

## Risk Factors Comparison 2024-03-11 to 2023-03-01 Form: 10-K

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Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this report, including our consolidated financial statements and the related notes and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” before deciding whether to invest in our common stock. 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, and you may lose all or part of your investment.

**Summary of Risk Factors** An investment in our common stock involves various risks, and prospective investors are urged to carefully consider the matters discussed in the section titled “Risk Factors” prior to making an investment in our common stock. These risks include, but are not limited to, the following:

- Our product candidates are in early stages of development and may fail in development or suffer delays that adversely affect their commercial viability. Results from our initial clinical trials may not be representative of the results we will experience in later clinical trials. If we or our collaborators are unable to complete development of or commercialize our product candidates or experience significant delays in doing so, our business will be materially harmed.
- We have only limited data regarding the safety profile of our product candidates when dosed in humans. Our ongoing and planned clinical trials or those of our collaborators may reveal significant adverse events, toxicities or other side effects and may result in a safety profile that could inhibit regulatory approval or market acceptance of any of our product candidates.
- We and / or our collaborators may be unable to obtain, or may be delayed in obtaining, required regulatory approvals in the United States or in foreign jurisdictions, which would materially impair our ability to commercialize and generate revenue from our product candidates.
- **Even if our product candidates receive regulatory approval, they will be subject to significant post-marketing regulatory requirements.**
- We may not be successful in our efforts to expand our pipeline of product candidates and develop marketable products.
- We have recently commenced clinical development of rosnilimab and ANB032, and have no history of commercializing biotechnology products, which may make it difficult to evaluate the prospects for our future viability.
- We face significant competition, and if our competitors develop and market products that are more effective, safer or less expensive than our product candidates, our commercial opportunities will be negatively impacted.
- Our product candidates may not achieve adequate market acceptance among physicians, patients, health care payors and others in the medical community necessary for commercial success.
- **We currently have no marketing and sales force. If we are unable to establish effective sales or marketing capabilities or enter into agreements with third parties to sell or market our product candidates, we may not be able to effectively sell or market our product candidates, if approved, or generate product revenue.**

The manufacture of biologics is complex, and our third-party manufacturers may encounter difficulties in production. If any of our third-party manufacturers encounter such difficulties, our ability to provide supply of our product candidates for clinical trials, our ability to obtain marketing approval, or our ability to provide supply of our products for patients, if approved, could be delayed or stopped.

- Political, economic or public health events, ~~such as the COVID-19 pandemic,~~ may have a material impact on the U. S. and global economies and could have a material adverse impact on our employees, contractors and patients, which could adversely and materially impact our business, financial condition and results of operations.
- We have limited operating revenue and a history of operational losses and may not achieve or sustain profitability.
- We have no products approved for commercial sale, and to date we have not generated any revenue or profit from sales of our product candidates.
- We will require additional capital to finance our operations, which may not be available to us on acceptable terms, or at all. As a result, we may not complete the development and commercialization of our product candidates or develop new product candidates.
- ~~We must attract and retain highly skilled employees in order to succeed.~~
- ~~We currently have no marketing and sales force. If we are unable to establish effective sales or marketing capabilities or enter into agreements with third parties to sell or market our product candidates, we may not be able to effectively sell or market our product candidates, if approved, or generate product revenue.~~

Our existing collaboration with GSK is important to our business, and future collaborations may also be important to us. If we are unable to maintain this collaboration, or if this collaboration is not successful, our business could be adversely affected.

- We may not succeed in establishing and maintaining additional development and commercialization collaborations, including the development or out-licensing of our legacy product candidates, which could adversely affect our ability to develop and commercialize product candidates.
- ~~Even if our product candidates receive regulatory approval, they will be subject to significant post-marketing regulatory requirements.~~
- ~~If we are unable to obtain or protect intellectual property rights in the U. S. and throughout the world,~~ we may not be able to compete effectively in our market.
- ~~We may not be able to~~ **must attract and retain highly skilled employees in order to succeed** ~~protect our intellectual property rights throughout the world.~~

The market price of our stock has been and may continue to be volatile, and you could lose all or part of your investment.

**Risks Related to Discovery and Development of Our Product Candidates** We are developing therapeutic antibodies, including our wholly-owned product candidates, as well as other programs that are being developed by our collaborators. However, all of our wholly-owned and most of partnered product candidates are in various stages of development, and, for a wide variety of reasons discussed below, may fail in development or suffer delays that adversely affect their commercial viability. A product candidate can unexpectedly fail at any stage of preclinical and clinical development. The historical failure rate for product candidates is high due to scientific feasibility, safety, efficacy, changing standards of medical care, and other variables. The results from preclinical testing or early clinical trials of a product candidate may not predict the results that will be obtained in later phase clinical trials of the product candidate. ~~For example, results from our initial Phase 2a clinical trial of etokimab in moderate-to-~~

~~severe atopic dermatitis patients were not representative of the results we experienced in our later etokimab moderate-to-severe atopic dermatitis Phase 2b clinical trial called “ATLAS” and we ultimately discontinued development of etokimab.~~

Furthermore, we may conduct clinical trials of a product candidate in multiple indications based on assumptions about the product candidate’s mechanism of action. However, it is possible that our assumptions regarding the effectiveness of a product candidate’s mechanism of action may be incorrect and that the product candidate may be ineffective in certain diseases or disorders. If this were the case, then the results from any clinical trials of a product candidate that we conduct are less likely to be positive. For example, we believed imsidolimab’s mechanism of action, the inhibition of IL- 36R, provided the potential for imsidolimab to be effective for treatment of a range of dermatological inflammatory diseases. However, top- line data from clinical trials of imsidolimab in indications other than GPP did not demonstrate efficacy ~~, and we do not currently plan to conduct further development of imsidolimab in indications other than GPP.~~ If our other ongoing or future clinical trials of any of our product candidates, including rosnilimab, ANB032, imsidolimab ~~or~~, ANB033 **or ANB101**, are unsuccessful, whether for one of the reasons mentioned above or otherwise, our product candidates may be delayed in development or fail entirely, which would have a material adverse impact on our business. The success of our current product candidates, and any other product candidates we may develop in the future, will depend on many factors, including the following:

- obtaining regulatory permission to initiate clinical trials;
- successful enrollment of patients in, and the completion of, our planned clinical trials;
- receiving marketing approvals from applicable regulatory authorities;
- establishing commercial manufacturing capabilities and / or making arrangements with third- party manufacturers;
- obtaining and maintaining patent and trade secret protection and non- patent exclusivity for our product candidates and their components;
- enforcing and defending intellectual property rights and claims;
- achieving desirable therapeutic properties for our product candidates’ intended indications;
- launching commercial sales of our product candidates, if and when approved, whether alone or in collaboration with third parties;
- acceptance of our product candidates, if and when approved, by patients, the medical community and third- party payors;
- effectively competing with other therapies; and
- maintaining an acceptable safety profile of our product candidates through clinical trials and following regulatory approval.

If we do not achieve one or more of these factors in a timely manner or at all, we could experience significant delays or an inability to successfully commercialize our product candidates, which would harm our business. Furthermore, delays or difficulties in patient enrollment or difficulties in retaining trial participants can result in increased costs, longer development times, or termination of a clinical trial. Clinical trials of a new product candidate require the enrollment of a sufficient number of patients, including patients who are suffering from the disease the product candidate is intended to treat and who meet other eligibility criteria. Rates of patient enrollment are affected by many factors, including the size of the patient population, the eligibility criteria for the clinical trial, the age and condition of the patients, the stage and severity of disease, the nature of the protocol, the proximity of patients to clinical sites, and the availability of effective treatments for the relevant disease. We may not be able to initiate our planned clinical trials if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials as required by the FDA or foreign regulatory authorities. ~~More specifically, some of our product candidates, including imsidolimab, initially target indications that are very rare, which can prolong the clinical trial timeline for the regulatory process if sufficient patients cannot be enrolled in a timely manner.~~ In order to obtain marketing approval for any of our product candidates, we must demonstrate the safety and efficacy of the product candidate for the relevant clinical indication or indications through preclinical studies and clinical trials as well as additional supporting data. If our product candidates are associated with undesirable side effects in preclinical studies or clinical trials or have characteristics that are unexpected, 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. We have conducted various preclinical studies of our product candidates, but we do not know the predictive value of these studies for humans, and we cannot guarantee that any positive results in preclinical studies will successfully translate to human patients. Phase 2 and Phase 3 clinical trials with rosnilimab, ANB032 and imsidolimab are ongoing ~~or planned~~. It is not uncommon to observe results in human clinical trials that are unexpected based on preclinical testing, or to observe results in later stage clinical trials that are unexpected based on early clinical trials. Many product candidates fail in clinical trials despite promising preclinical and early clinical results. In addition, top- line results of a clinical trial, which generally reflect preliminary reviews of primary efficacy and / or safety results, do not necessarily predict final results, and any top- line findings or assessments are subject to change pending the completion of final data review procedures. Moreover, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many companies that believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval for their products. Some patients in our clinical trials have experienced adverse events, including **SAEs serious adverse events**. ~~We reported that one patient dropped out of the GALLOP Phase 2 clinical trial for imsidolimab due to diagnosis with Staphylococcal aureus bacteremia on Day 3 post- imsidolimab administration, which was a serious adverse event deemed to be possibly drug- related.~~ Subjects in our ongoing and planned clinical trials may in the future suffer significant adverse events or other side effects not observed in our preclinical studies or in our Phase 1 ~~or~~, Phase 2 **or Phase 3** clinical trials. The observed potency and kinetics of our product candidates in preclinical studies may not be observed in human clinical trials. We have tested the dosing frequency and route of administration of our product candidates in preclinical studies, which will inform our dosing strategy for future clinical trials, however such dose and route of administration may not result in sufficient exposure or pharmacological effect in humans and may lead to unforeseen toxicity not previously observed in preclinical testing. If preclinical studies of our product candidates fail to provide preliminary evidence of safety to the satisfaction of regulatory authorities or do not otherwise produce satisfactory results, we may incur additional costs or experience delays in initiating and / or advancing the development and commercialization of our product candidates. Further, if clinical trials of our product candidates fail to demonstrate safety and efficacy to the satisfaction of regulatory authorities or do not otherwise produce positive results, we or our collaborators may incur additional costs or

experience delays in completing, or ultimately be unable to complete, the development and commercialization of our product candidates. If further significant adverse events or other side effects are observed in any of our current or future clinical trials, we may have difficulty recruiting patients to the clinical trial, patients may drop out of our trial, or we may be required to abandon the trial or our development efforts of that product candidate altogether. We, the FDA, or other applicable regulatory authorities, or an institutional review board or ethics committee, 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 studies have later been found to cause side effects that prevented their further development. Even if the side effects do not preclude a product candidate from obtaining or maintaining marketing approval, undesirable side effects may inhibit market acceptance of the approved product due to its tolerability versus other therapies. Any of these developments could materially harm our business, financial condition and prospects. Further, if any of our product candidates obtain marketing approval, toxicities associated with our product candidates may also develop after such approval and lead to a requirement to conduct additional clinical safety trials, additional warnings being added to the labeling, significant restrictions on the use of the product or the withdrawal of the product from the market. 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 testing. Our ability to continue to develop our product candidates, and to have the potential to achieve and sustain profitability, depends on the FDA and foreign regulatory authorities permitting us to conduct human clinical trials and, if our product candidates are safe and effective, obtaining approval from the FDA and foreign regulatory authorities to market them and subsequently successfully commercializing them, either alone or with our collaborators. The research, testing, manufacturing, labeling, approval, selling, marketing and distribution of drug and biologic products are subject to extensive regulation by the FDA and foreign regulatory authorities. Before commencing clinical trials in the United States for any other product candidate, we must submit an IND to the FDA; foreign regulatory authorities enforce similar requirements for initiation of clinical trials in other countries. An IND or foreign equivalent requires extensive preclinical studies, and there is no guarantee that the FDA or foreign regulatory authorities will allow clinical trials to proceed based on the IND or equivalent submission. For example, although we have initiated toxicology studies for our product candidates, the FDA in the United States, or other foreign regulatory authorities, as applicable, may not allow our clinical trials to proceed in the regulatory authority's jurisdiction if we are unable to show safety margins acceptable to the particular regulatory authority in appropriate animal species in our preclinical toxicology studies. Even if we or our collaborators initiate and complete clinical trials for our product candidates, these product candidates will not be permitted to be marketed in the United States until approval of a BLA from the FDA is received, and will not be permitted to be marketed in other countries without marketing approval from foreign regulatory authorities. Obtaining approval of a BLA or other marketing approvals is often a lengthy, expensive and uncertain process over which the FDA and foreign regulatory authorities have substantial discretion. Other than submitting and receiving acceptance for initiation of our previous and current clinical trials in the United States and certain foreign jurisdictions, we have had only limited discussions with the FDA and no discussions with foreign regulatory authorities regarding the development plans for any of our product candidates or the designs of any of our later-stage clinical studies. We thus may not have the full benefit of the FDA's or foreign regulatory authorities' current thinking on clinical trial designs or product development for our target indications. For example, **although** we believe our ~~planned~~ Phase 3 trials for imsidolimab for GPP, GEMINI- 1 and GEMINI- 2, with GEMINI- 1 enrolling approximately 45 moderate-to-severe **having demonstrated evidence of efficacy and safety in** GPP patients, will be sufficient to ~~demonstrate substantial evidence of efficacy and safety of imsidolimab in GPP patients and~~ obtain BLA approval, ~~and we discussed these plans with the FDA in an end-of-Phase 2 meeting, during the second quarter of 2021. However, the FDA may determine, based on future clinical efficacy and safety data from our GPP studies, that we will need additional clinical trials in order to obtain approval of a BLA. Preclinical studies and clinical trials are expensive, difficult to design and implement, can take many years to complete, and are uncertain as to outcome. Product candidates, on average, take 10 to 15 years to be developed from the time they are discovered to the time they are approved and available for treating patients. The start or end of a clinical trial is often delayed or halted for many reasons, including:~~ • imposition of a clinical hold for safety reasons or following an inspection of clinical trial operations or site by the FDA or other regulatory authorities; • manufacturing challenges; • insufficient supply or quality of product candidates or other materials necessary to conduct clinical trials; • delays in reaching or failure to reach agreement on acceptable clinical trial contracts or clinical trial protocols with prospective trial sites and **contract research organizations ("CROs")** or failure by such CROs or trials sites to carry out the clinical trial in accordance with our agreed-upon terms; • non-clinical or clinical sites becoming unavailable due to political, economic, or public health events, ~~such as the COVID-19 pandemic~~; • clinical sites electing to terminate their participation in one of our clinical trials; • inability or unwillingness of patients or medical investigators to follow clinical trial protocols; • required clinical trial administrative actions; • slower than anticipated patient enrollment; • changing standards of care; • safety concerns; • availability or prevalence of use of a comparative drug or required prior therapy; or • clinical outcomes or financial constraints. Our product candidates may not be effective, may be only moderately effective, or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use. Regulatory authorities may refuse to accept any application or may decide that our data are insufficient for approval and require additional preclinical or other studies or clinical trials. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit or prevent marketing approval of a product candidate. Moreover, regulatory authorities may determine that the clinical and other benefits of a product candidate do not outweigh the safety or other risks. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application may also cause delays in or prevent the approval of an application. If we or our collaborators experience any of the issues described above, or other similar

or related issues, we or our collaborators may:

- be delayed in obtaining marketing approval for our product candidates;
- not obtain marketing approval at all;
- obtain marketing approval in some countries and not in others;
- obtain approval for indications or patient populations that are not as broad as intended or desired;
- obtain approval with labeling that includes significant use or distribution restrictions or safety warnings, including boxed warnings;
- be subject to additional post-marketing testing requirements; or
- have the product removed from the market after obtaining marketing approval.

Any regulatory approvals that we or our collaborators may receive for our product candidates will require 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 study or risk management requirements. For example, the FDA may require a risk evaluation and mitigation strategy in order to approve our product candidates, which could entail requirements for a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or 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 continued compliance with cGMPs and good clinical practices 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 inspections by the FDA and other regulatory authorities for compliance with cGMP regulations and standards. If we, our collaborators or a regulatory agency 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 agency may impose restrictions on that product, the manufacturing facility or us or our collaborators, including requiring recall or withdrawal of the product from the market or suspension of manufacturing. In addition, failure to comply with FDA and foreign regulatory requirements may, either before or after product approval, if any, subject our company or our collaborators to administrative or judicially imposed sanctions, including:

- restrictions on our ability to conduct clinical trials, including full or partial clinical holds on ongoing or planned 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; and
- refusal to approve pending BLAs or supplements to approved BLAs.

The occurrence of any event or penalty described above may inhibit our ability, alone or with our collaborators, to commercialize our product candidates and generate revenue. Advertising and promotion of any product candidate that obtains approval in the United States will be heavily scrutinized by the FDA, the DOJ, the HHS Office of Inspector General, state attorneys general, members of Congress and the public. Violations, including promotion of our products for unapproved (or off-label) uses, are subject to enforcement letters, inquiries and investigations, and civil and criminal sanctions by the government. Additionally, comparable foreign regulatory authorities will heavily scrutinize advertising and promotion of any product candidate that obtains approval outside of the United States. In the United States, engaging in the impermissible promotion of our products for off-label uses can also subject us to false claims litigation under federal and state statutes, which can lead to civil and criminal penalties and fines and agreements that materially restrict the manner in which a company promotes or distributes drug products. These false claims statutes include the federal False Claims Act, which allows any individual to bring a lawsuit against a biotechnology company on behalf of the federal government alleging submission of false or fraudulent claims, or causing to present such false or fraudulent claims, for payment by a federal program such as Medicare or Medicaid. If the government prevails in the lawsuit, the individual will share in any fines or settlement funds. Such False Claims Act lawsuits against biotechnology companies have increased significantly in volume and breadth, leading to several substantial civil and criminal settlements regarding certain sales practices promoting off-label drug uses involving fines in excess of \$1.0 billion. This growth in litigation has increased the risk that a biotechnology company will have to defend a false claim action, pay settlement fines or restitution, agree to comply with burdensome reporting and compliance obligations, and be excluded from Medicare, Medicaid and other federal and state health care programs. In addition, we may incur liability from claims initiated under the Lanham Act or other federal and state unfair competition laws with respect to how our products are marketed and promoted. Furthermore, the off-label use of our products may increase the risk of product liability claims. If we do not lawfully promote our approved products, we may become subject to such litigation and, if we do not successfully defend against such actions, those actions may have an adverse effect on our business, financial condition and results of operations. Because we have limited financial and managerial resources, we focus on research programs and product candidates that we identify for specific indications. Our business depends on our successful development and commercialization of the limited number of internal product candidates we have in preclinical and early-stage clinical development. Even if we are successful in continuing to build our pipeline, development of the potential product candidates that we identify will require substantial investment in additional clinical development, management of clinical, preclinical and manufacturing activities, regulatory approval in multiple jurisdictions, building a commercial organization, and significant marketing efforts before we generate any revenue from product sales. Furthermore, such product candidates may not be suitable for clinical development, including as a result of their harmful side effects, limited efficacy or other characteristics that indicate that they are unlikely to be products that will receive marketing approval and achieve market acceptance. If we cannot successfully develop, partner and / or commercialize product candidates, we may not be able to obtain product or partnership revenue in future periods, which would adversely affect our business, prospects, financial condition and results of operations. As a result of our current focus on our lead product candidates, we may forego or delay pursuit of opportunities with other product candidates or for other indications that later prove to have greater commercial potential. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products

or profitable market opportunities. Our spending on current and future research and development programs and product candidates for specific indications may not yield any commercially viable products. Our understanding and evaluation of biological targets for the discovery and development of new product candidates may fail to identify challenges encountered in subsequent preclinical and clinical development. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights. **We have recently commenced Phase 2 clinical development of rosnilimab and ANB032, and have no history of commercializing biotechnology products, which may make it difficult to evaluate the prospects for our future viability.** Our operations to date have been largely limited to financing and staffing our company, developing our technology, and developing our wholly- owned product candidates and other product candidates in partnerships with our collaborators. As a company, we have only very limited experience conducting pivotal Phase 3 clinical trials and have not had previous experience commercializing product candidates, including submitting a BLA to the FDA. In part because of this lack of experience, we cannot be certain that planned clinical trials will begin or be completed on time, if at all, that our planned development programs would be acceptable to the FDA or other regulatory authorities, or that, if approval is obtained, such product candidates can be successfully commercialized. Clinical trials and commercializing our wholly- owned product candidates will require significant additional financial and management resources, and reliance on third- party clinical investigators, CROs, consultants or collaborators. Relying on third- party clinical investigators, CROs or collaborators may result in delays that are outside of our control. Furthermore, we may not have the financial resources to continue development of, or to enter into collaborations for, a product candidate if we experience any problems or other unforeseen events that delay or prevent regulatory approval of, or our ability to commercialize, product candidates, including:

- negative or inconclusive results from our clinical trials or the clinical trials of others for product candidates similar to ours, leading to a decision or requirement to conduct additional preclinical testing or clinical trials or abandon a program;
- ~~delays in submitting INDs or comparable foreign applications or delays or failure in obtaining the necessary approvals from regulators to commence a clinical trial, or a suspension or termination of a clinical trial once commenced;~~
- conditions imposed by the FDA or foreign regulatory authorities regarding the number, scope or design of our clinical trials;
- delays in enrolling research subjects in clinical trials;
- high drop-out rates of research subjects;
- inadequate supply or quality of clinical trial materials or other supplies necessary for the conduct of our clinical trials;
- greater than anticipated clinical trial costs;
- poor effectiveness or unacceptable side effects of our product candidates during clinical trials;
- unfavorable FDA or other regulatory agency inspection and review of a clinical trial site;
- failure of our third- party contractors or investigators to comply with regulatory requirements or otherwise meet their contractual obligations in a timely manner, or at all;
- serious and unexpected drug- related side effects experienced by participants in our planned clinical trials or by individuals using drugs similar to our product candidates;
- delays and changes in regulatory requirements, policy and guidelines, including the imposition of additional regulatory oversight around clinical testing generally or with respect to our technology in particular; or
- varying interpretations of data by the FDA and foreign regulatory authorities.

Consequently, any predictions you make about our future success or viability based on our ~~short~~ operating history may not be as accurate as they could be if we had ~~a longer operating history or~~ an established track record in conducting clinical trials or commercializing products. Further, as a clinical stage business, we may encounter unforeseen expenses, difficulties, complications, delays, and other known and unknown factors. We will need to transition from a company with a research focus to a company capable of supporting commercial activities. We may not be successful in such a transition. The biotechnology industry is highly competitive and subject to rapid and significant technological change. Products we may develop in the future are also likely to face competition from other drugs and therapies, some of which we may not currently be aware of. We have competitors both in the United States and internationally, including major multinational pharmaceutical and biotechnology companies, established biotechnology companies, specialty biotechnology companies, emerging and start- up companies, universities and other research institutions. Many of our competitors have significantly greater financial, manufacturing, marketing, drug development, technical and human resources and commercial expertise than we do. Large pharmaceutical and biotechnology companies, in particular, have extensive experience in clinical testing, obtaining regulatory approvals, recruiting patients and manufacturing biotechnology products. These companies also have significantly greater research and marketing capabilities than we do and may also have products 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. As a result of all of these factors, our competitors may succeed in obtaining patent protection and / or approval from the FDA or foreign regulatory authorities or discovering, developing and commercializing products in our field before we do. For our anti-PD- 1 agonist antibody program, our competitors include other anti-PD- 1 agonist antibodies peresolimab (Eli Lilly) in Phase 2b development for the treatment of rheumatoid arthritis, JNJ- 67484703 (Janssen) in Phase 2 development **for the treatment of atopic dermatitis**, a PD- 1 agonist antibody (Boehringer Ingelheim) in Phase 1 development, ~~PT627 and PT001~~ **GS- 0151 ( Gilead Pandion Therapeutics, which has been acquired by Merck)** in preclinical development ; and MB151 (MiroBio, which has been acquired by Gilead) in ~~preclinical development~~. Our **commercial- stage** competitors in moderate- to- severe rheumatoid arthritis include monoclonal antibodies targeting anti- TNF (Humira; Abbvie), IL- 6 (Actemra; Roche and Kevzara; Regeneron), CD- 80 / 86 (Orencia; BMS), CD- 20 (Rituxan; Roche), and janus kinase inhibitors (Rinvoq; AbbVie, Olumiant; Eli Lilly, and Xeljanz; Pfizer). ~~For our~~ **Commercial- stage competitors in moderate- to- severe ulcerative colitis include monoclonal antibodies targeting anti- TNF (Humira; Abbvie and Remicade; Johnson & Johnson), anti-  $\alpha$ 4 $\beta$ 7 (Entyvio; Takeda), anti- IL- 23 (Stelara; Johnson & Johnson and Omvoh; Eli Lilly) and S1P inhibitors (Zeposia; Bristol Myers Squibb and Velsipity; Pfizer) and janus kinase inhibitors (Rinvoq; AbbVie, and Xeljanz; Pfizer) as well as monoclonal antibodies targeting anti- TL1A**

**(PRA023; Merck, RVT- 3101; Roche and TEV' 574; Teva / Sanofi) in Phase 2 and 3 development. For our BTLA agonist antibody program, our competitors include other anti-BTLA agonist antibodies antibody LY3361237, GS- 0272 (Eli Lilly) in Phase 2 development, which has demonstrated efficacy in treatment of systemic lupus erythematosus as measured by the cutaneous lupus erythematosus disease area and severity index (CLASI), and MB272 (MiroBio, in Phase 1 development which has been acquired by Gilead) in Phase 1b development for SLE and rheumatoid arthritis. Our Commercial-stage competitors in moderate- to- severe atopic dermatitis include topical and oral corticosteroids, calcineurin inhibitors (Protopic; LEO Pharma and Elidel; Bausch Health), monoclonal antibodies targeting IL- 4 / 13 (Dupixent; Regeneron / Sanofi), IL- 13 (Adbry; LEO Pharma and lebrikizumab Ebglyss; Eli-Lilly), IL- 31 (nemolizumab; Galderma) , OX- 40L (amltelimab; Sanofi), and janus kinase inhibitors (Rinvoq; AbbVie and abrocitinib; Pfizer) as well as monoclonal antibodies targeting OX- 40 / OX40L (rocatinlimab; Amgen and amltelimab; Sanofi) in Phase 3 development . For our anti- CD122 antagonist antibody program, our clinical competitors include other anti- CD122 antagonist antibodies, auremolimab (Incyte), in Phase 1 development for vitiligo and FB- 102 (Forte Bioscience) in preclinical development, and three anti- IL- 15 monoclonal antibodies, AMG 714 (Amgen), currently in Phase 2 development for the treatment of vitiligo, CALY- 002 (Calypso, which Novartis has agreed to acquire), currently in Phase 1b development for the treatment of celiac disease and eosinophilic esophagitis, and TEV- ' 408 (Teva), currently in Phase 1b development for the treatment of celiac disease. For our anti- BDCA2 program, our competitors include one other anti- BDCA2 CD122 antagonist antibody, auremolimab litifilimab ( Biogen Villarix Therapeutics, which has been acquired by Incyte ) , currently in preclinical Phase 3 development ; and for SLE an and CLE, and one clinical- stage anti- ILT7 IL- 15 monoclonal antibody antibodies that target plasmacytoid dendritic cells for depletion , daxdilimab AMG 714 (Amgen) , currently in Phase 2 development for the treatment of vitiligo alopecia areata, dermatomyositis or anti- synthetase inflammatory myositis, and discoid lupus erythematosus . For insidolimab in the treatment of GPP, our competitors include one other anti- IL- 36 receptor antibody called SPEVIGO or spesolimab (Boehringer Ingelheim), recently approved for GPP flares in adults. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe effects, are more convenient, are less expensive or capture significant market share prior to or during our commercialization. Our competitors also may obtain FDA or other regulatory approval 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. In addition, our ability to compete may be affected in many cases by insurers or other third party payors seeking to encourage the use of biosimilar products. Even if our product candidates achieve marketing approval, they may be priced at a significant premium over competitive biosimilar products if any have been approved by then. Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These companies compete with us in recruiting and retaining qualified scientific and management personnel, establishing clinical trial sites and patient registration for planned clinical trials and acquiring technologies complementary to, or necessary for, our programs. In addition, the biotechnology industry is characterized by rapid technological change. If we fail to stay at the forefront of technological change, we may be unable to compete effectively. Technological advances or products developed by our competitors may render our technologies or product candidates obsolete, less competitive or not economical. Even if our product candidates receive regulatory approval, they may not gain adequate market acceptance among physicians, patients, health care 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 planned clinical trials; • the timing of market introduction of the product candidate as well as competitive products; • the clinical indications for which the product candidate is approved; • restrictions on the use of our products, if approved, such as boxed warnings or contraindications in labeling or a REMS, if any, which may not be required of alternative treatments and competitor products; • acceptance of the product candidate as a safe and effective treatment by physicians, clinics and patients; • the potential and perceived advantages of product candidates over alternative treatments, including any similar generic treatments; • the cost of treatment in relation to alternative treatments; • the availability of coverage and adequate reimbursement and pricing by third parties and government authorities; • relative convenience and ease of administration; • the frequency and severity of adverse events; • the effectiveness of sales and marketing efforts; and • unfavorable publicity relating to the product candidate. If any product candidate is approved but does not achieve an adequate level of acceptance by physicians, hospitals, health care payors and patients, we may not generate or derive sufficient revenue from that product candidate and may not become or remain profitable. We currently do not have a marketing or sales team for the marketing, sales and distribution of any of our product candidates that are able to obtain regulatory approval. In order to commercialize any product candidates, we must build on a territory- by- territory basis marketing, sales, distribution, managerial and other non- technical capabilities or make arrangements with third parties to perform these services, and we may not be successful in doing so. If our product candidates receive regulatory approval, we may decide to establish an internal sales or marketing team with technical expertise and supporting distribution capabilities to commercialize our product candidates, which 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 would adversely impact the commercialization of any of our product candidates that we obtain approval to market. With respect to the commercialization of all or certain of our product candidates, we may 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. 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 not successful in commercializing our 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. ~~We expect~~ The process of manufacturing biologics is complex, highly regulated and subject to multiple risks, and requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturing biologics is highly susceptible to product loss due to contamination, equipment failure, improper installation or operation of equipment, vendor or operator error, inconsistency in yields, variability in product characteristics and difficulties in scaling the production process. Even minor deviations from normal manufacturing processes could result in reduced production yields, product defects and other supply or supply chain disruptions. 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. We and our contract manufacturers must comply with cGMPs for the manufacturing of biologics used in clinical trials and, if approved, marketed products. Moreover, if the FDA determines that our manufacturer is not in compliance with FDA laws and regulations, including cGMPs, the FDA may deny BLA approval until the deficiencies are corrected or we replace the manufacturer in our BLA with a manufacturer that is in compliance. Furthermore, all of our therapeutic antibodies are manufactured by starting with cells which are stored in a cell bank. We have one master cell bank for each antibody manufactured in accordance with cGMP and create multiple working cell banks to support cGMP manufacturing, and believe we would have adequate backup should any cell bank be lost in a catastrophic event. However, it is possible that we could lose multiple cell banks and have our manufacturing severely impacted by the need to replace the cell banks. In addition, there are risks associated with large scale manufacturing for clinical trials or commercial scale including, among others, cost overruns, potential problems with process scale-up, process reproducibility, stability issues, compliance with good manufacturing practices, lot consistency and timely availability of raw materials. Even if we or our collaborators obtain regulatory approval for any of our product candidates, there is no assurance that manufacturers will be able to manufacture the approved product to specifications acceptable to the FDA or other regulatory authorities, to produce it in sufficient quantities to meet the requirements for the potential launch of the product or to meet potential future demand. Moreover, we source certain of the raw materials needed for our product candidates from outside the U. S. Although we have not experienced any material supply interruptions to date, it is possible that political, economic or public health events, ~~such as the COVID-19 pandemic,~~ could cause such interruptions in the future. If our manufacturers are unable to produce sufficient quantities for clinical trials or for commercialization, commercialization efforts would be impaired, which would have an adverse effect on our business, financial condition, results of operations and growth prospects. Any delay or interruption in the supply of clinical trial supplies could delay the completion of planned clinical trials, increase the costs associated with maintaining clinical trial programs and, depending upon the period of delay, require us to commence new clinical trials at additional expense or terminate clinical trials completely. Any adverse developments affecting clinical or commercial manufacturing of our product candidates or products may result in shipment delays, inventory shortages, lot failures, product withdrawals or recalls, or other interruptions in the supply of our product candidates or products. Scaling up a biologic manufacturing process is a difficult and uncertain task, and we may not be successful in transferring our production system or the manufacturer may not have the necessary capabilities to complete the implementation and development process. If we are unable to adequately validate or scale-up the manufacturing process with our current manufacturers, we will need to transfer to other manufacturers and complete the manufacturing validation process, which can be lengthy and costly. Even if we are able to adequately validate and scale-up the manufacturing process for our product candidates with contract manufacturers, we will still need to negotiate with such contract manufacturers agreements for commercial supply, and it is not certain we will be able to come to agreement on terms acceptable to us. Accordingly, failures or difficulties faced at any level of our manufacturing process could adversely affect our business and delay or impede the development and commercialization of our product candidates or products and could have an adverse effect on our business, prospects, financial condition and results of operations. Political, economic, or public health events, such as the COVID-19 pandemic and related mitigation measures **or actual or perceived instability in the U. S. and global banking systems**, have had, and may continue to have, an adverse impact on global economic conditions, which could have an adverse effect on our business and financial condition, including impairing our ability to raise capital when needed. The extent to which any political, economic or public health event impacts our business and operations will depend on future developments that are highly uncertain and cannot be predicted, including new information that may emerge concerning the severity of the ~~virus event~~ and the actions to contain its impact. Risks Related to Our Financial Position and Capital Needs We have limited operating revenue and a history of operational losses and may not achieve or sustain profitability. We have no products approved for commercial sale, and to date we have not generated any revenue or profit from sales of our product candidates. We are ~~an early~~ **a clinical** - stage biotechnology company with a limited operating history. We have no approved products. To date, our revenue has been primarily derived from our GSK research collaboration and license agreement and royalty monetization agreements based on our GSK collaboration, and we are significantly dependent on such collaborators for the successful development of product candidates in these collaborations. Our ability to generate revenue and become profitable depends upon our ability, alone or with our collaborators, to successfully complete the development of our product candidates for our target indications and to obtain necessary regulatory approvals. Since our inception, we have incurred significant operating losses in every year except fiscal year 2014. For the year ended December 31, ~~2022~~ **2023**, our collaboration revenue was \$ ~~10-17.3-2~~ million and our net loss was \$ ~~128-163.7-6~~ million. As of December 31, ~~2022~~ **2023**, we had an accumulated deficit of \$ ~~450-614.5-1~~ million. We have financed our operations primarily through our initial public offering of common stock in January 2017, our follow-on public offerings of common stock in October 2017 and September 2018, our ~~JEMPERLI~~ **Jemperli** Royalty Monetization Agreement, and our Zejula Royalty Monetization Agreement. We have devoted substantially all of our efforts to research and development. ~~We have only recently initiated~~ **Rosnilimab and ANB032 are in Phase 2** clinical development ~~for three of our product candidates and~~ **we** expect that it will be several years, if ever, before ~~we have a~~ **any of our active** product candidate ~~candidates are~~ **ready** for commercialization. We expect to continue to

incur significant expenses and increasing operating losses for the foreseeable future, and the net losses we incur may fluctuate significantly from quarter to quarter. Our revenue has been historically derived from amortization of upfront payments, research and development funding, milestone and royalty payments under collaboration and license agreements with our collaborators. Our ability to generate future product revenue from our current or future product candidates depends on a number of additional factors, including our ability (or as applicable our collaborators' ability) to:

- continue research and preclinical development of our product candidates;
- identify additional product candidates;
- maintain existing and enter into new collaboration agreements;
- conduct additional preclinical studies and initiate clinical trials for our product candidates;
- obtain approvals for the product candidates we develop or developed under our collaboration arrangements;
- establish a sales, marketing and distribution infrastructure to commercialize any product candidates for which we may obtain marketing approval;
- maintain, expand and protect our intellectual property portfolio;
- hire additional executive, clinical, quality control and scientific personnel;
- add operational, financial and management information systems and personnel, including personnel to support our product development and commercialization efforts;
- establish and maintain supply and manufacturing relationships with third parties and ensure adequate and legally compliant manufacturing of our product candidates;
- obtain coverage and adequate product reimbursement from third- party payors, including government payors;
- acquire or in- license other product candidates and technologies; and
- achieve market acceptance for our or our collaborators' products, if any.

We are unable to predict the timing or amount of increased expenses, or when, or if, we will be able to achieve or maintain profitability because of the numerous risks and uncertainties associated with product development. In addition, our expenses could increase significantly beyond expectations if we are required by the FDA or other regulatory authorities to perform studies or clinical trials in addition to those that we currently anticipate. Even if any of our product candidates are approved for commercial sale, we anticipate incurring significant costs associated with the commercial launch of any product candidate. We are currently only in the clinical development stages for our most advanced product candidates. In order to become and remain profitable we must, alone or with our collaborators, develop and eventually commercialize a product or products with significant market potential. This may require us to be successful in a range of challenging activities, including completing clinical trials of our product candidates, successfully developing companion diagnostics, obtaining marketing approval for these product candidates and manufacturing, marketing and selling those products for which we may obtain marketing approval. We may never succeed in these activities and, even if we do, may never generate revenues that are 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 raise capital, maintain or expand our research and development efforts, expand our business or continue our operations. A decline in the value of our company would also cause you to lose part or even all of your investment. As a research and development company, our operations have consumed substantial amounts of cash since our inception. We expect our research and development expenses to increase substantially in connection with our ongoing activities, particularly as **which expenses may substantially increase if** we continue our discovery and preclinical development to identify new clinical candidates, and we and our collaborators conduct **Phase 3** clinical trials **or of, and** seek marketing approval for our product candidates **without any partnerships**. In addition, if we obtain marketing approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Furthermore, we incur additional costs associated with operating as a public company. We believe that our existing cash, cash equivalents and investments will fund our current operating plan, including our ongoing stock repurchase plan, for at least the next 12 months. However, circumstances may cause us to consume capital more rapidly than we currently anticipate. For example, as we continue to move our product candidates **into and** through preclinical studies, submit INDs or foreign equivalents and conduct clinical development **trials**, we may have adverse results requiring us to find new product candidates. Any of these events may increase our development costs more than we expect. We may need to raise additional funds or otherwise obtain funding through collaboration agreements to continue development of our product candidates. If we need to secure additional financing, such additional fundraising efforts may divert our management from our day- to- day activities, which may adversely affect our ability to develop and commercialize our product candidates. In addition, we cannot guarantee that future financing will be available in sufficient amounts or on terms acceptable to us, if at all. If we do not raise additional capital when required or on acceptable terms, we may need to:

- significantly delay, scale back or discontinue the development or commercialization of our product candidates or cease operations altogether;
- seek strategic alliances for research and development programs at an earlier stage than we would otherwise desire or on terms less favorable than might otherwise be available;
- relinquish, or license on unfavorable terms, our rights to technologies or future product candidates that we otherwise would seek to develop or commercialize ourselves; or
- eliminate staff to conserve resources.

If we need to conduct additional fundraising activities and we do not raise additional capital in sufficient amounts or on terms acceptable to us, we may be prevented from pursuing development and commercialization efforts, which will have a material adverse effect on our business, operating results and prospects. Adverse macro- economic conditions, including volatility in equity capital markets, rising interest rates, **actual or perceived instability in the U. S. and global banking systems**, and fluctuations in foreign exchange rates, could prevent us from raising additional capital in sufficient amounts or on terms acceptable to us or at all. Our forecast of the period of time through which our financial resources will adequately support our operations is a forward- looking statement and involves risks and uncertainties, and actual results could vary as a result of a number of factors, including the factors discussed elsewhere in this " Risk Factors " section. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Our future funding requirements, both short and long- term, will depend on many factors, including:

- the initiation, progress, timing, costs and results of preclinical studies and clinical trials for our product candidates and future product candidates we may develop;
- the number and size of clinical trials needed to show safety, efficacy and an acceptable risk / benefit profile for any of our product candidates;
- the outcome, timing and cost of seeking and obtaining



regulatory approvals from the FDA and foreign regulatory authorities, including the potential for such authorities to require that we perform more studies or trials than those that we currently expect; • the commercial success or failure of products sold by our collaborators, such as **JEMPERLI Jemperli** by GSK, and the timing thereof; • our ability to maintain existing and enter into new collaboration agreements; • the cost to establish, maintain, expand and defend the scope of our intellectual property portfolio, including the amount and timing of any payments we may be required to make, or that we may receive, in connection with licensing, preparing, filing, prosecuting, defending and enforcing of any patents or other intellectual property rights; • the effect of competing technological and market developments; • market acceptance of any approved product candidates; • the costs of acquiring, licensing or investing in additional businesses, products, product candidates and technologies; • the cost of recruiting and retaining key employees, ~~including any search for a permanent replacement President and Chief Executive Officer, if applicable~~; • the costs and fees associated with any delays or cancellations of forecasted manufacturing batches; • the cost and timing of selecting, auditing and potentially validating manufacturing sites for commercial- scale manufacturing; and • the cost of establishing sales, marketing and distribution capabilities for our product candidates for which we may receive regulatory approval and that we determine to commercialize ourselves or in collaboration with our collaborators. If we cannot expand our operations or otherwise capitalize on our business opportunities due to a lack of capital, our business, financial condition and results of operations could be adversely affected. Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our product candidates on unfavorable terms to us. We may seek additional capital through a variety of means, including through public or private equity, debt financings or other sources, including up- front payments and milestone payments from strategic collaborations, license agreements and royalty agreements. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder. Such financing may result in dilution to stockholders, imposition of debt covenants, increased fixed payment obligations, or other restrictions that may affect our business. If we raise additional funds through up- front 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. **Risks Related to Managing Growth,..... a material adverse effect on our business**. **Risks Related to Our Dependence on Third Parties** We have entered into collaboration with GSK to develop several of our product candidates. GSK has advanced multiple antibodies generated through our collaboration into clinical trials. If our collaboration with GSK were terminated, we may not receive all or any of the funding potentially coming from such collaboration, which could adversely affect our business or financial condition. **Our operational obligations** **For example, in October 2023, we agreed with GSK to terminate the anti- LAG- 3 antagonist antibody development program** under each of our **existing collaborations- collaboration has ended. As a result, we will not receive any additional milestones or any royalties from GSK for that development program**. We are unable to predict the success of our collaborations. Our collaborators have discretion in determining and directing the efforts and resources, including the ability to discontinue all efforts and resources, they apply to the development and, if approval is obtained, commercialization and marketing of the product candidates covered by such collaborations. As a result, our collaborators may elect to de- prioritize our programs, change their strategic focus or pursue alternative technologies in a manner that results in reduced, delayed or no revenue to us. Our collaborators may have other marketed products and product candidates under collaboration with other companies, including some of our competitors, and their corporate objectives may not be consistent with our best interests. Our collaborators may also be unsuccessful in developing or commercializing our products. If our collaborations are unsuccessful, our business, financial condition, results of operations and prospects could be adversely affected. In addition, any dispute or litigation proceedings we may have with our collaborators in the future could delay development programs, create uncertainty as to ownership of intellectual property rights, distract management from other business activities and generate substantial expense. For example, in August 2020, we served notice on GSK related to an alleged breach of our collaboration agreement in connection with GSK’ s use of certain antibodies originally developed by us for the development of a drug not covered by the agreement. We subsequently settled this matter in October 2020, but there can be no assurance that we will not encounter such issues under our collaborations with GSK or other parties in the future. In addition to our current licensing arrangements, a part of our strategy is to enter into additional strategic product development and commercialization collaborations in the future, including collaborations to broaden and accelerate clinical development and potential commercialization of our product candidates, including our plans to develop and out- license our legacy product candidates, imsidolimab and etokimab. We may face significant competition in seeking appropriate development partners, and the negotiation process is time- consuming and complex. Moreover, we may not succeed in our efforts to establish collaborations or other alternative arrangements for any of our other existing or future product candidates and programs because our research and development pipeline may be insufficient, our product candidates and programs may be deemed to be at too early a stage of development for collaborative effort, and / or third parties may not view our product candidates and programs as having the requisite potential to demonstrate safety and efficacy or to be commercially viable. Even if we are successful in our efforts to establish new collaborations, the terms that we agree upon may not be favorable to us, and we may not be able to maintain such collaborations if, for example, development or approval of a product candidate is delayed or sales of an approved product candidate are disappointing. Any delay in entering into new collaboration agreements related to our product candidates could delay the development and commercialization of our product candidates and reduce their competitiveness if they reach the market. Moreover, if we fail to establish and maintain additional collaborations related to our product candidates: • the development of certain of our current or future product candidates may be terminated or delayed; • our cash expenditures related to development of certain of our current or future product candidates would increase significantly and we may need to seek additional financing; • we may be required to hire additional employees or otherwise develop expertise,

such as sales and marketing expertise, for which we have not budgeted; and • we will bear all of the risk related to the development and commercialization of any such product candidates. If third parties on which we depend to conduct our planned preclinical studies and clinical trials do not perform as contractually required, fail to satisfy regulatory or legal requirements or miss expected deadlines, our development program could be delayed with adverse effects on our business, financial condition, results of operations and prospects. We rely on third-party clinical investigators, CROs, **contract manufacturing organizations (“CMOs”)** and consultants to design, conduct, supervise and monitor key activities relating to, discovery, manufacturing, non-clinical studies and clinical trials of our product candidates, and we intend to do the same for future activities relating to existing and future programs. Because we rely on third parties and do not have the ability to conduct all required discovery, manufacturing, preclinical studies or clinical trials independently, we have less control over the timing, quality and other aspects of discovery, manufacturing, preclinical studies and clinical trials than we would if we conducted them on our own. These investigators, CROs, CMOs and consultants are not our employees, and we have limited control over the amount of time and resources that they dedicate to our programs. These third parties may have contractual relationships with other entities, some of which may be our competitors, which may draw time and resources from our programs. The third parties we contract with might not be diligent, careful or timely in conducting our discovery, manufacturing, preclinical studies or clinical trials, resulting in discovery, manufacturing, preclinical studies or clinical trials being delayed or unsuccessful, in whole or in part. If we cannot contract with acceptable third parties on commercially reasonable terms, or at all, or if these third parties do not carry out their contractual duties, satisfy legal and regulatory requirements for the conduct of preclinical studies or clinical trials or meet expected deadlines, our clinical development programs could be delayed and otherwise adversely affected. In all events, we are responsible for ensuring that each of our preclinical studies and clinical trials is conducted in accordance with the general investigational plan and protocols for the trial. Our reliance on third parties that we do not control does not relieve us of these responsibilities and requirements. Any such event could have an adverse effect on our business, financial condition, results of operations and prospects. We rely completely on third parties to manufacture our nonclinical, clinical and future commercial drug supplies of any approved products. We outsource the manufacture of our product candidates. We do not currently have the infrastructure or internal capability to manufacture supplies of our product candidates for use in development and commercialization. If we were to experience an unexpected loss of supply of our product candidates for any reason, whether as a result of manufacturing, supply or storage issues or otherwise, our business would be harmed, and we could experience delays, disruptions, suspensions or terminations of, or be required to restart or repeat, any pending or ongoing clinical trials. Although we generally do not begin a clinical trial unless we believe we have a sufficient supply of a product candidate to complete the clinical trial, we may be required to manufacture additional supplies of our product candidates to the extent our estimates of the amounts required prove inaccurate, we suffer unexpected losses of product candidate supplies, or we are required to have fresh product candidate supplies manufactured to satisfy regulatory requirements or specifications. Any significant delay or discontinuation in the supply of a product candidate, or the raw material components thereof, due to the need to replace a contract manufacturer or other third-party manufacturer, could considerably harm our business and ability to generate revenue and delay completion of our clinical trials, product testing and potential regulatory approval of our product candidates. Any delays in our preclinical or clinical development could lead to delays or cancellations of forecasted manufacturing batches, which would typically result in significant fees owed by us to the manufacturer and an uncertainty as to when the manufacturer will have the availability for a new time slot to manufacture the batch, which could lead to further delays in the development of the product candidate and have an adverse effect on our business. Reliance on third-party manufacturers entails additional risks, including the possible breach of the manufacturing agreement by the third party and the possible termination or nonrenewal of the agreement by the manufacturer at a time that is costly or inconvenient for us. If our contract manufacturers were to breach or terminate their manufacturing arrangements with us, the development or commercialization of the affected product candidates could be significantly delayed, which could have an adverse effect on our business. Any change in our manufacturers could be costly because the commercial terms of any new arrangement could be less favorable and because the expenses relating to the transfer of necessary technology and processes could be significant. We depend on a small number of suppliers for the raw materials necessary to produce our product candidates. The loss of these suppliers, or their failure to supply us with these raw materials, would materially and adversely affect our business. We depend on the availability of key raw materials for our product candidates from a small number of third-party suppliers. Because there are a limited number of suppliers for the raw materials that we use to manufacture our product candidates, we may need to engage alternate suppliers to prevent a possible disruption of the manufacture of the materials necessary to produce our product candidates for our clinical trials. We do not have any control over the availability of raw materials. If we or our manufacturers are unable to purchase these raw materials on acceptable terms, at sufficient quality levels, or in adequate quantities, if at all, the development of our product candidates would be delayed or there would be a shortage in supply, which would impair our ability to meet our development objectives for our product candidates or generate revenues from the sale of any approved products. If either we or any third-parties in the supply chain for materials used in the production of our product candidates are disrupted, including by political, economic or public health events, ~~such as the COVID-19 pandemic,~~ it could limit our ability to manufacture our product candidates for our preclinical or clinical studies. Risks Related to Regulatory Approval of Our Product Candidates and Other Legal Compliance Matters Any regulatory approvals that we or our..... financial condition and results of operations. The failure to obtain regulatory approval in international jurisdictions would prevent us or our collaborators from marketing our product candidates outside the United States. In order to market and sell our products in other jurisdictions, we or our collaborators must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and can involve additional testing. The time required to obtain approval may differ substantially from that required to obtain FDA approval. The regulatory approval process outside the United States generally includes all of the risks associated with obtaining FDA approval. In addition, in many countries outside the United

States, we or our collaborators must secure product reimbursement approvals before regulatory authorities will approve the product for sale in that country. Obtaining foreign regulatory approvals and 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 our collaborators fail to comply with the regulatory requirements in international markets and receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed, and our business will be adversely affected. We may not obtain foreign regulatory approvals on a timely basis, if at all. The failure to obtain approval of any of our product candidates by regulatory authorities in another country may significantly diminish the commercial prospects of that product candidate and our business prospects could decline. Any drugs we develop may become subject to unfavorable third- party reimbursement practices and pricing regulations. The availability and extent of coverage and adequate reimbursement by governmental and private 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 our product candidates will be paid by health maintenance, managed care, pharmacy benefit and similar health care management organizations or reimbursed by government health administration authorities, private health coverage insurers and other third- party payors. If reimbursement is not available, or is available only to limited levels, we or our collaborators 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 a sufficient return on our investment. Coverage and reimbursement may impact the demand for, or the price of, any product candidate for which marketing approval is obtained. If coverage and reimbursement are not available or reimbursement is available only at limited levels, we or our collaborators may not successfully commercialize any product candidate for which marketing approval is obtained. There is significant uncertainty related to the insurance coverage and reimbursement of newly approved products. In the United States, the principal decisions about reimbursement for new products are typically made by the Centers for Medicare & Medicaid Services (“ CMS ”), an agency within the U. S. Department of Health and Human Services, because CMS decides whether and to what extent a new product will be covered and reimbursed under Medicare. Private payors often follow CMS’ s decisions regarding coverage and reimbursement to a substantial degree. However, one payor’ s determination to provide coverage for a drug product does not assure that other payors will also provide coverage for the drug product. As a result, the coverage determination process is often a time- consuming and costly process that will require us or our collaborators to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. 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 examining the medical necessity and reviewing the cost effectiveness of medical drug products. There may be especially significant delays in obtaining coverage and reimbursement for newly approved drugs. Third- party payors may limit coverage to specific drug products on an approved list, known as a formulary, which might not include all FDA- approved drugs for a particular indication. We or our collaborators 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 or our collaborators commercialize and, if reimbursement is available, what the level of reimbursement and the timing of achieving a reimbursement determination will be. Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost containment initiatives in Europe, Canada and other countries has and will continue to put pressure on the pricing and usage of therapeutics, including our product candidates. In many countries, particularly the countries of the EU, the prices of medical products 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 the receipt of marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we or our collaborators may be required to conduct a clinical trial that compares the cost effectiveness of our product candidate to other available therapies. In general, the prices of products 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 product candidates may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenue and profits. Moreover, increasing efforts by governmental and third- party payors, in the United States and internationally, to cap or reduce health care costs may cause such organizations to limit both coverage and level of reimbursement for new products approved, and, as a result, they may not cover or provide adequate payment for our product candidates. We expect to experience pricing pressures in connection with the sale of any of our product candidates due to the trend toward managed health care, the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on health care costs in general, particularly prescription drugs and surgical procedures and other treatments, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products into the health care market. In addition to CMS and private payors, professional organizations such as the American Medical Association can influence decisions about reimbursement for new products by determining standards for care. In addition, many private payors contract with commercial vendors who sell software that provide guidelines that attempt to limit utilization of, and therefore reimbursement for, certain products deemed to provide limited benefit to existing alternatives. Such organizations may set guidelines that limit reimbursement or utilization of our product candidates. Furthermore, some of our target indications, such as GPP, are rare diseases with small patient populations. In order for therapeutics that are designed to treat smaller patient populations to be commercially viable, the reimbursement for such therapeutics must be higher, on a relative basis, to account

for the low volume of sales. Accordingly, we or our collaborators will need to implement a coverage and reimbursement strategy for any approved product candidate that accounts for the smaller potential market size. If we or our collaborators are unable to establish or sustain coverage and adequate reimbursement for any future product candidates from third-party payors, the adoption of those product candidates 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 reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we or our collaborators receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future. Healthcare legislative reform measures may increase the difficulty and cost for us or our collaborators to obtain marketing approval of and commercialize our product candidates and affect the pricing of our product candidates. In the United States and some foreign jurisdictions, there have been a number of legislative and regulatory changes and proposed changes regarding the healthcare system that could, among other things, prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our or our collaborators' ability to profitably sell any product candidates for which marketing approval is obtained. The commercial potential for our product candidates, if any, could be affected by changes in healthcare spending and policy in the United States and abroad. New laws, regulations, or judicial decisions or new interpretations of existing laws, regulations, or decisions, related to healthcare availability, the method of delivery, or payment for healthcare products and services could adversely affect our business, operations, and financial condition, if and when we or our collaborators are able to obtain marketing approval and commercialize our product candidates. For example, the ACA was enacted in 2010 with a goal, which among others, of reducing the cost of healthcare and substantially changing the way healthcare is financed by both government and private insurers, and significantly impacts the U.S. pharmaceutical industry. While there have been legislative and judicial efforts to modify, repeal or otherwise invalidate all or certain aspects of the ACA or its implementing regulations, among other things, the ACA remains in effect, expanded manufacturers' rebate liability under the Medicaid Drug Rebate Program, imposed a significant annual, nondeductible fee on companies that manufacture or import certain branded prescription drug products, and enacted substantial provisions affecting compliance, which may affect effect in its current form. It is unclear how any such efforts in the future will impact the ACA or our business practices with healthcare practitioners. In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In addition, the Biden Administration has indicated an intent to address prescription drug pricing and recent Congressional hearings have brought increased public attention to the costs of prescription drugs. For example, several healthcare reform on September 9, 2021, the Biden administration published a wide-ranging list of policy proposals to lower prescription drug prices, including by allowing Medicare to negotiate prices and disincentivizing price increases, and to support market changes that strengthen supply chains, promote biosimilars and generic drugs, and increase price transparency. These initiatives recently culminated in the enactment of the IRA, in August 2022, which will allow, among other things, allow the HHS to negotiate the selling price of certain drugs and biologics that CMS reimburses under Medicare Part B and Part D, although this will only apply to high-expenditure single-source drugs that have been approved for at least 7 years (11 years for biologics). The negotiated prices, which will first become effective in 2026, will be capped at a statutory ceiling price. Beginning in January 2023 for Medicare Part B and October 2022 for Medicare Part D, the IRA will also penalize drug manufacturers that increase prices of Medicare Part B and Part D drugs at a rate greater than the rate of inflation. In addition, the law eliminates the "donut hole" under Medicare Part D beginning in 2025 by significantly lowering the beneficiary maximum out-of-pocket cost and requiring manufacturers to subsidize, through a newly established manufacturer discount program, 10% of Part D enrollees' prescription costs for brand drugs below the out-of-pocket maximum, and 20% once the out-of-pocket maximum has been reached. The IRA permits the Secretary of HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years. Manufacturers that fail to comply with the IRA may be subject to various penalties, including civil monetary penalties. The IRA also extends enhanced subsidies for individuals purchasing health insurance coverage in ACA marketplaces through plan year 2025. These provisions will take effect progressively starting in 2023, although they may be subject to legal challenges. It is likely that federal and state legislatures within the United States and foreign governments will continue to consider changes to existing healthcare legislation. For example, the ACA has faced ongoing legal challenges, including litigation seeking to invalidate some of or all of the law or the manner in which it has been implemented. More recently, the 2017 Tax Cuts and Jobs Act was signed into law, which eliminated certain requirements of the ACA, including the individual mandate. In 2021 the U.S. Supreme Court dismissed a challenge on procedural grounds that argued the ACA is unconstitutional in its entirety because the individual mandate was repealed by Congress. Thus, the ACA will remain in effect in its current form. We cannot predict the reform initiatives that may be adopted in the future or whether initiatives that have been adopted will be repealed or modified. We expect that the ACA, the IRA and other state or federal 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. The implementation of cost containment measures or other healthcare reforms include the Drug Supply Chain Security Act may prevent us from being able to generate revenue, attain profitability, or commercialize our which imposes new obligations on manufacturers of pharmaceutical products related to product tracking and tracing. Legislative and regulatory proposals have been made to expand post-approval requirements and restrict sales and promotional activities for pharmaceutical products. We are not sure whether additional legislative changes will be enacted, or whether the current regulations, guidance or interpretations will be changed, or what the impact of such changes on our business, if any, may be. Further, we are unable to predict whether additional governmental action will be taken in response to the COVID-19 pandemic and whether such action will adversely affect our or our collaborators' ability to obtain marketing approval for or successfully commercialize our product candidates. Our business entails a significant risk of product liability, and our ability to obtain sufficient insurance coverage could have an adverse effect

on our business, financial condition, results of operations or prospects. 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 or our collaborators succeed in marketing any of our product candidates, such claims could result in an FDA investigation of the safety and effectiveness of our product candidates, our manufacturing processes and facilities or our marketing programs and potentially 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, substantial monetary awards to trial participants or patients and a decline in our stock price. We currently have product liability insurance that we believe is appropriate for our stage of development and may need to obtain higher levels prior to marketing any of our product candidates. 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. Our relationships with customers and third-party payors will be subject to applicable anti-kickback, fraud and abuse, transparency and other health care laws and regulations, which could expose us to, among other things, criminal sanctions, civil penalties, contractual damages, reputational harm, administrative burdens and diminished profits and future earnings. Health care providers and third-party payors play a primary role in the recommendation and prescription of any product candidates for which we or our collaborators obtain marketing approval. Our future arrangements with third-party payors and customers may expose us to broadly applicable fraud and abuse and other health care laws and regulations that may constrain the business or financial arrangements and relationships through which we or our collaborators market, sell and distribute our product candidates for which marketing approval is obtained. Restrictions under applicable federal and state health care laws and regulations include the following: • the federal Anti-Kickback Statute prohibits, among other things, persons and entities from knowingly and willfully soliciting, offering, receiving or providing remuneration, directly or indirectly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, order or recommendation of, any good or service, for which payment may be made under a federal health care program such as Medicare and Medicaid; • the federal false claims and civil monetary penalties laws, including the civil False Claims Act, impose criminal and civil penalties, including civil whistleblower or qui tam actions, against individuals or entities for, 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; • HIPAA imposes criminal and civil liability for, among other things, executing or attempting to execute a scheme to defraud any health care benefit program or making false statements relating to health care matters; • HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act and its implementing regulations, also imposes obligations, including mandatory contractual terms, 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 report to CMS annually information regarding payments and other transfers of value to physicians and teaching hospitals as well as information regarding ownership and investment interests held by physicians and their immediate family members. The information was initially made publicly available on a searchable website in September 2014 and is disclosed on an annual basis; and • analogous state and foreign laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving health care items or services reimbursed by non-governmental third-party payors, including private insurers. The ACA, among other things, amended the intent standard of the federal Anti-Kickback Statute and criminal health care fraud statutes to a stricter standard such that a person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. In addition, the ACA codified case law 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 federal False Claims Act. Some state laws require biotechnology companies to comply with the biotechnology industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government and may require drug manufacturers to report information related to payments and other transfers of value to physicians and other health care providers or marketing expenditures. For example, several states now require prescription drug companies to report certain expenses relating to the marketing and promotion of drug products and to report gifts and payments to individual health care practitioners in these states. Other states prohibit various marketing-related activities, such as the provision of certain kinds of gifts or meals. Still other states require the posting of information relating to clinical studies and their outcomes. Some states require the reporting of certain pricing information, including information pertaining to and justifying price increases. Some states further require pharmaceutical companies to implement compliance programs and / or marketing codes. Compliance with these laws is difficult and time consuming, and companies that do not comply with these state laws face civil penalties. **State and foreign data security laws, regulations also govern the privacy and security standards may cause our business to be materially adversely affected. We maintain a quantity of sensitive information, including confidential business and patient health information in some circumstances-connection with our clinical trials, many and are subject to U. S. and international laws and regulations governing the privacy and security of such information. Each of these laws is subject to varying interpretations and constantly evolving. In the United States, there are numerous federal and state privacy and data security laws and regulations governing the collection, use, disclosure and protection of personal information, including federal and state health information privacy laws, federal and state security breach notification laws, and federal and state consumer protection laws. In contrast, the EU and United Kingdom (" UK ") GDPR, which applies extraterritorially, imposes several strict requirements for controllers and**

processors of personal information. These include higher standards for obtaining consent from individuals to process their personal information, increased requirements pertaining to the processing of special categories of personal information (such as health information) and pseudonymized (i. e., key- coded) data, and heightened transfer requirements of personal information from the European Economic Area / UK / Switzerland to countries not deemed to have adequate data protections laws. The GDPR also provides that countries in the European Economic Area may establish their own laws and regulations further restricting the processing of certain personal information, including genetic data, biometric data, and health data. Companies that must comply with the GDPR face increased compliance obligations and risk, including more robust regulatory enforcement of data protection requirements and potential fines for noncompliance of up to € 20 million (approximately \$ 22. 6 million) or 4 percent of the annual global revenues of the noncompliant company, whichever is greater. In the United States, in addition to HIPAA, various federal (for example, the Federal Trade Commission) and state regulators have adopted, or are considering adopting, laws and regulations concerning personal information and data security. Certain state laws may be more stringent or broader in scope, or offer greater individual rights, with respect to personal information than federal, international, or other state laws, and such laws may differ from each other in significant ways and often are not preempted by HIPAA, thus all of which may complicate compliance efforts. For example, California enacted the California Consumer Privacy Act collection and use of health data in the EU is governed by the General Data Protection Regulation ( the “ GDPR-CCPA ”), later amended by ballot measure through which became fully applicable in May 2018. The GDPR extends the California Privacy geographical scope of EU data protection law to non- EU entities under certain conditions, tightens existing EU data protection principles and creates new obligations for companies and new rights Rights Act ( for individuals. The GDPR is complex, and guidance, interpretation and application under the GDPR are still developing “ CPRA ”). Failure to comply with the GDPR CCPA and the CPRA may result in substantial fines significant civil penalties, injunctive relief, or statutory or actual damages as determined by the California Privacy Protection Agency and California Attorney General through its investigative authority. Many other states have administrative penalties of up to the greater of € 20 million or 4 % of worldwide revenue. The GDPR may increase our or responsibility and liability are considering enacting comparable consumer privacy laws. Compliance with this new privacy legislation may result in relation additional costs and expense of resources to maintain compliance. There is also discussion in the U. S. of a new comprehensive federal data privacy law to which we would become subject if it is enacted. We cannot provide assurance that (i) current or future legislation will not prevent us from generating or maintaining personal information, or (ii) patients will consent to the use of their personal information (as necessary). Either of these circumstances may prevent us from undertaking or continuing essential research and development, manufacturing, and commercialization, which could have a material adverse effect on our business, results of operations, financial condition, and prospects. Federal, state, and foreign government requirements include obligations to notify regulators and / or individuals of security breaches or other similar reportable incidents experienced by us, or our vendors, contractors, or organizations with whom we had specific contractual obligations to protect our data that we. Further, the improper access to, use of, or disclosure of our data or a third-party’s personal information could subject us to individual or consumer class action litigation and governmental investigations and proceedings by federal, state, and local regulatory entities in the U. S. and by international regulatory entities. Compliance with these and any other applicable privacy and data security laws and regulations is a rigorous and time- intensive process, and we may be required to put in place additional mechanisms ensuring compliance with existing and the GDPR. The pending EU ePrivacy Regulation is also expected to establish new requirements applicable to the handling of personal data protection rules and possible government oversight imposes penalties for non- compliance. In addition to government regulation, privacy advocates and industry groups have and may in the future propose self- regulatory standards GDPR increases the scrutiny of transfers of personal data from time clinical trial sites located in the European Economic Area to the United States time. These and other industry jurisdictions that the European Commission does not recognize as having “ adequate ” data protection laws. For example, in July 2016, the European Commission adopted the EU- U. S. Privacy Shield Framework (the “ Privacy Shield Framework ”), which replaced the prior U. S. Safe Harbor scheme. On July 16, 2020, the Court of Justice of the European Union issued a decision, known as Schrems II, that declared the Privacy Shield Framework invalid. The Schrems II decision also resulted in substantial additional compliance obligations for companies that implement standard standards may legally or contractual contractually clauses apply to ensure a valid basis for the transfer of personal data outside of Europe. The European Commission has also adopted new standard contractual clauses that impose substantial additional obligations on the companies that wish to use us, the clauses as the basis for or we their data transfers. Following the UK’s exit from the European Union, the UK government transposed the General Data Protection Regulation into UK national law, thereby creating the “ UK GDPR. ” The UK made a number of technical changes to GDPR under the Data Protection, Privacy and Electronic Communications Regulation 2019. The UK Data Protection Act 2018 (“ Data Protection Act ”) also remains in place as a national data protection law that supplements UK GDPR. Additionally, California enacted the California Consumer Privacy Act (“ CCPA ”), which became effective on January 1, 2020, and the California Privacy Rights Act (“ CPRA ”), which expands upon the CCPA, is now in effect as of January 1, 2023 with enforcement beginning on July 1, 2023, subject to regulations promulgated through a newly created enforcement agency called the California Privacy Protection Agency (“ CPPA ”). The CCPA provides California residents expanded privacy rights, including the right to request correction, access, and deletion of their personal information, the right to opt out of certain personal information sharing, and the right to receive detailed information about how their personal information is processed including by California residents’ employers. The CCPA and CPRA provide California residents expanded rights to access and delete their personal information, opt out of certain personal information sharing and receive detailed information about how their personal information is used, and provides for civil penalties for violations, as well as a private right of action for data breaches that is

expected to increase data breach litigation. Comparable consumer privacy laws are set to take effect in 2023 in several other states. Generally, in recent years that has been a trend towards countries adopting stricter forms of data protection legislation, such as China's Personal Information Protection Law, which went into effect in November 2021. The costs of compliance with, and other burdens imposed by, the GDPR, CCPA and other U. S., EU and worldwide laws may **elect** impose onerous requirements on our business and, if our efforts to comply with such **standards** laws are not successful, our business could be adversely affected. Efforts to ensure that our current and future business arrangements with third parties will comply with applicable health care laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that **if our practices are not consistent or viewed as not consistent with legal and regulatory requirements, including changes in laws, regulations and standards or new interpretations or applications of existing laws, regulations and standards, we may become subject to audits, inquiries, whistleblower complaints, adverse media coverage, investigations, loss of export privileges, or severe criminal or civil sanctions, all of which may have a material adverse effect on our business, operating results, reputation, and financial condition. All of these evolving compliance and operational requirements impose significant costs, such as costs related to organizational changes, implementing additional protection technologies, training employees and engaging consultants, which are likely to increase over time. In addition, such requirements may require us to modify our data processing practices may not and policies, distract management or divert resources from other initiatives and projects, all of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Any failure or perceived failure by us to comply with current or future any applicable federal, statutes--- state, or similar foreign laws and regulations relating to data privacy and security could result in damage to or our case law involving applicable fraud and abuse reputation, as well as proceedings or litigation by governmental agencies or other health care laws and regulations. If third parties, including class action privacy litigation in certain jurisdictions, which would subject us to significant fines, sanctions, awards, injunctions, penalties, our- or judgments. Any of the foregoing could have a material adverse effect on our business, results of** operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant penalties, including civil, criminal and administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government funded health care programs, such as Medicare and Medicaid, contractual damages, reputational harm, diminished profits and future earnings, and the curtailment or restructuring of our operations. Defending against any such actions can be costly, time-consuming and may require significant financial **condition** and personnel resources. Therefore, **and prospects** 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 health care 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 criminal, civil or administrative sanctions, including exclusions from government funded health care programs. Our employees may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements and insider trading. We are exposed to the risk of employee fraud or other misconduct. Misconduct by employees could include failures to comply with FDA regulations, to provide accurate information to the FDA, to comply with federal and state health care fraud and abuse laws and regulations, to report financial information or data accurately or to disclose unauthorized activities to us. In particular, 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. Employee misconduct 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 employee misconduct. 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 fines or other sanctions. Risks Related to **Our Intellectual Property** **If we are unable to obtain or protect intellectual property rights, we may not be able to compete effectively in our market.** Our success depends in significant part on our and our licensors', licensees' or collaborators' ability to establish, maintain and protect patents and other intellectual property rights and operate without infringing the intellectual property rights of others. We have filed numerous patent applications both in the United States and in foreign jurisdictions to obtain patent rights to inventions we have discovered. We have also licensed from third parties rights to patent portfolios. Some of these licenses give us the right to prepare, file and prosecute patent applications and maintain and enforce patents we have licensed, and other licenses may not give us such rights. The patent prosecution process is expensive and time-consuming, and we and our current or future licensors, licensees or collaborators may not be able to prepare, file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. It is also possible that we or our licensors, licensees or collaborators will fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection on them. Moreover, in some circumstances, we may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the patents, covering technology that we license from or license to third parties and are reliant on our licensors, licensees or collaborators. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. If our current or future licensors, licensees or collaborators fail to establish, maintain or protect such patents and other intellectual property rights, such rights may be reduced or eliminated. If our licensors, licensees or collaborators are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised. The patent position of biotechnology companies generally is highly uncertain, involves complex legal and factual questions and has in

recent years been the subject of much litigation. As a result, the issuance, scope, validity, enforceability and commercial value of our and our current or future licensors', licensees' or collaborators' patent rights are highly uncertain. Our and our licensors', licensees' or collaborators' pending and future patent applications may not result in patents being issued which protect our technology or products, in whole or in part, or which effectively prevent others from commercializing competitive technologies and products. The patent examination process may require us or our licensors, licensees or collaborators to narrow the scope of the claims of our or our licensors', licensees' or collaborators' pending and future patent applications, which may limit the scope of patent protection that may be obtained. In the past, we have not always been able to obtain the full scope of patent protection we have initially sought in our patent applications, and as described above and as is typical for most biotechnology patent prosecution, we have been required to narrow or eliminate patent claims as part of the patent prosecution process. In addition, some patent applications that we or our licensors have filed have not resulted in issued patents because we or our licensors have abandoned those patent applications as changes in business and / or legal strategies dictated. We cannot assure you that all of the potentially relevant prior art relating to our patents and patent applications has been found. If such prior art exists, it can invalidate a patent or prevent a patent from issuing from a pending patent application. Even if patents do successfully issue and even if such patents cover our product candidates, third parties may initiate opposition, interference, re-examination, post-grant review, inter partes review, nullification or derivation action in court or before patent offices or similar proceedings challenging the validity, enforceability or scope of such patents, which may result in the patent claims being narrowed or invalidated. Our and our licensors', licensees' or collaborators' patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications, and then only to the extent the issued claims cover the technology. Because patent applications in the United States and most other countries are confidential for a period of time after filing, and some remain so until issued, we cannot be certain that we or our licensors, licensees, or collaborators were the first to file any patent application related to a product candidate. Furthermore, if third parties have filed such patent applications on or before March 15, 2013, an interference proceeding in the United States can be initiated by such third parties to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. If third parties have filed such applications after March 15, 2013, a derivation proceeding in the United States can be initiated by such third parties to determine whether our invention was derived from theirs. Even where we have a valid and enforceable patent, we may not be able to exclude others from practicing our invention where the other party can show that they used the invention in commerce before our filing date or the other party benefits from a compulsory license. In addition, 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. 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 for a product, we may be open to competition from competitive medications, including biosimilar or generic medications. Furthermore, 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 owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours. We expect to seek extensions of patent terms where these are available in any countries where we are prosecuting patents. This includes in the United States under the Drug Price Competition and Patent Term Restoration Act of 1984, which permits a patent term extension of up to five years beyond the expiration of the patent. However the applicable authorities, including the FDA and the U. S. Patent and Trademark Office ("USPTO") in the United States, and any equivalent foreign regulatory authority, may not agree with our assessment of whether such extensions are available and may refuse to grant extensions to our patents or may grant more limited extensions than we request. 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.** Filing, prosecuting, enforcing and defending patents on product candidates in all countries throughout the world would be prohibitively expensive, and our or our licensors', licensees' or collaborators' intellectual property rights may not exist in some countries outside the United States or may be less extensive in some countries than 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 and our licensors, licensees or collaborators may not be able to prevent third parties from practicing our and our licensors', licensees' or collaborators' inventions in all countries outside the United States or from selling or importing products made using our and our licensors', licensees' or collaborators' inventions in and into the United States or other jurisdictions. Competitors may use our and our licensors', licensees' or collaborators' 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 and our licensors, licensees or collaborators 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 and our licensors', licensees' or collaborators' patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biotechnology, which could make it difficult for us and our licensors, licensees or collaborators to stop the infringement of our and our licensors', licensees' or collaborators' patents or marketing of competing products in violation of our and our licensors', licensees' or collaborators' proprietary rights generally. Proceedings to enforce our and our licensors', licensees' or collaborators' patent rights in foreign jurisdictions could result in substantial costs and divert our and our licensors', licensees' or collaborators' efforts and attention from other aspects of our business, could put our and our licensors', licensees' or collaborators' patents at risk of being invalidated or interpreted narrowly and our and our licensors', licensees' or collaborators' patent applications at risk of not issuing and could provoke third



parties to assert claims against us or our licensors, licensees or collaborators. We or our licensors, licensees or collaborators may not prevail in any lawsuits that we or our licensors, licensees or collaborators initiate, and the damages or other remedies awarded, if any, may not be commercially meaningful. Changes in patent law could diminish the value of patents in general, thereby impairing our ability to protect our product candidates. As is the case with other biopharmaceutical companies, our success is heavily dependent on intellectual property, particularly patents. Obtaining and enforcing patents in the biopharmaceutical industry involve technological and legal complexity, and obtaining and enforcing biopharmaceutical patents is costly, time-consuming, and inherently uncertain. Patent reform legislation could increase the uncertainties and costs surrounding the prosecution of our and our licensors', licensees' or collaborators' patent applications and the enforcement or defense of our or our licensors', licensees' or collaborators' issued patents. On September 16, 2011, the Leahy-Smith America Invents Act (the "AIA") was signed into law. The AIA includes a number of significant changes to U. S. patent law. These include provisions that affect the way patent applications are prosecuted and may also affect patent litigation. An important change introduced by the AIA is that, as of March 16, 2013, the United States transitioned to a "first-to-file" system for deciding which party should be granted a patent when two or more patent applications are filed by different parties claiming the same invention. A third party that files a patent application in the USPTO after that date 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 the third party. This will require us to be cognizant going forward of the time from invention to filing of a patent application, but circumstances could prevent us from promptly filing patent applications on our inventions. Among some of the other changes introduced by the AIA are changes that limit where a patentee may file a patent infringement suit and providing opportunities for third parties to challenge any issued patent in the USPTO. This applies to all of our U. S. patents, even those issued before March 16, 2013. 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. The AIA and its implementation could increase the uncertainties and costs surrounding the prosecution of our patent applications and the enforcement or defense of our issued patents. Moreover, future and recent past changes in the patent laws in the U. S. and abroad could impact or could increase the uncertainties and costs surrounding the prosecution of our and our licensors', licensees' or collaborators' patent applications and the enforcement or defense of our or our licensors', licensees' or collaborators' issued patents, which could have an impact on our business and financial conditions. For example, over the past decade, the U. S. Supreme Court and the U. S. Court of Appeals for the Federal Circuit have rendered decisions in several patent cases such as Association for Molecular Pathology v. Myriad Genetics, Inc., BRCA1- & BRCA2- Based Hereditary Cancer Test Patent Litig., Mayo Collaborative Services v. Prometheus Laboratories, Inc., and Alice Corporation Pty. Ltd. v. CLS Bank International, 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 and our licensors', licensees' or collaborators' ability to obtain patents in the future, these type of changes in the patent laws have created uncertainty with respect to the value of patents, once obtained. Depending on decisions by Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that would weaken our and our licensors', licensees' or collaborators' ability to obtain new patents or to enforce existing patents and patents that we and our licensors, licensees or collaborators may obtain in the future. Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment, and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements. Periodic maintenance and annuity fees on any issued patent are due to be paid to the USPTO and foreign patent agencies in several stages over the lifetime of the patent. The USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. While an inadvertent lapse can in many cases be cured by payment of a late fee or by other means in accordance with the applicable rules, 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. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents. If we or our licensors, licensees or collaborators fail to maintain the patents and patent applications covering our product candidates, our competitors might be able to enter the market, which would have an adverse effect on our business. Our reliance on third parties requires us to share our trade secrets, which increases the possibility that a competitor will discover them or that our trade secrets will be misappropriated or disclosed. Because we collaborate with various collaborators on the development and commercialization of one or more of our product candidates and because we rely on third parties to manufacture our product candidates, we must, at times, share trade secrets with them. We seek to protect our wholly-owned technology in part by entering into confidentiality agreements and, if applicable, material transfer agreements, consulting agreements or other similar agreements with our advisors, employees, third-party contractors and consultants prior to disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, including our trade secrets. Despite the contractual provisions employed when working with third parties, the need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's discovery of our trade secrets or other unauthorized use or disclosure would impair our competitive position and may have an adverse effect on our business. In addition, these agreements typically restrict the ability of our advisors, employees, third-party

contractors and consultants to publish data potentially relating to our trade secrets, although our agreements may contain certain limited publication rights. For example, any academic institution that we may collaborate with in the future may be granted rights to publish data arising out of such collaboration, provided that we are notified in advance and given the opportunity to delay publication for a limited time period in order for us to secure patent protection of intellectual property rights arising from the collaboration, in addition to the opportunity to remove confidential or trade secret information from any such publication. Our existing collaborative research and development programs may require us to share trade secrets under the terms of our research and development collaborations or similar agreements. Despite our efforts to protect our trade secrets, our competitors may discover our trade secrets through breach of our agreements with third parties, independent development or publication of information by any of our third-party collaborators. A competitor's discovery of our trade secrets would impair our competitive position and have an adverse impact on our business. We may become involved in lawsuits to protect or enforce our intellectual property, which could be expensive, time-consuming and unsuccessful and have an adverse effect on the success of our business. Third parties may infringe our or our licensors', licensees' or collaborators' patents or misappropriate or otherwise violate our or our licensors', licensees' or collaborators' intellectual property rights. In the future, we or our licensors, licensees or collaborators may initiate legal proceedings to enforce or defend our or our licensors', licensees' or collaborators' intellectual property rights, such as the litigation we initiated in August 2020 to enforce our rights under our collaboration with GSK, to protect our or our licensors', licensees' or collaborators' trade secrets or to determine the validity or scope of intellectual property rights we own or control. Also, third parties may initiate legal proceedings against us or our licensors, licensees or collaborators to challenge the validity or scope of intellectual property rights we own or control. These proceedings can be expensive and time-consuming, and many of our or our licensors', licensees' or collaborators' adversaries in these proceedings may have the ability to dedicate substantially greater resources to prosecuting these legal actions than we or our licensors, licensees or collaborators. In addition, in an infringement proceeding, a court may decide that a patent owned by or licensed to us is invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that our or our licensors', licensees' or collaborators' patents do not cover the technology in question. Furthermore, an adverse result in any litigation or administrative proceeding could put one or more of our or our licensors', licensees' or collaborators' patents at risk of being invalidated, held unenforceable or interpreted narrowly. Accordingly, despite our or our licensors', licensees' or collaborators' efforts, we or our licensors, licensees or collaborators may not prevent third parties from infringing upon or misappropriating intellectual property rights we own or control, particularly in countries where the laws may not protect those rights as fully as in the United States. In addition, litigation and administrative proceedings could result in substantial costs and diversion of management resources, which could harm our business and financial results. Within and outside of the United States, there has been a substantial amount of litigation and administrative proceedings regarding patent and other intellectual property rights in the pharmaceutical industry including opposition, derivation, reexamination, inter partes review or interference proceedings, or other preissuance or post-grant proceedings. Such proceedings may be provoked by third parties or by us or our licensors, licensees or collaborators to protect or enforce our or our licensors', licensees' or collaborators' patents or patent applications. Additionally, third-party preissuance submission of prior art to the USPTO or other foreign jurisdictions may jeopardize the issuance or scope of our or our licensors', licensees' or collaborators' patent applications. An unfavorable outcome in any such proceedings could require us or our licensors, licensees or collaborators 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 or our licensors, licensees or collaborators a license on commercially reasonable terms or at all, and we could be forced to stop commercializing our product candidates. Even if we or our licensors, licensees or collaborators obtain a license, it may be non-exclusive, thereby giving our competitors access to the same technologies licensed to us or our licensors, licensees or collaborators. In addition, if the breadth or strength of protection provided by our or our licensors', licensees' or collaborators' patents and patent applications is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates. Even if we successfully defend such litigation or proceeding, we may incur substantial costs, and it may distract our management and other employees. We could be found liable for monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed a patent. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have an adverse effect on the price of shares of our common stock. If we breach the license agreements related to our product candidates, we could lose the ability to continue the development and commercialization of our product candidates. Our commercial success depends upon our ability, and the ability of our licensors, licensees and collaborators, to develop, manufacture, market and sell our product candidates and use our and our licensors', licensees' or collaborators' wholly-owned technologies without infringing the proprietary rights of third parties. A third party may hold intellectual property, including patent rights that are important or necessary to the development of our products. As a result, we ~~may~~ **are a party to a number of technology licenses that are important to our business and expect to enter into additional license agreements in the future with others in order to advance our existing or future research or allow commercialization of our existing or future product candidates. These licenses may not provide exclusive** in the future. For example, we have ~~in-licensed the rights to certain~~ **use such** intellectual property **and technology** relating to SHM under our ~~in-~~ **license agreement with the Medical Research Council, all relevant fields of use and in all territories in** which is the subject of issued patents **we may wish to develop or commercialize our technology and product candidates pending patent applications in certain countries** ~~the future~~ **the future**. If we fail to comply with the obligations under ~~these~~ **any such agreements** ~~agreement~~, including payment and diligence terms, our licensors may have the right to terminate these agreements, in which event we may not be able to develop, manufacture, market or sell any product that is covered by these agreements or may face other penalties

under the agreements. Such an occurrence could adversely affect the value of the product candidate being developed under any such agreement. Termination of these agreements or reduction or elimination of our rights under these agreements may result in our having to negotiate new or reinstated agreements, which may not be available to us on equally favorable terms, or at all, or cause us to lose our rights under these agreements, including our rights to intellectual property or technology important to our development programs. Disputes may arise regarding intellectual property subject to a licensing agreement, including: • the scope of rights granted under the license agreement and other interpretation- related issues; • the extent to which our technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement; • the sublicensing of patent and other rights under any collaboration relationships we might enter into in the future; • our diligence obligations under the license agreement and what activities satisfy those diligence obligations; • the ownership of inventions and know- how resulting from the joint creation or use of intellectual property by us and our licensors, licensees or collaborators; and • the priority of invention of patented technology. If disputes over intellectual property that we have licensed prevent or impair our ability to maintain ~~our current~~ **any future** licensing arrangements on acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates. Third parties may initiate legal proceedings against us alleging that we infringe their intellectual property rights, or we may initiate legal proceedings against third parties to challenge the validity or scope of intellectual property rights controlled by third parties, the outcome of which would be uncertain and could have an adverse effect on the success of our business. Third parties may initiate legal proceedings against us or our licensors, licensees or collaborators alleging that we or our licensors, licensees or collaborators infringe their intellectual property rights or we or our licensors, licensees or collaborators may initiate legal proceedings against third parties to challenge the validity or scope of intellectual property rights controlled by third parties, including in oppositions, interferences, reexaminations, post- grant reviews, inter partes reviews or derivation proceedings in the United States or other jurisdictions. These proceedings can be expensive and time- consuming, and many of our or our licensors', licensees' or collaborators' adversaries in these proceedings may have the ability to dedicate substantially greater resources to prosecuting these legal actions than we or our licensors, licensees or collaborators. Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize one or more of our product candidates. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of management and employee resources from our business. An unfavorable outcome could require us or our licensors, licensees or collaborators to cease using the related technology, to cease developing or commercializing our product candidates 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 or our licensors, licensees or collaborators a license on commercially reasonable terms or at all. Even if we or our licensors, licensees or collaborators obtain a license, it may be non- exclusive, thereby giving our competitors access to the same technologies licensed to us or our licensors, licensees or collaborators. In addition, we could be found liable for monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing our product candidates or force us to cease some of our business operations, which could harm our business. We may be subject to claims by third parties asserting that our employees or we have misappropriated their intellectual property or claiming ownership of what we regard as our own intellectual property. Many of our employees, including our senior management, were previously employed at universities or at other biopharmaceutical companies, including our competitors or potential competitors. Some of these employees executed proprietary rights, non- disclosure and non- competition agreements in connection with such previous employment. Although we try to ensure that our employees do not use the proprietary information or know- how of others in their work for us, we may be subject to claims that we or these employees have used or disclosed confidential information or intellectual property, including trade secrets or other proprietary information, of any such employee' s former employer. Litigation may be necessary to defend against these claims. If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel or sustain damages. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products, which license could be non- exclusive, thereby giving our competitors access to the same technologies licensed to us. Such a license may not be available on commercially reasonable terms or at all. Even if we successfully prosecute or defend against such claims, litigation could result in substantial costs and distract management. Our inability to protect our confidential information and trade secrets would harm our business and competitive position. In addition to seeking patents for some of our technology and products, we also rely on trade secrets, including unpatented know- how, technology and other proprietary information, to maintain our competitive position. We seek to protect these trade secrets, in part, by entering into non- disclosure and confidentiality agreements with parties who have access to them, such as our employees, corporate collaborators, outside scientific collaborators, contract manufacturers, consultants, advisors and other third parties. We also enter into confidentiality and invention or patent assignment agreements with our employees and consultants. Despite these efforts, any of these parties may breach the agreements and disclose our proprietary information, including our trade secrets, and we may not be able to obtain adequate remedies for such breaches. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret is difficult, expensive and time- consuming, and the outcome is unpredictable. In addition, some courts both within and outside the United States may be less willing or unwilling to protect trade secrets. Furthermore, if a competitor lawfully obtained or independently developed any of our trade secrets, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. Additionally, if the steps taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating the trade secret. If we do not obtain protection under the Hatch- Waxman Amendments and similar foreign legislation for extending the term of patents covering each of our product candidates, our business may be harmed. Depending upon the timing, duration and conditions of FDA marketing approval of our product candidates, one or more of our U. S. patents may be eligible for limited patent term extension under the Drug Price

Competition and Patent Term Restoration Act of 1984 (the “ Hatch- Waxman Amendments ”). The Hatch- Waxman Amendments permit a patent term extension of up to five years for a patent covering an approved product as compensation for effective patent term lost during product development and the FDA regulatory review process. However, we may not receive an extension if we fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Moreover, the length of the extension could be less than we request. If we are unable to obtain patent term extension or the term of any such extension is less than we request, the period during which we can enforce our patent rights for that product will be shortened, and our competitors may obtain approval to market competing products sooner. As a result, our revenue from applicable products could be reduced, possibly materially. Risks Related to **addition Managing Growth , Operations and Macroeconomic Conditions To succeed,we must recruit, certain- retain members ,manage and motivate qualified clinical,scientific,technical and management personnel,and we face significant competition for experienced personnel.This is especially critical as we ramp up our hiring needs entering into later- stage product development of our product candidates.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,harm our operating results and adversely affect our ability to successfully commercialize our product candidates.In particular,we believe that our future success is highly dependent upon the contributions of our senior management team ,as well as our senior scientists.The loss of services of any of these individuals,who all have worked together at- will employment arrangements with us,could delay for- or prevent only a relatively short period of time,and it may be difficult to evaluate their- the successful development of effectiveness,on an individual or our collective basis product pipeline , completion of our planned clinical trials and ability to address future challenges to our- or business-the commercialization of our product candidates,if approved .** 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 more diverse opportunities and better chances 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 and develop product candidates and our business will be limited .~~We currently do not have a marketing or sales team for the marketing,sales and distribution of any of our product candidates that are able to obtain regulatory approval.In order to commercialize any product candidates,we must build on a territory- by- territory basis marketing,sales,distribution,managerial and other non- technical capabilities or make arrangements with third parties to perform these services,and we may not be successful in doing so.If our product candidates receive regulatory approval,we may decide to establish an internal sales or marketing team with technical expertise and supporting distribution capabilities to commercialize our product candidates,which 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 would adversely impact the commercialization of any of our product candidates that we obtain approval to market. With respect to the commercialization of all or certain of our product candidates,we may 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.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 not successful in commercializing our 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.~~ We expect to expand our development and regulatory capabilities,and as a result,we may encounter difficulties in managing our growth,which could disrupt our operations.We expect to experience growth in the number of our employees and the scope of our operations,particularly in the areas of product candidate development and growing our capability to conduct clinical trials.To manage our anticipated future growth,we must continue to implement and improve our managerial,operational and financial systems,expand our facilities and continue to recruit and train additional qualified personnel.Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth,we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel.The expansion of our operations may lead to significant costs and may divert our management and business development resources.Any inability to manage growth could delay the execution of our business plans or disrupt our operations.We may be vulnerable to disruption,damage and financial obligation as a result of system failures.Despite the implementation of security measures,any of the internal computer systems belonging to us,our collaborators or our third- party service providers are vulnerable to damage from computer viruses,unauthorized access,natural disasters,terrorism,war and telecommunication and electrical failure.Any system failure,accident or security breach that causes interruptions in our own,in collaborators’ or in third- party service vendors’ operations could result in a material disruption of our drug discovery and development programs.For example,the loss of clinical trial data from completed or future clinical trials could result in delays in our or our collaborators’ regulatory approval efforts and significantly increase our costs in order to recover or reproduce the lost data.To the extent that any disruption or security breach results in a loss or damage to our data or applications,or inappropriate disclosure of confidential or proprietary information,we may incur liability as a result,our drug discovery programs and competitive position may be adversely affected,and the further development of our product candidates may be delayed.Furthermore,we may incur additional costs to remedy the damages caused by these disruptions or security breaches.Our operations,or the third parties upon whom we depend,are vulnerable to interruption by fire,earthquake,power loss,telecommunications failure,terrorist activity,health epidemics or pandemics and other events beyond our control,which could harm our business.Our facilities are located in San Diego,California,which is a seismically active region,and has also historically been subject to wildfires and electrical blackouts as a result of a shortage of available electrical power.We have not undertaken a systematic analysis of the potential

consequences to our business and financial results from a major earthquake, fire, power loss, terrorist activity, health epidemics or pandemics **or other disasters, including those resulting from or amplified by climate change, 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. We maintain multiple copies of each of our antibody sequences and electronic data records, most of which we maintain at our headquarters. If our facility was impacted by a seismic or wildfire event, we could lose some of our antibody sequences, which would have an adverse effect on our ability to perform our obligations under our collaborations and discover new targets. Furthermore, integral parties in our supply chain are geographically concentrated and operating from single sites, increasing their vulnerability to natural disasters or other sudden, unforeseen and severe and / or SAEs. If such an event were to affect our supply chain, it could have a material adverse effect on our business. Risks**

**Related to** Ownership of Our Common Stock The trading price of our common stock may be highly volatile and subject to wide fluctuations in response to various factors, some of which we cannot control. In addition to the factors discussed in this “ Risk Factors ” section and elsewhere in this report, these factors include: • the success of competitive products; • regulatory actions with respect to our products or our competitors’ products; • actual or anticipated changes in our growth rate relative to our competitors; • announcements by us or our competitors of significant acquisitions, strategic collaborations, joint ventures, collaborations or capital commitments; • results of preclinical studies and clinical trials of our product candidates or those of our competitors; • regulatory or legal developments in the United States and other countries; • developments or disputes concerning patent applications, issued patents or other proprietary rights; • the recruitment or departure of key personnel; • the level of expenses related to any of our product candidates or clinical development programs; • developments with respect to our existing collaboration agreements and announcements of new collaboration agreements; • disputes, breaches and terminations of our manufacturing agreements, collaborations agreements or other important agreements; • the results of our efforts to in- license or acquire additional product candidates or products; • actual or anticipated changes in estimates as to financial results, development timelines or recommendations by securities analysts; • variations in our financial results or those of companies that are perceived to be similar to us; • fluctuations in the valuation of companies perceived by investors to be comparable to us; • 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; • purchases of our common stock by us pursuant to **a our ongoing** stock repurchase program; • changes in the structure of health care payment systems; • market conditions in the biotechnology sector; and • general economic uncertainty and capital markets disruptions, which have been substantially impacted by geopolitical instability, **actual or perceived instability due to the ongoing military conflict in Ukraine**, **the U. S. and global banking systems, uncertainty with respect to the U. S. federal budget**, and rising interest rates and inflation. In addition, the stock market in general, and the Nasdaq Global Select Market 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 the past, following periods of volatility in the overall market and the market price of a particular company’ s securities, securities class action litigation has often been instituted against these companies. We have been subject to securities litigation in the past, and any future securities litigation could result in substantial costs and a diversion of our management’ s attention and resources. 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. We have broad discretion in the use of the net proceeds from our public offerings and may not use them effectively. Our management has broad discretion in the application of the net proceeds from our public offerings, and you will be relying on the judgment of our management regarding the application of these proceeds. Our management might not apply the net proceeds from our public offerings in ways that ultimately increase the value of your investment. If we do not invest or apply the net proceeds from our public offerings in ways that enhance stockholder value, we may fail to achieve expected financial results, which could cause our stock price to decline. 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 have been, and may in the future be, the target of this type of litigation. Regardless of the outcome, future litigation against us could result in substantial costs and divert our management’ s attention from other business concerns, which could seriously harm our business. The requirements of being a public company may strain our resources, divert management’ s attention, and affect our ability to attract and retain additional executive management and qualified board members. We are subject to the reporting requirements of the Exchange Act, the Sarbanes- Oxley Act, the Dodd- Frank Wall Street Reform and Protection Act, as well as rules adopted, and to be adopted, by the SEC and the Nasdaq Global Select Market. Our management and other personnel devote a substantial amount of time to these compliance initiatives. In addition, changing laws, regulations, and standards relating to corporate governance and public disclosure are creating uncertainty for public companies, increasing legal and financial compliance costs, and making some activities more time consuming. We intend to continue to invest resources to comply with evolving laws, regulations, and standards, and this investment may result in increased general and administrative expenses and a diversion of management’ s time and attention. If our efforts to comply with new laws, regulations, and standards differ from the activities intended by regulatory or governing bodies due to ambiguities related to their application and practice, regulatory authorities may initiate legal proceedings against us and our business may be adversely affected. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to incur substantial costs to maintain sufficient coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these and future 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 Board~~ of ~~directors Directors~~, our board committees or as executive officers. In addition, we are required to maintain internal control over financial reporting and to report any material weaknesses in such internal control. Section 404 of the Sarbanes- Oxley Act requires that we evaluate and determine the effectiveness of our internal control over financial reporting and provide a management report on our internal controls on an annual basis. If we have material weaknesses in our internal control over financial reporting, we may not detect errors on a timely basis and our financial statements may be materially misstated. We have only recently compiled the systems, processes and documentation necessary to comply with Section 404 of the Sarbanes- Oxley Act. We will need to maintain and enhance these processes and controls as we grow, and we may require additional management and staff resources to do so. Additionally, even if we conclude our internal controls are effective for a given period, we may in the future identify one or more material weaknesses in our internal controls, in which case our management will be unable to conclude that our internal control over financial reporting is effective. Regardless of compliance with Section 404, any failure of our internal control over financial reporting could have a material adverse effect on our reported operating results and harm our reputation. Internal control deficiencies could also result in a restatement of our financial results. Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall. We expect that significant additional capital may be needed in the future to continue our planned operations, including conducting clinical trials, commercialization efforts, expanded research and development activities and costs associated with operating a public company. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities, investors may be materially diluted by subsequent sales. We also have registered all shares of common stock that we may issue under our equity incentive plans or that are issuable upon exercise of outstanding options. These shares can be freely sold in the public market upon issuance and once vested, subject to volume limitations applicable to affiliates. If any of these additional shares are sold, or if it is perceived that they will be sold, in the public market, the market price of our common stock could decline. Such sales may also result in material dilution to our existing stockholders, and new investors could gain rights, preferences and privileges senior to the holders of our common stock. In November 2022, we entered into **a Sales Agreement (the “Cowen Sales Agreement”)** with Cowen and Company, LLC (**“Cowen”**), through which we may offer and sell shares of our common stock, having an aggregate offering of up to \$ 150. 0 million through Cowen ~~and Company, LLC~~ as our sales agent. 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 realities 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 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 dividend on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. Any return to stockholders will therefore be limited to the appreciation of their stock. **Our cash and investments could be adversely affected if the financial institutions in which we hold our cash and investments fail. We regularly maintain cash balances at third- party financial institutions in excess of the Federal Deposit Insurance Corporation insurance limit. Further, if we enter into a credit, loan or other similar facility with a financial institution, certain covenants included in such facility may require as security that we keep a significant portion of our cash with the institution providing such facility. If a depository institution where we maintain deposits fails or is subject to adverse conditions in the financial or credit markets, we may not be able to recover all, if any, of our deposits, which could adversely impact our operating liquidity and financial performance.** Provisions in our restated certificate of incorporation 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 restated certificate of incorporation 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 Board~~ of ~~directors Directors~~ so that not all members of our board are elected at one time; • permit only the ~~board Board~~ of ~~directors 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; • require super- majority voting to amend some provisions in our restated certificate of incorporation and restated bylaws; • 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; and • 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. In addition, Section 203 of the Delaware General Corporation Law (“ DGCL ”) may discourage, delay or prevent a change in control of our company. Section 203 of the DGCL imposes certain restrictions on mergers, business combinations and other transactions between us and holders of 15 % or more of our common stock. The exclusive forum provisions in our organizational documents may limit a

stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, or employees, or the underwriters of any offering giving rise to such claim, which may discourage lawsuits with respect to such claims. Our restated certificate of incorporation, to the fullest extent permitted by law, provides that the Court of Chancery of the State of Delaware is the exclusive forum for: any derivative action or proceeding brought on our behalf; any action asserting a breach of fiduciary duty; any action asserting a claim against us arising pursuant to the DGCL, our restated certificate of incorporation, or our restated bylaws; or any action asserting a claim that is governed by the internal affairs doctrine. This exclusive forum provision does not apply to suits brought to enforce a duty or liability created by the Securities Exchange Act of 1934, as amended, or Exchange Act. It could apply, however, to a suit that falls within one or more of the categories enumerated in the exclusive forum provision. This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, or other employees, or the underwriters of any offering giving rise to such claims, which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the choice of forum provisions contained in our restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could harm our business, financial condition, results of operations and prospects. Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all claims brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. Our restated bylaws provide that the federal district courts of the United States of America will, to the fullest extent permitted by law, be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act, or the Federal Forum Provision, including for all causes of action asserted against any defendant named in such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters to any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering. Our decision to adopt a Federal Forum Provision followed a decision by the Supreme Court of the State of Delaware holding that such provisions are facially valid under Delaware law. While federal or other state courts may not follow the holding of the Delaware Supreme Court or may determine that the Federal Forum Provision should be enforced in a particular case, application of the Federal Forum Provision means that suits brought by our stockholders to enforce any duty or liability created by the Securities Act must be brought in federal court and cannot be brought in state court, and our stockholders cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all claims brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. In addition, neither the exclusive forum provision nor the Federal Forum Provision applies to suits brought to enforce any duty or liability created by the Exchange Act. Accordingly, actions by our stockholders to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder must be brought in federal court, and our stockholders cannot waive compliance with the federal securities laws and the rules and regulations thereunder. Any person or entity purchasing or otherwise acquiring or holding any interest in any of our securities shall be deemed to have notice of and consented to our exclusive forum provisions, including the Federal Forum Provision. These provisions may limit a stockholders' ability to bring a claim, and may result in increased costs for a stockholder to bring such a claim, in a judicial forum of their choosing for disputes with us or our directors, officers, other employees or agents, which may discourage lawsuits against us and our directors, officers, other employees or agents. If securities or industry analysts do not publish research or reports about our business, or if they issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline. The trading market for our common stock is influenced by the research and reports that industry or securities analysts publish about us or our business. If any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, our intellectual property or our stock performance, or if our clinical trial results or 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. We plan to use our federal and state net operating loss ("NOL") carryforwards to offset ~~current year~~ taxable income from revenue generated from operations or corporate collaborations. However, our ability to use NOL carryforwards to offset taxable income in future years could be limited ~~by the provisions of Section 382 of the US Internal Revenue Code of 1986, as amended (the "Code"), in the event a cumulative change in ownership of more than 50% over a three-year period occurs~~. We plan to use our current year operating losses to offset taxable income from any revenue generated from operations or corporate collaborations. To the extent we have taxable income, we plan to use our NOL carryforwards to offset income that would otherwise be taxable. However, the benefits from the use of our NOL carryforwards may be impaired or limited under Section 382 of the Code, if we incur a cumulative ownership change of more than 50%, as interpreted by the U. S. Internal Revenue Service, over a three-year period. Under legislative changes made by U. S. federal tax legislation, commonly referred to as the Tax Cuts and Jobs Act, or the TCJA, the U. S. federal net operating losses incurred in 2018 and in future years may be carried forward indefinitely, but the ability to utilize such federal net operating losses to offset taxable income is limited to 80% of our taxable income before the deduction for such net operating loss carryovers. Our significant state NOLs were generated in the state of California, which provides a 20 year carry forward. State NOL carryforwards may be similarly limited by cumulative ownership changes. Any such disallowances may result in greater tax liabilities than we would incur in the absence of such a limitation, and any increased liabilities could adversely affect our business, results of operations, financial condition and cash flow. As of December 31, ~~2022-2023~~, we have federal NOLs of approximately \$ ~~287-313~~ **4.8** million. Of this, \$ ~~53-52~~ **1** million expire beginning December 31, ~~2029-2030~~ through December 31, 2037, if not used to reduce income taxes payable in the future and \$ ~~234-261~~ **3.7** million carry forward indefinitely. We are a smaller reporting company and may elect to comply with reduced public company reporting requirements applicable to smaller reporting companies, which could make our common stock less attractive

to investors. We are a “ smaller reporting company, ” meaning that we are not an investment company, an asset- backed issuer, or a majority- owned subsidiary of a parent company that is not a “ smaller reporting company, ” and have either: (i) a public float of less than \$ 250 million or (ii) annual revenues of less than \$ 100 million during the most recently completed fiscal year and (A) no public float or (B) a public float of less than \$ 700 million. As a “ smaller reporting company, ” we are subject to reduced disclosure obligations in our SEC filings compared to other issuers, including with respect to disclosure obligations regarding executive compensation in our periodic reports and proxy statements. Until such time as we cease to be a “ smaller reporting company, ” such reduced disclosure in our SEC filings may make it harder for investors to analyze our operating results and financial prospects. If some investors find our common stock less attractive as a result of any choices to reduce future disclosure we may make, there may be a less active trading market for our common stock and our stock price may be more volatile. 49