposition, derivation, revocation, reexamination, post-grant review (PGR) and inter partes review (IPR), or other similar proceedings challenging our owned 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 product candidates 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. Moreover, our patents or the patents of our future licensors may become subject to post-grant challenge proceedings, such as oppositions in a foreign patent office, that challenge our priority of invention or other features of patentability with respect to our patents and patent applications and those of our future licensors. Such challenges may result in loss of patent rights, loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our product candidates. 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. In addition, if the breadth or strength of protection provided by our patents and patent applications or the patents and patent applications of our future

licensors is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

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 develop products that are similar to our product candidates but that are not covered by the claims of the patents that we own or license;
- we or our future licensors or collaborators might not have been the first to make the inventions covered by the issued patents or patent application that we own or license;
- we or our future licensors or collaborators might not have been the first to file patent applications covering certain of 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 patent applications we own or license will not lead to issued patents;
- issued patents that we own or license may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- our competitors 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;
- the patents of others may have an adverse effect on our business; and
- we may choose not to file a patent in order to maintain certain trade secrets or know-how, and a third party may subsequently file a patent covering such intellectual property.

Should any of these events occur, it could significantly harm our business, results of operations and prospects.

Our commercial success depends significantly on our ability to operate without infringing the patents and other proprietary rights of third parties. Claims by third parties that we infringe their proprietary rights may result in liability for damages or prevent or delay our developmental and commercialization efforts.

Our commercial success depends in part on avoiding infringement of the patents and proprietary rights of third parties. However, our research, development and commercialization activities may be subject to claims that we infringe or otherwise violate patents or other intellectual property rights owned or controlled by third parties. Other entities may have or obtain patents or proprietary rights that could limit our ability to make, use, sell, offer for sale or import our product candidates and products that may be approved in the future, or impair our competitive position. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biopharmaceutical industry, including patent infringement lawsuits, oppositions, reexaminations, IPR proceedings and PGR proceedings before the USPTO and/or corresponding foreign patent offices. Numerous third-party U.S. and foreign issued patents and pending patent applications exist in the fields in which we are developing product candidates. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of our product candidates.

As the biopharmaceutical industry expands and more patents are issued, the risk increases that our product candidates may be subject to claims of infringement of the patent rights of third parties. Because patent applications are maintained as confidential for a certain period of time, until the relevant application is published, we may be unaware of third-party patents that may be infringed by commercialization of any of our product candidates, and we cannot be certain that we were the first to file a patent application related to a product candidate or technology. Moreover, because patent applications can take many years to issue, there may be currently-pending patent applications that may later result in issued patents that our product candidates may

infringe. In addition, identification of third-party patent rights that may be relevant to our technology is difficult because patent searching is imperfect due to differences in terminology among patents, incomplete databases and the difficulty in assessing the meaning of patent claims. There is also no assurance that there is not prior art of which we are aware, but which we do not believe is relevant to our business, which may, nonetheless, ultimately be found to limit our ability to make, use, sell, offer for sale or import our products that may be approved in the future, or impair our competitive position. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. Any claims of patent infringement asserted by third parties would be time consuming and could:

- result in costly litigation that may cause negative publicity;
- divert the time and attention of our technical personnel and management;
- cause development delays;
- prevent us from commercializing any of our product candidates until the asserted patent expires or is held finally invalid or not infringed in a court of law;
- require us to develop non-infringing technology, which may not be possible on a cost-effective basis;
- subject us to significant liability to third parties; or
- require us to enter into royalty or licensing agreements, which may not be available on commercially reasonable terms, or at all, or which might be non-exclusive, which could result in our competitors gaining access to the same technology.

Although no third party has asserted a claim of patent infringement against us as of the date of this Annual Report on Form 10-K, others may hold proprietary rights that could prevent our product candidates from being marketed. It is possible that a third party may assert a claim of patent infringement directed at any of our product candidates. Any patent-related legal action against us claiming damages and seeking to enjoin commercial activities relating to our product candidates, treatment indications, or processes could subject us to significant liability for damages, including treble damages if we were determined to willfully infringe, and require us to obtain a license to manufacture or market our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. We cannot predict whether we would prevail in any such actions or that any license required under any of these patents would be made available on commercially acceptable terms, if at all. Moreover, even if we or our future strategic partners were able to obtain a license, the rights may be nonexclusive, which could result in our competitors gaining access to the same intellectual property. In addition, we cannot be certain that we could redesign our product candidates, treatment indications, or processes to avoid infringement, if necessary. Accordingly, an adverse determination in a judicial or administrative proceeding, or the failure to obtain necessary licenses, could prevent us from developing and commercializing our product candidates, which could harm our business, financial condition and operating results. In addition, intellectual property litigation, regardless of its outcome, may cause negative publicity and could prohibit us from marketing or otherwise commercializing our product candidates and technology.

Parties making claims against us may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure.

In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise additional funds or otherwise have a material adverse effect on our business, results of operations, financial condition and prospects.

We may not be successful in obtaining or maintaining necessary rights to our product candidates through acquisitions and in-licenses.

Because our development programs may in the future require the use of proprietary rights held by third parties, the growth of our business may depend in part on our ability to acquire, in-license, or use these third-party proprietary rights. 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 for our product candidates. The licensing and acquisition of third-party intellectual property rights is a competitive area, and a

number of more established companies may pursue strategies to license or acquire third-party intellectual property rights that we may consider attractive or necessary. These established companies may have a competitive advantage over us due to their size, capital 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. We also may be unable to license or acquire third-party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. If we are unable to successfully obtain rights to required third-party intellectual property rights or maintain the existing intellectual property rights we have, we may have to abandon development of the relevant program or product candidate, which could have a material adverse effect on our business, financial condition, results of operations, and prospects.

We may be involved in lawsuits to protect or enforce our patents or our future licensors' patents, which could be expensive, time consuming and unsuccessful. Further, our issued patents or our future licensors' patents could be found invalid or unenforceable if challenged in court.

Competitors may infringe our intellectual property rights. To prevent infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. In addition, in a patent infringement proceeding, a court may decide that a patent we own or in-license is not valid, is unenforceable and/or is not infringed. If we or any of our potential future collaborators were to initiate legal proceedings against a third party to enforce a patent directed at one of our product candidates, the defendant could counterclaim that our patent or the patent of our future licensors is invalid and/or unenforceable in whole or in part. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge include an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, lack of sufficient written description, non-enablement, or obviousness-type double patenting. Grounds for an unenforceability assertion could include 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 also raise similar invalidity claims before the USPTO or patent offices abroad, even outside the context of litigation. Such mechanisms include re-examination, PGR, IPR, derivation proceedings, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). The outcome following legal assertions of invalidity and/or 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, our future licensors, and the patent examiners are unaware during prosecution. There is also no assurance that there is not prior art of which we are aware, but which we do not believe affects the validity or enforceability of a claim in our patents and patent applications or the patents and patent applications of our future licensors, which may, nonetheless, ultimately be found to affect the validity or enforceability of a claim. 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 technology or platform, or any product candidates that we may develop. Such a loss of patent protection would have a material adverse impact on our business, financial condition, results of operations and prospects.

In addition, if the breadth or strength of protection provided by our patents and patent applications or the patents and patent applications of our future licensors is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

Even if resolved in our favor, litigation or other legal proceedings relating to our intellectual property rights may cause us to incur significant expenses and could distract our technical and management personnel from their normal responsibilities. 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. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could compromise our ability to compete in the marketplace.

Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or other legal proceedings relating to our intellectual property rights, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation or other proceedings.

In addition, the issuance of a patent does not give us the right to practice the patented invention. Third parties may have blocking patents that could prevent us from marketing our own patented product and practicing our own patented technology.

Intellectual property litigation may lead to unfavorable publicity that harms our reputation and causes the market price of our common stock to decline.

During the course of any intellectual property litigation, there could be public announcements of the initiation of the litigation as well as results of hearings, rulings on motions, and other interim proceedings or developments in the litigation. If securities analysts or investors regard these announcements as negative, the perceived value of our existing product candidates, approved products, programs or intellectual property could be diminished. Accordingly, the market price of shares of our common stock may decline. Such announcements could also harm our reputation or the market for our future products, which could have a material adverse effect on our business.

Derivation proceedings may be necessary to determine priority of inventions, and an unfavorable outcome may require us to cease using the related technology or to attempt to license rights from the prevailing party.

Derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications or those of our future licensors. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms. Our defense of derivation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with such proceedings could have a material adverse effect on our ability to raise the funds necessary to continue our clinical trials, continue our development programs, license necessary technology from third parties or enter into development or manufacturing partnerships that would help us bring our product candidates to market.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our patent applications or those of our future licensors and the enforcement or defense of our issued patents or those of our future licensors.

On September 16, 2011, the Leahy-Smith America Invents Act (the Leahy-Smith Act), was signed into law. The Leahy-Smith Act includes a number of significant changes to U.S. patent law. These include provisions that affect the way patent applications will be prosecuted and may also affect patent litigation. In particular, under the Leahy-Smith Act, the United States transitioned in March 2013 to a ''first inventor to file'' system in which, assuming that other requirements of patentability are met, the first inventor to file a patent application will be entitled to the patent regardless of whether a third party was first to invent the claimed invention. A third party that files a patent application in the USPTO after March 2013 but before us could therefore be awarded a patent covering an invention of ours even if we 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. Furthermore, our ability to obtain and maintain valid and enforceable patents depends on whether the differences between our technology and the prior art allow our technology to be patentable over the prior art. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we may not be certain that we or our future licensors are the first to either (1) file any patent application related to our product candidates or (2) invent any of the inventions claimed in the patents or patent applications.

The Leahy-Smith 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 PGR, IPR, and derivation proceedings. An adverse determination in any such submission or proceeding could reduce the scope or enforceability of, or invalidate, our patent rights, which could adversely affect our competitive position.

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 patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. Thus, the Leahy-Smith Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications or those of our future licensors and the enforcement or defense of our issued patents or those of our future licensors, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

Changes in U.S. patent law, or laws in other countries, could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents, or could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.

As is the case with other pharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the pharmaceutical industry involve a high degree of technological and legal complexity. Therefore, obtaining and enforcing pharmaceutical patents is costly, time consuming and inherently uncertain. Changes in either the patent laws or in the interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property or narrow the scope of our patent protection and may increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. We cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. In addition, Congress or other foreign legislative bodies may pass patent reform legislation that is unfavorable to us.

For example, the Supreme Court of the United States has ruled on several patent cases in recent years, either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by the U.S. Congress, the U.S. federal courts, the USPTO, or similar authorities in foreign jurisdictions, the laws and regulations governing patents could change in unpredictable ways that would weaken our ability to obtain new patents or to enforce our existing patent and the patents we might obtain or license in the future.

As a further example, European patent applications will soon have the option, upon grant of a patent, of becoming a Unitary Patent, which will be subject to the jurisdiction of the Unitary Patent Court (UPC). The option of a Unitary Patent will be a significant change in European patent practice. As the UPC is a new court system, there is no precedent for the court, increasing the uncertainty of any litigation in the UPC.

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

We may also be subject to claims that former employees or other third parties have an ownership interest in our patents or other intellectual property. Litigation may be necessary to defend against these and other claims challenging inventorship or ownership. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. 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 distraction to management and other employees.

Patent terms may be inadequate to protect our competitive position on our 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 U.S. non-provisional 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 life has expired, we may be open to competition from competitive products. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our 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 FDA marketing approval of our product candidates, one or more of our U.S. patents or those of our future licensors may be eligible for limited patent term restoration under

the Drug Price Competition and Patent Term Restoration Act of 1984 (Hatch-Waxman Amendments). The Hatch-Waxman Amendments permit a patent restoration term of up to five years as compensation for patent term lost during product development and the FDA regulatory review process. A maximum of one patent may be extended per FDA approved product as compensation for the 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 and only those claims covering such approved drug product, a method for using it or a method for manufacturing it may be extended. Patent term extension may also be available in certain foreign countries upon regulatory approval of our product candidates. However, we may not be granted an extension because of, for example, 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 restoration or the term of any such extension is less than we request, our competitors may obtain approval of competing products following our patent expiration, and our revenue could be reduced, possibly materially. Further, if this occurs, our competitors may take advantage of our investment in development and clinical trials by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case.

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

Although we have pending patent applications in the United States and other countries, filing, prosecuting and defending patents in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in 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 inventions in and into the United States or other jurisdictions. Competitors may use our technologies 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 product candidates, and our patents, the patents of our future licensors, 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 many foreign countries do not favor the enforcement of patents and other intellectual property protection, which could make it difficult for us to stop the infringement of our patents or our future licensors' patents or marketing of competing products in violation of our proprietary rights. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents or the patents of our future licensors at risk of being invalidated or interpreted narrowly and our patent applications or the patent applications of our future licensors 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 rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

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.

Geo-political actions in the United States and in foreign countries could increase the uncertainties and costs surrounding the prosecution or maintenance of our patent applications or those of any current or future licensors and the maintenance, enforcement or defense of our issued patents or those of any current or future licensors. For example, the United States and foreign government actions related to Russia's invasion of Ukraine may limit or prevent filing, prosecution and maintenance of patent applications in Russia. Government actions may also prevent maintenance of issued patents in Russia. These actions could result in abandonment or lapse of our

patents or patent applications, resulting in partial or complete loss of patent rights in Russia. If such an event were to occur, it could have a material adverse effect on our business. In addition, a decree was adopted by the Russian government in March 2022, allowing Russian companies and individuals to exploit inventions owned by patentees that have citizenship or nationality in, are registered in, or have a predominately primary place of business or profit-making activities in the United States and other countries that Russia has deemed unfriendly without consent or compensation. Consequently, we would not be able to prevent third parties from practicing our inventions in Russia or from selling or importing products made using our inventions in and into Russia. Accordingly, 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, documentary, fee payment and other requirements imposed by regulations and governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to the USPTO and various foreign patent offices at various points over the lifetime of our patents and/or applications and those of our future licensors. We have systems in place to remind us to pay these fees, and we rely on our outside patent annuity service to pay these fees when due. Additionally, the USPTO and various foreign patent offices require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with rules applicable to the particular jurisdiction. However, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. If such an event were to occur, it could have a material adverse effect on our business.

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.

We intend to use registered or unregistered trademarks or trade names to brand and market ourselves and our products. Our trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. 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 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 secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our financial condition or results of operations.

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

In addition, we rely on the protection of our trade secrets, including unpatented know-how, technology and other proprietary information to maintain our competitive position. Although we have taken steps to protect our trade secrets and unpatented know-how, including entering into confidentiality agreements with third parties, and confidential information and inventions agreements with employees, consultants and advisors, we cannot provide any assurances that all such agreements have been duly executed, and 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.

Moreover, third parties may still obtain this information or may come upon this or similar information independently, and we would have no right to prevent them from using that technology or information to

compete with us. If any of these events occurs or if we otherwise lose protection for our trade secrets, the value of this information may be greatly reduced, and our competitive position would be harmed. If we do not apply for patent protection prior to such publication or if we cannot otherwise maintain the confidentiality of our proprietary technology and other confidential information, then our ability to obtain patent protection or to protect our trade secret information may be jeopardized.

We may be subject to claims that we or our employees have wrongfully used or disclosed alleged confidential information or trade secrets.

We have entered into and may enter in the future into non-disclosure and confidentiality agreements to protect the proprietary positions of third parties, such as outside scientific collaborators, CROs, third-party manufacturers, consultants, advisors, potential partners, and other third parties. We may become subject to litigation where a third party asserts that we or our employees inadvertently or otherwise breached the agreements and used or disclosed trade secrets or other information proprietary to the third parties. Defense of such matters, regardless of their merit, could involve substantial litigation expense and be a substantial diversion of employee resources from our business. We cannot predict whether we would prevail in any such actions. Moreover, intellectual property litigation, regardless of its outcome, may cause negative publicity and could prohibit us from marketing or otherwise commercializing our product candidates and technology. Failure to defend against any such claim could subject us to significant liability for monetary damages or prevent or delay our developmental and commercialization efforts, which could adversely affect our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to our management team and other employees.

Parties making claims against us may be able to sustain the costs of complex intellectual property litigation more effectively than we can because they have substantially greater resources. 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. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise additional funds or otherwise have a material adverse effect on our business, operating results, financial condition and prospects.

We may be subject to claims that we have wrongfully hired an employee from a competitor or that we or our employees have wrongfully used or disclosed alleged confidential information or trade secrets of their former employers.

As is common in the pharmaceutical industry, in addition to our employees, we engage the services of consultants to assist us in the development of our product candidates. Many of these consultants, and many of our employees, were previously employed at, or may have previously provided or may be currently providing consulting services to, other pharmaceutical companies including our competitors or potential competitors. We may become subject to claims that we, our employees or a consultant inadvertently or otherwise used or disclosed trade secrets or other information proprietary to their former employers or their former or current clients. 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, which could adversely affect our business. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to our management team and other employees.

Our rights to develop and commercialize our technology and product candidates may be subject, in part, to the terms and conditions of licenses granted to us by others.

We may enter into license agreements in the future with others to advance our existing or future research or allow commercialization of our existing or future product candidates. These licenses may not provide exclusive rights to use such intellectual property and technology in all relevant fields of use and in all territories in which we may wish to develop or commercialize our technology and products in the future.

In addition, subject to the terms of any such license agreements, we may not have the right to control the preparation, filing, prosecution, maintenance, enforcement, and defense of patents and patent applications covering the technology that we license from third parties. In such an event, we cannot be certain that these patents and patent applications will be prepared, filed, prosecuted, maintained, enforced, and defended in a manner consistent with the best interests of our business. If our future licensors fail to prosecute, maintain,

enforce, and defend such patents or patent applications, or lose rights to those patents or patent applications, the rights we have licensed may be reduced or eliminated, and our right to develop and commercialize any of our future product candidates that are subject of such licensed rights could be adversely affected.

Our future licensors may rely on third-party consultants or collaborators or on funds from third parties such that our future licensors are not the sole and exclusive owners of the patents we in-license. If other third parties have ownership rights to our future in-licensed patents, they may be able to license such patents to our competitors, and our competitors could market competing products and technology. This could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

It is possible that we may be unable to obtain licenses at a reasonable cost or on reasonable terms, if at all. Even if we are able to obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us. In that event, we may be required to expend significant time and resources to redesign our technology, product candidates, or the methods for manufacturing them or to develop or license replacement technology, all of which may not be feasible on a technical or commercial basis. If we are unable to do so, we may be unable to develop or commercialize the affected product candidates, which could harm our business, financial condition, results of operations, and prospects significantly. We cannot provide any assurances that third-party patents do not exist which might be enforced against our current technology, manufacturing methods, product candidates, or future methods or products resulting in either an injunction prohibiting our manufacture or future sales, or, with respect to our future sales, an obligation on our part to pay royalties and/or other forms of compensation to third parties, which could be significant.

If we fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties or otherwise experience disruptions to our business relationships with our future licensors, we could lose license rights that are important to our business.

Disputes may arise between us and our future licensors regarding intellectual property subject to a license agreement, including:

- 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 patents and other rights to third parties;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- our right to transfer or assign the license;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our future licensors and us and our partners; and
- the priority of invention of patented technology.

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 intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. Moreover, if disputes over intellectual property that we license in the future prevent or impair our ability to maintain our licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates, which could have a material adverse effect on our business, financial conditions, results of operations, and prospects.

In spite of our best efforts, our future licensors might conclude that we materially breached our license agreements and might therefore terminate the license agreements, thereby removing our ability to develop and commercialize products and technology covered by these license agreements. If these in-licenses are terminated,

or if the underlying patents fail to provide the intended exclusivity, competitors would have the freedom to seek regulatory approval of, and to market, products identical to ours. This could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

The patent protection and patent prosecution for some of our product candidates may be dependent on third parties.

While we normally seek to obtain the right to control prosecution, maintenance and enforcement of the patents relating to our product candidates, there may be times when the filing and prosecution activities for patents and patent applications relating to our product candidates are controlled by our future licensors or collaboration partners. If any of our future licensors or collaboration partners fail to prosecute, maintain and enforce such patents and patent applications in a manner consistent with the best interests of our business, including by payment of all applicable fees for patents covering our product candidates, we could lose our rights to the intellectual property or our exclusivity with respect to those rights, our ability to develop and commercialize those product candidates may be adversely affected and we may not be able to prevent competitors from making, using and selling competing products. In addition, even where we have the right to control patent prosecution of patents and patent applications we have licensed to and from third parties, we may still be adversely affected or prejudiced by actions or inactions of our licensees, our future licensors and their counsel that took place prior to the date upon which we assumed control over patent prosecution.

Intellectual property discovered through government funded programs may be subject to federal regulations such as "march-in" rights, certain reporting requirements and a preference for U.S.-based companies. Compliance with such regulations may limit our exclusive rights and limit our ability to contract with non-U.S. manufacturers.

Although we do not currently own issued patents or pending patent applications that have been generated through the use of U.S. government funding, we may acquire or license in the future intellectual property rights that have been generated through the use of U.S. government funding or grants. Pursuant to the Bayh-Dole Act of 1980, the U.S. government has certain rights in inventions developed with government funding. These U.S. government rights include a non-exclusive, non-transferable, irrevocable worldwide license to use inventions for any governmental purpose. In addition, the U.S. government has the right, under certain limited circumstances, to require us to grant exclusive, partially exclusive, or non-exclusive licenses to any of these inventions to a third party if it determines that: (1) adequate steps have not been taken to commercialize the invention; (2) government action is necessary to meet public health or safety needs; or (3) government action is necessary to meet requirements for public use under federal regulations (also referred to as ''march-in rights''). If the U.S. government exercised its march-in rights in our future intellectual property rights that are generated through the use of U.S. government funding or grants, we could be forced to license or sublicense intellectual property developed by us or that we license on terms unfavorable to us, and there can be no assurance that we would receive compensation from the U.S. government for the exercise of such rights. The U.S. government also has the right to take title to these inventions if the grant recipient fails to disclose the invention to the government or fails to file an application to register the intellectual property within specified time limits. Intellectual property generated under a government funded program is also subject to certain reporting requirements, compliance with which may require us to expend substantial resources. In addition, the U.S. government requires that any products embodying any of these inventions or produced through the use of any of these inventions be manufactured substantially in the United States. This preference for U.S. industry may be waived by the federal agency that provided the funding if the owner or assignee of the intellectual property can show that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible. This preference for U.S. industry may limit our ability to contract with non-U.S. product manufacturers for products covered by such intellectual property.

Risks Related to Our Dependence on Third Parties

We rely on third parties to conduct our ongoing preclinical studies and clinical trials, and plan to rely on third parties to conduct additional planned clinical trials, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such preclinical studies and clinical trials.

We utilize and depend upon independent investigators and collaborators, such as medical institutions, CROs, CMOs, and strategic partners to conduct and support our ongoing preclinical studies and clinical trials under

agreements with us and plan to continue to do so for our future clinical trials. These third parties have had and will continue to have a significant role in the conduct of our preclinical studies and ongoing and planned future clinical trials and the subsequent collection and analysis of data. For example, our academic and industrial partners contribute highly enabling technologies and services that include: (i) approximately 50 medicinal chemists at leading CROs as of December 31, 2022, (ii) bioinformatics support for our translational research efforts, (iii) crystallography and biophysical assay platforms to enable structure-based drug discovery, (iv) biochemical and cell-based assays to guide lead generation and optimization, and (v) patient-derived organoid and xenograft models to translate our findings to the clinical setting.

These third parties are not our employees, and except for remedies available to us under our agreements with such third parties, we have limited ability to control the amount or timing of resources that any such third party will devote to our preclinical studies or our ongoing or planned future clinical trials. The third parties we rely on for these services may also have relationships with other entities, some of which may be our competitors, for whom they may also be conducting clinical trials or other drug development activities, which could affect their performance on our behalf. Some of these third parties may terminate their engagements with us at any time. We also expect to have to negotiate budgets and contracts with CROs, clinical trial sites and CMOs and we may not be able to do so on favorable terms, which may result in delays to our development timelines and increased costs. If we need to enter into alternative arrangements with, or replace or add any third parties, it would involve substantial cost and require extensive management time and focus, or involve a transition period, and may delay our drug development activities, as well as materially impact our ability to meet our desired clinical development timelines.

Our heavy reliance on these third parties for such drug development activities will reduce our control over these activities. As a result, we will have less direct control over the conduct, timing and completion of preclinical studies and clinical trials and the management of data developed through preclinical studies and clinical trials than would be the case if we were relying entirely upon our own staff. Nevertheless, we are responsible for ensuring that each of our preclinical studies and clinical trials is conducted in accordance with applicable protocol, legal and regulatory requirements and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. For example, we will remain responsible for ensuring that each of our clinical trials is conducted in accordance with the general investigational plan and protocols for the clinical trial. Moreover, the FDA requires us to comply with GCP standards, regulations for conducting, recording and reporting the results of clinical trials to assure that data and reported results are reliable and accurate and that the rights, integrity and confidentiality of clinical trial participants are protected. The EMA also requires us to comply with similar standards. Regulatory authorities enforce these GCP requirements through periodic inspections of clinical trial sponsors, principal investigators and clinical trial sites. If we or any of our CROs fail to comply with applicable GCP requirements, the clinical data generated in our clinical trials may be deemed unreliable and the FDA, EMA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. There can be no assurance that upon inspection by a given regulatory authority, such regulatory authority will determine that any of our clinical trials substantially comply with GCP regulations. In addition, our clinical trials must be conducted with product produced under current cGMP regulations and will require a large number of test patients. Our failure or any failure by these third parties to comply with these regulations or to recruit a sufficient number of patients, may require us to repeat clinical trials, which would delay the regulatory approval process. Moreover, our business may be implicated if any of these third parties violates federal or state fraud and abuse or false claims laws and regulations or healthcare privacy and security laws.

If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our clinical trials in accordance with regulatory requirements or our stated protocols, or if these third parties need to be replaced, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for our product candidates and will not be able to, or may be delayed in our efforts to, successfully commercialize our product candidates. As a result, our financial results and the commercial prospects for our product candidates would be harmed, our costs could increase and our ability to generate revenue could be delayed.

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

We do not currently have the infrastructure or internal capability to manufacture supplies of our product candidates for use in development and commercialization. We rely, and expect to continue to rely, on third-party manufacturers for the production of our product candidates for preclinical studies and clinical trials under the guidance of members of our organization. We do not have long-term supply agreements, and we purchase our required drug product on a purchase order basis, which means that aside from any binding purchase orders we have from time to time, our supplier could cease supplying to us or change the terms on which it is willing to continue supplying to us at any time. In addition, the ongoing conflict between Ukraine and Russia, including the sanctions imposed by the United States, the European Union and others on Russia and other related parties, could negatively impact supply chains that directly or indirectly affect manufacturing processes necessary for the continued development and potential commercialization of our product candidates. If we were to experience an unexpected loss of supply of any of our product candidates for any reason, whether as a result of manufacturing, supply or storage issues or otherwise, we could experience delays, disruptions, suspensions or terminations of, or be required to restart or repeat, any pending or ongoing preclinical studies or clinical trials.

We expect to continue to rely on third-party manufacturers for the commercial supply of any of our product candidates for which we obtain marketing approval. We may be unable to maintain or establish required agreements with third-party manufacturers or to do so on acceptable terms. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- the failure of the third party to manufacture our product candidates according to our schedule and specifications, or at all, including if our third-party contractors give greater priority to the supply of other products over our product candidates or otherwise do not satisfactorily perform according to the terms of the agreements between us and them;
- the reduction or termination of production or deliveries by suppliers, or the raising or prices or renegotiation of terms;
- the termination or nonrenewal of arrangements or agreements by our third-party contractors at a time that is costly or inconvenient for us;
- the breach by the third-party contractors of our agreements with them;
- the failure of third-party contractors to comply with applicable regulatory requirements, including cGMPs;
- the breach by the third-party contractors of our agreements with them;
- the failure of the third party to manufacture our product candidates according to our specifications;
- the mislabeling of clinical supplies, potentially resulting in the wrong dose amounts being supplied or active drug or placebo not being properly identified;
- clinical supplies not being delivered to clinical sites on time, leading to clinical trial interruptions, or of drug supplies not being distributed to commercial vendors in a timely manner, resulting in lost sales; and
- the misappropriation of our proprietary information, including our trade secrets and know-how.

We do not have complete control over all aspects of the manufacturing process of our contract manufacturing partners and are dependent on these contract manufacturing partners for compliance with cGMP regulations for manufacturing both active pharmaceutical ingredients (API) and finished drug products. To date, we have obtained API and drug product for our product candidates from single-source third party contract manufacturers. We are in the process of developing our supply chain for each of our product candidates and intend to put in place framework agreements under which third-party contract manufacturers will generally provide us with necessary quantities of API and drug product on a project-by-project basis based on our development needs. As

we advance our product candidates through development, we will consider our lack of redundant supply for the API and drug product for each of our product candidates to protect against any potential supply disruptions. However, we may be unsuccessful in putting in place such framework agreements or protecting against potential supply disruptions.

Third-party manufacturers may not be able to comply with cGMP regulations or similar regulatory requirements outside of the United States. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA, EMA or comparable regulatory authorities, they will not be able to secure and/or maintain marketing approval for their manufacturing facilities. In addition, we do not have control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA, EMA or a 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 will need to find alternative manufacturing facilities, and those new facilities would need to be inspected and approved by the FDA, EMA or comparable regulatory authority prior to commencing manufacturing, which would significantly impact our ability to develop, obtain marketing 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 fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of product candidates or drugs, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our product candidates or drugs and harm our business and results of operations.

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

Our manufacturing process needs to comply with FDA regulations relating to the quality and reliability of such processes. Any failure to comply with relevant regulations could result in delays in or termination of our clinical programs and suspension or withdrawal of any regulatory approvals.

In order to commercially produce our products either at a third party's facility or in any facility of ours, we will need to comply with the FDA's cGMP regulations and guidelines. We may encounter difficulties in achieving quality control and quality assurance and may experience shortages in qualified personnel. We are subject to inspections by the FDA and comparable foreign regulatory authorities to confirm compliance with applicable regulatory requirements. Any failure to follow cGMP or other regulatory requirements or delay, interruption or other issues that arise in the manufacture, fill-finish, packaging, or storage of our precision medicines as a result of a failure of our facilities or the facilities or operations of third parties to comply with regulatory requirements or pass any regulatory authority inspection could significantly impair our ability to develop and commercialize our product candidates, including leading to significant delays in the availability of our precision medicines for our clinical trials or the termination of or suspension of a clinical trial, or the delay or prevention of a filing or approval of marketing applications for our product candidates. Significant non-compliance could also result in the imposition of sanctions, including warning or untitled letters, fines, injunctions, civil penalties, failure of regulatory authorities to grant marketing approvals for our product candidates, delays, suspension or withdrawal of approvals, license revocation, seizures or recalls of products, operating restrictions and criminal prosecutions, any of which could damage our reputation and our business.

If we engage in future acquisitions or strategic partnerships, this may increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities, and subject us to other risks.

From time to time, we evaluate various acquisition opportunities and strategic partnerships, including licensing or acquiring complementary products, product candidates, intellectual property rights, technologies or businesses. Any potential acquisition or strategic partnership may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of additional indebtedness or contingent liabilities;
- the issuance of our equity securities;
- assimilation of operations, intellectual property, products and product candidates of an acquired company, including difficulties associated with integrating new personnel;

- the diversion of our management's attention from our existing programs and initiatives in pursuing such a strategic merger or acquisition;
- retention of key employees, the loss of key personnel and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing products, product candidates and marketing approvals; and
- our inability to generate revenue from acquired technology and/or products sufficient to meet our objectives in undertaking the acquisition or even to offset the associated acquisition and maintenance costs.

In addition, if we undertake acquisitions or pursue partnerships in the future, we may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense.

If our third-party manufacturers use hazardous materials in a manner that causes injury or violates applicable law, we may be liable for damages.

Our research and development activities involve the controlled use of potentially hazardous substances, including chemical materials, by our third-party manufacturers. Our manufacturers are subject to federal, state and local laws and regulations in the United States governing the use, manufacture, storage, handling and disposal of medical and hazardous materials. Although we believe that our manufacturers' procedures for using, handling, storing and disposing of these materials comply with legally prescribed standards, we cannot completely eliminate the risk of contamination or injury resulting from medical or hazardous materials. As a result of any such contamination or injury, we may incur liability or local, city, state or federal authorities may curtail the use of these materials and interrupt our business operations. In the event of an accident, we could be held liable for damages or penalized with fines, and the liability could exceed our resources. We do not have any insurance for liabilities arising from medical or hazardous materials. Compliance with applicable environmental laws and regulations is expensive, and current or future environmental regulations may impair our research, development and production efforts, which could harm our business, prospects, financial condition or results of operations.

If we decide to establish collaborations but are not able to establish those collaborations on commercially reasonable terms, we may have to alter our development and commercialization plans.

Our drug development programs and the potential commercialization of our product candidates will require substantial additional cash to fund expenses. We may seek to selectively form collaborations to expand our capabilities, potentially accelerate research and development activities and provide for commercialization activities by third parties. Any of these relationships may require us to incur non-recurring and other charges, increase our near- and long-term expenditures, issue securities that dilute our existing stockholders, or disrupt our management and business.

We face significant competition in seeking appropriate collaborators and the negotiation process is time-consuming and complex. Whether we reach a definitive agreement for a collaboration depends, among other things, upon our assessment of the potential collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the collaborator's evaluation of a number of factors. Those factors may include the design or results of preclinical studies or clinical trials, the likelihood of approval by the FDA, EMA or comparable foreign regulatory authorities, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing drugs, the existence of uncertainty with respect to our ownership of intellectual property and industry and market conditions generally. The potential collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such collaboration could be more attractive than the one with us for our product candidate. Further, we may not be successful in our efforts to establish a collaboration or other alternative arrangements for product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view them as having the requisite potential to demonstrate safety and efficacy.

In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators. Even if we are successful in

entering into a collaboration, the terms and conditions of that collaboration may restrict us from entering into future agreements on certain terms with potential collaborators.

If and when we seek to enter into collaborations, we may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of a product candidate, reduce or delay its development program or one or more of our other research programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market and generate product revenue.

We may enter into collaborations with third parties for the development and commercialization of product candidates. If those collaborations are not successful, we may not be able to capitalize on the market potential of these product candidates.

If we enter into any collaboration arrangements with any third parties for the development and commercialization of our product candidates, we will likely have limited control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of our product candidates. Our ability to generate revenue from these arrangements will depend on our collaborators' abilities and efforts to successfully perform the functions assigned to them in these arrangements. Collaborations involving our product candidates would pose numerous risks to us, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations and may not perform their obligations as expected;
- collaborators may deemphasize or not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborators' strategic focus, including as a result of a business combination or sale or disposition of a business unit or development function, or available funding or external factors such as an acquisition that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our product candidates if the collaborators believe that competitive products are more likely;
- to be successfully developed or can be commercialized under terms that are more economically attractive than ours;
- a collaborator with marketing and distribution rights to multiple products may not commit sufficient resources to the marketing and distribution of our product relative to other products;
- we may grant exclusive rights to our collaborators that would prevent us from collaborating with others;
- collaborators may not properly obtain, maintain, defend or enforce our intellectual property rights or may use our proprietary information and intellectual property in such a way as to invite litigation or other intellectual property related proceedings that could jeopardize or invalidate our proprietary information and intellectual property or expose us to potential litigation or other intellectual property related proceedings;
- disputes may arise between the collaborators and us that result in the delay or termination of the research, development or commercialization of our product candidates or that result in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates;

- collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner or at all;
- collaborators may not provide us with timely and accurate information regarding development progress and activities under the collaboration or may limit our ability to share such information, which could adversely impact our ability to report progress to our investors and otherwise plan our own development of our product candidates;
- collaborators may own or co-own intellectual property covering our products or product candidates that result from our collaborating with them, and in such cases, we would not have the exclusive right to develop or commercialize such intellectual property; and
- a collaborator's sales and marketing activities or other operations may not be in compliance with applicable laws resulting in civil or criminal proceedings.

Risks Related to the Securities Markets and Ownership of Our Common Stock

The market price of our common stock is volatile, and investors could lose all or part of their investment.

The trading price of our common stock is highly volatile and subject to wide fluctuations in response to various factors, some of which we cannot control. The stock market in general, and pharmaceutical and biotechnology companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies.

Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance. In addition to the factors discussed in this ''Risk Factors'' section and elsewhere in this Annual Report on Form 10-K, these factors include:

- the timing and results of INDs, preclinical studies and clinical trials of our product candidates or those of our competitors;
- the success of competitive products or announcements by potential competitors of their product development efforts;
- regulatory actions with respect to our products or product candidates or our competitors' products or product candidates;
- actual or anticipated changes in our growth rate relative to our competitors;
- regulatory or legal developments in the United States and other countries, including changes in leadership at various federal departments and agencies as well as new legislation, executive, and administrative actions under the Biden administration;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- the recruitment or departure of key personnel;
- announcements by us or our competitors of significant acquisitions, strategic collaborations, joint ventures, collaborations or capital commitments;
- actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- market conditions in the pharmaceutical and biotechnology sector;
- changes in the structure of healthcare payment systems;
- share price and volume fluctuations attributable to inconsistent trading volume levels of our shares;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us, our insiders or our other stockholders;
- expiration of market stand-off or lock-up agreements;
- the impact of any natural disasters or public health emergencies, such as COVID-19; and

- general economic, political, industry and market conditions and instability (such as those created by the ongoing conflict between Ukraine and Russia, including, without limitation, sanctions against Russia imposed by the United States, the European Union and others).

The realization of any of the above risks or any of a broad range of other risks, including those described in this ''Risk Factors'' section, could have a dramatic and adverse impact on the market price of our common stock.

If securities or industry analysts do not publish research or reports, or if they publish adverse or misleading research or reports, regarding us, our business or our market, our stock price and trading volume could decline.

The trading market for our common stock is influenced by the research and reports that securities or industry analysts publish about us, our business or our market. If any of the analysts who cover us issue adverse or misleading research or reports regarding us, our business model, our intellectual property, our stock performance or our market, or if our operating results fail to meet the expectations of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of us or fail to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

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 our guidance.

Our quarterly and annual operating results may fluctuate significantly in the future, which makes it difficult for us to predict our future operating results. From time to time, we may enter into license or collaboration agreements or strategic partnerships with other companies that include development funding and significant upfront and milestone payments and/or royalties, which may become an important source of our revenue. These upfront and milestone payments may vary significantly from period to period and any such variance could cause a significant fluctuation in our operating results from one period to the next.

In addition, we measure compensation cost for stock-based awards made to employees at the grant date of the award, based on the fair value of the award as determined by our board of directors, and recognize the cost as an expense over the employee's requisite service period. As the variables that we use as a basis for valuing these awards change over time, including our underlying stock price and stock price volatility, the magnitude of the expense that we must recognize may vary significantly.

Furthermore, our operating results may fluctuate due to a variety of other factors, many of which are outside of our control and may be difficult to predict, including the following:

- the timing and cost of, and level of investment in, research and development activities relating to our programs, which will change from time to time;
- our ability to enroll patients in clinical trials and the timing of enrollment;
- our ability to timely initiate sites for clinical trials;
- the cost of manufacturing our current product candidates and any future product candidates, which may vary depending on FDA, EMA or other comparable foreign regulatory authority guidelines and requirements, the quantity of production and the terms of our agreements with manufacturers;
- expenditures that we will or may incur to acquire or develop additional product candidates and technologies or other assets;
- the timing and outcomes of preclinical studies and clinical trials for product candidates from our RAF and FGFR programs, and any product candidates from our research programs, or competing product candidates;
- the need to conduct unanticipated clinical trials or clinical trials that are larger or more complex than anticipated;
- competition from existing and potential future products that compete with our RAF or FGFR programs or any of our research programs, and changes in the competitive landscape of our industry, including consolidation among our competitors or partners;
- any delays in regulatory review or approval of product candidates from our RAF or FGFR programs, or any of our research programs;

- the level of demand for any of our product candidates, if approved, which may fluctuate significantly and be difficult to predict;
- the risk/benefit profile, cost and reimbursement policies with respect to our product candidates, if approved, and existing and potential future products that compete with our RAF or FGFR programs, or any of our research programs;
- our ability to commercialize product candidates from our RAF or FGFR programs, or any of our research programs, if approved, inside and outside of the United States, either independently or working with third parties;
- our ability to establish and maintain collaborations, licensing or other arrangements;
- our ability to adequately support future growth;
- potential unforeseen business disruptions that increase our costs or expenses;
- future accounting pronouncements or changes in our accounting policies; and
- the changing and volatile global economic and political environment.

The cumulative effect 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 guidance we may provide.

Our principal stockholders and management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

As of December 31, 2022, our executive officers, directors, holders of 5% or more of our capital stock and their respective affiliates beneficially owned approximately 49% of our outstanding voting stock. These stockholders, acting together, may be able to impact matters requiring stockholder approval. For example, they may be able to impact elections of directors, amendments of our organizational documents or approval of any merger, sale of assets or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that investors may feel are in their best interest as one of our stockholders. The interests of this group of stockholders may not always coincide with each investor's interests or the interests of other stockholders and they may act in a manner that advances their best interests and not necessarily those of other stockholders, including seeking a premium value for their common stock, and might affect the prevailing market price for our common stock.

Sales of a substantial number of shares of our common stock 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 could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock.

Certain holders of shares of our common stock have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. Registration of these shares under the Securities Act of 1933, as amended (Securities Act), would result in the shares becoming freely tradeable in the public market, subject to the restrictions of Rule 144 in the case of our affiliates. If these shares 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.

We are an "emerging growth company" and a smaller reporting company, and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies and smaller reporting companies will make our common stock less attractive to investors.

We are an ''emerging growth company,'' as defined in the JOBS Act. For as long as we continue to be an EGC, we intend to take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not EGCs, including:

- 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 in our periodic reports;
- not being required to comply with the auditor attestation requirements of Section 404 of 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;
- reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements; and
- exemptions from the requirements of holding nonbinding advisory stockholder votes on executive compensation and stockholder approval of any golden parachute payments not previously approved.

Under the JOBS Act, emerging growth companies can also delay adopting new or revised accounting standards until such time as those standards apply to private companies. We have elected to avail ourselves of this exemption from new or revised accounting standards and, therefore, 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 financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

We will remain an emerging growth company until the earliest to occur of: (i) the last day of the fiscal year in which we have more than $1.235 billion in annual revenue; (ii) the date we qualify as a ''large accelerated filer,'' with at least $700.0 million of equity securities held by non-affiliates; (iii) the date on which we have issued more than $1.0 billion in non-convertible debt securities during the prior three-year period; and (iv) December 31, 2025.

Even after we no longer qualify as an emerging growth company, we may still qualify as a ''smaller reporting company,'' which would allow us to continue to take advantage of many of the same exemptions from disclosure requirements, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. We cannot predict if investors will find our common stock less attractive because we may 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 more volatile.

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

As a public company, we incur significant legal, accounting and other expenses that we did not incur as a private company, and these expenses may increase even more after we are no longer an ''emerging growth company.'' We are subject to the reporting requirements of the Exchange Act, the Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, as well as rules adopted, and to be adopted, by the SEC and Nasdaq. Our management and other personnel need to devote a substantial amount of time to these compliance initiatives. Moreover, we expect these rules and regulations to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly, which will increase our operating expenses. For example, these rules and regulations 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 sufficient coverage, particularly in light of recent cost increases related to coverage. We cannot accurately 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.

In addition, as a public company we are required to incur additional costs and obligations in order to comply with SEC rules that implement Section 404 of the Sarbanes-Oxley Act. We are required to make a formal assessment of the effectiveness of our internal control over financial reporting, and once we cease to be an emerging growth company, we will be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm, unless we continue to qualify as a ''smaller reporting company'' at such time. We engage in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants and adopt a detailed work plan to assess and document the adequacy of our internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing that controls are designed and operating effectively, and implement a continuous reporting and improvement process for internal control over financial reporting.

If we identify material weaknesses or otherwise fail to maintain an effective system of internal controls in the future, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect investor confidence in us and, as a result, the value of our common stock.

In connection with the audit of our consolidated financial statements as of December 31, 2020 and 2019 and for the years ended December 31, 2020 and 2019, we identified material weaknesses in our internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim consolidated financial statements will not be prevented or detected on a timely basis.

Although we were able to remediate these material weaknesses, we may in the future discover additional weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our consolidated financial statements. Our internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner, or if we are unable to maintain proper and effective internal controls over financial reporting, we may not be able to produce timely and accurate consolidated financial statements. If that were to happen, our investors could lose confidence in our reported financial information, the market price of our stock could decline, and we could be subject to sanctions or investigations by the stock exchange on which our common stock is listed, the SEC or other regulatory authorities.

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

We are 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 may be subject to securities litigation, which is expensive and could divert management attention.

The market price of our common stock is volatile and, in the past, companies that have experienced volatility in the market price of their stock have been subject to securities class action litigation. We may be the target of this

type of litigation in the future. Securities litigation against us could result in substantial costs and divert our management's attention from other business concerns, which could seriously harm our business.

We do not intend to pay dividends on our common stock so any returns will be limited to the value of our stock.

We have never declared or paid any cash dividends 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. Any return to stockholders will therefore be limited to any appreciation in the value of their stock.

Anti-takeover provisions in our amended and restated certificate of incorporation and amended and restated bylaws and Delaware law might discourage, delay or prevent a change in control of our company or changes in our management and, therefore, depress the market price of our common stock.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that could depress the market price of our common stock by acting to discourage, delay or prevent a change in control of our company or changes in our management that the stockholders of our company may deem advantageous. These provisions, among other things:

- establish a classified board of directors so that not all members of our board are elected at one time;
- permit only the board of directors to establish the number of directors and fill vacancies on the board;
- provide that directors may only be removed ''for cause'' and only with the approval of two-thirds of our stockholders;
- authorize the issuance of ''blank check'' preferred stock that our board could use to implement a stockholder rights plan (also known as a ''poison pill'');
- eliminate the ability of our stockholders to call special meetings of stockholders;
- prohibit stockholder action by written consent, which requires all stockholder actions to be taken at a meeting of our stockholders;
- prohibit cumulative voting;
- authorize our board of directors to amend the bylaws;
- establish advance notice requirements for nominations for election to our board or for proposing matters that can be acted upon by stockholders at annual stockholder meetings; and
- require a super-majority vote of stockholders to amend some provisions described above.

In addition, Section 203 of the General Corporation Law of the State of Delaware (DGCL) prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder, generally a person which together with its affiliates owns, or within the last three years has owned, 15% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner.

Any provision of our amended and restated certificate of incorporation, amended and restated bylaws or Delaware law that has the effect of delaying or preventing a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our capital stock and could also affect the price that some investors are willing to pay for our common stock.

Our amended and restated bylaws provide that the Court of Chancery of the State of Delaware and the federal district courts of the United States of America will be the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated bylaws provide that the Court of Chancery of the State of Delaware (or, if the Court of Chancery does not have jurisdiction, another state court in Delaware or the federal district court for the District of Delaware) is the exclusive forum for the following (except for any claim as to which such court

determines that there is an indispensable party not subject to the jurisdiction of such court (and the indispensable party does not consent to the personal jurisdiction of such court within 10 days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than such court or for which such court does not have subject matter jurisdiction):

- any derivative action or proceeding brought on our behalf;
- any action asserting a claim of breach of fiduciary duty;
- any action asserting a claim against us arising under the DGCL, our amended- and restated certificate of incorporation or our amended and restated bylaws; and
- any action asserting a claim against us that is governed by the internal-affairs doctrine.

This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act or any other claim for which the U.S. federal courts have exclusive jurisdiction.

Such amended and restated bylaws further provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. These exclusive-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 lawsuits against us and our directors, officers and other employees. Any person or entity purchasing or otherwise acquiring any interest in any of our securities shall be deemed to have notice of and consented to these provisions. There is uncertainty as to whether a court would enforce such provisions, and the enforceability of similar choice of forum provisions in other companies' charter documents has been challenged in legal proceedings. We also note that stockholders cannot waive compliance (or consent to noncompliance) with the federal securities laws and the rules and regulations thereunder. It is possible that a court could find these types of provisions to be inapplicable or unenforceable, and if a court were to find either exclusive-forum provision in our amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving the dispute in other jurisdictions, which could seriously harm our business.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

Our offices are located in San Francisco and San Diego, California. In San Francisco, we lease 5,698 square feet of office space, under a lease that expires on June 30, 2026, with an option to extend for an additional three years at the end of the initial term. In San Diego, we occupy 8,088 square feet of office space under a lease which commenced in March 2022 for an initial term of five years and four months. We believe that our facilities are sufficient to meet our current needs and that suitable additional space will be available as and when needed.

Item 3. 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 litigation or legal proceedings that, in the opinion of our management, are likely to have a material adverse effect on our business. 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.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information for Common Stock

Our common stock is publicly traded on the Nasdaq Global Select Market under the symbol ''KNTE.''

Holders of Record

As of December 31, 2022, there were approximately 11 stockholders of record of our common stock. The actual number of stockholders is greater than this number of record holders and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees.

Dividend Policy

We have never declared or paid any cash dividends on our capital stock. We currently intend to retain any future earnings and do not expect to pay any dividends in the foreseeable future. Any future determination to declare cash dividends will be made at the discretion of our board of directors, subject to applicable laws, and will depend on a number of factors, including our financial condition, results of operations, capital requirements, contractual restrictions, general business conditions and other factors that our board of directors may deem relevant.

Recent Sales of Unregistered Securities

On February 17, 2023, we issued an aggregate of 2,200,000 shares of our common stock to the holders of all of the outstanding Series A Preference Shares in Kinnjiu as partial consideration for our purchase of those shares. The consideration constituting shares of our common stock were issued pursuant to the exemption provided in Section 4(a)(2) under the Securities Act and/or Regulation D promulgated thereunder as a transaction by an issuer not involving a public offering. We relied on the foregoing exemption from registration based in part on the representations made by each of Kinnjiu's selling shareholders, including representations with respect to their respective status as accredited investors, as such term in defined in Rule 501(a) of the Securities Act, and their respective investment intent.

Use of Proceeds from Public Offering of Common Stock

On December 2, 2020, our registration statement on Form S-1 (File No. 333-250086) was declared effective by the SEC for our IPO of common stock. We began trading on the Nasdaq Global Select Market on December 3, 2020, and the transaction formally closed on December 7, 2020. In connection with our IPO, we issued and sold an aggregate of 13,800,000 shares of our common stock at a price of $20.00 per share, including 1,800,000 shares issued and sold in connection with the full exercise by the underwriters of their option to purchase additional shares of common stock. The aggregate offering price for shares sold in our IPO was $276.0 million. The joint book-running managers for the initial public offering were Goldman Sachs & Co. LLC, SVB Leerink LLC, and Piper Sandler & Co. and Wedbush Securities Inc. After deducting underwriting discounts and commissions and offering costs paid or payable by us of approximately $22.7 million, the net proceeds from the offering were approximately $253.3 million. No payments were made by us to directors, officers or persons owning ten percent or more of our common stock or to their associates, or to our affiliates, other than payments in the ordinary course of business to officers for salaries and to non-employee directors pursuant to our director compensation policy.

Purchases of Equity Securities by the Issuer and Affiliated Purchasers

None.

Item 6. [Reserved].

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Investors should read the following discussion and analysis of our financial condition and results of operations together with the section entitled "Selected Consolidated Financial Data" and our consolidated financial statements and related notes included elsewhere in this Annual Report on Form 10-K. This discussion contains forward-looking statements that involve risks and uncertainties, including those described in the section titled "Special Note Regarding Forward Looking Statements." Our actual results and the timing of selected events could differ materially from those discussed below. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those set forth under the section titled "Risk Factors" included elsewhere in this report.

Overview

We are a clinical stage precision oncology company focused on the discovery, design and development of small molecule kinase inhibitors for difficult-to-treat, genomically defined cancers. Our mission is to inspire hope for those battling cancer by expanding on the promise of targeted therapies. Our Kinnate Discovery Engine, which starts with the identification of an unmet need among validated oncogenic drivers, utilizes our deep expertise in medicinal chemistry and structure-based design, and the tailored ecosystems of our partners to develop our targeted therapies. We focus our discovery and development efforts on three patient populations: (1) those with cancers that harbor known oncogenic drivers (gene alterations that cause cancers) with no currently available targeted therapies, (2) those with genomically well-characterized tumors that have intrinsic resistance to currently available treatments (non-responders), and (3) those whose tumors have acquired resistance over the course of therapy to currently available treatments. Our Kinnate Discovery Engine, together with the biomarker-driven approach of our drug development strategy, our continual translational research and early global expansion in development, may enable us to develop drugs with an increased probability of clinical success while reducing the cost and risk of drug development.

Our lead product candidate is exarafenib , which is a Rapidly Accelerated Fibrosarcoma (RAF) inhibitor in development for the treatment of patients with lung cancer, melanoma and other solid tumors. Unlike currently available treatments that target only B-Rapidly Accelerated Fibrosarcoma (BRAF) kinase Class I alterations, we have designed exarafenib to target BRAF Class II and Class III alterations, where it would be a first-line targeted therapy, in addition to covering BRAF Class I alterations. In April 2021, we filed an Investigational New Drug application (IND) for exarafenib with the U.S. Food and Drug Administration (FDA). In May 2021, the FDA cleared our IND for exarafenib and we initiated KN-8701, a Phase 1 clinical trial evaluating exarafenib. We began dosing exarafenib in humans in the second half of 2021. In 2022, we announced the addition of patients with NRAS mutant melanoma into KN-8701 both in monotherapy and in combination with a MEK inhibitor binimetinib. KN-8701 is currently ongoing. We anticipate disclosing exarafenib monotherapy and combination dose escalation data from this clinical trial in the first half of 2023. In the first quarter of 2023, we announced that we initiated enrollment of patients into the monotherapy dose expansion cohorts of KN-8701.

Our second product candidate is KIN-3248, a Fibroblast Growth Factor Receptors (FGFR) inhibitor, designed for the treatment of patients with intrahepatic cholangiocarcinoma (ICC), a cancer of the bile ducts in the liver, and urothelial carcinoma (UC), a cancer of the bladder lining as well as other solid tumors. KIN-3248 is designed to address clinically observed kinase domain mutations in FGFR2 and FGFR3 that drive resistance to current therapies. In January 2022, the FDA cleared our IND for KIN-3248 and we initiated KN-4802, a Phase 1 clinical trial evaluating KIN-3248, in the first quarter of 2022. KIN-3248 has demonstrated proof of concept in preclinical models showing activity across both initial FGFR 2/3 genomic alterations and a broad range of common resistant variants that arise from first generation FGFR 2/3 targeted therapies. We anticipate initial dose escalation data from the ongoing KN-4802 clinical trial in the second half of 2023.

We are also advancing other small molecule research programs, including a Cyclin-Dependent Kinase 12 (CDK12) inhibitor in our KIN004 program for the treatment of ovarian carcinoma (OC), triple-negative breast cancer (TNBC) and metastatic castration-resistant prostate cancer (mCRPC).

In February 2023, we announced that we acquired the ownership stake of Kinnjiu previously held by the Series A investors for $24.0 million, using a combination of $9.1 million in cash and 2.2 million shares of common stock of Kinnate. We retain Kinnjiu's cash, intellectual property and other assets, including key personnel and its legal entity structure. Since our inception in 2018, we have devoted substantially all of our resources to research and development activities, including with respect to our RAF and FGFR programs and

other research programs, business planning, establishing and maintaining our intellectual property portfolio, hiring personnel, raising capital, and providing general and administrative support for these operations.

We do not have any products approved for commercial sale, and we have not generated any revenue from product sales or other sources since inception. Our ability to generate product revenue sufficient to achieve profitability, if ever, will depend on the successful development and eventual commercialization of one or more of our product candidates which we expect, if it ever occurs, will take a number of years. We also 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 manufacturing if any of our product candidates obtain marketing approval. 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 development of our product candidates.

To date, we have financed our operations primarily through proceeds from the issuance of common stock (including our IPO) and private placements of our convertible preferred stock. As of December 31, 2022, we had cash and cash equivalents and short-term and long-term investments of $266.3 million, inclusive of $25.7 million at Kinnjiu. Based on our current operating plan, we believe that our current cash and cash equivalents and short-term and long-term investments will be sufficient to fund our planned operating expenses and capital expenditure requirements into mid-2024.

We have incurred significant losses since the commencement of our operations. Our consolidated net losses for the years ended December 31, 2022 and 2021 were $116.3 million and $89.8 million, respectively, and we expect to continue to incur significant and increasing losses for the foreseeable future as we continue to advance our product candidates and any future product candidates from discovery through preclinical development and into clinical trials as we seek regulatory approval for these product candidates. Our net losses may fluctuate significantly from period to period, depending on the timing of expenditures on our research and development activities. As of December 31, 2022, we had an accumulated deficit of $259.4 million.

We expect our expenses and capital requirements will increase substantially in connection with our ongoing activities as we:

- advance our RAF and FGFR programs through clinical development;
- advance the development of our other small molecule research programs, including our CDK12 inhibitor and next-generation programs for our product candidates;
- expand our pipeline of product candidates through our own product discovery and development efforts;
- seek to discover and develop additional product candidates;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- establish a sales, marketing and distribution infrastructure to commercialize any approved product candidates and related additional commercial manufacturing costs;
- implement operational, financial and management systems;
- attract, hire and retain additional clinical, scientific, management and administrative personnel;
- maintain, expand, protect and enforce our intellectual property portfolio, including patents, trade secrets and know how; and
- operate as a public company.

We will require substantial additional funding to develop our product candidates and support our continuing operations. Until such time that we can generate significant revenue from product sales or other sources, if ever, we expect to finance our operations through the sale of equity, debt financings or other capital sources, which could include income from collaborations, strategic partnerships or marketing, distribution, licensing or other strategic arrangements with third parties, or from grants. We may be unable to raise additional funds or to enter into such agreements or arrangements on favorable terms, or at all. Our ability to raise additional funds may be adversely impacted by potential worsening global economic conditions and the recent disruptions to, and volatility in, the credit and financial markets in the United States and worldwide caused by COVID-19, the

ongoing conflict between Russia and Ukraine, inflation rates, and other factors. Our failure to obtain sufficient funds on acceptable terms when needed could have a material adverse effect on our business, results of operations or financial condition, including requiring us to have to delay, reduce or eliminate our product development or future commercialization efforts. Insufficient liquidity may also require us to relinquish rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose. The amount and timing of our future funding requirements will depend on many factors, including the pace and results of our development efforts. We cannot provide assurance that we will ever be profitable or generate positive cash flow from operating activities.

We were incorporated in the State of Delaware in January 2018, and our principal executive offices are in San Francisco, California. Our research and development team is primarily based in San Diego, California, with a portion of our management team based in San Francisco, California.

Components of Our Results of Operations

Revenue

To date, we have not generated any revenue and we do not expect to generate any revenue from the sale of products or from other sources in the foreseeable future.

Operating Expenses

Research and Development

Research and development expenses account for a significant portion of our operating expenses and consist primarily of external and internal expenses incurred in connection with the discovery and development of our product candidates.

External expenses include:

- expenses incurred in connection with the discovery, preclinical and clinical development of our product candidates, including under agreements with third parties, such as consultants and CROs;
- the cost of manufacturing compounds for use in our preclinical and clinical studies, including under agreements with third parties, such as consultants and CMOs; and
- costs associated with consultants for chemistry, manufacturing and controls (CMC) development, regulatory, statistics and other services, including expenses for technology and facilities.

Internal expenses include employee-related expenses, including salaries and benefits, travel and stock-based compensation expense for employees engaged in research and development functions.

We expense research and development expenses in the periods in which they are incurred. External expenses are recognized based on an evaluation of the progress to completion of specific tasks using information provided to us by our service providers or our estimate of the level of service that has been performed at each reporting date. We track external expenses on the basis of lead programs and other programs. However, we do not track internal costs on a program specific basis because these costs are deployed across multiple programs and, as such, are not separately classified. We utilize third party contractors for our research and development activities and CMOs for our manufacturing activities and we do not have our own laboratory or manufacturing facilities. Therefore, we have no material facilities expenses attributed to research and development.

Product candidates in later stages of development generally have higher development costs than those in earlier stages. As a result, we expect that our research and development expenses will increase substantially over the next several years as we advance our product candidates through preclinical studies into and through clinical trials, continue to discover and develop additional product candidates and expand our pipeline, maintain, expand, protect and enforce our intellectual property portfolio, and hire additional personnel.

The successful development of our product candidates is highly uncertain, and we do not believe it is possible at this time to accurately project the nature, timing and estimated costs of the efforts necessary to complete the development of, and obtain regulatory approval for, any of our product candidates. To the extent our product candidates continue to advance into clinical trials, as well as advance into larger and later-stage clinical trials, our expenses will increase substantially and may become more variable. We are also unable to predict when, if ever,

we will generate revenue from our product candidates to offset these expenses. Our expenditures on current and future preclinical and clinical programs are subject to numerous uncertainties in timing and cost to completion. The duration, costs and timing of preclinical studies and clinical trials and development of our product candidates will depend on a variety of factors, including:

- the timing and progress of preclinical and clinical development activities;
- the number and scope of preclinical and clinical programs we decide to pursue;
- our ability to maintain our current research and development programs and to establish new ones;
- establishing an appropriate safety profile with IND-enabling toxicology studies;
- successful patient enrollment in, and the initiation and completion of, clinical trials;
- per-subject clinical trial costs;
- the number of clinical trials required for regulatory approval;
- the countries in which the clinical trials are conducted;
- the length of time required to enroll eligible subjects and initiate clinical trials;
- the number of subjects that participate in the clinical trials;
- the drop-out and discontinuation rate of subjects;
- potential additional safety monitoring requested by regulatory authorities;
- the duration of subject participation in the clinical trials and follow-up;
- the successful completion of clinical trials with safety, tolerability and efficacy profiles that are satisfactory to applicable regulatory authorities;
- the receipt of regulatory approvals from applicable regulatory authorities;
- the timing, receipt and terms of any marketing approvals and post-marketing approval commitments from applicable regulatory authorities;
- the extent to which we establish collaborations, strategic partnerships or other strategic arrangements with third parties, if any, and the performance of any such third party;
- obtaining and retaining research and development personnel;
- establishing commercial manufacturing capabilities or making arrangements with CMOs;
- development and timely delivery of commercial-grade drug formulations that can be used in our planned clinical trials and for commercial launch; and
- obtaining, maintaining, defending and enforcing patent claims and other intellectual property rights.

Any changes in the outcome of any of these factors could significantly impact the costs, timing and viability associated with the development of our product candidates.

General and Administrative

General and administrative expenses consist of salaries and benefits, travel and stock-based compensation expense for personnel in executive, human resources, finance and administrative functions; professional fees for legal, patent, consulting, accounting and audit services; and expenses for technology and facilities. We expense general and administrative expenses in the periods in which they are incurred.

We expect that our general and administrative expenses will increase over the next several years as we hire additional personnel to support the continued research and development of our programs and growth of our business. We also expect to continue to incur increased expenses as a result of operating as a public company, including expenses related to accounting, audit, legal, regulatory, compliance with the rules and regulations of the SEC, Sarbanes-Oxley Act of 2002, as amended (Sarbanes-Oxley Act) and those of the Nasdaq Global Select Market or any other national securities exchange on which our securities are traded, director and officer insurance, investor and public relations, and other administrative and professional services.

Other Income, Net

Other Income, Net

Other income, net primarily consists of interest income generated from our cash equivalents in interest-bearing money market accounts and short-term and long-term investments.

Results of Operations

Comparison of the Years Ended December 31, 2022 and 2021

The following table summarizes our results of operations for the periods indicated:

	Year Ended December 31,		
	2022	2021	Change
	(in thousands)		
Operating expenses:			
Research and development	$ 88,150	$ 67,166	$ 20,984
General and administrative	30,371	22,945	7,426
Total operating expenses	118,521	90,111	28,410
Loss from operations	(118,521)	(90,111)	(28,410)
Other income, net	2,250	348	1,902
Net loss	(116,271)	(89,763)	(26,508)
Net loss attributable to redeemable convertible noncontrolling interests	—	—	—
Net loss attributable to Kinnate	$(116,271)	$(89,763)	$(26,508)

Research and Development Expenses

The following table summarizes our research and development expenses incurred during the periods indicated:

	Year Ended December 31,		Increase (Decrease)
	2022	2021	
	(in thousands)		
External expenses:			
RAF	$23,713	$23,436	$ 277
FGFR	13,588	11,085	2,503
Other programs and other unallocated costs	16,924	10,859	6,065
Total external expenses	54,225	45,380	8,845
Internal expenses	33,925	21,786	12,139
Total research and development expenses	$88,150	$67,166	$20,984

Research and development expenses were $88.2 million for the year ended December 31, 2022 compared to $67.2 million for the year ended December 31, 2021, an increase of $21.0 million. The increase was primarily attributable to an increase of $2.5 million in external expenses for our FGFR program given the increased activity as this program advanced into the clinic, an increase of $6.1 million in external expenses for non-lead programs reflecting increased spend in early-stage pipeline research, as well as an increase of $12.1 million in internal research and development expenses as a result of a significant increase in research and development personnel and higher stock-based compensation. Research and development expenses included $3.3 million incurred at Kinnjiu during the year ended December 31, 2022 compared to $0.8 million during the year ended December 31, 2021 as the entity began operations in the second quarter of 2021.

General and Administrative Expenses

General and administrative expenses were $30.4 million for the year ended December 31, 2022 compared to $22.9 million for the year ended December 31, 2021, an increase of $7.5 million. This increase was primarily

driven by an increase in headcount and higher stock-based compensation, as well as increased consulting and professional services expenses. General and administrative expenses included $2.0 million incurred at Kinnjiu during the year ended December 31, 2022 compared to $0.6 million during the year ended December 31, 2021.

Other Income, Net

Other income, net was $2.3 million for the year ended December 31, 2022, compared to $0.3 million for the year ended December 31, 2021. The increase was primarily driven by a significant increase in interest rates during 2022 allowing us to invest maturing securities into securities with higher yields.

Liquidity and Capital Resources

Sources of Liquidity

On December 7, 2020, we completed our IPO. In connection with our IPO, we issued and sold 13,800,000 shares of our common stock at a price to the public of $20.00 per share resulting in gross proceeds of $276.0 million before deducting underwriting discounts and commissions and other offering expenses. Additionally, in January 2022, we filed a shelf registration with the SEC on Form S-3ASR (File No. 333-261970). The shelf registration statement included a prospectus supplement for an at-the-market offering (ATM Offering) to sell up to an aggregate of $150.0 million of shares of our common stock that may be issued and sold from time to time under a sales agreement with SVB Leerink LLC. To date, no shares have been issued and sold pursuant to the ATM Offering. In March 2022, we filed certain post-effective amendments to the Form S-3ASR for the purpose of, among other things, converting the registration statement to the current submission type for a non-automatic shelf registration statement and providing that the base prospectus included in the registration statement covers the offering, sale and issuance by us of up to $350.0 million in the aggregate of the securities identified in the registration statement in one or more offerings. The $150.0 million of common stock that may be offered, issued and sold in the ATM Offering is included in the $350.0 million of securities that may be offered, issued and sold by us under the base prospectus. Prior to our IPO, we funded our operations primarily through private placements of our convertible preferred stock with aggregate gross proceeds of $191.6 million.

Our primary uses of cash to date have been to fund our research and development activities, including with respect to our RAF and FGFR programs and other research programs, business planning, establishing and maintaining our intellectual property portfolio, hiring personnel, raising capital, and providing general and administrative support for these operations.

Future Funding Requirements

To date, we have not generated any revenue. We do not expect to generate any meaningful revenue unless and until we obtain regulatory approval of and commercialize any of our product candidates, and we do not know when, or if, that will occur. Until such time as we can generate significant revenue from product sales, if ever, we will continue to require substantial additional capital to develop our product candidates and fund operations for the foreseeable future. We expect our expenses to increase significantly in connection with our ongoing activities as described in greater detail below. We are subject to all the risks incident in the development of new biopharmaceutical products, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may harm our business. We expect our expenses to increase significantly, as we:

- advance our RAF and FGFR programs through clinical development;
- advance the development of our other small molecule research programs, including our CDK12 inhibitor;
- expand our pipeline of product candidates through our own product discovery and development efforts;
- seek to discover and develop additional product candidates;
- seek regulatory approvals for any product candidates that successfully complete clinical trials;
- establish a sales, marketing and distribution infrastructure to commercialize any approved product candidates and related additional commercial manufacturing costs;
- implement operational, financial and management systems;

- attract, hire and retain additional clinical, scientific, management and administrative personnel;
- maintain, expand, protect and enforce our intellectual property portfolio, including patents, trade secrets and know how; and
- operate as a public company.

In order to complete the development of our product candidates and to build the sales, marketing and distribution infrastructure that we believe will be necessary to commercialize our product candidates, if approved, we will require substantial additional funding. Until we can generate a sufficient amount of revenue from the commercialization of our product candidates, we may seek to raise any necessary additional capital through the sale of equity, debt financings or other capital sources, which could include income from collaborations, strategic partnerships or marketing, distribution, licensing or other strategic arrangements with third parties, or from grants. 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 and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, including restricting our operations and limiting our ability to incur liens, issue additional debt, pay dividends, repurchase our common stock, make certain investments or engage in merger, consolidation, licensing or asset sale transactions. If we raise funds through collaborations, strategic partnerships and other similar arrangements with third parties, we may be required to grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves. We may be unable to raise additional funds or to enter into such agreements or arrangements on favorable terms, or at all. Our ability to raise additional funds may be adversely impacted by potential worsening global economic conditions and the recent disruptions to, and volatility in, the credit and financial markets in the United States and worldwide. If we are unable to raise additional funds when needed, we may be required to delay, reduce or eliminate our product development or future commercialization efforts.

Based on our current operating plan, we believe that our current cash and cash equivalents and short-term and long-term investments will be sufficient to fund our planned operating expenses and capital expenditure requirements into mid-2024. We have based our projections of operating capital requirements on our current operating plan, which includes several assumptions that may prove to be incorrect, and we may use all of our available capital resources sooner than we expect.

Because of the numerous risks and uncertainties associated with research, development and commercialization of product candidates, we are unable to estimate the exact amount and timing of our working capital requirements. Our future funding requirements will depend on many factors, including:

- the scope, timing, progress, results and costs of researching and developing our product candidates, and conducting preclinical studies and clinical trials;
- the scope, timing, progress, results and costs of researching and developing other product candidates that we may pursue;
- the costs, timing and outcome of regulatory review of our product candidates;
- the costs of future activities, including product sales, medical affairs, marketing, manufacturing and distribution, for any of our product candidates for which we receive marketing approval;
- the costs of manufacturing commercial-grade products and sufficient inventory to support commercial launch;
- the revenue, if any, received from commercial sale of our products, should any of our product candidates receive marketing approval;
- the cost and timing of attracting, hiring and retaining skilled personnel to support our operations and continued growth;
- the costs of preparing, filing and prosecuting patent applications, maintaining and enforcing our intellectual property rights and defending intellectual property-related claims;

- our ability to establish and maintain collaborations, strategic partnerships or marketing, distribution, licensing or other strategic arrangements with third parties on favorable terms, if at all;
- the extent to which we acquire or in-license other product candidates and technologies, if any;
- the timing, receipt and amount of sales of, or milestone payments related to or royalties on, our current or future product candidates, if any; and
- the costs associated with operating as a public company.

A change in the outcome of any of these or other factors with respect to the development of any of our product candidates could significantly change the costs and timing associated with the development of that product candidate. Furthermore, our operating plans may change in the future, and we may need additional funds to meet operational needs and capital requirements associated with such operating plans.

We lease office space in San Diego, California and San Francisco, California. In June 2021, we entered into an agreement to lease 8,088 rentable square feet of office space located in San Diego, California (SD Lease) for a period of five years and four months with a lease commencement date of March 2022. Additionally, we have an option to extend the SD Lease for an additional five years at the end of the initial term. In August 2021, we entered into an agreement to lease 5,698 rentable square feet of office space located in San Francisco, California (SF Lease) for an initial term that commenced on January 1, 2022 and expires June 30, 2026. Additionally, we have an option to extend the SF Lease for an additional three years at the end of the initial term. As of December 31, 2022 we have $1.0 million and $3.2 million in current and long-term operating lease liabilities, respectively.

In addition, we have entered into agreements in the normal course of business with certain vendors for the provision of goods and services, which includes manufacturing services with CMOs and development services with CROs. These agreements may include certain provisions for purchase obligations and termination obligations that could require payments for the cancellation of committed purchase obligations or for early termination of the agreements. The amount of the cancellation or termination payments vary and are based on the timing of the cancellation or termination and the specific terms of the agreement. These obligations and commitments are not separately presented.

Cash Flows

The following tables summarizes our cash flow for the periods indicated:

	Year Ended December 31,	
	2022	2021
	(in thousands)	
Net cash used in operating activities	$(89,034)	$ (71,065)
Net cash used in investing activities	(6,830)	(180,574)
Net cash provided by financing activities	1,160	36,237
Effect of exchange rate changes on cash and cash equivalents	1	—
Net decrease in cash, cash equivalents and restricted cash	$(94,703)	$(215,402)

Operating Activities

Net cash used in operating activities during the year ended December 31, 2022 was $89.0 million. This consisted of our net loss of $116.3 million offset by a net increase in working capital of $6.4 million, primarily due to an increase in accounts payable and accrued expenses and decrease in prepaid expenses and other assets, net of stock-based compensation expense of $19.6 million, depreciation expense of $0.6 million and amortization/accretion of investments of $0.7 million.

Net cash used in operating activities during the year ended December 31, 2021 was $71.1 million. This consisted of our net loss of $89.8 million offset by a net increase in working capital of $1.6 million, primarily due to an increase in accounts payable and accrued expenses partially offset by an increase in prepaid expenses and other assets, net of stock-based compensation expense of $15.0 million and amortization/accretion of investments of $1.9 million.

Investing Activities

Net cash used in investing activities during the year ended December 31, 2022 was $6.8 million and related primarily to purchases of short-term and long-term investments totaling $176.5 million partially offset by the sales and maturities of short-term and long-term investments totaling $172.4 million. Additionally, purchases of property and equipment totaled $2.7 million during the year ended December 31, 2022.

Net cash used in investing activities during the year ended December 31, 2021 was $180.6 million and related primarily to purchases of short-term and long-term investments totaling $247.1 million partially offset by the sales and maturities of short-term and long-term investments totaling $67.3 million.

Financing Activities

Net cash provided by financing activities during the year ended December 31, 2022 was $1.2 million, which consisted of proceeds from the issuance of common stock upon stock option exercises and under our employee stock purchase plan of $0.9 million and $0.6 million, respectively, partially offset by the payment of deferred offering costs in the amount of $0.4 million.

Net cash provided by financing activities during the year ended December 31, 2021 was $36.2 million. This consisted primarily of contributions from noncontrolling interest owners of $34.9 million, net of offering costs, proceeds from the issuance of common stock upon stock option exercises of $0.7 million and proceeds from the issuance of common stock under our employee stock purchase plan of $0.9 million.

Off-Balance Sheet Arrangements

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

Critical Accounting Policies and Significant Judgments and Estimates

Our consolidated financial statements are prepared in accordance with generally accepted accounting principles in the United States. The preparation of our consolidated financial statements and related disclosures requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, costs and expenses, and the disclosure of contingent assets and liabilities in our consolidated financial statements. We base our estimates on historical experience, known trends and events and various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We evaluate our estimates and assumptions on a periodic basis. Our actual results may differ from these estimates.

While our significant accounting policies are described in more detail in the notes to our consolidated financial statements appearing elsewhere in this Annual Report on Form 10-K, we believe that the following accounting policies are critical to understanding our historical and future performance, as the policies relate to the more significant areas involving management's judgments and estimates used in the preparation of our consolidated financial statements.

Research and Development Expenses

As part of the process of preparing our consolidated financial statements, we are required to estimate our accrued research and development expenses as of each balance sheet date. This process involves 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 actual costs. The majority of our service providers invoice us in arrears for services performed, based on a pre-determined schedule or when contractual milestones are met, but some require advance payments. We make estimates of our accrued expenses as of each balance sheet date in the consolidated financial statements based on facts and circumstances known to us at that time. If timelines or contracts are modified based upon changes in the protocol or scope of work to be performed, we modify our estimates and accruals accordingly on a prospective basis.

We base our expenses related to external research and development services 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. The financial terms of these agreements are subject to negotiation, vary from contract to contract and may result in uneven payment flows. 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 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 the estimate, we adjust the accrual or the amount of prepaid expenses accordingly.

Although we do not expect our estimates to be materially different from amounts actually incurred, our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in reporting amounts that are too high or too low in any particular period. To date, there have not been any material adjustments to our prior estimates of accrued research and development expenses.

Stock-Based Compensation

Stock-based compensation expense represents the cost of the grant date fair value of employee, officer, director and non-employee awards, estimated in accordance with the applicable accounting guidance, recognized on a straight-line basis over the vesting period. The vesting period generally approximates the expected service period of the awards. We recognize forfeitures as they occur.

The fair value of stock options and employee stock plan awards under the 2020 ESPP is estimated using a Black-Scholes valuation model on the date of grant. The Black-Scholes option-pricing model requires inputs based on certain subjective assumptions. Changes to these assumptions can materially affect the fair value of stock options and employee stock plan awards, and ultimately the amount of stock-based compensation expense recognized in our consolidated financial statements. These assumptions include:

- Fair Value of Common Stock: Since the completion of our initial public offering, the fair value of each share of common stock underlying stock option grants is based on the closing price of our common stock on the Nasdaq Global Select Market as reported on the date of grant.
- Expected Term: We have opted to use the ‘‘simplified method’’ for estimating the expected term of options, whereby the expected term equals the arithmetic average of the vesting term and the original contractual term of the option, which is generally 10 years.
- Expected Volatility: Due to the limited trading history of our common stock, we have based our estimate of expected volatility on the historical volatility of a group of similar companies that are publicly traded. The historical volatility data was computed using the daily closing prices for the selected companies’ shares during the equivalent period of the calculated expected term of the stock-based awards. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available.
- Risk-Free Interest Rate: The risk-free interest rates used are based on the U.S. Treasury yield in effect at the time of grant for zero-coupon U.S. treasury notes with maturities approximately equal to the expected term of the stock options.
- Expected Dividend: To date, we have not issued any dividends and do not expect to issue dividends over the life of the options and therefore have estimated the dividend yield to be zero.

The assumptions underlying these valuations represent our board’s and management’s best estimates, which involve inherent uncertainties and the application of significant judgment. As a result, if factors or expected outcomes change and we use significantly different assumptions or estimates, our stock-based compensation expense could be materially different.

The fair value of RSUs is estimated based on the fair value of our common stock on the date of grant.

Variable Interest Entity

Our consolidated financial statements include the accounts of our variable interest entity (VIE), Kinnjiu. We evaluate our ownership, contractual and other interests in entities that are not wholly-owned to determine if these entities are VIEs, and, if so, whether we are the primary beneficiary of the VIE. In determining whether we are the primary beneficiary of a VIE and therefore required to consolidate the VIE, we apply a qualitative approach

that determines whether we have both (1) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and (2) the obligation to absorb losses of, or the rights to receive benefits from, the VIE that could potentially be significant to that VIE. As of December 31, 2022, prior to the acquisition of the minority ownership stake discussed elsewhere in this Annual Report on Form 10-K, we held an approximately 58% equity interest in Kinnjiu. Based on our assessment, we concluded that Kinnjiu is a VIE and we are the primary beneficiary.

Recently Issued Accounting Pronouncements

A description of recently issued accounting pronouncements that may potentially impact our financial position and results of operations is disclosed in Note 2 to our consolidated financial statements appearing elsewhere in this Annual Report on Form 10-K.

Emerging Growth Company and Smaller Reporting Company Status

We are an ''emerging growth company'' as defined in the Jumpstart Our Business Startups Act of 2012, as amended (JOBS Act). We will remain an emerging growth company until the earliest to occur of: (i) the last day of the fiscal year in which we have $1.235 billion or more in annual revenue; (ii) the date we qualify as a ''large accelerated filer,'' with at least $700 million of equity securities held by non-affiliates; (iii) the date on which we have issued more than $1.0 billion in non-convertible debt securities during the prior three-year period; and (iv) December 31, 2025. As a result of this status, we have taken advantage of reduced reporting requirements in this Annual Report on Form 10-K and may elect to take advantage of other reduced reporting requirements in our future filings with the SEC. In particular, in this Annual Report on Form 10-K, we have provided only two years of audited 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.

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, delaying the adoption of these accounting standards until they would apply to private companies. We have elected to use the extended transition period to enable us to comply with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date on which we (i) are no longer an emerging growth company and (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. 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'' meaning that the market value of our stock held by non-affiliates is less than $700 million and our annual revenue was less than $100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company if either (i) the market value of our stock held by non-affiliates is less than $250 million or (ii) our annual revenue was less than $100 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700 million. If we are a smaller reporting company at the time, we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation and other matters.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Interest Rate Risk

As of December 31, 2022, our cash equivalents consisted primarily of interest-bearing money market accounts. We also had investments in short-term, high grade securities. Our primary exposure to market risk is interest income sensitivity, which is affected by changes in the general level of U.S. interest rates. However, because of the short-term maturities of our investments, a hypothetical 100 basis point increase or decrease in interest rates during any of the periods presented would not have had a material impact on our financial results.

As of December 31, 2022, we had no debt outstanding and are therefore not exposed to interest rate risk with respect to debt.

Effects of Inflation

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

Foreign Currency Risk

Our expenses are generally denominated in U.S. dollars. However, we have entered into a limited number of contracts with vendors for research and development services that are denominated in foreign currencies, including the Canadian dollar. Additionally, Kinnjiu has contracts that are denominated in the Chinese Renminbi. Accordingly, we are subject to foreign currency transaction gains or losses on our contracts denominated in foreign currencies. To date, foreign currency transaction gains and losses have not been material to our consolidated financial statements, and we have not had a formal hedging program with respect to foreign currency. A hypothetical 10% increase or decrease in exchange rates during any of the periods presented would not have had a material impact on our financial results.

Item 8. Financial Statements and Supplementary Data

KINNATE BIOPHARMA INC.
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors
Kinnate Biopharma Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Kinnate Biopharma Inc. and subsidiaries (the Company) as of December 31, 2022 and 2021, the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for the years then ended, 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, 2022 and 2021, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. 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 U.S. 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. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

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
March 15, 2023

KINNATE BIOPHARMA INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share and par value amounts)

	December 31,	
	2022	**2021**
Assets		
Current assets:		
Cash and cash equivalents	$ 29,261	$ 116,096
Cash at consolidated joint venture	25,725	33,593
Short-term investments	172,214	103,362
Prepaid expenses and other current assets	3,637	5,639
Total current assets	230,837	258,690
Property and equipment, net	3,071	956
Right-of-use lease assets	3,377	—
Long-term investments	39,139	105,449
Restricted cash	371	371
Deferred offering costs	—	641
Other non-current assets	2,031	757
Total assets	$ 278,826	$ 366,864
Liabilities, Redeemable Convertible Noncontrolling Interests and Stockholders' Equity		
Current liabilities:		
Accounts payable	$ 2,970	$ 3,148
Accrued expenses	13,206	9,239
Current portion of operating lease liabilities	991	—
Total current liabilities	17,167	12,387
Operating lease liabilities, long-term	3,191	—
Total liabilities	20,358	12,387
Commitments and contingencies (See Note 13)		
Redeemable convertible noncontrolling interests	35,000	35,000
Stockholders' equity:		
Preferred stock, $0.0001 par value; 200,000,000 shares authorized at December 31, 2022 and 2021; 0 shares outstanding at December 31, 2022 and 2021	—	—
Common stock, $0.0001 par value; 1,000,000,000 shares authorized at December 31, 2022 and 2021; 44,342,292 and 43,855,944 shares issued and outstanding at December 31, 2022 and 2021, respectively	4	4
Additional paid-in capital	484,237	463,089
Accumulated other comprehensive loss	(1,410)	(524)
Accumulated deficit	(259,363)	(143,092)
Total stockholders' equity	223,468	319,477
Total liabilities, redeemable convertible noncontrolling interests and stockholders' equity	$ 278,826	$ 366,864

See accompanying notes to consolidated financial statements.

KINNATE BIOPHARMA INC.
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE LOSS
(in thousands, except share and per share amounts)

	Years Ended December 31,	
	2022	**2021**
Operating expenses:		
Research and development	$ 88,150	$ 67,166
General and administrative	30,371	22,945
Total operating expenses	118,521	90,111
Loss from operations	(118,521)	(90,111)
Other income, net	2,250	348
Net loss	(116,271)	(89,763)
Net loss attributable to redeemable convertible noncontrolling interests	—	—
Net loss attributable to Kinnate	$ (116,271)	$ (89,763)
Weighted-average shares outstanding, basic and diluted	44,065,749	43,601,162
Net loss per share, basic and diluted	$ (2.64)	$ (2.06)
Comprehensive loss:		
Net loss	$ (116,271)	$ (89,763)
Other comprehensive loss:		
Currency translation adjustments	1	—
Unrealized loss on investments	(887)	(515)
Total comprehensive loss	(117,157)	(90,278)
Comprehensive loss attributable to redeemable convertible noncontrolling interests	—	—
Comprehensive loss attributable to Kinnate	$ (117,157)	$ (90,278)

See accompanying notes to consolidated financial statements.

KINNATE BIOPHARMA INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands, except share amounts)

	Common Stock		Additional Paid-in	Accumulated Other Comprehensive	Accumulated	Total Stockholders'	Redeemable Convertible Noncontrolling
	Shares	Amount	Capital	Loss	Deficit	Equity	Interests
Balance at December 31, 2020	43,477,439	$ 4	$446,601	$ (9)	$ (53,329)	$ 393,267	$ —
Stock-based compensation expense	—	—	15,016	—	—	15,016	—
Shares issued under equity incentive plans	328,238	—	730	—	—	730	—
Shares issued under employee stock purchase plan	50,267	—	889	—	—	889	—
Contributions from redeemable convertible noncontrolling interest owners	—	—	—	—	—	—	35,000
Issuance costs for Series A preferred stock to redeemable convertible NCI	—	—	(147)	—	—	(147)	—
Net loss	—	—	—	—	(89,763)	(89,763)	—
Other comprehensive loss	—	—	—	(515)	—	(515)	—
Balance at December 31, 2021	43,855,944	$ 4	$463,089	$ (524)	$(143,092)	$ 319,477	$35,000
Stock-based compensation expense	—	—	19,582	—	—	19,582	—
Shares issued under equity incentive plans	414,051	—	945	—	—	945	—
Shares issued under employee stock purchase plan	72,297	—	621	—	—	621	—
Net loss	—	—	—	—	(116,271)	(116,271)	—
Other comprehensive loss	—	—	—	(886)	—	(886)	—
Balance at December 31, 2022	44,342,292	$ 4	$484,237	$(1,410)	$(259,363)	$ 223,468	$35,000

See accompanying notes to consolidated financial statements.

KINNATE BIOPHARMA INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Years Ended December 31,	
	2022	2021
Cash flows from operating activities:		
Net loss	$(116,271)	$ (89,763)
Adjustments to reconcile net loss to net cash used in operating activities:		
Stock-based compensation expense	19,582	15,016
Depreciation	604	123
Amortization/accretion of investments	682	1,877
Loss on disposal of property and equipment	—	58
Changes in operating assets and liabilities:		
Prepaid expenses and other assets	1,369	(3,053)
Operating lease right-of-use assets and liabilities, net	805	—
Accounts payable and accrued expenses	4,195	4,677
Net cash used in operating activities	(89,034)	(71,065)
Cash flows from investing activities:		
Purchases of short-term and long-term investments	(176,528)	(247,142)
Sales and maturities of short-term and long-term investments	172,417	67,337
Purchases of property and equipment	(2,719)	(769)
Net cash used in investing activities	(6,830)	(180,574)
Cash flows from financing activities:		
Contributions from redeemable noncontrolling interest owners, net	—	34,853
Proceeds from issuance of common stock under equity incentive plans	945	730
Proceeds from issuance of common stock under employee stock purchase plan	621	889
Payment of deferred offering costs	(406)	(235)
Net cash provided by financing activities	1,160	36,237
Effect of exchange rate changes on cash and cash equivalents	1	—
Net decrease in cash, cash equivalents and restricted cash	(94,703)	(215,402)
Cash, cash equivalents and restricted cash at the beginning of the period	150,060	365,462
Cash, cash equivalents and restricted cash at the end of the period	$ 55,357	$ 150,060
Supplemental non-cash investing and financing activity:		
Capitalized value of tenant improvement allowance	$ 606	$ —
Operating lease liabilities arising from obtaining right-of-use assets	$ 4,569	$ —
Write-off of deferred offering costs	$ 641	$ —
Deferred offering costs included in accounts payable and accrued expenses	$ —	$ 406

See accompanying notes to consolidated financial statements.

1) Organization and Basis of Presentation

a) Organization and Nature of Operations

Kinnate Biopharma Inc. (Kinnate or the Company) was incorporated in the State of Delaware in January 2018 and is headquartered in San Francisco, California. The Company is a precision oncology company focused on the discovery, design and development of small molecule kinase inhibitors for difficult-to-treat, genomically defined cancers.

Since its inception, the Company has devoted substantially all of its resources to research and development activities, business planning, establishing and maintaining its intellectual property portfolio, hiring personnel, raising capital, and providing general and administrative support for these operations. It has incurred losses and negative cash flows from operations since commencement of its operations. The Company had an accumulated deficit of $259.4 million and had cash and cash equivalents and short-term and long-term investments totaling $240.6 million as of December 31, 2022, exclusive of $25.7 million at its consolidated joint venture discussed in the paragraph below. From its inception through December 31, 2022, the Company has financed its operations primarily through issuances of common stock, including in the Company's initial public offering (IPO), and private placements of convertible preferred stock.

In May 2021, the Company announced the closing of a Series A preferred stock financing of a China joint venture, Kinnjiu Biopharma Inc. (Kinnjiu), to enable the potential development and commercialization of certain targeted oncology product candidates across People's Republic of China, Hong Kong, Taiwan and Macau. Contributions from noncontrolling interest members totaled $35.0 million before issuance costs of $0.2 million. As of December 31, 2022, the Company held an approximately 58% equity interest in Kinnjiu. In February 2023, the Company acquired the ownership stake of Kinnjiu previously held by Series A investors (Kinnjiu Transaction) (see Note 11). Kinnjiu is now a wholly-owned subsidiary of the Company.

As the Company continues to pursue its business plan, it expects to finance its operations through the sale of equity, debt financings or other capital resources, which could include income from collaborations, strategic partnerships or marketing, distribution, licensing or other strategic arrangements with third parties, or from grants. However, there can be no assurance that any additional financing or strategic transactions will be available to the Company on acceptable terms, if at all. If events or circumstances occur such that the Company does not obtain additional funding, it may need to delay, reduce or eliminate its product development or future commercialization efforts, which could have a material adverse effect on the Company's business, results of operations or financial condition. The accompanying consolidated financial statements do not include any adjustments that might be necessary if the Company were unable to continue as a going concern. Management believes that it has sufficient working capital on hand to fund operations through at least the next twelve months from the date these consolidated financial statements were available to be issued.

b) Basis of Presentation

The Company's consolidated financial statements are prepared in accordance with U.S. generally accepted accounting principles (U.S. GAAP). The accompanying consolidated financial statements include the accounts of the Company and its variable interest entity (VIE), Kinnjiu, for which the Company is the primary beneficiary. All intercompany transactions and balances have been eliminated in consolidation.

The accompanying consolidated financial statements include all known adjustments necessary for a fair presentation of the results as required by GAAP. These adjustments consist primarily of normal recurring accruals and estimates that impact the carrying value of assets and liabilities. Operating results presented in these consolidated financial statements are not necessarily indicative of future results.

The Company evaluates its ownership, contractual and other interests in entities that are not wholly-owned to determine if these entities are VIEs, and, if so, whether the Company is the primary beneficiary of the VIE. In determining whether the Company is the primary beneficiary of a VIE and therefore required to consolidate the VIE, the Company applies a qualitative approach that determines whether the Company has both (1) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and (2) the obligation to absorb losses of, or the rights to receive benefits from, the VIE that could potentially be significant

to that VIE. As of December 31, 2022, the Company held an approximately 58% equity interest in Kinnjiu. Based on the Company's assessment, the Company concluded that Kinnjiu is a VIE and the Company is the primary beneficiary. See Note 11 with respect to Kinnjiu Transaction.

2) Summary of Significant Accounting Policies

a) Use of Estimates

The preparation of consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of expenses during the reporting period. Accounting estimates and management judgments reflected in the consolidated financial statements include: normal recurring accruals, including the accrual of research and development expenses; fair value of investments; valuation of deferred tax assets; and stock-based compensation. Although these estimates are based on the Company's knowledge of current events and actions it may undertake in the future, actual results may materially differ from these estimates and assumptions. The Company uses the best information available to update its critical accounting estimates.

b) Concentration of Credit Risk

Financial instruments, which potentially subject the Company to concentration of credit risk, consist primarily of cash and cash equivalents and short-term and long-term investments. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. 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 has not experienced any losses on deposits since inception. The Company's short-term and long-term investments are invested in high grade securities with limited concentration in any one issuer, and as a result, the Company believes represent minimal credit risk.

c) Fair Value of Financials Instruments

The accounting guidance defines fair value, establishes a consistent framework for measuring fair value, and expands disclosure for each major asset and liability category measured at fair value on either a recurring or nonrecurring basis. 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 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.

The carrying amounts of cash, cash equivalents, prepaid expenses and other current assets, accounts payable and accrued expenses are reasonable estimates of their fair value because of the short maturity of these items.

d) Cash and Cash Equivalents

The Company considers all highly liquid investments with an original maturity of three months or less at the date of purchase to be cash equivalents. Cash equivalents primarily represent funds invested in readily available money market accounts. As of December 31, 2022 and 2021, the Company had cash and cash equivalents balances deposited at major financial institutions.

e) Investments

All investments have been classified as ''available-for-sale'' and are carried at fair value as determined based upon quoted market prices or pricing models for similar securities at period end. Investments with contractual maturities less than 12 months at the balance sheet date are considered short-term investments. Those investments with contractual maturities 12 months or greater at the balance sheet date are considered long-term investments. Dividend and interest income are recognized in the Company's consolidated statements of operations and comprehensive loss when earned. Realized gains and losses are included in earnings and are derived using the specific identification method for determining the cost of securities sold. Unrealized gains and losses are reported as a component of accumulated other comprehensive loss. The cost of the Company's available-for-sale debt securities is adjusted for amortization of premium and accretion of discounts to maturity. The Company reviews its portfolio of available-for-sale debt securities, using both quantitative and qualitative

factors, to determine if declines in fair value below cost have resulted from a credit-related loss or other factors. If the decline in fair value is due to credit-related factors, a loss is recognized in statements of operations, whereas if the decline in fair value is not due to credit-related factors, the loss is recorded in other comprehensive loss.

f) Property and Equipment, Net

Property and equipment, net are stated at cost less accumulated depreciation. Depreciation is computed using the straight-line method over the estimated useful lives of the assets, which ranges between three to five years. Leasehold improvements are stated at cost and depreciated over the shorter of the estimated useful life or the remaining lease term at the time the asset is placed into service.

g) Impairment of Property and Equipment

The Company accounts for the impairment of long-lived assets by reviewing these assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If circumstances require a long-lived asset or asset group to be tested for possible impairment, the Company first compares undiscounted cash flows expected to be generated by that asset or asset group to its carrying value. If the carrying value of the long-lived asset or asset group is not recoverable on an undiscounted-cash-flow basis, an impairment is recognized to the extent that the carrying value exceeds its fair value. The Company did not recognize impairment losses for the periods ended December 31, 2022 and 2021.

h) Leases

The Company determines if an arrangement is or contains a lease at inception. For leases with a term greater than one year, right-of- use assets and lease liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. In determining the net present value of lease payments, the Company uses its incremental borrowing rate which represents an estimated rate of interest that the Company would have to pay to borrow equivalent funds on a collateralized basis at the lease commencement date. Leases are classified as finance or operating, with classification affecting the pattern and classification of expense recognition in the consolidated statement of operations and comprehensive loss. The Company's leases often include options to extend or terminate the lease. These options are included in the lease term when it is reasonably certain that the Company will exercise that option. As of December 31, 2022, it is not reasonably certain that these options will be exercised, and they are not included within the lease term.

i) Deferred Offering Costs

Deferred offering costs are expenses directly related to an at-the-market offering of the Company's common stock (ATM Offering) (see Note 8), which is pursuant to a prospectus supplement which is part of a shelf registration that was declared effective by the Securities and Exchange Commission (SEC) on January 3, 2022 (Shelf Registration). These costs consist of legal, accounting, printing and filing fees that the Company has capitalized. Deferred costs associated with the ATM Offering will be netted against proceeds, if any, from funds raised pursuant to the ATM Offering.

j) Research and Development

Research and development expenses are expensed in the periods in which they are incurred. External expenses consist primarily of payments to outside consultants and contract research organizations in connection with the Company's clinical trials, discovery and preclinical activities, process development, manufacturing activities, regulatory and other services. External expenses are recognized based on an evaluation of the progress to completion of specific tasks using information provided to the Company by its service providers or the estimate of the level of service that has been performed at each reporting date.

The Company makes estimates of accrued expenses as of each balance sheet date based on facts and circumstances known at that time. The Company periodically confirms the accuracy of its estimates with the service providers and makes adjustments if necessary. The significant estimates in its accrued research and development expenses include the costs incurred for services performed by vendors in connection with research and development activities for which the Company has not yet been invoiced. Research and development expenses amounted to $88.2 million and $67.2 million for the years ended December 31, 2022 and 2021, respectively.

k) Redeemable Convertible Noncontrolling Interests

The shares third parties own in Kinnjiu represent an interest in the equity the Company does not control. The redeemable convertible noncontrolling interests attributable to other owners has been classified in temporary equity on the consolidated balance sheets as the preferred stock is redeemable by the noncontrolling interests.

Since the preferred stock held at Kinnjiu does not represent a residual equity interest, net losses of Kinnjiu are not allocated to the preferred shares. As a result, the balance of the preferred stock classified as a redeemable convertible noncontrolling interest equals its carrying value. Additionally, net losses of Kinnjiu have not been allocated to the noncontrolling interest related to ordinary shares held by a third party as the amounts to be allocated have been immaterial to date.

l) Commitments and Contingencies

The Company recognizes a liability with regard to loss contingencies when it believes it is probable a liability has been incurred, and the amount can be reasonably estimated. If some amount within a range of loss appears at the time to be a better estimate than any other amount within the range, the Company accrues that amount. When no amount within the range is a better estimate than any other amount the Company accrues the minimum amount in the range. The Company has not recorded any such liabilities as of December 31, 2022 and 2021.

m) Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined on the basis of the differences between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The Company recognizes deferred tax assets to the extent that the Company believes these assets are more likely than not to be realized. In making such a determination, management considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. If management determines that the Company would be able to realize its deferred tax assets in the future in excess of their recorded amount, management would make an adjustment to the deferred tax asset valuation allowance, which would reduce the provision for income taxes.

As of December 31, 2022 and 2021, the Company maintained valuation allowances against its deferred tax assets as the Company concluded it had not met the ‘‘more likely than not’’ to be realized threshold. Changes in the valuation allowance when they are recognized in the provision for income taxes would result in a change in the estimated annual effective tax rate.

n) Stock-Based Compensation

Stock-based compensation expense represents the cost of the grant date fair value of employee, officer, director and non-employee stock option grants, estimated in accordance with the applicable accounting guidance, recognized on a straight-line basis over the vesting period. The vesting period generally approximates the expected service period of the awards. The Company recognizes forfeitures as they occur.

The fair value of restricted stock units is based on the Company’s closing stock price on the grant date. The fair value of stock options is estimated using a Black-Scholes valuation model on the date of grant. This method requires certain assumptions be used as inputs, such as the fair value of the underlying common stock, expected term of the option before exercise, expected volatility of the Company’s common stock, risk-free interest rate and expected dividend. Options granted have a maximum contractual term of ten years. The Company has limited historical stock option activity and therefore estimates the expected term of stock options granted using the simplified method, which represents the arithmetic average of the original contractual term of the stock option and its weighted-average vesting term. The expected volatility of stock options is based upon the historical volatility of a number of publicly traded companies in similar stages of clinical development. 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. The risk-free interest rates used are based on the U.S. Treasury yield in

effect at the time of grant for zero-coupon U.S. treasury notes with maturities approximately equal to the expected term of the stock options. The Company has historically not declared or paid any dividends and does not currently expect to do so in the foreseeable future, and therefore has estimated the dividend yield to be zero.

o) Comprehensive Loss

Comprehensive 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 and foreign currency gains and losses. The unrealized losses on available-for-sale investments and foreign currency translation adjustments are included as a component of other comprehensive loss that is excluded from the reported net loss.

p) Net Loss Per Share

Basic net loss per common share is calculated by dividing the net loss attributable to common stockholders 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 attributable to common stockholders 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 Company's common stock options are considered to be potentially dilutive securities. 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.

The following table sets forth the computation of the basic and diluted net loss per share (in thousands, except share and per share amounts).

	Years Ended December 31,	
	2022	2021
Numerator		
Net loss attributable to Kinnate	$ (116,271)	$ (89,763)
Denominator		
Weighted-average shares outstanding used in computing net loss per share, basic and diluted	44,065,749	43,601,162
Net loss per share, basic and diluted	$ (2.64)	$ (2.06)

The following outstanding shares of potentially dilutive securities were excluded from the computation of diluted net loss per share attributable for the periods presented because including them would have been anti-dilutive:

	As of December 31,	
	2022	2021
Options to purchase common stock	9,107,467	7,477,568
Non-vested restricted stock units	287,916	—
Total	9,395,383	7,477,568

p) Recently Issued Accounting Standards

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standard Update (ASU) No. 2016-02, Leases (Topic 842) (ASC 842), which sets out the principles for the recognition, measurement, presentation and disclosure of leases for both parties to a contract (i.e., lessees and lessors). The new standard requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether the lease is effectively a financed purchase by the lessee. This classification will determine whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease, respectively. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than 12 months regardless of their classification. ASC 842 provides a lessee with an option to not account for leases with a term of 12 month or less as leases in the scope of the new standard. ASC 842 supersedes the previous leases standard, ASC 840 Leases. For public business entities,

this ASU is effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years, and should be applied through a modified retrospective transition approach for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements. Early adoption is permitted. As amended by ASU No. 2020-05, for all other entities, this ASU is effective for fiscal years beginning after December 15, 2021 and interim periods within fiscal years beginning after December 15, 2022. As a result of the Company having elected the extended transition period for complying with new or revised accounting standards pursuant to Section 107(b) of the JOBS Act, ASU No. 2016-02 is effective for the Company for the year ended December 31, 2022, and all interim periods within. In July 2018, the FASB issued supplemental adoption guidance and clarification to ASC 842 within ASU No. 2018-10, Codification Improvements to Topic 842, Leases and ASU No. 2018-11, Leases (Topic 842): Targeted Improvements. ASU No. 2018-11 provides another transition method in addition to the existing modified retrospective transition method by allowing entities to initially apply the new leasing standard at the adoption date and recognize a cumulative-effect adjustment to the opening balance of accumulated deficit in the period of adoption. On January 1, 2022, the Company adopted ASC 842 using the modified retrospective approach. Accordingly, prior period financial information and disclosures have not been adjusted and continue to be reported in accordance with the Company's historical accounting under the previous lease standard. In addition, the Company elected the package of practical expedients available for existing contracts, which allowed it to carry forward historical assessments of lease identification, lease classification, and initial direct costs. As a result of adopting ASC 842, the Company recognized right-of-use assets and lease liabilities of $3.7 million and $4.2 million, respectively, on January 1, 2022, which are related to the Company's facility operating leases. The difference between the right-of-use assets and lease liabilities is primarily attributed to unamortized lease incentives. There was no adjustment to the opening balance of accumulated deficit as a result of the adoption of ASC 842.

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments–Credit Losses (Topic 326) (ASC 326): Measurement of Credit Losses on Financial Instruments, which introduced the expected credit losses methodology for the measurement of credit losses on financial assets measured at amortized cost basis, replacing the previous incurred loss methodology. The amendments in Update 2016-13 added Topic 326, Financial Instruments–Credit Losses, made several consequential amendments to the Codification. Update 2016-13 also modified the accounting for available-for-sale debt securities, which must be individually assessed for credit losses when fair value is less than the amortized cost basis, in accordance with Subtopic 326-30, Financial Instruments– Credit Losses–Available-for-Sale Debt Securities. The guidance is effective for public business entities for annual periods beginning after December 15, 2019, including interim periods within those years. For all other entities, the standard is effective for annual periods beginning after December 15, 2022 and interim periods, therein. Early adoption is permitted. Since the Company has elected to use the extended transition period under the JOBS Act available to emerging growth companies (EGCs), the ASU is effective for the Company for fiscal years beginning after December 15, 2022. The Company does not expect the adoption to have a material impact on its consolidated financial statements.

In December 2019, the FASB issued ASU 2019-12, Income Taxes – Simplifying the Accounting for Income Taxes (ASU 2019-12). Among other items, the amendments in ASU 2019-12 simplify the accounting treatment of tax law changes and year-to-date losses in interim periods. An entity generally recognizes the effects of a change in tax law in the period of enactment; however, there is an exception for tax laws with delayed effective dates. Under current guidance, an entity may not adjust its annual effective tax rate for a tax law change until the period in which the law is effective. This exception was removed under ASU 2019-12, thereby providing that all effects of a tax law change are recognized in the period of enactment, including adjustment of the estimated annual effective tax rate. Regarding year-to-date losses in interim periods, an entity is required to estimate its annual effective tax rate for the full fiscal year at the end of each interim period and use that rate to calculate its income taxes on a year-to-date basis. However, current guidance provides an exception that when a loss in an interim period exceeds the anticipated loss for the year, the income tax benefit is limited to the amount that would be recognized if the year-to-date loss were the anticipated loss for the full year. ASU 2019-12 removes this exception and provides that, in this situation, an entity would compute its income tax benefit at each interim period based on its estimated annual effective tax rate. The Company adopted the standard on the required effective date of January 1, 2022. The ASU did not have a material impact on its consolidated financial statements and related disclosures.

3) Cash, Cash Equivalents and Restricted Cash

The following table provides a reconciliation of the components of cash, cash equivalents and restricted cash reported in the consolidated statements of cash flows (in thousands):

	As of December 31,	
	2022	2021
Cash and cash equivalents	$29,261	$116,096
Cash at consolidated joint venture	25,725	33,593
Restricted cash, non-current	371	371
Total cash, cash equivalents and restricted cash reported in the Consolidated Statements of Cash Flows	$55,357	$150,060

The cash at the consolidated joint venture represents cash held at Kinnjiu and the use of such cash is limited to the operations of Kinnjiu (see Note 11). The restricted cash balance relates to the Company's office lease in San Diego, California (see Note 13).

4) Property and Equipment, Net

Property and equipment, net, consisted of the following (in thousands):

	As of December 31,	
	2022	2021
Furniture and fixtures	$ 760	$ 5
Computers and equipment	442	381
Computer software	99	69
Leasehold improvements	2,511	638
Property and equipment	3,812	1,093
Less accumulated depreciation	(741)	(137)
Property and equipment, net	$3,071	$ 956

Depreciation expense for the years ended December 31, 2022 and 2021 was $0.6 million and $0.1 million, respectively.

5) Accrued Expenses

Accrued expenses consisted of the following (in thousands):

	As of December 31,	
	2022	2021
Accrued research and development	$ 7,884	$4,842
Accrued compensation	4,832	3,344
Accrued legal fees	243	425
Other accruals	247	628
Total	$13,206	$9,239

6) Investments

The Company's investment policy defines allowable investments and establishes guidelines relating to credit quality, diversification, and maturities of its investments to preserve principal and maintain liquidity. In accordance with the Company's investment policy, it has invested funds in marketable securities as of December 31, 2022 and 2021.

The cost, gross unrealized holding gains, gross unrealized holding losses and fair value of available-for-sale investments by types and classes of security at December 31, 2022 and 2021 consisted of the following (in thousands):

	December 31, 2022				
	Maturity in Years	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Corporate debt securities	less than 1	$ 9,604	$ 2	$ (72)	$ 9,534
Commercial paper	less than 1	41,243	—	—	41,243
U.S. Treasury securities	less than 1	119,810	—	(1,254)	118,556
U.S. Agency bonds	less than 1	2,877	4	—	2,881
Short-term investments		$173,534	$ 6	$(1,326)	$172,214
Corporate debt securities	1 - 2	$ 15,426	$—	$ (60)	$ 15,366
U.S. Agency bonds	1 - 2	5,907	—	(9)	5,898
Asset-backed securities	1 - 2	17,897	20	(42)	17,875
Long-term investments		$ 39,230	$20	$ (111)	$ 39,139

	December 31, 2021				
	Maturity in Years	Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value
Corporate debt securities	less than 1	$ 27,450	$—	$ (25)	$ 27,425
U.S. Treasury securities	less than 1	60,226	—	(67)	60,159
Asset-backed securities	less than 1	15,798	—	(20)	15,778
Short-term investments		$103,474	$—	$(112)	$103,362
U.S. Treasury securities	1 - 2	105,861	—	(412)	105,449
Long-term investments		$105,861	$—	$(412)	$105,449

The available–for-sale investments' gross unrealized losses and fair value aggregated by classes of security and length of time that individual securities have been in a continuous loss position at December 31, 2022 and 2021 consisted of the following (in thousands):

	December 31, 2022								
	Less than 12 months			More than 12 months			Total		
	Count	Fair Value	Unrealized Losses	Count	Fair Value	Unrealized Losses	Count	Fair Value	Unrealized Losses
Corporate debt securities	7	$22,806	$(132)	—	$ —	$ —	7	$ 22,806	$ (132)
Commercial paper	—	—	—	—	—	—	—	—	—
U.S. Treasury securities	3	14,625	(57)	7	103,931	(1,197)	10	118,556	(1,254)
U.S. Agency bonds	2	5,898	(9)	—	—	—	2	5,898	(9)
Asset-backed securities	6	7,843	(42)	—	—	—	6	7,843	(42)
	18	$51,172	$(240)	7	$103,931	$(1,197)	25	$155,103	$(1,437)

	December 31, 2021								
	Less than 12 months			More than 12 months			Total		
	Count	Fair Value	Unrealized Losses	Count	Fair Value	Unrealized Losses	Count	Fair Value	Unrealized Losses
Corporate debt securities	6	$ 27,425	$ (25)	—	$—	$—	6	$ 27,425	$ (25)
U.S. Treasury securities	11	165,608	(479)	—	—	—	11	165,608	(479)
Asset–backed securities	4	15,778	(20)	—	—	—	4	15,778	(20)
	21	$208,811	$(524)	—	$—	$—	21	$208,811	$(524)

The Company reviews its investments to identify and evaluate investments that have an indication of possible other-than-temporary impairment. Factors considered in determining whether a loss is other-than-temporary include the length of time and extent to which fair value has been less than the cost basis, the financial condition and near-term prospects of the investee, and the Company's intent and ability to hold the investment for a period of time sufficient to allow for any anticipated recovery in market value. At December 31, 2022 and 2021, the Company held securities in a total unrealized loss position of $1.4 million and $0.5 million, respectively. The Company generally does not intend to sell any investments prior to recovery of their amortized cost basis for any investment in an unrealized loss position. Further, such investments are invested in high grade securities. As such, the Company has classified these losses as temporary in nature.

The Company has determined that there were no material declines in fair value of its investments due to credit–related factors as of December 31, 2022 and 2021.

7) Fair Value Measurements

The accounting guidance defines fair value, establishes a consistent framework for measuring fair value and expands disclosure for each major asset and liability category measured at fair value on either a recurring or nonrecurring basis. 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 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. As a basis for considering such assumptions, the accounting guidance establishes a three–tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1: Observable inputs such as quoted prices in active markets;

Level 2: Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and

Level 3: Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

The carrying amounts of the Company's prepaid expenses and other current assets, accounts payable and accrued expenses are generally considered to be representative of their fair value because of the short-term nature of these instruments. The Company's investments, which may include money market funds and available-for-sale investment securities consisting of high-quality, marketable debt instruments of corporations and the U.S. government are measured at fair value in accordance with the fair value hierarchy.

Following are the major categories of assets measured at fair value on a recurring basis as of December 31, 2022 and 2021 (in thousands):

	Fair Value Measurements at December 31, 2022			
	Level 1	Level 2	Level 3	Total
Money market funds	$28,261	$ —	$—	$ 28,261
Corporate debt securities	—	24,900	—	24,900
Commercial paper	—	41,243	—	41,243
U.S. Treasury securities	—	118,556	—	118,556
U.S. Agency bonds	—	8,779	—	8,779
Asset-backed securities	—	17,875	—	17,875
Total cash equivalents and investments	$28,261	$211,353	$—	$239,614

	Fair Value Measurements at December 31, 2021			
	Level 1	Level 2	Level 3	Total
Money market funds	$115,049	$ —	$—	$115,049
Corporate debt securities	—	27,425	—	27,425
U.S. Treasury securities	—	165,608	—	165,608
Asset-backed securities	—	15,778	—	15,778
Total cash equivalents and investments	$115,049	$208,811	$—	$323,860

Money market funds are classified as cash and cash equivalents in the Company's consolidated balance sheets at December 31, 2022 and 2021.

8) Stockholders' Equity

Under its Amended and Restated Articles of Incorporation dated December 7, 2020, the Company had a total of 1,200,000,000 shares of capital stock authorized for issuance, consisting of 1,000,000,000 shares of common stock, par value of $0.0001 per share, and 200,000,000 shares of preferred stock, par value of $0.0001 per share.

Common stock reserved for future issuance consisted of the following:

	As of December 31,	
	2022	2021
Common stock options outstanding	9,107,467	7,477,568
RSUs outstanding	287,916	—
Common stock reserved for future equity grants	1,700,947	4,079,339
Total common stock reserved for future issuance	11,096,330	11,556,907

At the Market Offering Program

In January 2022, the Company filed a shelf registration with the SEC on Form S-3ASR (File No. 333-261970). The shelf registration statement included a prospectus supplement for an at-the-market offering (ATM Offering) to sell up to an aggregate of $150.0 million of shares of the Company's common stock that may be issued and sold from time to time under a sales agreement with SVB Leerink LLC. As of December 31, 2022, no shares have been issued and sold pursuant to the ATM Offering. Accordingly, deferred offering costs in the amount of $0.6 million were expensed in the fourth quarter of 2022.

9) Equity Incentive Plans and Stock-Based Compensation

a) Equity Incentive Plans

In December 2020, the Company adopted the 2020 Equity Incentive Plan (the 2020 Plan), which replaced the 2018 Equity Incentive Plan (the 2018 Plan). The 2020 Plan allows for the issuance of incentive stock options (ISOs), nonstatutory stock options (NSOs), stock appreciation rights (SARs), restricted stock and restricted stock units (RSUs). The 2020 Plan was established to enable the Company to attract and retain the best available personnel, to provide additional incentive to its employees, directors, and consultants of the Company and to promote the financial success and progress of the Company. Under the 2020 Plan, the Company can offer ISOs to employees and NSOs to employees, non-employee directors, and consultants. The 2020 Plan allows the Company to issue options for shares of its common stock, restricted stock units (RSUs) and other award types, up to a total of 5,218,000 shares (the Equity Pool), subject to annual evergreen adjustments and appropriate adjustments for stock splits, combinations and other similar events for issuance pursuant to awards made under the 2020 Plan. The 588,039 shares of the Company's common stock that remained available for issuance under the 2018 Plan immediately prior to the effectiveness of the 2020 Plan are also reserved under the 2020 Plan.

Under the 2020 and 2018 Plans, the exercise price of each share shall be established at the sole discretion of the Company's board of directors (or any of the committees of the Company's board of directors); provided, however, that the exercise price per share shall not be less than the fair market value for shares of the Company's common stock on the date of grant. The exercise price per share of an ISO granted to an optionee who on the date of the grant owns stock possessing more than 10% of the total combined voting power of all classes of the Company's stock shall not be less than 110% of the fair market value of a share of its common stock on the date of grant.

The options that are granted under the 2020 and 2018 Plans are exercisable at various dates as determined upon grant and terminate within 10 years of the date of grant, unless the optionee owns 10% or more of the common shares at which point the expiration period is 5 years, or upon the employee's termination (whereupon the terminated employee has thirty days after termination to exercise vested options from the date of termination). The vesting period generally occurs over two to four years unless there is a specific performance vesting trigger at which time those shares will vest when the performance trigger is probable to occur. RSUs granted under the 2020 Plan vest over four years from the grant date and represent share awards that, upon vesting, will deliver to the holder shares of the Company's common stock.

Stock Options

Stock option activity is as follows for the year ended December 31, 2022:

	Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2022	7,477,568	$11.11	8.3	$74,268
Granted	2,904,414	9.92		
Exercised	(400,906)	2.36		
Forfeited	(873,609)	14.26		
Outstanding at December 31, 2022	9,107,467	$10.81	7.8	$11,521
Exercisable at December 31, 2022	4,428,265	$ 9.39	7.0	$ 8,220

All exercisable options are vested and all outstanding options are vested or expected to vest. Total intrinsic value of options exercised was $2.8 million and $6.0 million for the years ended December 31, 2022 and 2021, respectively.

Restricted Stock Units

Restricted stock unit activity is as follows for the year ended December 31, 2022:

	Restricted Stock Units Outstanding	Weighted-Average Grant Date Fair Value	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2022	—	$ —	$ —
Granted	347,587	14.71	
Vested	(19,952)	14.71	
Forfeited	(39,719)	14.71	
Outstanding at December 31, 2022	287,916	$14.71	$1,756

b) Kinnjiu Equity Incentive Plan

In May 2021, Kinnjiu adopted the 2021 Equity Incentive Plan (2021 Plan) to attract and retain the best available personnel, to provide additional incentive to its employees, directors, and consultants of Kinnjiu and to promote the financial success and progress of Kinnjiu. The 2021 Plan allows for the issuance of ISOs, NSOs, SARs, restricted stock and RSUs. The 2021 Plan allows Kinnjiu to issue awards for shares of its common stock up to a total of 9,000,000 shares. As of December 31, 2022, 2,432,500 shares of common stock remained available for future grants under the 2021 Plan.

Under the 2021 Plan, the exercise price of each share shall be established at the sole discretion of Kinnjiu's board of directors (or any of the committees of Kinnjiu's board of directors); provided, however, that the exercise price per share shall not be less than the fair market value for shares of Kinnjiu's common stock on the date of grant. An independent valuation firm was engaged to provide a valuation report related to the fair market value of Kinnjiu's shares, as Kinnjiu is not publicly traded, and the fair market value was determined to be $0.34 per ordinary share

Pursuant to the 2021 Plan, both SARs and NSOs were granted to employees and consultants to Kinnjiu. The NSOs generally vest over 4 years. The vesting provisions for SAR awards, which have been granted to Kinnjiu employees, include both a service-based vesting requirement and liquidity event requirement, each such vesting date, a Vesting Event. The service-based vesting is as follows: (i) 30% of the SAR shall vest on the two-year anniversary of the vesting commencement date, (ii) 30% of the SAR shall vest on the three-year anniversary of the vesting commencement date, and (iii) 40% of the SAR shall vest on the four-year anniversary of the vesting commencement date. The liquidity event requirement shall be satisfied upon the earlier of the expiration of a lock-up period following an IPO event or a change in control, subject to the holder of the SAR continuing to be a service provider through the date such earlier event occurs. The SARs shall automatically be exercised, to the extent vested, upon the occurrence of a Vesting Event. Unless otherwise determined by the administrator of the plan, the portion of the SAR that has not satisfied the service-based vesting requirement as of immediately prior to the liquidity event will terminate on the liquidity event without consideration. As the settlement of the SARs granted to Kinnjiu employees is contingent upon both a service condition and performance condition (liquidity event such as an IPO) that is not deemed probable, compensation cost for such awards will not be recognized until the event occurs. In connection with the Kinnjiu Transaction in February 2023, all SARs outstanding under the 2021 Plan were cancelled.

Equity award activity is as follows for the year ended December 31, 2022:

Stock Options

	Shares	Weighted-Average Exercise Price
Outstanding at January 1, 2022	2,837,500	$0.34
Granted	—	—
Exercised	—	—
Forfeited	(500,000)	0.34
Outstanding at December 31, 2022	2,337,500	$0.34
Exercisable at December 31, 2022	726,825	$0.34

SARs

	Shares	Weighted-Average Exercise Price
Outstanding at January 1, 2022	300,000	$0.34
Granted	4,130,000	0.34
Exercised	—	—
Forfeited	(200,000)	0.34
Outstanding at December 31, 2022	4,230,000	$0.34
Exercisable at December 31, 2022	—	—

c) Employee Stock Purchase Plan

In December 2020, the Company's board of directors approved and adopted the 2020 Employee Stock Purchase Plan (the ESPP). The ESPP became effective on the business day immediately prior to the effective date of the Company's first registration statement. The ESPP permits eligible employees who elect to participate in an offering under the ESPP to have up to 15% of their eligible earnings withheld, subject to certain limitations, to purchase shares of common stock pursuant to the ESPP. The price of common stock purchased under the ESPP is equal to 85% of the lower of the fair market value of the common stock at the commencement date of each offering period or the relevant date of purchase. Each offering period is six months, with new offering periods commencing every six months on or about the dates of May 15 and November 15 of each year. A total of 435,000 shares of common stock were initially reserved for issuance under the ESPP.

D) Stock-Based Compensation Expense

The Company measures and recognizes stock-based compensation expense based on the fair value of the award as measured on the grant date. The fair value of RSUs granted is based on the Company's closing stock price on

the grant date. The fair value of stock options and employee stock purchase plan awards is estimated using the Black-Scholes valuation model. The Company accounts for any forfeitures of share-based awards when they occur. Previously recognized compensation expense for an award is reversed in the period that the award is forfeited. The fair value of stock options was estimated using the following assumptions:

	Years Ended December 31,	
	2022	2021
Expected term (in years)	5-6	5-6
Expected volatility	79% - 86%	85% - 89%
Risk-free interest rate	1.62% - 4.35%	0.68% - 1.21%
Expected dividend	0%	0%

The weighted-average grant-date fair value of options granted was $7.13 and $21.70 for the years ended December 31, 2022, and 2021, respectively.

The assumptions used for the years ended December 31, 2022 and 2021 under the ESPP were as follows:

	Years Ended December 31,	
	2022	2021
Expected term (in years)	0.50	0.50
Expected volatility	50% - 86%	50% - 68%
Risk-free interest rate	0.07% - 4.54%	0.03% - 0.07%
Expected dividend	0%	0%

Stock-based compensation expense related to the Company's stock options, RSUs and ESPP totaled the following (in thousands):

	Years Ended December 31,	
	2022	2021
Research and development	$ 8,604	$ 6,778
General and administrative	10,978	8,238
Total stock-based compensation	$19,582	$15,016

As of December 31, 2022 and 2021, there was approximately $39.2 million and $45.0 million of total unrecognized stock-based compensation expense related to nonvested stock-based compensation arrangements, which is expected to be recognized over a weighted-average period of approximately 2.33 years and 2.58 years, respectively.

As of December 31, 2022, there was approximately $4.1 million of total unrecognized stock-based compensation expense related to unvested RSUs, which is expected to be recognized over a weighted-average period of approximately 3.67 years. There were no RSUs vested during the year ended December 31, 2021.

As of December 31, 2022 and 2021, there was approximately $0.2 million and $0.1 million of total unrecognized stock-based compensation expense related to the ESPP.

10) Related Party Transactions

Series A Preferred Stock Financing of Kinnjiu

In connection with the Series A preferred stock financing of Kinnjiu, contributions from noncontrolling interest members totaled $35.0 million before issuance costs of $0.2 million. Such noncontrolling interest members are also investors or affiliates of investors in the Company and have representatives that serve on both the Company's board of directors and the board of directors of Kinnjiu. In February 2023, the Company acquired the ownership stake of Kinnjiu previously held by Series A investors (see Note 11).

11) Variable Interest Entity

As disclosed above, in May 2021, the Company announced the closing of a Series A preferred stock financing of Kinnjiu to enable the potential development and commercialization of certain targeted oncology product candidates across People's Republic of China, Hong Kong, Taiwan and Macau. Contributions from

noncontrolling interest members totaled $35.0 million before issuance costs of $0.2 million. As of December 31, 2022, the Company held an approximately 58% equity interest in the joint venture. As the Company determined it was the primary beneficiary of this VIE, the VIE has been consolidated in the Company's consolidated financial statements.

The Company provides certain general and administrative and research and development services to Kinnjiu pursuant to intercompany agreements; however, the Company does not provide any financial support and has no obligation to fund operations of Kinnjiu.

The following table summarizes the fair value of Kinnjiu, as of May 13, 2021 recorded upon initial consolidation in the Company's consolidated balance sheets and the carrying amount of such assets and liabilities as of December 31, 2022 and 2021, excluding intercompany balances (in thousands):

	As of December 31,		
	2022	2021	May 13, 2021
Cash at consolidated joint venture	$25,725	$33,593	$35,011
Prepaid expenses and other current assets	20	215	—
Right-of-use lease assets	223	—	—
Other non-current assets	48	—	—
Accounts payable and accrued expenses	491	286	—
Operating lease liabilities	206	—	—

In February 2023, the Company entered in a Stock Purchase Agreement to acquire the ownership stake of Kinnjiu previously held by Series A investors for total consideration of $24.0 million, consisting of $9.1 million in cash and $14.9 million in Company stock, which resulted in the issuance of 2,200,000 shares of Company stock to the Series A investors. As the Company had a controlling financial interest in Kinnjiu prior to the Kinnjiu Transaction, the increase in its interest in Kinnjiu will be accounted for as an equity transaction with no gain or loss recognized in the consolidated statements of operations and comprehensive loss. The Kinnjiu Transaction gives the Company greater control over its clinical development programs in the People's Republic of China, Hong Kong, Macau and Taiwan. Kinnjiu is now a wholly-owned subsidiary of the Company.

12) Income Taxes

Significant components of the Company's provision for income taxes and income taxes computed using the U.S. federal statutory corporate tax rate were as follows (in thousands):

	Years Ended December 31,	
	2022	2021
Income taxes computed at the statutory rate	$(24,417)	$(18,850)
State income taxes, net of federal benefit	(21)	(4)
Permanent items	1,419	922
Stock-based compensation	331	(280)
Research credits	(4,233)	(1,306)
Other	2,140	548
Change in valuation allowance	24,781	18,970
Provision for income taxes	$ —	$ —

Significant components of the Company's deferred taxes were as follows (in thousands):

	As of December 31,	
	2022	2021
Deferred tax assets:		
Net operating loss carryforward	$ 34,119	$ 28,054
Research and development credit carryforwards	5,524	1,295
Stock-based compensation	3,213	1,774
Accrued compensation	858	635
Capitalized research and development expenditures	13,311	—
Other, net	1,151	144
Gross deferred tax assets:	58,176	31,902
Less valuation allowance	(56,928)	(31,741)
Total deferred tax assets	1,248	161
Deferred tax liabilities:		
Right-of-use lease assets	(663)	—
Property and equipment	(585)	(51)
Other	—	(110)
Total deferred tax liabilities	(1,248)	(161)
Net deferred tax assets	$ —	$ —

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. 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 its deferred tax assets. Due to the Company's history of losses, management cannot conclude that the deferred tax assets will be realized. The change in the valuation allowance for the year ended December 31, 2022 was an increase of $25.2 million.

At December 31, 2022, the Company has federal and California net operating loss carryforwards of approximately $155.9 million and $25.0 million, respectively.

As a result of the Tax Cuts and Jobs Act of 2017, as amended by the Coronavirus Aid, Relief, and Economic Security Act, for U.S. income tax purposes, net operating losses generated in taxable years beginning after December 31, 2017 can be carried forward indefinitely, but for taxable years beginning after December 31, 2020 the deductibility of such NOLs is limited to 80% of current year taxable income. The California net operating losses will begin to expire in 2038 and the foreign losses carry forward indefinitely.

Pursuant to the Internal Revenue Code, as amended (IRC) Sections 382 and 383, annual use of the Company's NOL and research and development credit carryforwards may be limited in the event a cumulative change in ownership of more than 50% occurs within a three-year period. The Company has not completed an ownership change analysis pursuant to IRC Section 382. If ownership changes have occurred or occur in the future, the amount of remaining tax attribute carryforwards available to offset taxable income and income tax expense in future years may be restricted or eliminated. If eliminated, the related asset would be removed from deferred tax assets with a corresponding reduction in the valuation allowance. Due to the existence of the valuation allowance, limitations created by future ownership changes, if any, will not impact the Company's effective tax rate.

The Company conducted a study to document whether its research activities qualify for the research and development tax credit. Based on such study, the Company determined that certain research activities qualified for the research and development tax credit. As of December 31, 2022, the Company has federal and California research and development tax credit carryforwards of $5.6 million and $2.5 million, respectively, which begin to expire in 2040.

Uncertain tax positions are evaluated based upon the facts and circumstances that exist at each reporting period. Subsequent changes in judgment based upon new information may lead to changes in recognition, derecognition, and measurement. Adjustment may result, for example, upon resolution of an issue with the taxing authorities or expiration of a statute of limitations barring an assessment for an issue.

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 by tax authorities. As of December 31, 2022 and 2021, the Company did not have gross unrecognized tax benefits.

The Company is subject to taxation in the United States and California. All of the Company's tax years from inception are subject to examination by federal and state tax authorities. The Company's practice is to recognize interest and penalties related to income tax matters in income tax expense. The Company had no accrued interest or penalties related to income tax matters in the Company's balance sheets at December 31, 2022 and 2021 and has not recognized interest or penalties in the Company's statements of operations and comprehensive loss for the years ended December 31, 2022 and 2021. Further, the Company is not currently under examination by any federal, state or local tax authority.

13) Commitments and Contingencies

Litigation

The Company, from time to time, is involved in legal proceedings, regulatory actions, claims and litigation arising in the ordinary course of business. The Company was not a defendant in any lawsuit for the years ending December 31, 2022 and 2021, that, in the opinion of Company's management, is likely to have a material adverse effect on the Company's business.

Operating Leases

In June 2021, the Company entered into an agreement to lease 8,088 rentable square feet of office space located in San Diego, California (SD Lease) for a period of five years and four months expiring on July 31, 2027. Additionally, the Company has an option to extend the SD Lease for an additional five years at the end of the initial term. The SD Lease commenced in March 2022.

In connection with the execution of the SD Lease, the Company provided a standby letter of credit for $0.4 million in lieu of a security deposit, which is classified as restricted cash on the consolidated balance sheets. So long as the Company is not in default under the SD Lease, this amount will decrease after each of years three and four of the SD Lease term to $0.3 million.

In August 2021, the Company entered into an agreement to lease 5,698 rentable square feet of office space located in San Francisco, California (SF Lease). The SF Lease commenced in January 2022 and expires on June 30, 2026. The Company has an option to extend the SF Lease for an additional three years at the end of the initial term.

The operating lease right-of-use assets and liabilities on the Company's consolidated balance sheets related to these facility leases. The right-of-use lease assets were $3.4 million as of December 31, 2022. Operating lease liabilities were $4.2 million as of December 31, 2022, including $1.0 million classified as a current liability.

The Company's facility leases require the Company to pay property taxes, insurance and common area maintenance. While these payments are not included as part of its lease liabilities, they are recognized as variable lease cost in the period they are incurred.

Operating lease costs under operating leases for the year ended December 31, 2022 were approximately $1.0 million. The weighted-average discount rate used was 7.0%. The weighted-average remaining lease term for operating leases was 4.1 years.

Future lease payments of operating lease liabilities as of December 31, 2022 were as follows (in thousands):

	Operating Leases
2023	1,230
2024	1,113
2025	1,112
2026	927
Thereafter	428
Total minimum lease payments	4,810
Less: imputed interest	(628)
Total operating lease liabilities	4,182
Less: current portion	(991)
Lease liability, net of current portion	$3,191

Under ASC 840, future minimum lease payments under non-cancelable operating leases as of December 31, 2021 were as follows (in thousands):

Year Ending December 31,	Operating Leases
2022	$ 638
2023	1,045
2024	1,076
2025	1,108
2026	924
Thereafter	365
Total mimium lease payments	$5,156

Rent expense was $0.2 million for the year ended December 31, 2021.

14) Employee Benefit Plan

The Company has a defined-contribution 401(k) plan for employees. Employees are eligible to participate in the plan beginning immediately following date of hire. Under the terms of the plan, employees may make voluntary contributions as a percentage of compensation and the Company may make a discretionary match or another contribution. The Company contributed $0.5 million and $0.4 million to the plan during the years ended December 31, 2022 and 2021, respectively.

15) Subsequent Events

In February 2023, the Company completed the Kinnjiu Transaction (see Note 11).

On March 10, 2023, Silicon Valley Bank (SVB) was placed into receivership with the Federal Deposit Insurance Corporation (FDIC). The Company sought to minimize risk associated with its cash deposits held at SVB by opening accounts with other banks, engaging a different asset manager and initiating transfers of funds from SVB to other banks. On March 12, 2023, the U.S. Department of the Treasury, Federal Reserve and FDIC jointly announced that all SVB depositors will have access to all of their money and be made whole. Accordingly, the Company does not believe it will be materially impacted by the placement of SVB into receivership and will continue to monitor the situation as it evolves.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our reports filed or submitted under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time period specified in the SEC's rules and forms, and that such information is accumulated and communicated to management including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. As of December 31, 2022, we carried out an evaluation under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of December 31, 2022, the design and operation of our disclosure controls and procedures were effective at a reasonable assurance level and we believe the consolidated financial statements included in this Annual Report on Form 10-K fairly represent in all material respects our financial condition, results of operations and cash flows at and for the periods presented in accordance with U.S. GAAP.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act). Under the supervision of and with the participation of our principal executive officer and principal financial officer, our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2022 based on the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in ''Internal Control—Integrated Framework'' (2013). Based on this assessment, management concluded that our internal control over financial reporting was effective as of December 31, 2022.

This Annual Report on Form 10-K does not include an attestation report of our independent registered public accounting firm on our internal control over financial reporting due to an exemption established by the JOBS Act for ''emerging growth companies.''

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) and 15d-15(d) of the Securities Exchange Act of 1934 that occurred during the quarter ended December 31, 2022 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

A control system, no matter how well designed and operated, can provide only reasonable and not absolute assurance of achieving the desired control objectives. In reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the benefits of possible controls and procedures relative to their costs. In addition, the design of any system of controls is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

Item 9B. Other Information.

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

Not applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

Information required by this item will be contained in our definitive proxy statement to be filed with the SEC on Schedule 14A within 120 days after December 31, 2022, and is incorporated herein by reference.

Item 11. Executive Compensation.

Information required by this item will be contained in our definitive proxy statement to be filed with the SEC on Schedule 14A within 120 days after December 31, 2022, and is incorporated herein by reference.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Information required by this item will be contained in our definitive proxy statement to be filed with the SEC on Schedule 14A within 120 days after December 31, 2022, and is incorporated herein by reference.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

Information required by this item will be contained in our definitive proxy statement to be filed with the SEC on Schedule 14A within 120 days after December 31, 2022, and is incorporated herein by reference.

Item 14. Principal Accounting Fees and Services.

Our independent registered public accounting firm is KPMG LLP, San Diego, CA, Auditor Firm ID: 185. Information required by this item will be contained in our definitive proxy statement to be filed with the SEC on Schedule 14A within 120 days after December 31, 2022, and is incorporated herein by reference.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) The following documents are filed as part of this report:

(1) Financial Statements

The consolidated financial statements of Kinnate Biopharma Inc. are filed as part of this report on Form 10-K under Item 8. Financial Statements and Supplementary Data.

(2) Financial Statement Schedules

All other schedules have been omitted because they are not required, not applicable, or the required information is included in the consolidated financial statements or notes thereto.

(3) Exhibits

The documents listed in the Exhibit Index are incorporated by reference or are filed with this report, in each case as indicated herein (numbered in accordance with Item 601 of Regulation S-K).

Item 16. Form 10-K Summary.

None.

Exhibit Index

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
3.1	Amended and Restated Certificate of Incorporation of the Registrant.	8-K	001-39743	3.1	December 8, 2020
3.2	Amended and Restated Bylaws of the Registrant.	8-K	001-39743	3.2	December 8, 2020
4.1	Amended and Restated Investors' Rights Agreement by and among the Registrant and certain of its stockholders, dated August 24, 2020.	S-1	333-250086	4.1	November 13, 2020
4.2	Specimen common stock certificate of the Registrant.	S-1/A	333-250086	4.2	November 30, 2020
4.3	Description of Securities.	10-K	001-39743	4.3	March 28, 2022
10.1+	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers.	S-1	333-250086	10.1	November 13, 2020
10.2+	2018 Equity Incentive Plan, as amended, and forms of agreement thereunder.	S-1	333-250086	10.2	November 13, 2020
10.3+	2020 Equity Incentive Plan and forms of agreements thereunder.	S-1/A	333-250086	10.3	November 30, 2020
10.4+	2020 Employee Stock Purchase Plan and forms of agreements thereunder.	S-1/A	333-250086	10.4	November 30, 2020
10.5+	Employment Letter between the Registrant and Nima Farzan.	S-1	333-250086	10.5	November 13, 2020
10.6+	Employment Letter between the Registrant and Mark Meltz.	S-1	333-250086	10.6	November 13, 2020
10.7+	Employment Letter between the Registrant and Richard Williams, MBBS, Ph.D.	S-1	333-250086	10.8	November 13, 2020
10.8+	Employment Letter between the Registrant and Neha Krishnamohan.	8-K	001-39743	10.1	June 7, 2021
10.9+	Executive Incentive Compensation Plan.	S-1	333-250086	10.9	November 13, 2020
10.10+	Change in Control and Severance Agreement between the Registrant and Nima Farzan.	S-1	333-250086	10.10	November 13, 2020

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
10.11+	Change in Control and Severance Agreement between the Registrant and Mark Meltz.	S-1	333-250086	10.11	November 13, 2020
10.12+	Change in Control and Severance Agreement between the Registrant and Richard Williams, MBBS, Ph.D.	S-1	333-250086	10.13	November 13, 2020
10.13+	Change in Control and Severance Agreement between the Registrant and Neha Krishnamohan.	8-K	001-39743	10.2	June 7, 2021
10.14*	Amended and Restated Outside Director Compensation Policy.				
10.15	Sales agreement, between the Company and SVB Leerink LLC, dated as of January 3, 2022.	S-3ASR	333-261970	1.2	January 3, 2022
23.1*	Consent of KPMG LLP, Independent Registered Public Accounting Firm.				
24.1*	Power of Attorney (reference is made to the signature page hereto).				
31.1*	Certification of Principal Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
31.2*	Certification of Principal Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.				
32.1 †	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
32.2 †	Certification of Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.				
101.INS*	Inline XBRL Instance Document.				

Exhibit Number	Exhibit Description	Incorporated by Reference			
		Form	File No.	Exhibit	Filing Date
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.				
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.				
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.				
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document.				
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document.				
104*	Cover Page Interactive Data File (formatted in inline XBRL and contained in Exhibit 101).				

---

* Filed herewith.

\+ Indicates management contract or compensatory plan.

† The certifications attached as Exhibit 32.1 and Exhibit 32.2 that accompany this Annual Report on Form 10-K are not deemed filed with the SEC and are not to be incorporated by reference into any filing of the Registrant under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, whether made before or after the date of this Form 10-K, irrespective of any general incorporation language contained in such filing.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this Report to be signed on its behalf by the undersigned, thereunto duly authorized.

Kinnate Biopharma Inc.

Date: March 15, 2023

By: /s/ Nima Farzan

Nima Farzan
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Nima Farzan and Neha Krishnamohan as his or her true and lawful attorneys-in-fact and agents, with full power of substitution and substitution, for him or her and in his or her name, place, and stead, in any and all capacities (including his or her capacity as a director and/or officer of Kinnate Biopharma Inc.) to sign any or all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as they, he or she might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agents or any of them, or their, his, or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this Report has been signed below by the following persons on behalf of the Registrant in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Nima Farzan **Nima Farzan**	President, Chief Executive Officer and Director (*Principal Executive Officer)*	March 15, 2023
/s/ Neha Krishnamohan **Neha Krishnamohan**	Chief Financial Officer and Executive Vice President, Corporate Development *(Principal Financial Officer)*	March 15, 2023
/s/ Dean Mitchell **Dean Mitchell**	Chair of the Board of Directors	March 15, 2023
/s/ Jill DeSimone **Jill DeSimone**	Director	March 15, 2023
/s/ Melissa Epperly **Melissa Epperly**	Director	March 15, 2023
/s/ Keith Flaherty **Keith Flaherty, M.D.**	Director	March 15, 2023
/s/ Carl Gordon **Carl Gordon, Ph.D.**	Director	March 15, 2023
/s/ Michael Rome **Michael Rome, Ph.D.**	Director	March 15, 2023
/s/ Helen Sabzevari **Helen Sabzevari, Ph.D.**	Director	March 15, 2023
/s/ Laurie Smaldone Alsup **Laurie Smaldone Alsup, M.D.**	Director	March 15, 2023
/s/ Jim Tananbaum **Jim Tananbaum, M.D.**	Director	March 15, 2023

Exhibit 10.14

KINNATE BIOPHARMA, INC.

AMENDED AND RESTATED OUTSIDE DIRECTOR COMPENSATION POLICY

Kinnate Biopharma Inc. (the "Company") believes that the granting of equity and cash compensation to members of the Company's Board of Directors (the "Board," and members of the Board, "Directors") represents an effective tool to attract, retain and reward Directors who are not employees of the Company ("Outside Directors"). This Amended and Restated Outside Director Compensation Policy (the "Policy") is intended to formalize the Company's policy regarding cash compensation and grants of equity awards to its Outside Directors. Unless otherwise defined herein, capitalized terms used in this Policy will have the meaning given such term in the Company's 2020 Equity Incentive Plan, as amended from time to time, or if such plan no longer is in use at the time of the grant of an equity award, the meaning given such term or similar term in the equity plan then in place under which the equity award is granted (the "Plan"). Each Outside Director will be solely responsible for any tax obligations incurred by such Outside Director as a result of the equity awards and cash and other compensation such Outside Director receives under this Policy.

1. Effective Date. This Policy was initially made effective as of the effective date of the first registration statement that was filed by the Company and declared effective pursuant to Section 12(b) of the U.S. Securities Exchange Act of 1934, as amended, with respect to the Company's common stock (the "IPO"), and was subsequently amended and restated on February 17, 2023 by the Board in accordance with Section 10 hereof (such date, the "Effective Date").

2. Cash Compensation

2.1 Board Member Annual Cash Retainer. Each Outside Director will be paid an annual cash retainer of $40,000. There are no per-meeting attendance fees for attending Board meetings or meetings of any committee of the Board.

2.2 Additional Annual Cash Retainers. As of the Effective Date, each Outside Director who serves as the Chair of the Board, or the chair or a member of a committee of the Board, will be eligible to earn additional annual fees as follows:

Chair of the Board:	$30,000
Audit Committee Chair:	$15,000
Audit Committee Member:	$ 7,500
Compensation Committee Chair:	$10,000
Compensation Committee Member:	$ 5,000
Nominating and Corporate Governance Committee Chair:	$ 8,000
Nominating and Corporate Governance Committee Member:	$ 4,000

For clarity, each Outside Director who serves as the chair of a committee will receive only the additional annual fee as the chair of the committee and not the additional annual fee as a member of such committee while serving as such chair, provided, that the Outside Director who serves as the Chair of the Board will receive the annual fee for services provided in such role as well as the annual fee as an Outside Director.

2.3 Payment Timing and Proration. Each annual cash retainer under this Policy will be paid quarterly in arrears on a prorated basis to each Outside Director who has served in the relevant capacity at any time during the immediately preceding fiscal quarter of the Company ("Fiscal Quarter"), and such payment will be made no later than thirty (30) days following the end of such immediately preceding Fiscal Quarter. For clarity, an Outside Director who has served as an Outside Director, as a member of an applicable committee (or chair thereof) during only a portion of the relevant Fiscal Quarter will receive a prorated payment of the quarterly installment of the applicable annual cash retainer(s), calculated based on the number of days during such Fiscal Quarter such Outside Director has served in the relevant capacities. For clarity, an Outside Director who has served as an Outside Director or as a member of an applicable committee (or chair thereof) from the Effective

Date through the end of the Fiscal Quarter containing the Effective Date (the ''Initial Period''), as applicable, will receive a prorated payment of the quarterly installment of the applicable annual cash retainer(s), calculated based on the number of days during the Initial Period that such Outside Director has served in the relevant capacities.

3. Equity Compensation. Outside Directors will be eligible to receive all types of Awards (except Incentive Stock Options) under the Plan, including discretionary Awards not covered under this Policy. All grants of Awards to Outside Directors pursuant to Sections 3.2 and 3.3 of this Policy will be automatic and nondiscretionary, except as otherwise provided herein, and will be made in accordance with the following provisions:

3.1 No Discretion. No person will have any discretion to select which Outside Directors will be granted Annual Awards (as defined below) under this Policy or to determine the number of Shares to be covered by such Awards (except as provided in Sections 3.4.4 and 10 below).

3.2 Initial Awards. Each individual who first becomes an Outside Director following the Effective Date automatically will be granted an award of Options (an ''Initial Award'') to purchase 50,000 Shares. The grant date of the Initial Award will be the first Trading Day on or after the date on which such individual first becomes an Outside Director (such first date as an Outside Director, the ''Initial Start Date''), whether through election by the stockholders of the Company or appointment by the Board to fill a vacancy. If an individual was an Inside Director, becoming an Outside Director due to termination of the individual's status as an Employee will not entitle the Outside Director to an Initial Award. Each Initial Award will be scheduled to vest as to one thirty-sixth (1/36th) of the Shares subject to the Initial Award on a monthly basis following the Initial Award's grant date on the same day of the month as such grant date (or on the last day of the month, if there is no corresponding day in such month), subject to the Outside Director remaining a Service Provider through the applicable vesting date.

3.3 Annual Award. On the first Trading Day immediately following each Annual Meeting of the Company's stockholders (an ''Annual Meeting'') that occurs after the Effective Date, each Outside Director who has completed at least six (6) months of continuous service as an Outside Director as of the date of such Annual Meeting automatically will be granted an award of Options to purchase 25,000 Shares (the ''Annual Award''). The Annual Award will be scheduled to vest as to one-twelfth ($1/12^{th}$) of the Shares subject to the Annual Award on a monthly basis following the Annual Award's grant date on the same day of the month as such grant date (or the last day of the month, if there is no corresponding day in such month), or if earlier, the day immediately before the date of the next Annual Meeting that occurs after the Annual Award's grant date, subject to the Outside Director remaining a Service Provider through the applicable vesting date.

3.4 Additional Terms of Initial Awards and Annual Awards. The terms and conditions of each Initial Award and Annual Award will be as follows.

3.4.1 The term of each Initial Award and Annual Award will be ten (10) years, subject to earlier termination as provided in the Plan.

3.4.2 The per Share exercise price of each Initial Award and Annual Award will be equal to one hundred percent (100%) of the Fair Market Value per Share on such Award's grant date.

3.4.3 Each Initial Award and Annual Award will be granted under and subject to the terms and conditions of the Plan and the applicable form of Award Agreement previously approved by the Board or its Committee, as applicable, for use thereunder.

3.4.4 The Board or its Committee, as applicable and in its discretion, may change and otherwise revise the terms of Initial Awards and Annual Awards granted pursuant to this Policy, including without limitation the number of Shares subject thereto and type of Award.

4. Change in Control. In the event of a Change in Control, each Outside Director will fully vest in his or her outstanding Company equity awards as of immediately prior to the Change in Control, including any Initial Award and Annual Award, provided that the Outside Director continues to be an Outside Director through the date of such Change in Control.

5. Annual Compensation Limit. No Outside Director may be granted, in any Fiscal Year, Awards with values (based on their grant date fair value determined in accordance with U.S. generally accepted accounting principles), and be provided any other compensation (including without limitation any cash retainers or fees) in amounts that, in any Fiscal Year, in the aggregate, exceed $750,000, provided that such amount is increased to $1,000,000 in the Fiscal Year of his or her initial service as an Outside Director. Any Awards or other compensation provided to an individual (a) for his or her services as an Employee, or for his or her services as a Consultant other than as an Outside Director, or (b) prior to the Registration Date, will be excluded for purposes of this Section 5.

6. Travel Expenses. Each Outside Director's reasonable, customary and properly documented travel expenses to meetings of the Board and any of its committees, as applicable, will be reimbursed by the Company.

7. Adjustments. In the event that any dividend or other distribution (whether in the form of cash, Shares, other securities or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, reclassification, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs (other than any ordinary dividends or other ordinary distributions), the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under this Policy, will adjust the number and class of the shares of stock issuable pursuant to Awards that may be granted pursuant to Section 3 of this Policy.

8. Section 409A. In no event will cash compensation or expense reimbursement payments under this Policy be paid after the later of (a) the fifteenth (15th) day of the third (3rd) month following the end of the Company's taxable year in which the compensation is earned or expenses are incurred, as applicable, or (b) the fifteenth (15th) day of the third (3rd) month following the end of the calendar year in which the compensation is earned or expenses are incurred, as applicable, in compliance with the ''short-term deferral'' exception under Section 409A. It is the intent of this Policy that this Policy and all payments hereunder be exempt from or otherwise comply with the requirements of Section 409A so that none of the compensation to be provided hereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities or ambiguous terms herein will be interpreted to be so exempt or comply. In no event will the Company or any of its Parents or Subsidiaries have any responsibility, liability, or obligation to reimburse, indemnify, or hold harmless an Outside Director (or any other person) for any taxes imposed, or other costs incurred, as a result of Section 409A.

9. Stockholder Approval. The initial adoption of this Policy was approved by the Company's stockholders in connection with the IPO. Unless otherwise required by applicable law, this Policy will not be subject to any additional approval by the Company's stockholders, including, for clarity, as a result of or in connection with any action taken with respect to this Policy as contemplated in Section 10.

10. Revisions. The Board or any committee of the Board that has been designated appropriate authority with respect to Outside Director compensation (or with respect to any applicable element or elements thereof, authority with respect to such element or elements) (the ''Committee'') may amend, alter, suspend or terminate this Policy at any time and for any reason. Further, the Board may provide for cash, equity, or other compensation to Outside Directors in addition to the compensation provided under this Policy. No amendment, alteration, suspension or termination of this Policy will materially impair the rights of an Outside Director with respect to compensation that already has been paid or awarded, unless otherwise mutually agreed between the Outside Director and the Company. Termination of this Policy will not affect the Board's or the Committee's ability to exercise the powers granted to it with respect to Awards granted under the Plan pursuant to this Policy before the date of such termination, including without limitation such applicable powers set forth in the Plan.

* * *

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (No. 333-251105 and No. 333-263913) on Form S-8 and in the registration statement (No. 333-261970) on Form S-3 of our report dated March 15, 2023, with respect to the consolidated financial statements of Kinnate Biopharma Inc.

/s/ KPMG LLP

San Diego, California
March 15, 2023

Exhibit 31.1

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Nima Farzan, certify that:

1. I have reviewed this Annual Report on Form 10-K of Kinnate Biopharma Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2023

By: /s/ Nima Farzan

Nima Farzan
President and Chief Executive Officer

Exhibit 31.2

CERTIFICATION PURSUANT TO
RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934,
AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Neha Krishnamohan, certify that:

1. I have reviewed this Annual Report on Form 10-K of Kinnate Biopharma Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2023

By: /s/ Neha Krishnamohan

Neha Krishnamohan
Chief Financial Officer and Executive Vice President, Corporate Development

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Kinnate Biopharma Inc. (the ''Company'') on Form 10-K for the period ended December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the ''Report''), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, as amended, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 15, 2023

By: /s/ Nima Farzan

Nima Farzan
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Kinnate Biopharma Inc. (the ''Company'') on Form 10-K for the period ended December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the ''Report''), I certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, as amended, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 15, 2023

By: /s/ Neha Krishnamohan

Neha Krishnamohan
Chief Financial Officer and Executive Vice President, Corporate Development
(Principal Financial Officer)

Corporate Information

Dean Mitchell
Chair and Director

Jill DeSimone
Director

Melissa Epperly
Director

Keith Flaherty, M.D.
Director

Carl Gordon, Ph.D.
Director

Michael Rome, Ph.D.
Director

Helen Sabzevari, Ph.D.
Director

Laurie Smaldone Alsup, M.D.
Director

Jim Tananbaum, M.D.
Director

Nima Farzan
President, Chief Executive Officer and Director

Mark Meltz
Chief Operating Officer, General Counsel and Corporate Secretary

Neha Krishnamohan
Chief Financial Officer, Executive Vice President, Corporate Development

Richard Williams, MBBS, Ph.D.
Chief Medical Officer

Robert Kania, Ph.D.
Senior Vice President, Drug Discovery

KINNATE BIOPHARMA

Website

www.kinnate.com

LinkedIn

www.linkedin.com/company/kinnate-biopharma-inc/

Annual Meeting

Our 2023 Annual Meeting of Stockholders will be held on Friday, June 9, 2023 at 9:00 a.m. Pacific Time. Stockholders may attend the meeting virtually by visiting www.virtualshareholdermeeting.com/KNTE2023.

KINNATE
BIOPHARMA

www.kinnate.com