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Investing in shares of our common stock involves a high degree of risk. You should carefully consider the following risks and uncertainties, together with all of the other information contained in this Annual Report on Form 10-K, including our financial statements and related notes, before making an investment decision. The risks described below are not the only ones facing us. The occurrence of any of the following risks, or of additional risks and uncertainties not presently known to us or that we currently believe to be immaterial, could materially and adversely affect our business, financial condition, results of operations and prospects, and reputation. In such case, the trading price of shares of our common stock could decline, and you may lose all or part of your investment. This Annual Report on Form 10-K also contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of a number of factors, including the risks described below. See Special Note Regarding Forward- Looking Statements in this Annual Report on Form 10-K. Risks Relating to Our Financial Position and Need for Additional Capital We have incurred significant net operating losses since our inception and anticipate that we will incur continued net operating losses for the foreseeable future **and we may not be able to achieve or sustain profitability**. We have incurred significant **net operating** losses each year since our inception. For the years ended December 31, **2023 and** 2022 and 2021, we incurred net losses of \$ **102. 1 million and \$** 99. 4 million and **\$** 66. 9 million, respectively. As of December 31, 2022 2023, we had an accumulated deficit of \$ 197-299. 2-3 million. In addition, we have not commercialized any products and have never generated any revenue from product sales. We have devoted almost all of our financial resources to research and development, including our preclinical development activities. We expect to continue to incur significant expenses and **net-operating** losses over the next several years and for the foreseeable future as we seek to advance product candidates through preclinical and clinical development, expand our research and development activities, develop new product candidates, complete preclinical studies and clinical trials, seek regulatory approval and, if we receive approval from the FDA or foreign regulatory authorities, commercialize our products. Furthermore, the costs of advancing product candidates into each succeeding clinical phase tend to increase substantially over time. The total costs to advance any of our product candidates to marketing approval in even a single jurisdiction is substantial. Our prior losses, combined with expected future losses, will continue to have an adverse effect on our stockholders' deficit and working capital. We anticipate that our expenses will increase substantially if and as we: • progress our ANTLER phase 1 clinical trial trial for our CB-CAR - 010 T product candidates candidates and our CaMMouflage phase 1 clinical trial for our CB-011 product candidate; • continue our current research programs and our preclinical and clinical development of our other current product candidates , including CB- 012 and CB- 020, and any other product candidates we identify and choose to develop; • hire additional clinical, quality control, regulatory, and scientific personnel; • seek to identify additional research programs and additional product candidates; • further develop our genome- editing technologies; • acquire or in- license technologies; • expand, maintain, enforce, and defend our intellectual property estate; • seek regulatory and marketing approvals for any of our product candidates that successfully complete clinical trials, if any; • establish and expand manufacturing capabilities and supply chain capacity for our product candidates; • add operational, legal, financial, and management information systems and personnel; • experience any delays, challenges or other issues associated with any of the above, including the failure of clinical trials meeting endpoints, the generation of unanticipated preclinical study results or clinical trial data subject to differing interpretations, or the occurrence of potential safety issues or other development or regulatory challenges; • make royalty, milestone, or other payments under current, and any future, in-license or assignment agreements; • establish a sales, marketing, and distribution infrastructure to commercialize any product candidates for which we obtain marketing approval; and • continue to operate as a public company. We are unable to predict the extent of any future losses or when we will become profitable, if at all. Even if we do become profitable, we may not be able to sustain or increase our profitability on a quarterly or annual basis. We will need substantial additional financing to develop our product candidates and implement our operating plans. If we fail to obtain additional financing, we may be delayed or unable to complete the development and commercialization of our product candidates. We will continue to need additional capital beyond the proceeds received from our initial public offering ("IPO"), and we may raise capital through equity offerings (including our at- themarket facility), debt financings, collaborations and strategic alliances, licensing arrangements, or other sources. We expect to spend a substantial amount of capital in the research, development, and manufacture of our product candidates. We expect our expenses to increase in connection with our ongoing activities, particularly as we initiate and continue clinical trials for, and seek marketing approval of, our product candidates. 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 to the extent that we do not obtain commercialization partners who will bear the costs for such activities. We may also need to raise additional funds sooner if we choose to pursue additional indications or markets for our product candidates or otherwise expand more rapidly than we presently anticipate. Furthermore, we will continue to incur significant costs associated with operating as a public company. Accordingly, we will need to obtain substantial additional funding in connection with our continuing operations. Because our allogeneic cell therapy product candidates are based on new technologies, they require extensive research and development and have substantial manufacturing costs. In addition, clinical costs to treat cancer patients with our product candidates, including treatment of any potential side effects that may arise, will be significant. As of December  $31, \frac{2022-2023}{202}$ , we had cash, cash equivalents, and marketable securities of  $\frac{317-372}{2}, \frac{0.4}{2}$  million. We expect our cash, cash equivalents, and marketable securities to be sufficient to fund our current operating plan through at least the next 12 months

from the date the consolidated financial statements included in this Annual Report on Form 10-K are issued. Our expectation is based on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Our future capital requirements will depend on, and could increase significantly as a result of, many factors, including: • costs, progress, and results of our product candidate preclinical studies and clinical trials; • potential delays in our preclinical studies and clinical trials, whether current or planned, due to unforeseen events as well as other factors such as the economic environment or the COVID-19 pandemic pandemics or other public health crises; • potential difficulties and delays in **receiving regulatory clearances and / or approvals for our product candidates;** • costs and prioritization of our research and development programs as well as costs to acquire or in-license technologies or other product candidates; • expansion of our workforce or our facilities; • costs of establishing and maintaining a supply chain for the development and manufacture of our product candidates; • timing and outcome of regulatory review of our product candidates; • success of our collaboration with AbbVie and our receipt of reimbursements due thereunder; • our ability to establish and maintain additional collaborations on favorable terms; • costs of fulfilling our contractual obligations to reimburse certain parties for costs incurred in connection with the prosecution and maintenance of licensed patent rights, including reimbursements owed to The Regents of the University of California; • achievement of milestones that trigger payments under any of our current license and assignment agreements as well as under any additional agreements we enter into in the future; • costs of preparing, filing, prosecuting, and maintaining our patent portfolio, including costs associated with administrative proceedings of patent offices; • litigation costs in the event we seek to enforce our patents against third parties or if we are sued for infringement by third parties as well as for stockholder lawsuits; • effects of competing technologies, success or failure of products similar to our product candidates, and market developments; • costs of establishing or contracting for sales and marketing capabilities if we obtain regulatory approvals to market our product candidates; and • costs of operating as a public company. Changing circumstances may cause us to consume capital significantly faster than we currently anticipate, and we may need to spend more money than expected because of circumstances beyond our control. We may also need to raise additional capital sooner if we choose to expand programs, personnel, and facilities more rapidly than planned. In any event, we will require additional capital for the further research, development, and commercialization of our product candidates, including potentially establishing our own internal manufacturing capabilities. Any additional fundraising efforts may divert our management from their day- to- day activities, which may adversely affect our ability to research, develop, and commercialize our product candidates. We cannot be certain that additional funding will be available when needed and on acceptable terms, or at all. If we are unable to obtain funding on a timely basis, we may be required to significantly curtail, delay, or discontinue one or more of our product candidate preclinical studies, clinical trials, or development and commercialization, or we may be unable to expand our operations or otherwise capitalize on our business opportunities, as desired. Any of the above could significantly harm our business, financial condition, results of operations, and prospects and cause the price of our common stock to decline. Raising additional capital may cause dilution to our stockholders, restrict our operations, and / or require us to relinquish rights to our technologies or product candidates. Until such time, if ever, that we can generate substantial product revenues, we expect to finance our cash needs through a combination of equity offerings, debt financings, and strategic collaboration and licensing arrangements. The terms of any financing may adversely affect the holdings or the rights of our stockholders and the issuance of additional securities, whether equity or debt, by us, or the possibility of such issuance, may cause the market price of our common stock to decline. Debt financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures, licensing or assigning our intellectual property rights, declaring dividends, and possibly other restrictions. To the extent that we raise additional capital through the sale of equity or convertible debt securities, our stockholders' interests will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Attempting to secure additional financing may also divert our management from our day- to- day activities, which could impair or delay our ability to develop our product candidates. Furthermore, if, in the future, one or more banks or financial institutions enter receivership or become insolvent in response to financial conditions affecting the banking system or financial markets, our ability to access our existing cash, cash equivalents, and marketable securities may be threatened and could have a material **impact on our business and financial condition.** If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce, or terminate our product development or future commercialization efforts. Alternatively, we could be required to seek collaborators for our product candidates at an earlier stage than would otherwise be desirable or on terms that are less favorable than might otherwise be available. We might need to relinquish or license on unfavorable terms our rights to our product candidates in markets where we otherwise would seek to pursue development and commercialization ourselves, or to license our intellectual property to others who could develop products that will compete with our products. Any of these actions could have a material adverse effect on our business, financial condition, results of operations, and prospects. We have a limited operating history, which may make it difficult to evaluate our technologies and product candidate development capabilities or to predict our future performance. We are a clinical-stage biotechnology company formed in 2011, with no products approved for commercial sale, and we have not generated any revenues from product sales. Our operations to date have been limited to financing and staffing our company, developing our technologies, and identifying and developing our product candidates. Our prospects must be considered in light of the uncertainties, risks, expenses, and difficulties frequently encountered by companies in their early stages of operations. We have not yet demonstrated an ability to obtain marketing approval, manufacture at commercial scale, or conduct sales and marketing activities for our product candidates, which are all necessary for successful product commercialization. Consequently, predictions about our future success or viability may not be as accurate as they could be if we had a longer operating history or a history of successfully developing and commercializing cell therapy products. Our ability to generate product revenue or profits, which we do not expect to occur for many years, if ever, will depend heavily on the successful development and eventual

commercialization of our product candidates, which may never occur. Unless we receive approval from the FDA or other regulatory authorities for our product candidates, we will not have product revenues. We may never be able to develop or commercialize a marketable cell therapy product. We are early in our development efforts. All of our programs will require clinical development, regulatory approval, manufacturing at commercial scale, distribution channels, a commercial organization, significant marketing efforts, and substantial investment before we generate any revenue from product sales. In addition, our product candidates must be approved for marketing by the FDA before we may commercialize our products in the United States and, if we wish to commercialize our products outside the United States, by foreign regulatory agencies. Furthermore, we will continue to incur costs associated with operating as a public company, including significant legal, accounting, insurance, investor relations, and other expenses. Additionally, the rapidly evolving nature of the genome- editing and cell therapy fields may make it difficult to evaluate our technologies and product candidates as well as to predict our future performance. Our short history as an operating company makes any assessment of our future success or viability subject to significant uncertainty. We will encounter risks and difficulties, known and unknown, that are frequently experienced by early-stage companies in rapidly evolving fields. As we advance our product candidates, we must transition from a company with a research focus to a company capable of supporting clinical development and, if successful, commercial activities. We may not be successful in such transitions. If we do not address these risks successfully, our business will suffer. Similarly, we expect that our financial condition and operating results may fluctuate significantly from quarter to quarter and year to year due to a variety of factors, many of which are beyond our control. As a result, you should not rely upon the results of any quarterly or annual period as an indicator of future operating performance. Risks Relating to Our Business, Government Regulation, Technology, and Industry We are early in our development efforts and it will be many years before we commercialize a product candidate, if ever. If we are unable to advance our product candidates through clinical trials, obtain regulatory approval, and ultimately commercialize our product candidates, or **we** experience significant delays in doing so, our business will be materially harmed. We are early in the development of our cell therapy product candidates and have focused our research and development efforts to date on various CRISPR genome- editing technologies, including our chRDNA genome- editing technology, as well as identifying our initial CAR- T cell product candidates. Our future success depends heavily on the successful development of our product candidates. Our ability to generate product revenue, which we do not expect will occur for many years, if ever, will be a result of the successful development and eventual commercialization of our product candidates, which may never occur. Our product candidates may have **expected or unexpected** adverse side effects or fail to demonstrate safety and efficacy. Additionally, our product candidates may have other characteristics that may make them impractical or prohibitively expensive for large- scale manufacturing. In certain cases, CROs and clinical trial sites may fail to conduct the clinical trials as planned, may fail to **comply with applicable requirements, or may deviate from the clinical trial protocols.** Furthermore, our product candidates may not receive regulatory approval or, if they do, they may not be accepted by the medical community or patients or may not be competitive with other products that become available. We currently have no product revenue and we may never be able to successfully develop or commercialize a marketable product. We must submit IND applications to the FDA to initiate clinical trials in the United States. In September 2020, we announced that the FDA had cleared our IND application for our first product candidate, CB- 010, and, in November 2022, we announced that the FDA had cleared our IND application for our second product candidate, CB- 011, and, in October 2023, we announced that the FDA had cleared our IND application for our third product candidate, CB-012. The filing of future IND applications for our other product candidates is subject to additional preclinical research, research- scale and clinical- scale manufacturing, exploration of possible other genome- editing systems, evaluation of potential targets, and other factors vet to be identified. In addition, commencing any new clinical trial is subject to review by the FDA based on the acceptability and sufficiency of our CMC, and preclinical information provided to support our IND applications. If the FDA or foreign regulatory authorities require us to complete additional preclinical studies or we are required to satisfy other requests for additional data or information, our clinical trials may be delayed. Even after we receive and incorporate guidance from the FDA or foreign regulatory authorities, these regulatory authorities could disagree that we have satisfied all requirements to initiate our clinical trials or they may change their position on the acceptability of our trial design or the clinical endpoints selected. They could impose a clinical hold, which may require us to complete additional preclinical studies or clinical trials . The FDA and foreign regulatory authorities may refuse to clear our IND applications . The success of our product candidates will depend on several factors, including the following: • sufficiency of our financial and other resources; • acceptance of our chRDNA genome- editing technology; • ability to develop and deploy armoring technologies so that our product candidates have a competitive edge; • successful completion of preclinical studies; • clearance of IND applications to initiate clinical trials; • successful enrollment in, and completion of, our clinical trials; • data from our clinical trials that support an acceptable risk- benefit profile of our product candidates for our intended patient populations and indications and demonstrate safety and efficacy; • establishment of agreements with CMOs for clinical and commercial supplies and scaling up of manufacturing processes and capabilities to support our clinical trials; • successful development of our internal process development and transfer to larger- scale facilities; • receipt of regulatory and marketing approvals from applicable regulatory authorities as well as receipt of regulatory exclusivity for our product candidates; • establishment, maintenance, enforcement, and defense of patent and trade secret protection and other intellectual property rights; • not infringing, misappropriating, or otherwise violating third- party intellectual property rights; • entry into collaborations to further the development of our product candidates or for the development of new product candidates; • establishment of sales, marketing, and distribution capabilities for commercialization of our product candidates if and when approved, whether by us or in collaboration with third parties; • identification and establishment of a stable supply chain that permits us to procure the necessary materials for our product candidates; • legal and regulatory compliance by third parties that provide services to us or on our behalf, including but not limited to CMOs, suppliers, and clinical research organizations (" CROs "), some of which may be subject to regulatory investigations; • the ability of CROs and clinical trial sites to conduct our clinical

trials; • maintenance of a continued acceptable safety profile of products post- approval; • acceptance of product candidates, if and when approved, by patients, the medical community, and third- party payors; • effective competition with other therapies and treatment options, including but not limited to autologous CAR-T cell therapies, small molecules, and antibody treatment; • establishment and maintenance of healthcare coverage and adequate reimbursement; and • expanding indications and patient populations for our products post- approval. Our product candidates are cell therapies generated by our novel CRISPR chRDNA genome- editing technologies, which make it difficult to predict the time and cost of developing these product candidates and obtaining regulatory approval. To date, no other products that use these chRDNA genome- editing technologies have advanced into clinical trials or received marketing approval in the United States. We are concentrating our initial research, development, and manufacturing efforts on our allogeneic CAR-T cell therapies that are intended to treat patients with certain cancers. Before obtaining regulatory approval for the commercial sale of any of our product candidates, we must demonstrate through lengthy, complex, and expensive preclinical studies and clinical trials that our product candidates are both safe and effective for their intended use. The clinical trial requirements of the FDA and other regulatory authorities, and the criteria these regulators use to determine the safety and efficacy of a product candidate, vary substantially according to the type, complexity, novelty, intended use, and target population of our product candidates. The outcome of preclinical studies and clinical trials is inherently uncertain. Preclinical results in animals may not be predictive of safety or efficacy in humans. Failure can occur at any time during the preclinical study and clinical trial processes and because we have never successfully commercialized a product and our first product candidate is in an early stage of clinical development, there is a high risk of failure. We may never succeed in developing marketable products. Approval processes by the FDA or other regulatory authorities for existing autologous anti- CD19 and anti- BCMA CAR- T cell therapies may not be indicative of what these regulatory authorities will require for approval of our allogeneic anti- CD19 CAR- T cell therapy or our other product candidates. Also, although we expect reduced variability in our allogeneic products candidates compared to autologous products, we do not have any clinical data supporting benefits of lower variability, and the use of healthy donor material may create separate variability challenges for us. Moreover, our product candidates may not perform successfully in clinical trials or may be associated with serious adverse events ("SAEs") that distinguish them from the autologous anti- CD19 and anti- BCMA CAR-T therapies that have previously been approved. For instance, allogeneic product candidates may result in GvHD, which is not experienced with autologous products. GvHD results when allogeneic T cells see the patient's normal tissue as foreign and attack and damage those cells. Even if we collect promising initial clinical data for our product candidates, longer- term data may reveal adverse events or responses that are not durable. Negative clinical outcomes would significantly impact our business. In addition, approved autologous CAR- T therapies and those under development have shown frequent rates of cytokine release syndrome, neurotoxicity, serious infections, prolonged cytopenia, hypogammaglobulinemia, and other SAEs that have resulted in patient death. There may be similar adverse events for our allogeneic CAR- T and CAR- NK cell therapy product candidates, including patient death. Moreover, patients eligible for allogeneic CAR-T cell therapies but ineligible for autologous CAR- T cell therapies due to aggressive cancer or an inability to wait for autologous CAR- T cell therapies may be at greater risk for complications and death from therapy. Our allogeneic CAR- T cell product candidates may also cause unique adverse events related to the differences between the donor and patients, such as GvHD or infusion reactions. Our product candidates may not be successful in limiting the risk of GvHD, exhaustion of the CAR-T cells, or premature rejection by a patient's immune system. If significant GvHD or other SAEs are observed with the administration of our product candidates, or if any of our product candidates are viewed as less safe or effective than autologous therapies or other allogeneic therapies, our ability to develop other allogeneic therapies may be adversely affected. We use our CRISPR chRDNA genome- editing platform to generate our product candidates, and we believe our chRDNA guides significantly improve the specificity of CRISPR genome editing (e.g., by reducing the number of off- target events). CRISPR genome editing generally is relatively new; to date, no-only one cell therapy product using CRISPR- Cas9 genome -editing has technologies have been approved in the United States although clinical trials of **additional** product candidates based on CRISPR- Cas9 and other genome- editing technologies are underway. As a result, the regulatory approval process for cell therapy product candidates such as ours is uncertain and may be more expensive and take longer than the approval process for product candidates based on better known or more extensively studied technologies. As such, it is difficult to accurately predict the developmental challenges we may face as we progress our product candidates through preclinical studies and clinical trials. There may be long- term adverse effects from treatment with our product candidates resulting from the use of our chRDNA genome- editing technologies that we cannot predict with the knowledge we have today. Also, animal models may not exist for some of the diseases we choose to pursue in our programs, which may complicate and increase the cost of preclinical research. As a result of these factors, it is difficult for us to predict the time and cost of our product candidate development, and we cannot predict whether the application of our chRDNA technologies, or other genome- editing technologies we may use in the future, will result in the identification, development, preclinical studies, and clinical trials to support regulatory approval of any of our cell therapy product candidates. There can be no assurance that any development problems we experience in the future related to our chRDNA technologies or any of our research programs will not cause significant delays or unanticipated costs, or that such development problems can be solved. We may not achieve the desired safety and efficacy of our product candidates. Also, we may not sufficiently improve genome- editing specificity and our genome editing may have off- target events. Moreover, we may not be able to achieve a high degree of on- target gene knockout and insertion efficiency in developing our product candidates. Any of these factors may prevent us from completing our clinical trials, delay or cause us to fail to meet our clinical trial endpoints, or lead us to fail to commercialize any of our cell therapy product candidates. We may also experience delays in developing robust, reproducible, and scalable manufacturing processes and transferring those processes to CMOs, which may prevent us from completing our clinical trials or commercializing our products on a timely or profitable basis, if at all. Currently, we have only manufactured our CB- 010 and, CB- 011, and CB- 012 product candidates for clinical trials. In addition, since we are in the early stages of

clinical development, we do not know the doses to be used in later phase 2 or pivotal **phase 3 clinical** trials needed necessary to evaluate the efficacy of our product candidates, which will affect the manufacturing requirements for our product candidates. Finding a suitable dose, such as a MTD maximum tolerated dose or, as applicable, a RP2D recommended phase 2 dose, for our cell therapy product candidates may delay our anticipated clinical development timelines and prolong our clinical trials. Accordingly, our expectations regarding our costs of manufacturing may vary significantly as we develop our product candidates and understand these critical factors. Such factors may delay or keep us from bringing a product candidate to market and could decrease our ability to generate sufficient product revenue, which could harm our business, financial condition, results of operations, and prospects. Manufacturing of our product candidates is complex and we could experience manufacturing problems during our clinical trials, which could delay or limit commercialization of our product candidates. The manufacturing processes used to produce our cell therapy product candidates are and will be complex, as our product candidates are new products and, to date, only our CB- 010 and CB- 011 product candidates have been manufactured according to cGMPs. Several factors could cause production interruptions including facility contaminations; shortages or quality problems; contamination of healthy donor cells, chRDNA guides, Cas9 and Cas12a proteins, viruses, iPSC master cell banks or working cell banks; natural disasters, including the COVID-19 pandemic pandemics and other public health crises; labor shortages and strikes; lack of experienced scientific, quality control, and manufacturing personnel; human error; or other disruptions in the operations of our suppliers and CMOs. We conduct process development activities at our facilities and we may experience personnel and supply shortages. Problems with our manufacturing process, even minor deviations from the normal process, could result in product defects or manufacturing failures that result in lot failures, product recalls, product liability claims, or insufficient inventory. We may encounter problems achieving adequate quantities and quality of clinical grade materials that meet FDA or other applicable standards or specifications with consistent and acceptable production yields and costs. As our product candidates proceed through preclinical studies to clinical trials to regulatory review, and potential marketing approval and commercialization, it is common that various aspects of our manufacturing methods will be altered along the way to optimize processes and results. Such changes carry the risk that intended objectives will not be achieved. If we make any such changes, our product candidates could perform differently and affect the results of clinical trials conducted with the altered materials. Such changes may also require additional testing as well as notification to or approval from the FDA or other regulatory authorities, which could delay completion of our clinical trials, require bridging clinical trials, require repetition of one or more clinical trials, increase clinical trial costs, delay approval of our product candidates, if any, and ultimately jeopardize commercialization. If we receive marketing approval for a product candidate, the FDA and other regulatory authorities may require us to submit samples of any lot of any approved product together with the protocols showing the results of applicable tests at any time. Under some circumstances, the FDA or other regulatory authorities may require that we not distribute a lot until the relevant agency authorizes its release. Slight deviations in the manufacturing process, including those affecting quality attributes and stability, may result in unacceptable changes in the product that could result in lot failures or product recalls. Problems in our manufacturing processes could restrict our ability to meet market demand for our products. All these factors could be costly to us and otherwise harm our business, financial condition, results of operations, and prospects. Our business is highly dependent on the success of our product candidates, which will require significant additional preclinical studies and and / or human clinical trials before we can seek regulatory approval and potentially commercialize our product candidates. If we are unable to advance our preclinical studies and clinical trials and obtain regulatory approval for, and successfully commercialize, our product candidates for the treatment of patients in approved indications, or if we are substantially delayed in doing so, our business will be significantly harmed. Our business and future success depends on our ability to advance our product candidates through preclinical studies and clinical trials, obtain regulatory approval for, and successfully commercialize, our product candidates. The failure of our product candidates in clinical trials, or the failure of other companies' allogeneic anti- CD19 CAR- T and allogeneic anti- BCMA CAR- T cell therapies, including for reasons due to safety, efficacy, or the durability of response, may impede our ability to develop not only CB- 010 and, CB- 011, and CB- 012 but our other CAR- T and CAR- NK product candidates as well, and may significantly influence physicians' and regulatory authorities' opinions with regard to the viability of our entire pipeline of allogeneic cell therapies. In order to submit IND applications for our other product candidates, we will need to complete many objectives, such as our preclinical research of product candidates still in discovery and advancement of cGMP conditions for our product candidates. If we are unable to achieve any of these objectives, we may not be able to submit other IND applications in a timely manner or at all, which would significantly harm our business. We may not be successful in our efforts to identify and successfully research and develop additional product candidates and may expend our limited resources to pursue particular product candidates or indications while failing to capitalize on other product candidates or indications that may be more profitable, or for which there is a greater likelihood of commercial success. Part of our business strategy involves identifying and developing new cell therapy product candidates. The process by which we identify product candidates may fail to yield successful product candidates for a number of reasons, including: • we may not be able to assemble sufficient resources to identify or acquire additional product candidates; • competitors may develop alternative therapies that render new product candidates obsolete or less attractive; • product candidates we develop or acquire may be covered by third- party intellectual property rights; • new product candidates may, on further study, be shown to have adverse side effects, toxicities, or other characteristics that indicate that they are unlikely to receive marketing approval or achieve market acceptance; • new product candidates may not be safe or effective; • the market for a new product candidate may change so that the continued development of that product candidate is no longer reasonable; and • we may not be able to produce new product candidates in commercial quantities at an acceptable cost, or at all. We have limited financial and managerial resources. We are focused initially on allogeneic CAR- T and CAR- NK cell therapies and, as a result, 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 timely capitalize on viable commercial products or profitable market opportunities. Our

spending on current and future product candidates for specific indications may not yield any commercially viable products. 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 when it would have been more advantageous for us to retain sole development and commercialization rights to that product candidate. If we experience delays or difficulties enrolling patients in the clinical trials for our product candidates, including our ANTLER phase 1 clinical trial for our CB- 010, product candidate and our CaMMouflage phase 1 clinical trial for our CB- 011, and CB- 012 product <del>candidate candidates</del>, our ability to advance our product candidates through clinical development and the regulatory process could be delayed or prevented. The timely completion of clinical trials depends, among other things, on our ability to enroll a sufficient number of patients who remain in the trial until its conclusion. We may encounter delays in enrolling or be unable to enroll a sufficient number of patients to complete any of our clinical trials and, even if patients are enrolled, they may withdraw from our clinical trials before completion. For both our current ANTLER and our CaMMouflage phase 1-clinical trials, we have entered into contracts with elinical research organizations ("CROs"), as well as clinical trial agreements with the sites participating in our clinical trials. Patient selection and enrollment may be challenging . The; additionally, the protocols for our ongoing clinical trials specifically protocol for CB-010 excludes - exclude many non-Hodgkin lymphoma patients from our ANTLER phase 1 elinical trial, including patients previously treated with anti-CD19- targeted therapy or allogeneic stem cell transplantation, patients with certain active or chronic GvHD requiring therapy, or patients unwilling to follow extended safety monitoring. The clinical protocol for CB-011 excludes some multiple myeloma patients from our CaMMouflage phase 1 elinical trial, including patients with prior treatments CAR-T cell therapy and / or BCMA-targeted therapy within the last three months. Our ANTLER and CaMMouflage phase 1 clinical trials, as well as any other conditions. **Our current and** future clinical trials for our other product candidates, will compete for enrollment of patients with other clinical trials for product candidates that are in the same cell therapeutic areas with the same or similar study populations as our product candidates. Our clinical trials will also compete for enrollment of patients with other clinical trials for product candidates based on non- cellular modalities, such as small molecules and antibodies, that are intended for the same or similar study populations as our product candidates. This competition will reduce the number and types of patients available to us because some patients who might opt to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. Additionally, since the number of qualified and experienced clinical investigators for therapeutic areas is limited, some of our clinical trial sites may be also conducting clinical trials for some of our competitors, which may reduce the number of patients who are available for our clinical trials at that clinical trial site. Moreover, because our product candidates represent a departure from more commonly used methods for cancer treatment, potential patients and their doctors may be inclined to use conventional therapies, such as chemotherapy, HSC transplantation, or autologous CAR- T cell therapies, rather than refer patients to our clinical trials. Because our cell therapy product candidates are edited with CRISPR chRDNA guides, our products may be perceived to have additional or greater safety risks. Patients eligible for allogeneic CAR-T cell therapies but ineligible for autologous CAR- T cell therapies may be difficult to treat due to advanced and aggressive cancers and may fail to experience improved outcomes and be at greater risk for complications and death from our product candidates. If patients are unwilling to participate in our cell therapy trials, the timeline for recruiting patients, conducting clinical trials, and obtaining regulatory approval of any of our product candidates may be delayed. In addition, the enrollment of patients depends on many factors, including: • severity or stage of the type of cancer under investigation; • size of the patient population and process for identifying patients; • design of the clinical trial protocol; • regulatory hold on clinical trial recruitment because of unexpected safety events; • availability of eligible prospective patients who are otherwise eligible patients for competitive clinical trials; • availability and efficacy of approved alternative treatments for the disease under investigation: • ability to obtain and maintain patient consent; • risk that enrolled patients will drop out before completion of the trial; • eligibility and exclusion criteria for the trial in question; • perceived risks and benefits of our product candidates; • perceived risks and benefits of genome- editing and cell therapies; • perceived risks and benefits of participating in a clinical trial; • efforts by clinical sites and investigators to facilitate timely enrollment in clinical trials; • patient referral practices of physicians; • physicians' ability to monitor patients adequately during and after treatment because of patient healthcare access issues caused by COVID-19, other pandemics, or public health erises; • proximity and availability of clinical trial sites for prospective patients; and • interruptions, delays, or staffing shortages resulting from the COVID-19 pandemic-pandemics, or other pandemics, or public health crises. Enrollment delays in our clinical trials may result in increased development costs for any product candidates we may develop, which may cause our stock price to decline and limit our ability to obtain additional financing. If we have difficulty enrolling a sufficient number of patients to conduct our clinical trials as planned, we may need to delay, limit, or terminate our **current** ANTLER phase 1-clinical trial trials, or our CaMMouflage phase 1 clinical trial or future clinical trials, and postpone or forgo seeking marketing approval, any of which would have an adverse effect on our business, financial condition, results of operations, and prospects. Clinical trials are expensive, time - consuming, and subject to uncertainty. We cannot guarantee that any of our clinical trials will be conducted as planned or completed on schedule, if at all. Issues may arise that could suspend or terminate our clinical trials. A failure of one or more of our clinical trials may occur at any stage of testing, and our future clinical trials may not be successful. Events that may prevent successful or timely completion of clinical development include: • the FDA or comparable foreign regulatory authorities disagreeing as to the design or implementation of our clinical trials; • delays or failure to obtain regulatory clearance to initiate our clinical trials, as well as delays or failures to obtain any necessary approvals by the clinical sites; • delays, suspension, or termination of our clinical trials by the clinical sites; • modification of clinical trial protocols; • delays in reaching agreement on acceptable terms with prospective CROs and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites, as well as possible future breaches of such agreements; • failure to manufacture sufficient quantities of our product candidates for use in our clinical trials; • failure by CMOs, third- party suppliers, CMOs, CROs, and or clinical trial sites to comply with regulatory

requirements or meet their contractual obligations to us in a timely manner, or at all; • imposition of a temporary or permanent clinical hold by us, IRBs for the institutions at which such trials are being conducted, or by the FDA or other regulatory authorities for safety or other reasons, such as a result of a new safety finding in a clinical trial on a similar product by one of our competitors, that presents unreasonable risk to clinical trial participants; • changes in regulatory requirements and guidance that require amending or submitting new clinical protocols; • changes in the standard of care on which we developed our clinical development plan, which may require new or additional trials; • the cost of clinical trials of our product candidates being greater than we anticipated; • insufficient funding to continue clinical trials with our product candidates; • the emergence of unforeseen safety issues or undesirable side effects; • clinical trials of our product candidates producing negative or inconclusive results, which may result in our deciding, or regulators requiring us, to conduct additional clinical trials or abandon development of our product candidates; • inability to establish clinical trial endpoints that applicable regulatory authorities consider clinically meaningful, or, if we seek accelerated approval, that applicable regulatory authorities consider likely to predict clinical benefit; • regulators withdrawing their approval of a product or imposing restrictions on its distribution; and If (i) we are required to extend the duration of any clinical trials or to conduct additional preclinical studies or clinical trials or other testing of our product candidates beyond those that we currently contemplate; (ii) we are unable to successfully complete preclinical studies or clinical trials of our product candidates or other testing; (iii) the results of these trials, studies, or tests are negative or produce inconclusive results; (iv) there are safety concerns; or (v) we determine that the observed safety or efficacy profile would not be competitive in the marketplace, we may: • abandon the development of one or more product candidates; • incur unplanned costs; • be delayed in obtaining marketing approval for our product candidates or not obtain marketing approval at all; • obtain marketing approval in some jurisdictions and not in others; • obtain marketing approval for indications or patient populations that are not as broad as we intended or designed; • obtain marketing approval with labeling that includes significant use restrictions or safety warnings, including black box warnings; • be subject to additional post- marketing requirements; or • have regulatory agencies remove the product from the market or we voluntarily withdraw the product from the market after obtaining marketing approval. Our clinical trials may fail to adequately demonstrate the safety and efficacy of any of our product candidates and , if this happens, the development of our product candidates may be delayed or unsuccessful, which could prevent or delay regulatory approval and commercialization. Our product candidates are in various stages of preclinical and clinical development. If we encounter safety or efficacy problems in our ongoing or future studies, our developmental plans and business could be significantly harmed. Product candidates in later stages of clinical trials may fail to show the desired safety profiles and efficacy results despite having progressed through initial clinical trials. A number of companies in the biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier trials. Based upon negative or inconclusive results, we may decide, or regulatory agencies may require us, to conduct additional clinical trials or preclinical studies. In addition, data obtained from clinical trials are susceptible to varying interpretations, and regulatory agencies may not interpret our data as favorably as we do, which may delay, limit, or prevent regulatory approval. In addition, the design of a clinical trial can determine whether its results will support approval of our product candidates, and flaws in the design of a clinical trial may not be apparent until the clinical trial is well advanced. We have limited experience designing clinical trials and may be unable to design and execute a clinical trial that will support regulatory approval. From time to time, we may publish initial, interim, or preliminary data from our clinical trials. Initial, interim, or preliminary data from clinical trials are subject to the risk that one or more of the clinical outcomes may materially and adversely change as patient enrollment continues, and additional and long- term patient data become available, including data respect to efficacy, duration of response, and / or safety. Additional clinical data may not support or may contradict the findings of the initial, interim, or preliminary data reported earlier. Initial, interim, or preliminary clinical trial data may be based on a limited number of patients and are subject to the risk that they will not ultimately be predictive of the safety and / or efficacy of the final product candidate. We also make assumptions, estimations, calculations, and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully evaluate all data at the time of publishing initial, interim, or preliminary data. These data also remain subject to audit and verification procedures that may result in the final data being materially different from the data we previously published. The information that we choose to disclose publicly regarding preclinical studies or clinical trials is typically a summary of extensive information, and others may not agree with what we determine is material or otherwise appropriate information to include in our disclosure, and any information we determine not to disclose may ultimately be deemed significant with respect to future decisions, conclusions, views, activities, or otherwise regarding a particular product candidate or our product candidates generally. As a result, initial, interim, and preliminary data should be viewed with caution until the final data are available. Moreover, initial, interim, and preliminary data are subject to the risk that one or more of the clinical outcomes may materially and adversely change as more patient data become available when patients mature on study, dose levels change, patient enrollment continues, or, for final data, as other ongoing or future clinical trials with a product candidate further develop. Past results of clinical trials may not be predictive of future results. Unfavorable differences between initial, interim, or preliminary data and final data could significantly harm our business prospects and may cause the trading price of our common stock to decline significantly. Because of these risks, our product candidates may fail or encounter difficulties in clinical trials. If we are unable to advance our product candidates through clinical trials to seek marketing approval, our business, financial condition, results of operations, and prospects will be materially harmed. If our product candidates cause serious adverse events or undesirable side effects, including injury and death, or have other properties that could delay or prevent regulatory approval, their they would have limited or no commercial potential may be limited or extinguished. Product candidates we develop may be associated with undesirable or unacceptable side effects, unexpected characteristics, or other SAEs, including death. Immunotherapy, and its method of action of harnessing the immune system, is powerful and could lead to serious side effects that we only discover in clinical trials. In addition to potential SAEs from the immune system or side effects caused by our CB-010 or our CB-011 product candidate

candidates currently in clinical trials, or any product candidate we may develop and advance into one or more clinical trials, the product candidate administration process and related procedures may also cause undesirable side effects. Patients who enroll in our current ANTLER phase 1 clinical trial or our CaMMouflage phase 1 clinical trial undergo a lymphodepletion regimen, including administration of fludarabine and cyclophosphamide, which can lead to SAEs. Because these regimens will cause a transient and sometimes prolonged blood count suppression, patients have an increased risk of leukopenia, anemia, thrombocytopenia bleeding, or infection, which could ultimately lead to death. Although we educate clinical site personnel administering our cell therapy product candidates to understand the side effect profiles for our product candidates, inadequate recognition or management of the potential side effects of our product candidates could result in patient injury or death. If any undesirable or unacceptable side effects, unexpected characteristics, or other SAEs occur, our clinical trials could be suspended or terminated, and our business and reputation could suffer substantial harm. There can be no assurance that we will resolve any adverse event related to any of our products to the satisfaction of the FDA or any regulatory agency in a timely manner or at all. If we are unable to demonstrate that such adverse events were caused by factors other than our product candidates, the FDA or other regulatory authorities could order us to cease further clinical trials of, or deny approval of, our product candidates. Even if we demonstrate that such SAEs are not product candidate- related, such occurrences could affect patient recruitment or the ability of enrolled patients to complete our clinical trials. Moreover, if we elect, or are required, to delay, suspend, or terminate any clinical trial of any of our product candidates, the commercial prospects of such product candidates may be harmed and our ability to generate product revenues from these product candidates may be delayed or eliminated. Any of these occurrences may harm our business, financial condition, results of operations, and prospects. The FDA or other regulatory agencies may disagree with our regulatory plans and we may fail to obtain regulatory approval of our cell therapy product candidates. If and when each of our ANTLER phase 1 clinical trial trials for our CB-CAR - 010 T product candidate candidates is completed and, assuming positive data, we will propose to the FDA that such product candidate advance to a pivotal phase 3 clinical trial , and will propose the same for our CB-011 product candidate when our CaMMouflage phase 1 clinical trial is completed. Although the FDA has found substantial evidence to support approval outside of the traditional phase 1, phase 2, and phase 3 framework for the approved autologous anti- CD19 and anti- BCMA CAR- T cell therapies, the general approach for FDA approval of a new biologic is for the sponsor to provide dispositive data from at least two adequate and well- controlled clinical trials of the relevant biologic in the applicable patient population. Such clinical trials typically involve hundreds of patients, have significant costs, and take years to complete. We do not have agreement or guidance from the FDA that our regulatory development plans will be sufficient for submission of a BLA. For example, the FDA may require that we conduct a comparative trial against an approved therapy, such as an approved autologous CAR-T cell therapy, which would significantly delay our development timelines and require substantially more resources. In addition, the FDA may limit our evaluation to patients who have failed or who are ineligible for autologous therapy, patients who may be difficult to treat, or patients with advanced and aggressive cancer, and our product candidates may fail to improve outcomes for those patients. In addition, the standard of care may change with the approval of new products in the same indications to which our cell therapy product candidates are directed. This may result in the FDA or other regulatory authorities requesting additional studies to show that our product candidate is comparable or superior to the new products. Our clinical trial results may also not support marketing approval. In addition, our product candidates could fail to receive regulatory approval for many reasons, including: • the FDA or other regulatory authorities may disagree with the design or implementation of our clinical trials; • we may be unable to demonstrate to the satisfaction of the FDA or other regulatory authorities that our product candidates are safe and effective for their proposed indications; • the results of clinical trials may not meet the level of statistical significance required by the FDA or other regulatory authorities for approval, including due to heterogeneity of patient populations; • we may be unable to demonstrate that the clinical and other benefits of our product candidates outweigh the safety risks; • the data collected from clinical trials of our product candidates may not be sufficient to the satisfaction of the FDA or other regulatory authorities to support the submission of a BLA or a similar filing in a foreign jurisdiction or to support commercial reimbursement or reimbursement under publicly-funded health systems; • new information or data indicating safety concerns with CAR- T cell therapies may result in the FDA or other regulatory authorities declining to approve or requiring additional clinical data for our product candidates : • the FDA or other authorities will review our manufacturing processes and inspect our CMOs' facilities and may not approve our manufacturing processes or CMOs' facilities; and • the approval policies or regulations of the FDA or other regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval. Even if we comply with all FDA requests, we may still fail to obtain regulatory approval. We cannot be sure that we will ever obtain regulatory clearance for our product candidates. Failure to obtain FDA approval of our product candidates will severely undermine our business by leaving us without a commercially marketable product in the United States, and therefore without any source of revenues from product sales in the United States, until another product candidate can be developed or obtained and ultimately approved. Even if we complete the necessary preclinical studies and clinical trials, the regulatory approval process is expensive, time- consuming, and uncertain, and we may be unable to obtain the regulatory approvals necessary for the commercialization of our product candidates; furthermore, if there are delays in obtaining regulatory approvals, we may not be able to commercialize our products, may lose competitive lead time, and our ability to generate revenues will be materially impaired. The process of obtaining marketing approvals, both in the United States and in other jurisdictions, is expensive, may take many years, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity, and novelty of the product candidates involved. It is impossible to predict if or when any of our product candidates will prove to be safe and effective in humans or if we will receive regulatory approval for such product candidates. The risk of failure through the development process is high. Any product candidates we may develop, and the activities associated with their development and commercialization, including their manufacture, preclinical and clinical development, safety, efficacy, recordkeeping, labeling, storage, advertising, promotion, sale, and distribution, are subject to comprehensive regulation by the FDA and other

regulatory authorities. Failure to obtain marketing approval for a product candidate will prevent us from commercializing the product candidate in a given jurisdiction. We have not received approval or authorization to market any product candidates from regulatory authorities in any jurisdiction and it is possible that none of our product candidates or any product candidates we may seek to develop in the future will ever obtain marketing approval or commercialization. We have not previously submitted a BLA to the FDA or made a similar submission to any foreign regulatory authority. A BLA must include extensive preclinical and clinical data and supporting information to establish our product candidate's safety and efficacy for each desired indication. The BLA must also include significant information regarding the chemistry, manufacturing, and controls for our product. Any product candidates we develop 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. The FDA and other regulatory authorities have substantial discretion in the approval process and may refuse to accept our BLA applications and decide that our data are insufficient and require additional preclinical studies or clinical trials. The same may happen with review of our product candidates by foreign regulatory authorities. In addition, varying interpretations of the data obtained from preclinical studies and clinical trials could delay, limit, or prevent marketing approval of our product candidates. Any marketing approval we ultimately obtain may be limited or subject to restrictions or post- approval commitments that render our approved product not commercially viable. If we experience delays in obtaining approval or if we fail to obtain approval of any product candidates we may develop, the commercial prospects for those product candidates and our ability to generate revenues will be materially impaired and we may lose competitive lead time as similar products enter the market. We expect the innovative nature of our product candidates to create further challenges in obtaining regulatory approval. For example, the FDA has limited experience with the development of allogeneic T cell and NK cell therapies for cancer **and other diseases**. We may also request regulatory approval of future CAR- T or CAR- NK cell therapy product candidates by target, regardless of cancer type or origin, which the FDA may have difficulty accepting if our clinical trials have only involved cancers of certain types or origins. The FDA may also require a panel of experts, referred to as an Advisory Committee, to deliberate on the adequacy of the safety and efficacy data. The opinion of an Advisory Committee, although not binding, may have a significant impact on our ability to obtain marketing approval of our product candidates based on our completed clinical trials, as the FDA often adheres to an Advisory Committee's recommendations. Accordingly, the regulatory approval pathway for our product candidates may be uncertain, complex, expensive, and lengthy, and approval may not be obtained. The regulatory landscape that will govern our product candidates is uncertain; regulations relating to more established gene therapy and cell therapy products are still developing, and changes in regulatory requirements could result in delays or discontinuation of development of our product candidates or unexpected costs in obtaining regulatory approval. Because we are developing CAR- T and CAR- NK cell therapy product candidates that are unique biological entities, the regulatory requirements to which we will be subject are not entirely clear. Even with respect to more established products that fit into the categories of gene therapies or cell therapies, the regulatory landscape is still developing. For example, regulatory requirements governing gene therapy products and cell therapy products have changed frequently and may continue to change in the future. Moreover, there is substantial, and sometimes uncoordinated, overlap in those responsible for regulation of existing gene therapy products and cell therapy products. Gene therapy clinical trials are also subject to additional review and oversight by an IBC. Although the FDA decides whether individual gene therapy protocols may proceed, review processes and determinations of other reviewing bodies can impede or delay the initiation of a clinical trial, even if the FDA has reviewed the study and cleared its initiation. Conversely, the FDA can place an IND application on clinical hold even if such other entities have provided a favorable review. In addition, regulatory agencies, including the FDA, develop and issue guidance documents with which we, in practice, must comply, even if the agencies state that the documents only represent the current thinking of the agencies and are not binding. These documents may provide additional guidance and recommendations regarding the testing, design, development, and manufacturing of cell therapy products. Failure to comply with such regulatory agency guidance could delay or prevent regulatory approval of our product candidates. The content of such guidance documents may change in the future, which could add to the cost, time, and resources that are required for completion of our preclinical studies, clinical trials, or regulatory approvals. We may not receive additional priority review, such as RMAT designation, breakthrough therapy designation, or fast track designation, by the FDA for our allogeneic CAR- T and CAR- NK cell therapies. We may continue to apply for certain expedited programs in the United States, such as RMAT, breakthrough therapy, fast track, or priority review programs. The FDA granted RMAT designation for our CB- 010 product candidate for r / r LBCL as well as fast track designation for r / r B- NHL. The FDA granted fast track designation for our CB- 011 product candidate in r / r MM. Although obtaining each of these designations has specific and different criteria, they are reserved for therapeutic products that are intended for serious diseases, and each designation offers certain benefits to prioritize the review and approval of such therapeutic option, which may include rolling reviews, intensive guidance, or approval based on surrogate endpoint or an intermediate clinical endpoint that is reasonably likely to predict a drug's clinical benefit. However, there is no assurance that we will be able to obtain such designations in the future and, even with expedited designation, we may ultimately fail to obtain FDA's full approval for our product candidates, or the approved indication may be narrower than the indication covered by the designation. We may continue to seek orphan drug designation for our allogeneic CAR- T and CAR- NK cell therapy product candidates across various indications, but we may not be able to obtain such designations or to maintain the benefits associated with orphan drug designation, including market exclusivity, which may cause our revenue, if any, to be reduced. We may submit applications to FDA for additional orphan drug designation for our allogeneic CAR- T and CAR- NK cell therapy product candidates in specific orphan indications in which there is a medically plausible basis for the use of these products. Under the Orphan Drug Act, the FDA may designate a product as an orphan drug if it is intended to treat a rare disease or condition, defined as a patient population of fewer than 200, 000 in the United States, or a patient population greater than 200, 000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from

sales in the United States. Although we received orphan drug designation from the FDA for our CB- 010 product candidate in follicular lymphoma FL and for our CB- 011 product candidate in the treatment of MM, there is no guarantee that we will obtain additional designations for other indications or for our other product candidates as the FDA may decline future requests if it determines that our product candidates and the proposed indications do not meet the threshold for the orphan drug designation. Even if we obtain additional orphan drug designations, we may not be the first company to obtain FDA approval for the orphan drug indication, in which case exclusive marketing rights would not be available to us. In addition, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan designated indication and may be lost if the FDA later determines that the request for designation was materially defective, we are unable to ensure sufficient quantities of the product to meet the needs of patients with the rare disease or condition, or if a subsequent applicant demonstrates clinical superiority over our products. In addition, there remains some uncertainty regarding the legal and regulatory framework for orphan drug exclusivity. In September 2021, the U.S. Court of Appeals for the Eleventh Circuit agreed with a pharmaceutical company's position that once an orphan drug is approved for a disease or condition, the FDA may not approve another drug for the same disease or condition, even if for different uses or indications that the FDA has not approved. However, in January 2023, the FDA stated that it will continue to tie the applicability of the orphan drug exclusivity to the specific uses or indications, rather than diseases or conditions, despite the loss. Thus, any future orphan drug exclusivity may be blocked if another company receives approval before us for an indication for a disease or a condition, even if our orphan drug designation was for a different indication. Our allogeneic CAR- T and CAR- NK cell therapy product candidates will be regulated as biological products, or biologics, and therefore may be subject to uncertainty regarding regulatory exclusivity or maintaining regulatory approval. Under the BPCIA, the FDA has the authority to review and approve biosimilar biologics, including the possible designation of a biosimilar as "interchangeable" based on its similarity to an approved biologic. An application for a biosimilar product cannot be approved by the FDA until 12 years after the reference product was approved under a BLA. We believe that our product candidates should qualify for the 12- year period of exclusivity. However, some uncertainty over interpretation of the law remains, and there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our product candidates to be reference products for competing products, potentially creating the opportunity for biosimilar competition sooner than anticipated. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of the reference products in a way that is similar to traditional generic substitution for drug products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing. Even if we obtain marketing approvals for our product candidates, the terms of such approvals and ongoing regulation of our products could require substantial expenditure of resources and may limit how we manufacture and market our products, which could materially impair our ability to generate revenues. Any product candidate for which we obtain marketing approval could be subject to restrictions or withdrawal from the market, and we may be subject to substantial penalties if we fail to comply with regulatory requirements or if we experience unanticipated problems with our products, when and if any of them are approved. Even if we receive marketing approval for a product candidate, the approval may be subject to limitations on the indicated uses for which the product may be marketed or to the conditions of approval or contain requirements for costly post- marketing testing and studies to further assess the safety or efficacy of the product. The FDA also may place other conditions on our approval, including the requirement for a REMS to ensure the safe use of the product by reinforcing medication use behaviors and actions. If the FDA concludes a REMS is needed, we must submit a proposed REMS before our product candidate will be eligible to receive marketing approval. A REMS could include medication guides, physician communication plans, or other elements to ensure safe use, such as restricted distribution methods, patient registries, and other risk minimization tools. Certain REMS programs can significantly impact and restrict the marketability of our products, even if our products are approved. The FDA's policies may change and additional government regulations may be enacted that could prevent, limit, or delay regulatory approval of our product candidates. If we are slow to address or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained, which would adversely affect our business, prospects, and ability to achieve or sustain profitability. Any government investigation of alleged violations of law, including investigations of any of our suppliers or CMOs, could require us to expend significant time and resources in response and could generate negative publicity. Accordingly, we will need to continue to expend time, money, and effort on regulatory compliance activities. If we are not able to comply with post- approval regulatory requirements, we could have the marketing approval for our products withdrawn by regulatory authorities and our ability to market any product candidates could be limited, which could adversely affect our ability to achieve or sustain profitability. Furthermore, the cost of compliance with post- approval regulations, including REMS, may have a negative effect on our business, financial condition, results of operations, and prospects. The FDA and other regulatory authorities closely regulate the post- approval marketing and promotion of biologics to ensure that they are marketed only for the approved indications and in accordance with the provisions of the approved labeling. The FDA and other regulatory authorities impose stringent restrictions on off- label promotion, and if we market our products for unapproved indications, including off- label indications, we may be subject to enforcement action for off- label marketing by the FDA and other federal and state enforcement agencies, including the DOJ. Violation of the FDCA and other statutes, including the federal False Claims Act, relating to the promotion and advertising of prescription products, may also lead to investigations or allegations of violations of federal and state healthcare fraud and abuse laws and state consumer protection laws. In addition, later discovery of previously unknown problems with our products or the manufacturing of our products, may cause: • restrictions on our products or the manufacturing of our products; • restrictions on the labeling or marketing of our products; • restrictions on the exportation, distribution, or use of our products; • requirements to conduct post- marketing clinical trials; • receipt of warning or untitled letters; • withdrawal of our products from the market; • refusal to approve pending BLAs or BLA supplements that we submit; • recall of our products; • fines, restitution, or disgorgement of profits or revenue; • suspension or

withdrawal of marketing approvals; • suspension of any ongoing clinical trials; • product seizure; and • injunctions or the imposition of civil or criminal penalties. Any government investigation of alleged violations of law could require us to expend significant time and resources in response and could generate negative publicity and adversely affect our reputation. The occurrence of any event or penalty described above may inhibit our ability to commercialize any product candidates we develop and adversely affect our business, financial condition, results of operations, and prospects. We may never obtain approval to commercialize our product candidates outside the United States, which could limit our ability to recognize the full market potential of our product candidates and could materially impair our ability to generate revenues. In order to market and sell any of our product candidates in the EU or other foreign jurisdictions, we must obtain separate marketing approvals and comply with numerous and varying regulatory requirements. The approval procedure varies among countries and jurisdictions 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 the risks associated with obtaining FDA approval. In addition, in many countries, it is required that the product be approved for reimbursement before the product can be approved for sale in that country. We may not obtain approvals from regulatory authorities outside the United States on a timely basis, if at all. Approval by the FDA does not ensure approval by regulatory authorities in other jurisdictions, and approval by one regulatory authority outside the United States does not ensure approval by regulatory authorities in other jurisdictions. The failure to obtain approval in one jurisdiction may negatively impact our ability to obtain approval elsewhere. We may not be able to file for marketing approvals and may not receive necessary approvals to commercialize our product candidates in multiple jurisdictions, which could materially impair our ability to generate revenue. Following the United Kingdom's exit from the EU in 2020 (commonly referred to as "Brexit"), the EU and United Kingdom entered into the EU-UK Trade and Cooperation Agreement, which was entered into force permanently on May 1, 2021. The agreement provides details on how some aspects of the United Kingdom and the EU's relationship regarding pharmaceutical products will operate; however, there are still many uncertainties. Since the regulatory framework in the United Kingdom covering pharmaceutical products is derived from EU directives and regulations, Brexit could materially impact the future regulatory requirements for product candidates and products in the United Kingdom as there is now potential for the UK regulations to diverge from the EU regulations. In the meantime, the Medicines and Healthcare products Regulatory Agency ( the "MHRA "), the medicines and medical devices regulator in the United Kingdom, has published detailed guidance for industry and organizations to follow as of January 1, 2021, which is updated as necessary. A number of new marketing authorization routes have been introduced post-Brexit under the UK Human Medicines Regulations 2012 (SI 2012 / 1916) to allow for quick recognition of products that are approved in the EU and to allow greater flexibility in the UK procedures (such as a "rolling review" that permits the submission of an application in modules). As of January 1, 2024, the MHRA is applying its new International Reliance Procedure to medicines approved in other jurisdictions (including by the FDA and EMA) that meet certain criteria to undergo a fast- tracked MHRA review to obtain and / or update a marketing authorization in the UK. Any delay in obtaining, or an inability to obtain, any marketing approvals, as a result of Brexit or otherwise, may force us to restrict or delay efforts to seek regulatory approval in the United Kingdom for our product candidates, which could harm our business. Negative public opinion and increased regulatory scrutiny of genetic research and therapies involving genome editing may damage public perception of our product candidates generated through genome editing or adversely affect our ability to conduct our business or obtain regulatory approvals for our product candidates. The CRISPR chRDNA genome- editing technologies that we use are novel, and public perception may be influenced by claims that genome editing is unsafe, and therapeutic products generated through genome editing may not gain the acceptance of the public or the medical community. In particular, our success will depend upon physicians specializing in our targeted diseases prescribing our product candidates, if approved for marketing, as treatments in lieu of, or in addition to, existing, more familiar treatments for which greater clinical data may be available. Any increase in negative perceptions of genome editing may result in fewer physicians prescribing our treatments or may reduce the willingness of patients to accept our products. In addition, given the nature of genome- edited and CAR- T and CAR- NK cell therapies in general, governments may place import, export, or other restrictions in order to retain control or limit the use of such technologies. Increased negative public opinion or more restrictive government regulations, either in the United States or internationally, could have a negative effect on our business or financial condition and may delay or impair the commercialization of our product candidates or demand for such products. In particular, genome- editing technology is subject to public debate and heightened regulatory scrutiny due to ethical concerns relating to the potential application of genomeediting technology to human embryos or the human germline. We do not apply genome- editing technologies to human embryos or the human germline. In April 2016, a group of scientists reported on their attempts to edit the genome of human embryos to modify the gene for hemoglobin beta. This is the gene in which a mutation occurs in patients with the inherited blood disorder beta thalassemia. Although this research was purposefully conducted in embryos that were not viable, the work prompted calls for a moratorium or other types of restrictions on genome editing of human eggs, sperm, and embryos. Additionally, in November 2018, a researcher at the Southern University of Science and Technology in Shenzhen, China, reportedly claimed they had created the first human genome- edited babies, which was subsequently confirmed by Chinese authorities and was negatively received by the public, in particular by those in the scientific community. In the wake of the claim, the World Health Organization established a new advisory committee to create global governance and oversight standards for human genome editing. The Alliance for Regenerative Medicine in Washington, D. C., of which we are a member, has called for a voluntary moratorium on the use of genome- editing technologies, including CRISPR, in research that involves altering human embryos or human germline cells and has also released a bioethical framework of principles for the use of genome editing in therapeutic applications endorsed by a number of companies that use genome- editing technologies. Similarly, the NIH has announced that it would not fund any use of genome- editing technologies in human embryos, noting that there are multiple existing legislative and regulatory prohibitions against such work, including the Dickey-Wicker Amendment, which prohibits the use of

appropriated funds for the creation of human embryos for research purposes or for research in which human embryos are destroyed. Although we do not use our CRISPR chRDNA genome- editing technologies to edit human embryos or the human germline, such public debate about the use of genome- editing technologies in human embryos and heightened regulatory scrutiny could prevent or delay our development of our product candidates and, if approved, the market acceptance of our products. More restrictive government regulations or negative public opinion would have a negative effect on our business or financial condition. Adverse events in our clinical trials or those of our competitors or of academic researchers utilizing genomeediting technologies, even if not ultimately attributable to product candidates we may identify and develop, and the resulting publicity, could result in increased governmental regulation, unfavorable public perception, potential regulatory delays in the testing or approval of our product candidates, stricter labeling requirements for those product candidates that are approved, and a decrease in demand for any such product candidates. We currently have no marketing and sales organization and as a company have no experience in marketing products. If we are unable to establish marketing and sales capabilities or enter into agreements with third parties to market and sell our product candidates, we may not be able to generate product revenue. To achieve commercial success for any approved product for which we retain sales and marketing responsibilities, we must develop and build a sales and marketing team or make arrangements with third parties to perform these services. There are risks involved with both establishing our own sales and marketing capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time consuming and could delay our product launch. We will have to compete with other pharmaceutical and biotechnology companies to recruit, hire, train, and retain marketing and sales personnel. If the commercial launch of our product for which we have recruited a sales force and established marketing capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses, which may be costly and our investment will be lost if we cannot retain or reposition our sales and marketing personnel. Factors that may inhibit our efforts to commercialize our products on our own include: • our inability to recruit, hire, train, and retain adequate numbers of effective sales, marketing, customer service, medical affairs, and other support personnel; • our inability to equip sales personnel with effective materials, including sales literature, to help them educate physicians and other healthcare providers regarding our product candidates and their approved indications; • our inability to effectively manage a geographically dispersed sales and marketing team; • the inability of medical affairs personnel to negotiate arrangements for reimbursement and other acceptance by payors; • the inability to price our products at a sufficient price point to ensure an adequate and attractive level of profitability; and • unforeseen costs and expenses associated with creating an independent sales and marketing organization. If we are unable or decide not to establish internal sales, marketing, and distribution capabilities, we will need to enter into arrangements with third parties to perform sales, marketing, and distribution services. In such cases, our product revenue or the profitability to us from these revenue streams is likely to be lower than if we were to market and sell any product candidates that we develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell and market our product candidates or may be unable to do so on terms that are favorable to us. We likely will have little control over those third parties and they may fail to devote the necessary resources and attention to sell and market our product candidates effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we may not be successful in commercializing our product candidates, and our business, financial condition, results of operations, and prospects will be materially adversely affected. Our products may not gain market acceptance among physicians, patients, hospitals, cancer treatment centers, and others in the medical community, which could significantly harm our business, financial condition, results of operations, and prospects. The use of CAR-T and CAR-NK cells as potential cancer treatments is a recent development and may not become broadly accepted by physicians, patients, hospitals, cancer treatment centers, and others in the medical community. Ethical, social, and legal concerns about genome editing could result in the development of additional regulations restricting or prohibiting our products. Even with the requisite approvals from the FDA and other regulatory authorities internationally, the commercial success of our product candidates will depend, in significant part, on the acceptance of physicians, patients, and healthcare payors of products generated through genome editing in general, and our allogeneic CAR- T and CAR- NK cell therapy product candidates in particular, as medically necessary, cost- effective, safe, and effective therapies. We expect physicians in the large bone marrow transplant centers to be particularly important to the market acceptance of our CB- 010, CB- 011, and CB- 012 product candidates and we may not be able to adequately educate them on the benefits and risks associated with the use of our product candidates to address concerns and foster acceptance, for many reasons. For example, certain of the product candidates that we may develop target a cell surface marker that may be present on cancer cells as well as non- cancerous cells. It is possible that our product candidates may kill these non- cancerous cells, which may result in unacceptable side effects, including death. Additional factors will influence whether our product candidates are accepted in the market, including: • the clinical indications for which our product candidates are approved; • physicians, hospitals, cancer treatment centers, and patients considering our product candidates as safe and effective treatments; • the potential and perceived advantages of our product candidates over alternative treatments; • the prevalence, identification, or severity of any side effects; • product labeling or product insert requirements of the FDA or other regulatory authorities, including limitations or warnings contained in the product labeling; • the timing of market introduction of our product candidates as well as competitive products; • the cost of treatment of our product candidates in relation to alternative treatments; • the availability of coverage and adequate reimbursement by third- party payors and government authorities; • the willingness of patients to pay out- of- pocket for our product candidates in the absence of coverage; • relative convenience and ease of administration, including as compared to alternative treatments and competitive therapies; and the effectiveness of our sales and marketing efforts ; and • potential product liability claims. If our product candidates are approved but fail to achieve market acceptance among physicians, patients, hospitals, cancer treatment centers, or others in the medical community, we will not be able to generate significant revenue. Even if our products achieve market acceptance, we may not be able to maintain that

market acceptance over time if new cell therapy products, genome- editing technologies, or other therapeutic approaches are introduced that are more favorably received than our products, are more cost effective, or render our products obsolete. The market opportunities for our product candidates may be smaller than we currently believe and limited to those patients who are ineligible for or have failed prior treatment, which may adversely affect our business. Because the target patient populations of our product candidates are small, we must be able to successfully identify patients and capture a significant market share to achieve profitability and growth. Our projections of both the number of patients who have the cancers we are targeting, as well as the subset of patients with these cancers in a position to receive second or later lines of therapy and who have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. New studies may change the estimated incidence or prevalence of these cancers. The number of eligible patients may turn out to be lower than we expected. Additionally, the potentially addressable patient population for our product candidates may be limited or may not be amenable to treatment with our product candidates. Given the small number of patients who have the eligibility criteria and diseases that we are **or will be** targeting, it is critical to our ability to become profitable that we successfully identify such patients. The effort to identify patients with diseases we seek to treat is in early stages, and we cannot accurately predict the number of patients for whom treatment might be possible. Additionally, the potentially addressable patient population for each of our product candidates may be limited or may not be amenable to treatment with our product candidates, and new patients may become increasingly difficult to identify or gain access to, which would adversely affect our business, financial condition, results of operations, and prospects. Even if we obtain significant market share for our product candidates, because the potential target populations are small, we may never achieve profitability without obtaining regulatory approval for additional indications. Even if we are able to commercialize our product candidates, such products may be subject to unfavorable pricing regulations, thirdparty reimbursement practices, or healthcare reform initiatives, which could harm our business. The regulations that govern marketing approvals, pricing, and reimbursement for new biologic products vary widely from country to country. Some countries require approval of the sale price of a product before it can be marketed. In many countries, the pricing review period begins after marketing approval is granted. In some non-U. S. markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial marketing approval is granted. As a result, we might obtain marketing approval for our product candidates in a particular country, but then be subject to price regulations that delay our commercial launch of such product candidates, possibly for lengthy time periods, and such delays would negatively impact the revenues we are able to generate from the sale of our product candidates in that country. Pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if any product candidates we may develop obtain marketing approval. Because our **current** product candidates represent new approaches to the treatment of cancer, we cannot accurately estimate the potential revenue from our product candidates. Significant uncertainty exists as to the coverage and reimbursement status of any of our products for which we obtain regulatory approval. Additionally, reimbursement coverage may be more limited than the indications for which our products are approved. The marketability of our products may suffer if government and other thirdparty payors fail to provide coverage and adequate reimbursement. Furthermore, 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 of our product candidates for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future. Moreover, eligibility for reimbursement does not imply that our product candidates will be paid for in all cases or at a rate that will cover our costs, including research, development, manufacture, sale, and distribution. Interim reimbursement levels for new products, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of our product candidate and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost products, and may be incorporated into existing payments for other services. Net prices for our product candidates may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of products from countries where our product candidates may be sold at lower prices than in the United States. Third- party payors, whether domestic or foreign, governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. In both the United States and certain foreign jurisdictions, there have been a number of legislative and regulatory changes to healthcare systems that could impact our ability to sell our product candidates, if approved, profitably. There have been, and likely will continue to be, legislative and regulatory proposals at the federal and state levels directed at broadening the availability of, and containing or lowering the cost of, healthcare. The implementation of cost containment measures that third- party payors and healthcare providers are instituting and any other healthcare reforms may prevent us from being able to generate, or may reduce, our revenues from the sale of our product candidates, if approved, and our product candidates may not be profitable. Such reforms could have an adverse effect on anticipated revenue from product candidates for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop product candidates. Even if our product candidates are successful in clinical trials and receive marketing approval, we cannot provide any assurances that we will be able to obtain and maintain third- party payor coverage or adequate reimbursement for our product candidates in whole or in part. Enacted and future healthcare legislation may increase the difficulty and cost for us to obtain approval of and commercialize our product candidates and could adversely affect our business. The Affordable Care Act and Inflation Reduction Act brought significant changes to the way healthcare is financed by both the government and private insurers, and significantly impacted the U.S. pharmaceutical industry, including expanding the list of covered entities eligible to participate in the 340B drug pricing program and establishing a new Medicare Part D coverage gap discount program. We expect that these and other healthcare reform measures in the future, may result in more rigorous coverage criteria and lower reimbursement, and in addition, exert downward pressure on the price that we receive for any approved product. Any reduction in reimbursement from Medicare or other government- funded programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may hinder us in generating

revenue, attaining profitability, or commercializing our cell therapy products once, and if, marketing approval is obtained. In the EU, coverage and reimbursement status of any product candidates for which we obtain regulatory approval are provided for by the national laws of EU member states. The requirements may differ across the EU member states. In markets outside the United States and the EU, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings or other price controls on specific products and therapies. We cannot predict the likelihood, nature, or extent of government regulation that may arise from future legislation or administrative action in the United States, the EU, or any other jurisdiction. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or those third parties are not able to maintain regulatory compliance, our product candidates may lose any regulatory approval that we may have obtained and we may not achieve or sustain profitability. We face significant competition from other biotechnology and pharmaceutical companies, which may result in other companies developing or commercializing products before, or more successfully than, we do, thus rendering our product candidates non- competitive or reducing the size of the market for our product candidates. Our operating results will suffer if we fail to compete effectively. The biopharmaceutical industry, and the genome- editing, cell therapy, and immuno- oncology industries specifically, is characterized by intense competition and rapid innovation. Our potential competitors include major multi- national pharmaceutical companies, established biotechnology companies, specialty pharmaceutical companies, and universities and other research institutions. Many of our competitors have substantially greater financial, technical, and other resources, such as larger research and development staffs, established manufacturing capabilities and facilities, and experienced marketing organizations with well- established sales forces. Smaller or early- stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies that have greater resources. Mergers and acquisitions in the biotechnology and pharmaceutical industries may result in even more resources being concentrated on our competitors. Competition may increase further as a result of advances in the commercial applicability of genome editing or other new technologies and greater availability of capital for investment in these industries. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient enrollment for participation in clinical trials, as well as in acquiring technologies complementary to, or necessary for, our development programs. In addition, due to the intense research and development taking place in the genome- editing field, including by us and our competitors, the intellectual property landscape is in flux and highly competitive. There may be significant intellectual property- related litigation and proceedings relating to our owned and in- licensed, and other third- party, intellectual property rights in the future. Our commercial opportunities could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient to administer, have broader acceptance and higher rates of reimbursement by third- party payors, or are less expensive than any product candidates that we may develop. 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. Additionally, genome- editing technologies developed by our competitors may render our product candidates uneconomical or obsolete, and we may not be successful in marketing any product candidates we may develop against competitor products. The key competitive factors affecting the success of our product candidates are likely to be their efficacy, safety, and availability of reimbursement. Our focus is on the development of cell therapies using our chRDNA genome- editing technology. We are aware of several companies focused on developing therapies for various indications using CRISPR- Cas9 and / or CRISPR- Cas12a genome- editing technology including CRISPR Therapeutics AG, Editas Medicine, Inc., and Intellia. In addition, several academic groups have developed new genome- editing technologies based on CRISPR- Cas9, such as base editing and prime editing, as well as alternative CRISPR systems, which may have utility in therapeutic development. We believe companies such as Beam Therapeutics Inc., Metagenomi Technologies, LLC, Prime Medicine, Inc., and Scribe Therapeutics, Inc. are developing alternative CRISPR systems. Multiple academic labs and companies have also published on other CRISPR- associated nuclease variants that can edit human DNA. There are also companies developing therapies using non- CRISPR genome- editing technologies, such as transcription activator- like effector nucleases, meganucleases, and zinc finger nucleases. These companies include bluebird bio, Inc., Allogene Therapeutics, Inc., Cellectis S. A., Precision BioSciences, Inc., and Sangamo Therapeutics. In addition to competition from other genome- edited therapies or gene or cell therapies, any product we may develop may also face competition from other types of therapies, such as small molecule, antibody, or protein therapies. Our allogeneic CAR-T and CAR- NK cell therapy product candidates face significant competition from multiple companies, including Allogene Therapeutics, Inc., Adicet Bio, Inc., Atara Biotherapeutics, Inc., Cellectis S. A., Celyad Oncology SA, CRISPR Therapeutics AG, Fate Therapeutics, Inc., Imugene Limited, Legend Biotech Corporation, Poseida Therapeutics, Inc., Precision BioSciences, and Sangamo Therapeutics. There are over 200-170 preclinical- and clinical- stage autologous and allogeneic anti-CD19 CAR- T programs, some of which will be competitive with our CB- 010 product candidate, and over 90-60 preclinicaland clinical- stage autologous and allogeneic anti- BCMA CAR- T programs, some of which will be competitive with our CB-011 product candidate. Additionally, other companies are developing allogeneic CAR- T cell therapies for AML. To become and remain profitable, we must develop and eventually commercialize product candidates with significant market potential, which will require us to be successful in a range of challenging activities. These activities may include completing preclinical studies and clinical trials of our product candidates; obtaining marketing and reimbursement approval for these product candidates; manufacturing, marketing, and selling those products that are approved; and satisfying any post-marketing requirements. We may never succeed in any or all these activities and, even if we do, we may never generate revenues that are significant 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 price of our common stock and could impair our ability to raise capital, maintain our research and development efforts, expand our business, or continue our

operations. A decline in the price of our common stock also could cause stockholders to lose all or part of their investments. Our business operations and current and future relationships with clinical site investigators, healthcare professionals, consultants, third- party payors, patient organizations, and customers will be subject to applicable healthcare regulatory laws, which could expose us to penalties. Our business operations and current and future arrangements with clinical site investigators, healthcare professionals, consultants, third- party payors, patient organizations, and customers may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations. These laws may constrain the business or financial arrangements and relationships through which we conduct our operations, including how we market, sell, and distribute our product candidates, if approved. Such laws include, but are not limited to, the U. S. Anti-Kickback Statute, U. S. civil and criminal false claims laws, the U. S. federal Beneficiary Inducement Statute, HIPAA, and state and local laws and regulations. Some of these laws may apply differently to, and may have different requirements for, and effects on, our business, rendering compliance complex and possibly burdensome. We cannot predict how future changes to these laws may impact our business. Ensuring that our internal operations and future business arrangements with third parties comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices, including our relationships with physicians and other healthcare providers, may not comply with current or future statutes, regulations, agency guidance, or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of the laws described above or any other governmental laws and regulations that may apply to us, we may be subject to significant penalties, including civil, criminal, and administrative penalties; damages; fines; exclusion from government- funded healthcare programs, such as Medicare and Medicaid or similar programs in other jurisdictions; integrity oversight and reporting obligations to resolve allegations of non- compliance; disgorgement; individual imprisonment; contractual damages; reputational harm; diminished profits; and the curtailment or restructuring of our operations. If any of the physicians or other providers or entities with whom we expect to do business are found to not be in compliance with applicable laws, they may be subject to criminal, civil, or administrative sanctions, including exclusions from government- funded healthcare programs and imprisonment, which could affect our ability to operate our business. Furthermore, defending against any these actions can be costly, time- consuming, and may require significant personnel resources. Therefore, even if we are successful in defending against any actions that may be brought against us, our business may be impaired. Our business activities will be subject to U. S. export control licensing requirements, as well as other U. S. and foreign trade regulations, sanctions laws, anti- corruption laws, and anti- money laundering laws and regulations including the Foreign Corrupt Practices Act, which could expose us to penalties. We develop product candidates that may be subject to U. S. export control licensing requirements and foreign investment regulations. Export licensing policies vary, and we may be unable to collaborate with certain countries or, if our product candidates receive regulatory approval, make sales to certain customers as a result of applicable license requirements. We also may incur increased compliance program costs in connection with U.S. export controls, and the availability of future investments from certain countries may be limited as a result of the controlled nature of our product candidates. If we expand our business internationally or collaborate globally, we will be required to make investments in compliance programs related to U.S. international trade laws, including the FCPA and similar anti-bribery or anti- corruption laws, regulations, and rules of other countries in which we may choose to operate. Anti- corruption laws are interpreted broadly. Our business is heavily regulated and therefore involves significant interaction with public officials, including, potentially in the future, officials of non- United States-U. S. governments. Additionally, in many other countries, the healthcare providers who prescribe pharmaceuticals are employed by their government, and the purchasers of pharmaceuticals are government entities; therefore, if our product candidates receive regulatory approval, our dealings with these prescribers and purchasers will be subject to regulation under the FCPA. We may engage third parties to sell our product candidates outside the United States if we receive regulatory approval in such jurisdictions for our product candidates. We may also have direct or indirect interactions with officials and employees of government agencies or government- affiliated hospitals, universities, and other organizations. The SEC and the DOJ have increased their FCPA enforcement activities with respect to biotechnology and pharmaceutical companies. For these reasons, we may be required to expend resources related to training and compliance under FCPA and other anti- corruption laws. There is no certainty that all our employees, suppliers, CMOs, CROs, or other third parties providing services to us will comply with all applicable laws and regulations, particularly given the high level of complexity of these laws. We can be held liable for the corrupt or other illegal activities of our employees, agents, contractors, and other collaborators, even if we do not explicitly authorize or have actual knowledge of these activities. If we have international activities in the future, we may be required to invest in compliance programs and resources related to U. S. import and export regulations, anti-money laundering laws, and various economic and trade sanctions regulations administered by the U. S. Treasury Department's Office of Foreign Assets Controls. Violations of these international trade laws and regulations could result in fines; criminal sanctions against us, our management, or other employees; the closing down of facilities, including those of our suppliers and CMOs; requirements to obtain export licenses; cessation of business activities in sanctioned countries; implementation of compliance programs; and prohibitions on the conduct of our business. Any such violations could include prohibitions on our ability to seek regulatory approval for our product candidates and, if such approval is received, to sell our products in one or more jurisdictions. This could materially damage our reputation, our ability to attract and retain employees, and our business, financial condition, results of operations, and prospects. We face potential liability related to the privacy of health information we may obtain from the patients in our clinical trials if we fail to comply with privacy laws Most healthcare providers are subject to privacy and security regulations promulgated under HIPAA, as amended by HITECH. We are not currently classified as a covered entity or business associate under HIPAA and thus are not subject to its requirements or penalties. However, any person may be prosecuted under HIPAA's criminal provisions either directly or under aiding- and- abetting or conspiracy principles. Consequently, depending on the facts and circumstances, we could face substantial criminal penalties if we knowingly receive individually identifiable health information from a HIPAA- covered

healthcare provider or research institution that has not satisfied HIPAA's requirements for disclosure of individually identifiable health information. In addition, if we receive sensitive personally identifiable information, including health information, we may be subject to state laws requiring notification of affected individuals and state regulators if a breach of personal information occurs, which is a broader class of information than the health information protected by HIPAA. We cannot assure you that we, our CROs, our clinical trial sites, and our clinical trial principal investigators with access to personally identifiable and other sensitive or confidential information relating to the patients in our clinical trials will not breach contractual obligations, or that we or they will not experience data security breaches or attempts thereof. This could have a corresponding effect on our business, including putting us in breach of our obligations under privacy laws and regulations as discussed above, which could in turn adversely affect our business, financial condition, results of operations, and prospects. We cannot assure you that our contractual measures and our own privacy and security- related safeguards will protect us from the risks associated with the third- party processing, storage, and transmission of such information. Compliance with global privacy and data security requirements could result in additional costs and liabilities to us or inhibit our ability to collect and process data globally, and the failure to comply with such requirements could subject us to significant fines and penalties, which could have a material adverse effect on our business, financial condition, results of operations, or prospects. The regulatory framework for the collection, use, safeguarding, sharing, transfer, and other processing of information worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. Globally, many jurisdictions have established their own data security and privacy frameworks. In the United States, there are a broad variety of data protection laws that are either currently in place or under way and a wide range of enforcement agencies at both the state and federal levels have the authority to review companies for privacy and data security concerns based on general consumer protection laws. The Federal Trade Commission ("FTC"), and state Attorneys attorneys General general have been aggressive in reviewing privacy and data security protections for consumers. New laws also are being considered at both the state and federal levels. For example, the CCPA, which went into effect on January 1, 2020, 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. Many other states are considering similar legislation. A broad range of legislative measures also have been introduced at the federal level. There also is the threat of consumer class actions related to these laws and the overall protection of personal data. Additionally, the CCPA was amended by the California Privacy Rights Act (" CPRA "), which significantly amends the CCPA and imposes additional data protection obligations on covered businesses, including additional consumer rights processes, limitations on data uses, new audit requirements for higher risk data, and opt outs for certain uses of sensitive data. It will also create a new California data protection agency authorized to issue substantive regulations, which could result in increased privacy and information security enforcement. The majority of the provisions went into effect on January 1, 2023, and additional compliance investment and potential business process changes may be required. Similar laws have passed in, or are being considered by, other states. The enactment of such laws in other states could result in potentially conflicting requirements, which would make compliance challenging and costly. The FTC and many state attorneys general continue to enforce federal and state consumer protection laws against companies for online collection, use, dissemination and security practices that appear to be unfair or deceptive. For example, according to the FTC, failing to take appropriate steps to keep consumers' personal information secure can constitute unfair acts or practices in or affecting commerce in violation of Section 5 (a) of the Federal Trade Commission Act. The FTC expects a company's data security measures to be reasonable and appropriate in light of the sensitivity and volume of consumer information it holds, the size and complexity of its business, and the cost of available tools to improve security and reduce vulnerabilities. We may also be subject to new state laws governing the privacy of consumer health data, including information concerning individual health conditions and treatment. The data privacy laws in the EU have also been significantly reformed. The collection, use, disclosure, transfer, or other processing of personal data regarding individuals in the EU, including personal health data, is subject to the **General Data Protection Regulation**, (EU) 2016 / 679 (the "GDPR"). The GDPR is wide- ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches, and taking certain measures when engaging third- party processors. The GDPR has expanded the definition of personal data to include coded data and requiring changes to informed consent practices and more detailed notices for clinical trial patients and investigators. In addition, the GDPR also imposes strict rules on the transfer of personal data to countries outside the EU, including the United States and, as a result, increases the scrutiny that clinical trial sites located in the European Economic Area should apply to transfers of personal data from such sites to countries that are considered to lack an adequate level of data protection, such as the United States. The GDPR also permits data protection authorities to require destruction of improperly gathered or used personal information or impose substantial fines for violations of the GDPR, which can be up to 4 % of global revenues or  $\in$  20 million, whichever is greater, and it also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. In addition, the GDPR provides that EU member states may make their own additional laws and regulations limiting the processing of personal data, including genetic, biometric, or health data. Furthermore, <del>as <mark>since the United Kingdom is no longer part</mark> of <mark>the EU, its data protection regulatory regime will be</mark></del> independent of the EU. From January 1, 2021, companies have had to comply with the GDPR and also the United Kingdom GDPR (" UK GDPR "), which, together with the amended UK-United Kingdom Data Protection Act 2018, retains the GDPR in UK national law. The relationship between the United Kingdom and the EU in relation to certain aspects of data protection law remains unclear. In addition, the longer term economic, legal, political, regulatory, and social framework to be put in place between the United Kingdom and the EU has had, and may continue to have, a material and adverse

effect on global economic conditions and the stability of global financial markets and may significantly reduce global market liquidity and restrict the ability of key market participants to operate in certain financial markets. Any of these factors could depress economic activity and restrict our access to capital, which could materially and adversely affect our business, financial condition, and results of operations. Risks Relating to Our Intellectual Property If we do not possess the necessary intellectual property rights covering our CRISPR chRDNA genome- editing technologies and, our product candidates, **and other proprietary technologies**, we may not be able to block competitors or to compete effectively in the market. Our industry is subject to rapid technological change and our success depends in large part on our ability to obtain and maintain intellectual property protection in the United States and other jurisdictions with respect to our CRISPR chRDNA platform technologies and product candidates. We rely upon a combination of patents, owned by us or in-licensed from third parties, and trade secrets to protect our technology and product candidates. We seek to protect our intellectual property by filing patent applications in the United States and in other jurisdictions related to our genome- editing technologies and product candidates that are important to our business. We also rely on know- how and continuing technological innovation to develop and maintain our competitive position. If we are unable to obtain or maintain intellectual property protection with respect to our CRISPR chRDNA genome- editing platform technologies and product candidates, our business, financial condition, results of operations, and prospects will be materially harmed. The strength of patents in the biotechnology and pharmaceutical fields generally, and the genome- editing field in particular, involves complex legal and scientific questions and can be uncertain. For example, the scope of patent protection that will be available to us in the United States is uncertain. Changes in either the patent laws or their interpretation may diminish our ability to protect our intellectual property; obtain, maintain, defend, and enforce our intellectual property rights; and, more generally, could affect the value of our intellectual property or narrow the scope of our owned or in-licensed patents. With respect to both owned and in-licensed intellectual property, we cannot predict whether the patent applications we and our licensors are currently pursuing will issue grant as patents, whether the claims of any issued granted patents will provide sufficient protection, or whether, if these patents are challenged by our competitors, they will be found to be invalid, unenforceable, or not infringed. The patent prosecution process is expensive, time- consuming, and complex, and we or our licensors may not be able to file, prosecute, maintain, enforce, or license all necessary or desirable patents at a reasonable cost or in a timely manner or in all jurisdictions. It is also possible that we will fail to identify patentable aspects of our research and development in time to obtain patent protection before public disclosures are made. Although we may enter into non-disclosure or confidentiality agreements with parties who may have access to patentable aspects of our research and development, such as our employees, collaborators, CMOs, **suppliers**, consultants, CROs, clinical trial site investigators and personnel, and other third parties, any one of these parties may breach their confidentiality agreements and disclose innovations before we can file a patent application, thereby jeopardizing our ability to seek patent protection. The USPTO requires compliance with a number of procedural, documentary, fee payment, and other similar provisions during the patent application process. The ultimate outcome of our pending patent applications is uncertain and the coverage claimed in a patent application can be significantly reduced before the patent is **issued granted**. Even as our patent applications, or those of our licensors, currently or in the future, issue grant as patents, they may not issue grant in a form that will provide us with any meaningful protection, prevent competitors or other third parties from competing with us, dissuade companies from collaborating with us, or otherwise provide us with any competitive advantage. Periodic maintenance fees on issued granted patents are also required to be paid over the lifetime of the patent. Although an inadvertent lapse can, in many cases, be cured by payment of a late fee or by other means in accordance with applicable laws and regulations, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in the loss of patent rights. Noncompliance events that could result in abandonment or lapse of a patent or patent application include, but are not limited to, failure to respond to official actions within prescribed time limits, nonpayment of fees, failure to properly legalize and submit formal documents, and the like. If we experience noncompliance events that cannot be corrected and we lose our patent rights, competitors could enter the market, which would have a material adverse effect on our business. Composition of matter patents for biological and pharmaceutical products, such as CAR- based cell therapy products, often provide a strong form of intellectual property protection as such patents provide protection without specifying any particular method of use or manufacture. Methods of use patents can protect particular applications of a product or the manufacturing of a product; however, such method claims do not prevent a competitor from using a product that is identical to our product for an indication that is outside the scope of the patented method of use or making a product that is identical to our product using a different method of manufacturing. Our allogeneic CAR- T and CAR- NK cell therapy product candidates do not contain our chRDNA genomeediting technology; rather, our chRDNA guides are used in the manufacturing of our CAR- T and CAR- NK products. It is virtually impossible to determine whether a competitor has infringed our chRDNA patents in making their products. Thus, even if we obtain patent protection on certain aspects of our technologies, such protection may not be enough to block our competitors from entering the market. Third- party claims of intellectual property infringement may prevent or delay our ability to commercialize our product candidates. The fields of genome editing and CAR- T and CAR- NK cell therapies are relatively new. No genome- edited products have been commercialized and there is ongoing patent litigation in the autologous CAR-T cell therapy space. Due to the widespread research and development that is taking place in these fields, including by us and our competitors, the intellectual property landscape is in flux and may remain uncertain for the foreseeable future. There may be significant litigation and administrative proceedings that could affect our genome- editing technologies and product candidates. Our commercial success depends upon our ability to develop, manufacture, market, and sell product candidates that we may develop or license without infringing, misappropriating, or otherwise violating the intellectual property rights of third parties. The biotechnology and pharmaceutical industries are characterized by extensive litigation regarding patents and other intellectual property rights. Numerous U. S. and foreign issued granted patents and pending patent applications owned by third parties exist in the fields in which we are developing our product candidates. As industry, government, academia, and other

biotechnology and pharmaceutical research expands and more patents are **issued granted**, the risk increases that our genomeediting technologies or product candidates may give rise to claims of infringement of the patent rights of others. We cannot guarantee that our genome- editing technologies, current and future product candidates, or the use or manufacture of such product candidates does not currently or will not in the future infringe third- party patents. There may be third- party patents with claims to compositions, methods of manufacture, or methods of use or treatment that could cover our current or future product candidates. It is possible that we may fail to identify relevant third- party patents or applications. Furthermore, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Thus, we cannot be certain that we were the first to file any patent application related to our genome-editing technologies or product candidates. Furthermore, patent rights are granted jurisdiction- by- jurisdiction, and our freedom to practice certain genomeediting technologies, including our ability to research, develop, and commercialize our product candidates, may differ by country. Numerous third- party U. S. and foreign issued granted patents and pending patent applications exist in the fields of CRISPR genome editing as well as the field of immuno- oncology, including those relating to CAR constructs and CAR- T and CAR- NK cell therapy compositions and methods of use. Our CB- 010 product candidate - which is an allogeneic anti- CD19 CAR-T cell therapy for the treatment of r/r B-NHL, uses Cas9 chRDNAs to insert the CD19- specific CAR into the T cell genome and for an additional edit. Numerous parties have intellectual property relating to RNA- guided Cas9 genome editing. See Risk Factors-" Our ability to continue to receive licensing revenue and to enter into new licensing arrangements related to the foundational CRISPR- Cas9 intellectual property will be substantially impaired if such intellectual property is limited by administrative patent proceedings -or other patent challenges," in Item 1A of this Annual Report on Form 10-K. Our CB-011 product candidate and our CB- 012 product candidate both use Cas12a chRDNAs to insert the CAR into the T cell genome and to make additional edits. We are aware of certain third- party patents assigned to the Broad Institute, Massachusetts Institute of Technology, and the President and Fellows of Harvard University relating to CRISPR- Cas12a genome- editing systems (Cas12a was then referred to as Cpf1), which will expire in late 2035 assuming no PTE or PTA. Additionally, we are aware of third- party patents assigned to the U.S. government relating to anti-BCMA CARs as well as nucleic acids encoding such CARs, vectors comprising these nucleic acids, and host cells expressing such CARs, which will expire in 2033 assuming no PTE or PTA. We are also aware of several third- party patents relating to various CAR compositions, methods of use, and components, including specific co- stimulatory regions. There is ongoing patent litigation over various third- party CAR patents, and unexpired patents that survive that litigation could be asserted against us. Third parties may assert that our product candidates infringe their patents, including those listed above. Under U. S. patent laws, conducting clinical trials and seeking regulatory approval in the United States for therapeutic products are generally not considered an act of infringement, and similar exemptions are present in other countries. Nevertheless, third parties may allege that the act of filing our BLA or conducting clinical trials is outside of the safe harbor provision for activities reasonably related to the development and submission of information to the FDA for regulatory approval, and third parties may, upon our regulatory filing, assert infringement claims based on existing patents or patents that may be **issued granted** prior to our BLA filing, regardless of the merit of such claims. Even if we believe third- party intellectual property claims are without merit, there is no assurance that a court would find in our favor on questions of infringement, validity, enforceability, ownership, or priority. Patents in the United States by law enjoy a presumption of validity that can be rebutted only with evidence that is " clear and convincing," a heightened standard of proof. In order to successfully challenge the validity of any U.S. patent in federal court, we would need to overcome this presumption of validity, and there can be no assurance that a court of competent jurisdiction would invalidate the patent. A court of competent jurisdiction could hold that these third- party patents are valid, enforceable, and infringed, which could materially and adversely affect our ability to commercialize any product candidates we may develop, including CB- 010, CB- 011, and CB-012, and CB-020, as well as any other product candidates or technologies covered by the asserted third- party patents. If any third- party patents were held by a court of competent jurisdiction to cover our genome- editing technology used in the manufacturing of our product candidates or any product candidate itself or its indication, the holders of those patents may be able to block our ability to commercialize the product candidate unless and until we obtained a license under the applicable patents, or the patents expire, or are held to be not infringed, unpatentable, invalid, or unenforceable. We may not be able to obtain a license to the blocking patents, or the terms of the license may not be commercially viable. Even if we were able to obtain a license, it could be non- exclusive, thereby giving our competitors and other third parties access to the same intellectual property licensed to us, and it could require us to make substantial upfront, milestone, and royalty payments. If we are unable to obtain a necessary license to a third- party patent on commercially reasonable terms, or at all, our ability to commercialize our product candidates may be blocked or delayed, which could have a material adverse effect on our business, financial condition, results of operations, and prospects. We could also be forced, including by court order, to cease manufacturing and commercializing any infringing product candidates. In addition, we could be found liable for significant monetary damages, including treble damages and attorneys' fees, if we are found to have willfully infringed the third- party patent. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar material adverse effect on our business, financial condition, results of operations, and prospects. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of our management time and resources from our business. We may not be able to protect our intellectual property rights throughout the world. Filing, prosecuting, maintaining, enforcing, and defending patents on our genome- editing technologies and product candidates in countries outside the United States is expensive. Prosecution of patent applications is often a longer process and patents may grant at a later date, and with a shorter term, than in the United States. The requirements for patentability differ in certain jurisdictions and countries. Additionally, the patent laws of some countries do not afford intellectual property protection to the same extent as the laws of the United States. For example, unlike patent law in the United States, patent law in most European countries and many other

jurisdictions precludes the patentability of methods of treatment and diagnosis of the human body. Other countries may impose substantial restrictions on the scope of claims, limiting patent protection to specifically disclosed embodiments. Consequently, we may not be able to prevent third parties from practicing our inventions in major markets outside the United States, or from selling or importing products into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and may export otherwise infringing products to jurisdictions where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent such competition. Moreover, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in intellectual property laws in various jurisdictions worldwide. Many companies have encountered significant problems in enforcing and defending intellectual property rights in various jurisdictions globally. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property, particularly those relating to biotechnology products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our intellectual property rights generally. Proceedings to enforce our intellectual property rights in various jurisdictions globally could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly, could put related patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we file, and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage against competitors. Many jurisdictions have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties if they are not practicing the patented technology. In addition, some countries limit the enforceability of patents against third parties, including government agencies. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we or any of our licensors are forced to grant a license to third parties with respect to any patents relevant to our business, our competitive position may be impaired, and our business, financial condition, results of operations, and prospects may be adversely affected. Patent protection must be maintained on a country- by- country basis, which is an expensive and time- consuming process with uncertain outcomes. Accordingly, we may choose not to seek patent protection in certain jurisdictions or countries, and we will not have the benefit of patent protection in such jurisdictions or countries. We may be subject to claims challenging the inventorship of our patents and other intellectual property. We may in the future be subject to claims that former employees, consultants, or other third parties have an interest in our patents or other intellectual property as an inventor, co- inventor, or owner of trade secrets. Although it is our policy to require our employees and consultants who may be involved in the conception or development of intellectual property to execute agreements assigning that intellectual property to us, we may be unsuccessful in executing such an agreement with each party who conceives or develops intellectual property that we regard as our own or such party may breach the assignment agreement. We may have disputes arise from conflicting obligations of consultants or others who are involved in developing our product candidates. Litigation may be necessary to obtain ownership or to defend against claims challenging inventorship. If we or our licensors fail in that litigation, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property. Such an outcome could have a material adverse effect on our business. Even if we or our licensors are successful in defending against those claims, litigation could result in substantial costs and be a distraction to our management and other employees, and the claims could have a material adverse effect on our business, financial condition, results of operations, and prospects. The terms of our patents may not be sufficient to effectively protect our products and business, and the expiration of our patents may subject **us to increased competition**. Although various extensions may be available, the term of a patent, and the protection it affords, is limited. In most countries including the United States, the natural expiration of a patent is generally 20 years after its first effective filing date. Even if patents covering our product candidates are obtained, once the patent term has expired for a product we may be open to competition from biosimilar or generic medications. In addition, although, upon issuance in the United States the term of a patent can be increased based on certain delays caused by the USPTO, this increase can be reduced or eliminated based on certain delays caused by us during patent prosecution or if terminal disclaimers are filed over other co- owned patents or patent applications to avoid rejections based on obviousness- type double patenting. If we do not have sufficient patent term to protect our products, our business, financial condition, results of operations, and prospects will be adversely affected. We may not obtain patent term extension for any product candidates we develop. Depending upon the timing, duration, and specifics of any FDA marketing approval of any product candidates we develop, our U. S. patents may be eligible for limited PTE under the Hatch- Waxman Amendments. The Hatch- Waxman Amendments permit a patent extension term of up to five years as compensation for patent term lost during clinical trials and the FDA regulatory review process. A PTE cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, only one patent may be extended, and only a patent with claims covering the approved biologic, a method for its approved indication, or a method for manufacturing it may be extended. However, we may not be granted an extension because of, for example, failing to exercise due diligence during the clinical phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents, or otherwise failing to satisfy the applicable requirements. Moreover, we may not receive PTE or we may receive less time than we requested. If we are unable to obtain PTE or if the term of any such PTE is less than we request, we will be unable to rely on our patent position to forestall the marketing of competing products following our patent expiration, and our business, financial condition, results of operations, and prospects could be materially harmed. Changes to the patent law in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our genome- editing technologies and product candidates. Patent reform legislation in the United States and other countries could increase the uncertainties around patent protection, costs, and the enforcement or defense of our patents,

all of which could have a material adverse effect on our business, financial condition, results of operations, and prospects. For example, the 2011 Leahy- Smith America Invents Act included a number of significant changes to U. S. patent law. Such provisions affect the way patent applications are prosecuted, redefine prior art, and provide more efficient and cost- effective avenues for competitors to challenge the validity of patents. In addition, the Leahy- Smith America Invents Act transformed the U. S. patent system from a first- to- invent to a first- to- file system, effective on March 16, 2013. For small companies, such as ours, this means that we must file our patent applications earlier in our development process rather than relying on proving priority of invention and it is now easier and less costly for third parties to attack our patents, all of which could harm our business, financial condition, results of operations, and prospects. There is uncertainty regarding the patentability of certain inventions in the biotechnology and pharmaceutical areas. Recent decisions by the U.S. Supreme Court have either narrowed the scope of patent protection available in certain circumstances or weakened the rights of patent owners in particular situations. For example, in Association for Molecular Pathology v. Myriad Genetics, Inc., the Supreme Court ruled that a "naturally occurring DNA segment is a product of nature and not patent eligible merely because it has been isolated," and invalidated Myriad Genetics' claims on isolated BRCA1 and BRCA2 genes. To the extent that our claims relate to naturally occurring antibodies or proteins, these may be deemed to be directed to natural products or to lack an inventive concept above and beyond an isolated natural product, and a court may decide the claims are invalid under the Myriad decision. Depending on future actions by the U. S. Congress, the U. S. courts, the USPTO, and the relevant law- making bodies, as well as courts and patent offices in other countries, the laws and regulations governing patents could change in unpredictable ways that may weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future, which could have a material adverse effect on our existing patent portfolio and those of our licensors. In Europe 's Unified, a new unitary patent system took effect on June 1, 2023, which will significantly impact European patents, including those granted before the introduction of such a system. Under the unitary patent system, European patent applications will have the option, upon grant of a patent, of becoming a Unitary Patent, which will be subject to the jurisdiction of the Unitary Patent Court (the " **UPC** "). The UPC may present uncertainties for our ability to protect and enforce our patent rights against competitors in Europe. Although this new court was is being implemented to provide more certainty and efficiency to patent enforcement throughout Europe, it will also provide provides our competitors with a new forum to use to centrally challenge our patents, rather than having to seek invalidity or non- infringement decisions on a country- by- country basis. It will be several years before the scope of patent rights that will be recognized by the UPC Unified Patent Court, and the strength of patent remedies that will be provided, is known. We may be involved in lawsuits or other proceedings to enforce or protect our patents, the patents of our licensors, or our other intellectual property rights, which could be expensive, time- consuming, and unsuccessful. Competitors may infringe our patents or our licensors' patents or challenge the validity of our or our licensors' patent rights. Even if our patents are unchallenged, they may not adequately prevent others from designing their products to avoid being covered by our claims. If the breadth or strength of protection provided by our patents and patent applications to our product candidates is threatened, it could dissuade companies from collaborating with us to develop, and threaten our or their ability to commercialize, our product candidates. Litigation or other legal proceedings relating to intellectual property claims, with or without merit, is unpredictable and generally expensive and time- consuming and likely to divert significant resources from our core business, including distracting our management and scientific personnel from their normal responsibilities, and generally harm our business. Additionally, a defendant could counterclaim that our patent is invalid or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity or unenforceability are commonplace, and there are numerous grounds upon which a third party can assert invalidity or unenforceability of a patent. Thus, suing a third party for patent infringement puts our patents at risk and we may choose not to take such actions, thus allowing a competitor to infringe our patents. Grounds for a validity challenge in a counterclaim could be an alleged failure to meet any of several statutory requirements, including lack of novelty, obviousness, or non- enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. Thus, a court may decide that one or more of our patents is not valid or is unenforceable or may refuse to stop the other party from using the technology at issue on the grounds that our patents do not cover the technology in question. An adverse result in any litigation or defense proceedings could put one or more of our patents at risk of being invalidated, held unenforceable, or interpreted narrowly and could put one or more of our pending patent applications at risk of not issuing, all of which could negatively impact our business. Even if we establish infringement in a legal proceeding against a third party, the court may decide not to grant an injunction against further infringing activity by the defendant and may only award money damages, which may or may not be an adequate remedy for us depending on the circumstances. Furthermore, because of the substantial amount of discovery required in connection with U. S. patent litigation, there is a risk that some of our confidential information could be compromised by disclosure during litigation. Third parties may also raise similar claims of invalidity before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include inter partes review, ex parte reexamination, and post grant review in the United States, and equivalent proceedings in foreign jurisdictions, including opposition proceedings before the EPO. These proceedings could result in revocation or amendment to our patents, which potentially could result in our patents no longer protecting our genomeediting technologies or our product candidates. A loss of patent protection could have a material adverse impact on our business. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their greater financial resources. There can be no assurance that we will have sufficient financial or other resources for such litigation or proceedings, which may continue for several years. Accordingly, despite our efforts, we may not be able to prevent third parties from infringing or misappropriating or successfully challenging our intellectual property rights. In addition, if securities analysts or investors perceive litigation results to be negative, it could have a substantial adverse effect on the price of our

common stock. There could be public announcements of the results of litigation or patent challenge hearings, motions, or other interim proceedings or developments, which also could affect the price of our stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing, or distribution activities. Any of the foregoing could allow third parties to develop and commercialize competing technologies and products and have a material adverse impact on our business, financial condition, results of operations, and prospects. Our product candidates are biologics, and as such, we may enter into a settlement agreement with a biosimilar manufacturer seeking to market a product highly similar to our product; such a settlement agreement may be reviewed by the Federal Trade Commission and such review could result in a fine or penalty and substantial expense. The FTC reviews patent settlement agreements between biologics companies and biosimilar manufacturers to evaluate whether these agreements include, among other things, anti- competitive reverse payments that slow or defeat the introduction of lower- priced medicines, including biosimilars. If we are faced with an FTC challenge of a settlement agreement with a biosimilar manufacturer, such challenge could impact how or whether we settle the case and, even if we strongly disagree with the FTC' s position, we could face a penalty or fine and substantial expense. Any litigation settlements we enter into with biosimilar manufacturers could also be challenged by third parties adversely affected by the settlement. These kinds of follow- on lawsuits, which may be class action suits, can be expensive and can continue over multiple years. If we were to face lawsuits of this nature, we may not be successful in defeating these claims and we may, therefore, be subject to large payment obligations, which we may not be able to satisfy in whole or in part. Our rights to develop and commercialize our product candidates are subject to the terms and conditions of our licenses and assignments with third parties. If we fail to comply with our obligations under these agreements, we could lose intellectual property rights and be subject to litigation from our licensors or assignors. We license, or have taken assignment to, patents related to certain of our product candidates and genome- editing technologies from third parties. These licenses and assignments typically impose obligations on us, including diligence and payment obligations. If we fail to comply with our obligations under these agreements, our licensors and assignors may have the right to terminate our agreements, in which case we would not be able to commercialize any product that is covered by the patent rights at issue. Additionally, we may be subject to litigation for breach of these agreements. Moreover, if disputes over intellectual property that we have licensed, or taken assignment of, prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the product candidates or technologies covered by such patents, which could have a material adverse effect on our business, financial conditions, results of operations, and prospects. In addition, intellectual property rights that we license in the future may include sublicenses under intellectual property owned by third parties, in some cases through multiple tiers. The actions of our licensors may therefore affect our rights to use our sublicensed intellectual property, even if we are in compliance with all of the obligations under our license agreements. Should our licensors or any of the upstream licensors fail to comply with their obligations under the agreements pursuant to which they obtain the rights that are sublicensed to us, or should those agreements be terminated or amended, our ability to develop and commercialize our product candidates may be materially harmed. Our CRISPR chRDNA genome- editing patent family was developed under a three- year research collaboration between us and Pioneer, now Corteva Agriscience. Initially, this patent family was owned by Pioneer under the terms of the Pioneer Agreement with Pioneer (then a DuPont company), and Pioneer granted us an exclusive license to the chRDNA patent family in the fields of human and animal therapeutics and research tools as well as a non- exclusive license in certain other fields outside the Pioneer Exclusive Field. Through an amendment to the Pioneer Agreement, dated December 18, 2020, Pioneer assigned the chRDNA patent family to us in exchange for an upfront payment and potential future milestones. As part of this amendment, Pioneer also granted a covenant not to sue for our licensees of our chRDNA technologies under certain other Pioneer intellectual property (to which we already have a license that, in this situation, we cannot sublicense to licensees of our chRDNA technologies in the field of human therapeutics) that might cover our chRDNA genome- editing technology, provided that we make the required payments. Thus, if we do not make such payments, our licensees could be sued by Pioneer, which could result in our licensees suing us for breach of contract. Additionally, under the Pioneer Agreement, we licensed certain Pioneer background CRISPR- Cas9 intellectual property, particularly a patent family owned by Vilnius University and exclusively licensed to Pioneer, that we have sublicensed to several third parties as part of our CRISPR- Cas9 out- licensing program. Although the Vilnius patent family does not cover our chRDNA genome- editing technologies or product candidates, if we were to materially breach the Pioneer Agreement and not cure the breach, Pioneer could terminate the Pioneer Agreement, which would expose us to possible lawsuits from a number of our sublicensees to the Vilnius University patent family. For our CB- 011 product candidate, an allogeneic anti-BCMA CAR- T cell therapy, we took assignment of an anti- BCMA scFv from ProMab under the ProMab Agreement. Although we own the patent family that covers this scFv and its methods of use, if we materially breach, and do not cure, the ProMab Agreement, ProMab could terminate the ProMab Agreement and we would be required to immediately cease any and all manufacture, sale, offer for sale, use, import, or export of products comprising the anti-BCMA scFv (provided that, if our product is approved for commercial sale, we may sell any remaining existing inventory of such products for a short period of time). If this were to happen prior to regulatory approval, we would not be able to continue the development of CB- 011 and, if this were to happen after regulatory approval, we would lose all future revenues from CB- 011. The scFv in our CB- 012 product candidate, an allogeneic anti- CLL- 1 CAR- T cell therapy, is exclusively licensed to us in this field by MSKCC. To maintain the license, we are required to pay annual license fees and to meet certain diligence milestones within specified periods of time. We may extend these periods by a certain number of months upon payment of additional fees. If we materially breach, and do not cure, the MSKCC Agreement, MSKCC may terminate the MSKCC Agreement, in which case we would not be able to continue the development of CB- 012 or any other licensed CLL- 1 product candidate. Thus, we are reliant upon the above licenses to and assignments of certain intellectual property from third parties that is important or necessary to the development of our genome- editing technologies and product candidates. In spite of our best efforts, our licensors or assignors might

conclude that we have materially breached our license or assignment agreements, respectively, and might terminate these agreements, thereby removing our ability to develop and commercialize products and technology covered by the agreements. To the extent such third parties fail to meet their obligations under these agreements, which we are not in control of, we may lose the benefits of the agreements. If these agreements are terminated, or if the underlying patents fail to provide the intended exclusivity, competitors could have the freedom to seek regulatory approval of, and to market, products identical to ours. Any of these events could have a material adverse effect on our competitive position, business, financial condition, results of operations, and prospects. Disputes may arise with the third parties from whom we license or take assignment of our intellectual property rights from for a variety of reasons, including: • the scope of rights granted under the license or assignment agreement and other interpretation-related issues; • the extent to which our technology and processes infringe on, or derive from, intellectual property of the licensor that is not subject to the license or assignment agreement and is not covered by a covenant not to sue; • the sublicensing of rights and the obligations to our licensors associated with sublicensing; • our diligence obligations under license or assignment agreements and what activities satisfy those diligence obligations; and • whether payments are due and when. We may not be successful in obtaining or maintaining necessary rights to any future product candidates that we acquire through acquisitions or in-licenses. Our future programs may involve additional product candidates that may require the use of intellectual rights held by third parties, and the growth of our business could depend, at least in part, on our ability to acquire or in-license these intellectual property rights. We may be unable to acquire or in-license intellectual property rights from third parties that we identify. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, which would harm our business. Even if we are able to obtain a license, it may be non- exclusive, thereby giving our competitors access to the same technologies licensed to us. In that case, we may be required to expend significant time and resources to develop or license other product candidates. We may need to cease development of a future product candidate covered by such third-party intellectual property rights. The licensing and acquisition of third- party intellectual property rights is a competitive area, and companies that may be more established or have greater resources than we do may also be pursuing strategies to license or acquire third- party intellectual property rights that we may consider necessary or attractive in order to develop product candidates. More established companies may have a competitive advantage over us due to their size, cash resources, and greater clinical development and commercialization capabilities. In addition, companies that perceive us to be a competitor may be unwilling to assign or license rights to us. We also may be unable to license or acquire third party intellectual property rights on terms that would allow us to make an appropriate return on our investment or at all. There can be no assurance that we will be able to successfully complete such negotiations and ultimately acquire the rights to the intellectual property surrounding the additional product candidates or new genome- editing or other technologies that we may seek to acquire. If we are unable to successfully obtain rights to required third party intellectual property rights, we may not be able to expand our product pipeline, which could have a material adverse effect on our business, financial condition, results of operations, and prospects **. Our** ability to continue to receive licensing revenue and to enter into new licensing arrangements related to the foundational CRISPR- Cas9 intellectual property will be substantially impaired if such intellectual property is limited by administrative patent proceedings or other patent challenges. We have an exclusive license from UC and Vienna in all fields to the CVC IP, having as inventors Drs. Jennifer A. Doudna, Emmanuelle Charpentier, Martin Jinek, and Krzysztof Chylinski. We have entered into over 25 sublicenses, both exclusive and non- exclusive, to this CRISPR- Cas9 intellectual property in combination with licenses to our own Cas9 intellectual property (and sometimes in combination with a sublicense to the Vilnius Cas9 patent family we licensed from Pioneer) in a variety of fields (e.g., human cell therapy, microbial applications, agriculture, livestock, industrial biotechnology, nutrition and health, research reagents and services, forestry, transgenic animal models, internal research, etc.). We are also required to share with UC / Vienna a percentage of sublicensing revenue we receive including cash and equity. These sublicense agreements are an important source of revenues for us while we are developing our own product candidates. Furthermore, we must reimburse UC / Vienna for the patent prosecution and maintenance costs associated with the CVC IP, which are substantial in light of all the disputes outlined below. The CVC IP that we have exclusively licensed from UC / Vienna is co- owned with Dr. Charpentier, and Dr. Charpentier has not granted us any rights to the CVC IP, either directly or indirectly. On December 15, 2016, we entered into the IMA with UC, Vienna, Dr. Charpentier, CRISPR Therapeutics AG (the exclusive licensee of Dr. Charpentier in the field of human therapeutics), ERS Genomics Ltd (the exclusive licensee of Dr. Charpentier in all fields outside human therapeutics), and Intellia, our exclusive licensee in a defined field of human therapeutics. Under the IMA, the co- owners provided reciprocal worldwide cross- consents to each of the other co- owners' existing licensees and sublicensees as well as future licensees and sublicensees, with no accounting to the other owners. The IMA includes a number of other commitments and obligations with respect to supporting and managing the CVC IP, including a cost- sharing agreement. In the United States, each co- owner has the freedom to license and exploit the technology. As a result, although our license from UC / Vienna is exclusive, we do not have any rights from Dr. Charpentier and thus our license to the CVC IP from UC / Vienna is non- exclusive with respect to such co- owned rights. Furthermore, in the United States, each co- owner is required to be joined as a party to any claim or action we may wish to bring to enforce those patent rights. Although we have entered into the IMA, which provides for, among other things, notice of and coordination in the event of third- party infringement of the patent rights within the CVC IP, there can be no assurance that all parties will cooperate in any future infringement. In addition, the parties to the IMA may dispute certain provisions and the resolution of any contract interpretation disagreement could increase what we believe to be our financial obligations to UC / Vienna. The CVC IP is, and has been, the source of several disputes in the USPTO, the EPO, and other patent offices. At the time the CVC IP was first filed (May 25, 2012), the United States was under a first- to- invent patent system; thus, if two or more patent applications or one or more patents and one or more patent applications claimed the same invention, the USPTO would determine the inventorship. Specifically, the Broad Institute Inc. and Massachusetts Institute of Technology and, in some instances, the President and Fellows of Harvard College (individually and collectively, the "Broad"), owns a patent family (having an earliest

filing date of December 12, 2012) that includes issued granted patents in the United States and Europe that claim certain aspects of CRISPR- Cas9 systems to edit DNA in eukaryotic (i. e., plant and animal) cells, including human cells. In January 2016, the Patent Trial and Appeal Board ("PTAB") of the USPTO declared an interference (Interference No. 106, 048, or the' 048 interference) between one of the then- pending U.S. patent applications (now U.S. Patent No. 10, 266, 850) included in the CVC IP and 12 issued granted U. S. patents owned jointly by the Broad to determine which set of inventors invented first and, thus, was entitled to patents on the invention in the United States. The PTAB concluded at the end of the motions phase that the declared interference should be discontinued (and not progress to the priority phase) because the involved claim sets were considered patentably distinct from each other. Following appeal by the CVC group, in September 2018, the U.S. Court of Appeals for the Federal Circuit ("CAFC"), affirmed the PTAB's decision to terminate the interference proceeding without determining which inventors actually invented the use of the CRISPR- Cas9 genome- editing technology in eukaryotic cells. In June 2019, the PTAB declared another interference (Interference No. 106, 115, or the' 115 interference) between 14 pending U. S. patent applications in the CVC IP and 13 patents and a patent application co- owned by the Broad. The Broad patents include those that were the subject of the' 048 interference. In February 2022, the PTAB issued its decision that the Broad inventors were the first to invent the use of CRISPR- Cas9 genome editing in eukaryotic cells; the owners of the CVC IP have appealed this decision to the CAFC and briefing is ongoing. In addition to the Broad, ToolGen, Inc., MilliporeSigma (a subsidiary of Merck KGaA), and Harvard University, each filed patent applications claiming CRISPR- Cas9- related inventions after the CVC IP was first filed (October 23, 2012 in the case of ToolGen patent family; December 6, 2012 in the case of the MilliporeSigma patent family; and December 17, 2012 in the case of the Harvard University patent family) and have each alleged that they invented one or more of the inventions claimed in the CVC IP before the CVC inventors did. In December 2020, the PTAB declared an interference (Interference No. 106, 127, or the' 127 interference) between a ToolGen patent application that claims certain aspects of CRISPR- Cas9 systems to edit DNA in eukaryotic cells, including human cells, and the same 14 pending U.S. patent applications in the CVC IP that are involved in the appeal of the' 115 interference. The motions phase of this interference has concluded and the priority phase suspended until the CAFC appeal is decided. Additionally, the PTAB declared an interference (Interference No. 106, 126) at the same time between the same ToolGen patent application and the Broad patents and patent application in the appeal of the' 115 interference; the motions phase has concluded and this interference is also suspended until the CAFC appeal is decided. In June 2021, the PTAB declared an interference (Interference No. 106, 132 or the <sup>4</sup> 132 interference) between a MilliporeSigma patent application that claims methods for using CRISPR- Cas9 systems to edit DNA in eukaryotic cells, including human cells, and the same 14 pending U.S. applications in the CVC IP that are involved in the '115 and '127 interferences. This interference completed the motions phase and is also suspended until the CAFC appeal is decided. Also in June 2021, the PTAB declared an interference (Interference No. 106, 133) between the same MilliporeSigma patent application and the Broad patents and patent applications in the '115 and '126 interferences; the motions phase has concluded and this interference is also suspended until the CAFC appeal is decided. We do not know the impact of a decision by the CAFC in the appeal of the '115 interference on these suspended interferences. Opposition and appeal proceedings in the EPO are ongoing against patents owned by the Broad, ToolGen, and MilliporeSigma as well as against, and various third parties have opposed the three--- the issued CVC IP European patents. The decision upholding the CVC European patent in amended form has been appealed within the EPO. Additionally, invalidation trials or appeals thereof of the CVC IP are ongoing in **China, India, and** Japan and China. Such proceedings, including appeals, are often lengthy and can lead to the revocation of a patent in its entirety, the maintenance of the patent as issued granted, or, depending upon the jurisdiction, the maintenance of a patent in amended form. These CVC IP CRISPR- Cas9 patents will expire in 2033 without PTA or PTE. In light of the uncertainty surrounding the CVC IP, certain third parties have negotiated royalty-stacking provisions in their sublicenses with us, whereby they can deduct from what they owe to us a certain percentage of royalties they pay to other parties with CRISPR- Cas9 patents (such as to the Broad). Furthermore, other third parties have adopted a "wait and see" approach and are not entering into license agreements with us or third parties until all of the uncertainty surrounding inventorship and priority among the groups with CRISPR- Cas9 patents is resolved. If patents in the CVC IP are invalidated, certain of our sublicensees may wish to renegotiate their license agreements with us or may terminate for convenience. If this happens prior to commercialization of our own product candidates, we could lose a source of revenues while still remaining responsible for reimbursing UC for costs of prosecuting and maintaining the remaining CVC IP. If we are unable to protect the confidentiality of our trade secrets, our business and competitive position will be harmed. In addition to seeking patents for some of our technology and product candidates, we also rely on trade secrets and confidentiality agreements to protect our know- how that is not patentable, processes for which patents are difficult to enforce, and any other elements of our product discovery and development processes that involve confidential know- how, information, or technology that is not covered by patents. Trade secrets and know- how can be difficult to protect. We seek to protect these trade secrets and other confidential information, in part, by entering into non- disclosure or confidentiality agreements with parties who have access to them, such as our employees, collaborators, CMOs, CROs, clinical trial site personnel and investigators, consultants, and other third parties. We also enter into confidentiality and invention assignment agreements with our employees and our agreements with consultants include invention assignment obligations. We seek to preserve the integrity and confidentiality of our data, know- how, and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. Although we have confidence in these individuals, organizations, and systems, agreements or security measures may be breached, and we may not have adequate remedies for any breaches. Monitoring unauthorized uses and disclosures is difficult, and we do not know whether the steps we have taken to protect our confidential information will be effective. We cannot guarantee that our trade secrets and other confidential information will not be disclosed or that competitors will not otherwise gain access to our trade secrets. Despite these efforts, any of these parties may breach agreements and disclose our confidential information, including our trade secrets, and we may not be able to obtain adequate remedies for any 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 confidential information, including trade secrets. If a competitor lawfully obtains or independently develops any of our trade secrets, we will have no right to prevent that competitor from using such information to compete with us, which could harm our competitive position. If we are unable to prevent unauthorized material disclosure of our intellectual property to third parties, or misappropriation of our intellectual property by third parties, we may not be able to establish or maintain a competitive advantage in our markets, which could materially adversely affect our business, operating results, financial condition, and prospects. Additionally, it is possible that our genome- editing technology platform, our trade secrets, and our know- how will over time be disseminated within the industry through the publication of journal articles and the movement of personnel from our company into academia or into other companies that may be our competitors. Furthermore, others may independently discover our trade secrets or other confidential information. For example, the FDA, as part of its Transparency Initiative, is currently considering whether to make additional information publicly available on a routine basis, including information that we consider to be confidential, including trade secrets, and it is not clear at the present time how the FDA's disclosure policies may change in the future, if at all. If any of our trade secrets were to be lawfully obtained or independently developed by a competitor or other third party, we would have no right to prevent them, or those to whom they communicate it, from using that technology or information to compete with us. If any of our trade secrets were to be disclosed to or independently developed by a competitor or other third party, our competitive position will be materially and adversely harmed. Intellectual property rights do not necessarily address all potential competitive threats and may not adequately protect our business or permit us to maintain our competitive advantage. The degree of future protection afforded by our intellectual property rights, whether through patents or trade secrets, is uncertain because intellectual property rights have limitations and may not adequately protect our business or permit us to maintain our competitive advantage. For example: • others may be able to make, use, and sell cell therapy products that are similar to our product candidates without infringing our intellectual property rights; • others may independently develop similar or alternative genome- editing technologies without infringing our intellectual property rights; • we may not develop additional patentable technologies; • others may misappropriate our trade secrets, or independently develop or acquire our trade secrets lawfully; and • our patents may have expired, whether or not PTE was granted. Should any of these events occur, they could have a material adverse effect on our business, financial condition, results of operations, and prospects. If our trademarks are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected. If our trademarks are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected. Our unregistered trademarks may be challenged, infringed, circumvented, declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors may adopt trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our unregistered trademarks. Over the long term, if we are unable to successfully register our trademarks and establish name recognition based on our trademarks, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our trademarks, domain names, copyrights, or other intellectual property rights may be ineffective and could result in substantial costs and diversion of resources and could adversely impact our business, financial condition, results of operations, and prospects. Risks Relating to Our Relationships with Third Parties We rely on third parties to supply the materials for, and the manufacturing of, our clinical product candidates, and, if such product candidates receive regulatory approval, we may continue our reliance on third parties for manufacturing of our commercial products. Our continued success is subject to the performance of these third parties. We currently do not have clinical- scale manufacturing capabilities, nor do we have any immediate plans to develop such capabilities; thus, we must rely on third- party CMOs to manufacture clinical supplies for our product candidates. We currently rely on five different CMOs to supply materials to an additional CMO who manufactures the necessary CB- 010 and, CB- 011 materials, and CB- 012 **product candidates** for our phase 1 clinical trials. We anticipate that we may need to engage other suppliers and CMOs for our clinical trials with our CB-012 and CB-020 product candidates. We receive the CRISPR chRDNA guides used for genome editing from one CMO, the Cas proteins (Cas9 in the case of CB- 010 and Cas12a in the case of CB- 011 and CB- 012) from another CMO, the virus used to insert the CAR into the T cell genome from another CMO located outside the United States, and our healthy donor cells from **multiple two different** sources owned by the same third- party supplier. The virus CMO receives plasmid from another supplier used in the manufacture of the viral material. Another CMO uses all of these materials to manufacture the CAR-T products. Coordination is essential to ensure that the various materials are received by the CMO manufacturing the T cell products in time, and in the correct amounts, for manufacturing runs. The manufactured CAR-T products then undergo a series of release testing. There can be no assurance that we will not experience supply or manufacturing issues in the future; particularly, given our reliance on single- source suppliers, some of which are small companies with limited resources and experience to support clinical, and ultimately commercial, products. We cannot ensure that these suppliers will remain in business or that they will not be purchased by one of our competitors or another company that is not interested in continuing to produce these materials for our intended purposes. In addition, the lead time needed to establish a relationship with a new supplier can be lengthy, and we may experience delays in meeting demand if we must switch to a new supplier or CMO. The time and effort to qualify a new supplier or CMO, including to meet any regulatory requirements for such qualification, could result in additional costs, diversion of resources, or reduced manufacturing yields, any of which would negatively impact our operating results. Furthermore, we may be unable to enter into agreements with a new supplier on commercially reasonable terms, which could have a material adverse impact on our business, financial condition, results of operations, and prospects. If

our CMOs and suppliers cannot successfully manufacture materials that conform to our specifications and the strict regulatory requirements of the FDA or other regulatory authorities, they will not be able to secure or maintain regulatory approval for their manufacturing facilities. In addition, we have no direct control over the ability of our CMOs and suppliers to maintain adequate quality control, quality assurance, and corresponding maintenance of records and documents, or to hire and retain trained personnel. If the FDA or a foreign regulatory authority inspects these third- party facilities for compliance with regulations for the manufacture and testing of materials or product candidates and, if these facilities fail inspection and cannot adequately correct deficiencies, we may need to find alternative CMOs, which would significantly impact our ability to develop and obtain regulatory approval for our product candidates, and if approved, to market our products, **One of our CMOs is a company with** ties to China. U. S. lawmakers have urged the U. S. government to investigate CMOs and CROs that have ties to China to ensure that sensitive U. S. biotechnology intellectual property is not transferred to China. Any such investigations or other regulatory actions could affect the ability of this CMO to provide services to us in a timely manner. In addition, if our CMOs and suppliers are unable to timely perform or have operations temporarily halted as a result of inspection or enforcement actions taken by the FDA or other regulatory authorities, or as a result of the COVID-19 pandemic pandemics or other public health crises, we may experience manufacturing delays or delays in receiving healthy donor cells used in manufacturing our <del>CB-010</del> product <del>candidates</del> or may need to find alternative CMOs or suppliers, which in each case would significantly impact our ability to develop, obtain regulatory approval for, and market our product candidates, if approved. We do not yet have sufficient information to reliably estimate the cost of the commercial manufacturing of our product candidates, and the actual cost to manufacture and process our product candidates could materially and adversely affect the commercial viability of our product candidates. Our product candidates have not been manufactured at commercial scale, may not be able to achieve commercial manufacturing, and we may be unable to create a product inventory necessary to satisfy demands for any of our product candidates following approval. As a result, we may never be able to develop a commercially viable product. In addition, our current reliance on a limited number of CMOs and suppliers exposes us to a variety of risks, each of which could delay our preclinical studies, clinical trials, the approval, if any, of our product candidates by the FDA or foreign regulatory authorities, or the commercialization of our product candidates or result in higher costs or deprive us of potential product revenue. These risks include: • our CMOs and suppliers may be unable to timely manufacture our product candidates or produce the quantity and quality required to meet our preclinical, clinical, and commercial needs, if any; • our CMOs and suppliers may not be able to execute our manufacturing procedures appropriately; • our CMOs and suppliers have their own proprietary methods, which we may not have access to if we wish to, or are required to, switch CMOs or suppliers. Additionally, we may not own, or may have to share, the intellectual property rights to any improvements made by our CMOs in the manufacturing process for our product candidates; • our CMOs and suppliers may not perform as agreed or may not remain in business for the time required to supply our clinical trials or to successfully manufacture, store, and distribute our commercial products; • our CMOs and suppliers could breach or terminate their agreements with us; • we face competition for supplies from other gene and cell therapy companies, which may make it difficult for us to secure materials or the testing of such materials on commercially reasonable terms or in a timely manner; • our CMOs may fail to adequately store the various components received from our suppliers and any damage or loss of such materials could materially impact our ability to manufacture and supply our product candidates; • our product candidates may be damaged or otherwise made unfit for use in clinical trials during shipment from our CMOs to clinical trial sites; • we rely on third parties to perform release tests on our product candidates prior to delivery to clinical trial sites. If these tests are not appropriately done and test data are not reliable, patients could be put at risk of serious harm; • we may be unable to identify additional CMOs or suppliers on acceptable terms or at all because the number of potential manufacturers is limited and the FDA or foreign regulatory authorities may have questions regarding any replacement CMO or supplier. This may require new testing and regulatory interactions. In addition, a new CMO would have to be educated in, or develop substantially equivalent processes for, production of our product candidates; and • as a result of the eurrent COVID-19 pandemics or other public health crises, our CMOs and suppliers may experience production delays and shutdowns. Our CMO that supplies the virus we use to insert the CAR into our CB-010 CAR-T product eandidate **candidates** is located outside the United States. To date, our virus CMO has not been audited by the FDA, but it has received the cGMP certification for the manufacture of recombinant viral vectors from an EU national regulatory authority. There are additional risks with using a non-U. S. vendor, including: • economic weakness, including inflation, or political instability in particular non-U.S. economies and markets; • difficulties in compliance with non-U.S. laws and regulations; • changes in non-U. S. regulations and customs, tariffs, and trade barriers; • changes in non- U. S. currency exchange rates and currency controls; • trade protection measures, import, or export licensing requirements, or other restrictive actions by U. S. or non-U. S. governments; • negative consequences from changes in tax laws; • difficulties in managing international logistics and transportation ; • the CMO's potential unfamiliarity with FDA requirements when shipping into the United States; and • workforce uncertainty in countries where labor unrest is more common than in the United States. For our allogeneic CAR-T product candidates, we rely on receiving healthy donor material to manufacture our product candidates. Variation in quality of donor T cells, and potential challenges in procuring appropriate donor material, could result in insufficient product supply or may result in us being unable to initiate or continue clinical trials on the timelines we expect. Unlike autologous CAR-T companies, we are reliant on receiving healthy donor material to manufacture our product candidates. Healthy donor T cells vary in quality, and this variation requires us to release batches with the highest integrity based on specifications confirmed by regulatory authorities, which makes producing standardized product candidates more likely. However, this step may slow the development and commercialization pathway of those product candidates if releasable batches are not identified sufficiently rapidly. We and our CMOs have developed a screening process designed to enhance the quality and consistency of T cells used in the manufacture of our CAR-T cell product candidates, but our screening process may fail to identify suitable donor material and we may discover failures with the material after production. We may also have to develop new testing methods and update

our specifications for new risks, such as screening for new viruses. We have strict specifications for donor material, which include specifications required by regulatory authorities. If we are unable to (i) identify and obtain donor material that satisfies specifications, (ii) agree with regulatory authorities on appropriate specifications, or (iii) address variability of donor T cells, there may be insufficient material or we may be unable to initiate or continue clinical trials on the timelines we expect, which could harm our reputation and adversely impact our business and prospects. Although our suppliers are currently able to provide us with donor material, if, in the future, our suppliers are unable to secure donor material due to the COVID-19 pandemie **pandemics** or other public health crises or for **any** other reasons, we may no longer have sufficient donor material to manufacture our cell therapy product candidates . Additionally, our donor- derived product candidates may be subject to rapid recognition by a patient's immune system, thus limiting their potential efficacy. We rely and will continue to rely on third parties to conduct our clinical trials. If these third parties do not successfully carry out their contractual duties or do not meet expected deadlines, we may not be able to obtain regulatory approval of, or commercialize, our product candidates. We depend, and will continue to depend, on CROs, clinical trial sites and clinical trial principal investigators, contract laboratories, and other third parties to conduct our ongoing ANTLER and CaMMouflage phase 1 clinical trials and future clinical trials. We will rely heavily on these third parties over the course of our clinical trials, and we control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our studies is conducted in accordance with the protocol and applicable legal, regulatory, and scientific standards and regulations, and our reliance on third parties does not relieve us of our regulatory responsibilities. We and these third parties are required to comply with cGCPs, which are regulations and guidelines enforced by the FDA and comparable foreign regulatory authorities for the conduct of clinical trials on product candidates in clinical development. Regulatory authorities enforce cGCPs through periodic inspections and for- cause inspections of clinical trial principal investigators and trial sites. If we or any of these third parties fail to comply with applicable cGCPs or fail to enroll a sufficient number of patients, we may be required to conduct additional clinical trials to support our marketing applications, which would delay the regulatory approval process. Moreover, our business may be implicated if any of these third parties violates federal, state, or foreign fraud and abuse or false claims laws and regulations or healthcare privacy and security laws, or provide us or government agencies with inaccurate, misleading, or incomplete data. Although we intend to design the clinical trials for our product candidates, our CROs will-facilitate and monitor our clinical trials. As a result, many important aspects of our clinical development programs, including site and investigator selection, and the conduct and timing and monitoring of the study, are will be partly or completely outside our direct control. Our reliance on third parties to conduct and **monitor the progress of** clinical trials will also result results in less direct control over the collection, management, and quality of data developed through clinical trials than would be the case if we were relying entirely upon our own employees. Communicating with third parties can also be challenging, potentially leading to mistakes as well as difficulties in coordinating activities. Any third parties conducting our clinical trials are not, and will not be, our employees and, except for remedies available to us under our agreements with these third parties, we cannot control whether they devote sufficient time and resources to our ongoing preclinical, clinical, and nonclinical programs. These third parties may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other drug development activities, which could affect their performance on our behalf. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements, or if there are other difficulties with such third parties, such as staffing difficulties, changes in priorities, or financial distress, our clinical trials may be extended, delayed, or terminated. Unauthorized access or manipulation of our clinical trial data in databases maintained or utilized by third parties may adversely affect the validity of the data from our clinical trials and, ultimately, our clinical trials. There have been instances in the biotechnology industry of clinical trial investigators acting improperly, including data fabrication and unauthorized manipulation of data. In addition, a growing number of cybersecurity incidents are being reported, during which certain organizations gain access to databases that contain clinical trial data and demand a ransom. In such instances, it may be difficult to determine whether the validity of our clinical trial data has been compromised, thereby jeopardizing the entire clinical trial. As a result, we may not be able to complete development of, obtain regulatory approval of, or successfully commercialize our product candidates. As a result, our financial results and the commercial prospects for our product candidates will be harmed, our costs could increase, and our ability to generate revenue could be delayed. If any of our relationships with trial sites, or any CRO that we may use in the future, terminates, we may not be able to timely enter into arrangements with alternative trial sites or CROs, or do so on commercially reasonable terms. Switching or adding clinical trial sites or CROs to conduct our clinical trials involves substantial cost and requires extensive management time, training, and focus. In addition, there is a natural transition lag when a new third party must learn about our product candidates and protocols, which can result in delays that may materially impact our ability to meet our desired clinical development timelines. We also are required to register certain ongoing clinical trials and post the results of completed clinical trials on a U.S. government- sponsored database, www. ClinicalTrials. gov, within certain timeframes. Failure to do so can result in fines, adverse publicity, and civil and criminal sanctions. Our ANTLER phase 1 clinical trial for our CB- 010 product candidate and, our CaMMouflage phase 1 clinical trial for our CB- 011 product candidate, and our AMpLIFY phase 1 clinical trial for our CB- 012 product candidate are posted on www. Clinical Trials. gov. For any violations of laws and regulations during the conduct of our preclinical studies and clinical trials, we could be subject to warning letters or enforcement action that may include civil and other penalties, up to and including criminal prosecution - AbbVie has the right to delay timelines or terminate our collaboration and license agreement at its sole discretion, which will affect our ability to receive reimbursements, milestone payments, and royalties. In addition, we may not be able to meet our obligations under the AbbVie collaboration, and the development of our product candidates may be delayed in light of our obligations to AbbVie. In February 2021, we entered into a multi- year collaboration and license agreement under which we will utilize our

CRISPR Cas12a chRDNA genome- editing and cell therapy technologies to research and develop two new CAR- T cell therapies for AbbVie. We are responsible for conducting certain preclinical research, development, and manufacturing activities, including assisting in the manufacturing of all phase 1 clinical materials and assisting AbbVie with the preparation and filing of its IND applications. We and AbbVie develop research plans, budgets, and timelines for the two Program Slots; however, ultimately these are under AbbVie's control and AbbVie may choose to delay certain activities. For example, the parties have agreed that all CMO manufacturing activities be performed no earlier than 2024. Such delays may affect the amount of reimbursement we receive and revenue we recognize from the collaboration. Our ability to receive significant milestone payments is based on AbbVie's achievement of developmental, regulatory, and sales-based milestones, which is outside of our control and is dependent on AbbVic's commercially reasonable efforts to develop, commercialize, and manufacture the licensed collaboration products. Any delays by AbbVie will substantially impact the timing of these milestones. Furthermore, AbbVie has the right to terminate the collaboration and license agreement at its sole discretion upon 90 days' prior written notice to us, which would eliminate all future reimbursements, milestone payments, and royalties and could be perceived negatively by the market. The collaboration involves a number of our employees and resources. We have not previously undertaken a collaboration of this magnitude and focus. Although we may hire additional employees to increase our research and development group, it is not certain that we will be able to timely hire, or retain, qualified employees, in which ease the work on our pipeline product candidates may be delayed until we are able to increase our staff such that we can meet our obligations under the AbbVie research plan and continue to develop our own product candidates. We may form or seek collaborations or strategic alliances in the future for the development and commercialization of one or more of our product candidates or for new product candidates. We may not be successful in those efforts and, even if we do enter into any collaborations, they may not be successful. Our product candidate development programs and the potential commercialization of our product candidates will require substantial additional cash to fund expenses. To date, we have not partnered with a third party with respect to **commercializing of** any of our product candidates . We have entered into agreements with Pfizer with respect to certain information rights and rights of first negotiation with Pfizer regarding a BCMA Product Candidate, including our CB-011 product candidate. In the future, we may choose to partner with third parties for one or more of our product candidates. If we are unable to negotiate and enter into partnerships, we may have to curtail the development of the product candidate for which we are seeking to collaborate, reduce or delay its development program or one or more of our other development programs, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop our product candidates or bring them to market, if approved, and generate product revenue. If we decide to collaborate with pharmaceutical or biotechnology companies for the development and potential commercialization of any of our product candidates, or new product candidates, we may not be able to negotiate collaborations for such product candidates on a timely basis, on acceptable terms, or at all. We may also be restricted under existing agreements from entering into future collaborations. Collaborations are complex and time- consuming to negotiate and document. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the potential collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the potential collaborator's evaluation of a number of factors. Those factors may include the design or results of clinical trials, the likelihood of approval by FDA or comparable regulatory authorities outside the United States, the potential market for the subject product candidate or candidates, the costs and complexities of manufacturing and delivering such product candidates to patients, the potential of competing biologics or other therapeutic approaches, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge, and industry and market conditions generally. The potential collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than one with us for our product candidate or for a new product candidate. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators. Thus, we may face significant competition in seeking appropriate collaborators. Furthermore, the terms of any collaborations or other arrangements that we may establish may not be favorable to us. Even if we are able to enter into a collaboration, the following are some of the risks associated with doing so: • collaborators have significant discretion in determining the efforts and resources that they will apply to collaborations and may not devote sufficient resources to the development, manufacturing, marketing, or sale of collaboration products; • collaborators may not pursue development and commercialization of any product candidates we may develop or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in the collaborator's strategic focus or available funding, or external factors such as an acquisition that diverts resources or creates competing priorities; • collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials, or require further development of a product candidate for clinical testing; • collaborators may adopt alternative technologies, which could decrease the marketability of our product candidates and genome- editing technologies; • collaborators may independently develop, or develop with third parties, products that compete directly or indirectly with our product candidates if the collaborators believe that competitive products are more likely to be successfully developed or can be commercialized under terms that are more economically attractive than ours, that may result in the withdrawal of the collaborator support for our collaboration product candidates; • collaborators with marketing and distribution rights to one or more products may not commit sufficient resources to the marketing and distribution of our product candidates; • collaborators may not properly obtain, maintain, enforce, or defend our intellectual property if we grant such rights or may use our intellectual property in such a way

as to invite litigation that could jeopardize or invalidate our intellectual property or expose us to potential litigation; • we may lose certain valuable rights under circumstances identified in our collaborations, including if we undergo a change in control; • disputes may arise between our collaborator and us that may cause the collaborator to act in a manner adverse to us and could result in the delay or termination of the research, development, or commercialization of our product candidates or that result in costly litigation or arbitration that diverts our management's attention and resources; • collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner, if at all. For example, if a collaborator were to be involved in a business combination, the continued pursuit and emphasis on our product development or commercialization program under such collaboration could be delayed, diminished, or terminated; and • collaboration agreements may be terminated and, if terminated, we may find it more difficult to find a suitable replacement collaborator or attract new collaborators, resulting in a need for additional capital to pursue further development or commercialization of the applicable product candidates we may develop. We may not realize the benefits of acquired assets or other strategic transactions. We evaluate various strategic transactions on an ongoing basis. We may acquire other businesses, products or product candidates, intellectual property, or technologies as well as pursue joint ventures or investments in complementary businesses. The success of any future strategic transaction depends on various risks and uncertainties, including: • unanticipated liabilities related to acquired companies or joint ventures; • difficulties integrating acquired personnel, technologies, and operations into our existing business; • retention of key employees; • diversion of management' s time and focus from operating our business to management of strategic alliances or joint ventures or acquisition integration challenges; • increases in our expenses and reductions in our cash available for operations and other uses; • disruption in or termination of our relationships with collaborators or suppliers as a result of such a transaction; and • possible write- offs or impairment charges relating to acquired businesses or joint ventures. Foreign acquisitions and joint ventures are subject to additional risks, including those related to integration of operations across different cultures and languages, currency risks, potentially adverse tax consequences of overseas operations, and the particular economic, political, and regulatory risks associated with specific countries. Future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, or amortization expenses or write- offs of goodwill, any of which could harm our financial condition. We could also incur losses resulting from undiscovered liabilities that are not covered by the indemnification we may obtain from the seller. If we in-license product candidates or products or acquire businesses, we may not be able to realize the benefit of those transactions if we are unable to successfully integrate them with our existing operations and company culture. We cannot be certain that, following a strategic transaction or license, we will achieve the results, revenue, or specific net income that justifies the transaction. Future acquisitions or dispositions could result in potentially dilutive issuances of our equity securities, the incurrence of debt, contingent liabilities, or amortization expenses or write- offs of goodwill, any of which could harm our financial condition. We may be subject to claims that our employees, consultants, or third parties performing services for us have wrongfully used or disclosed confidential information of third parties. Many of our employees were previously, and our consultants are or were previously, employed at universities or research institutions, or at other biotechnology or pharmaceutical companies. Although we try to ensure that our employees, consultants, and third parties performing services for us do not use the confidential information of former employers or other companies in their work for us, we may be subject to claims that we or these individuals have used or disclosed confidential information or intellectual property, including trade secrets, of any such individual's current or former employer or other third party. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to our management and employees. Risks Relating to Employee Matters, Managing Growth, and Other Risks Relating to Our Business Our future success depends on our ability to retain our executive officers and to attract, retain, and motivate qualified personnel. We are highly dependent on the research and development, clinical, operational, legal, financial, and other business expertise of our executive officers, including Rachel E. Haurwitz, Ph. D., our president and chief executive officer; Steven B. Kanner, Ph. D., our chief scientific officer; Tim Kelly, M. S. / M. B. A., our chief technology officer; Ruhi Khan, M. B. A., our chief business officer; Barbara G. McClung, J. D., our chief legal officer and corporate secretary; Jason V. O' Byrne, M. B. A., our chief financial officer; and **Reigin Zawadzki Syed Rizvi, M. D.**, our chief medical people officer; as well as other members of our senior leadership team and our scientists-research and development team. Certain of our scientists have greatly contributed to our intellectual property and are critical as we move our CRISPR Cas12a chRDNA technology platform forward. Although we have entered into employment agreements with all of our executive officers, each of them may terminate their employment with us at any time. All of our employees are "at will, "which means that any of our employees could leave our employment at any time, with or without notice. We conduct substantially all of our research activities at our facilities in Berkeley, California. The San Francisco Bay Area is headquarters to many other biopharmaceutical companies and many academic and research institutions. Competition for skilled personnel in our industry is intense and may limit our ability to hire and retain highly qualified personnel on acceptable terms, if at all. Many of the biotechnology companies and research institutions that we compete against for qualified personnel and consultants have greater financial and other resources, different risk profiles, and a longer history in the industry than we do. Recruiting and retaining qualified research, development, manufacturing, regulatory, and clinical personnel is critical to our success. Our success also depends on our ability to continue to attract, retain, and motivate entry-level, mid-level, and senior scientific personnel as well as managers. We may not be able to attract and retain these personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies, as well as academic and research institutions, for similar personnel. If we are unable to continue to attract and retain high- quality personnel and consultants, the rate and success at which we can discover and develop product candidates and operate our business will be limited. To induce employees to remain at our company, in addition to salary and cash incentives, we provide equity awards that vest over time, the value of which may be significantly affected by movements in

our stock price that are beyond our control and may be insufficient to counteract more lucrative offers from other companies. In addition, we rely on consultants and advisors, including our co- founders and scientific advisory board, or SAB, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors, including Drs. Jennifer A. Doudna and Martin Jinek, who are among our founders and who are pioneers in CRISPR genome- editing technology, are not employed by us, are employed by employers other than us, and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. The inability to recruit or retain certain executive officers, key employees, consultants, or advisors may impede the progress of our research, development, and commercialization objectives and have a material adverse effect on our business, intellectual property, financial condition, results of operations, and prospects. We must continue developing and expanding our company, and we may encounter difficulties in managing this development and expansion, which could disrupt our operations. As of March 1, 2023-2024, we have 137-158 full-time employees, and we expect to continue to increase our number of employees and the scope of our operations, specifically clinical operations, in 2023-2024 and beyond as we seek to advance development, and if successful, commercialization, of our product candidates. To manage our anticipated development and expansion, we must continue to implement and improve our managerial, operational, and financial systems; expand our facilities; and continue to recruit and train additional gualified personnel. Current and future growth imposes significant added responsibilities on members of management, including: • identifying, recruiting, integrating, maintaining, motivating, and integrating additional employees; • managing our internal development efforts effectively, including clinical trials and FDA or foreign regulatory authority review for our product candidates, while complying with our contractual obligations to third parties; and • improving our operational, financial and management controls, reporting systems, and procedures. Also, our management may need to divert a disproportionate amount of its attention away from their day- to- day activities and devote a substantial amount of time to managing these expansion activities. Due to our limited resources, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. This may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees, and reduced productivity among our remaining employees. The physical expansion of our operations may lead to significant costs and may divert financial resources from other projects, such as the development of our product candidates. If our management is unable to effectively manage this expansion, our expenses may increase more than expected, our ability to generate or increase our revenue could be reduced, and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize our product candidates, if approved, and compete effectively will depend, in part, on our ability to effectively manage the continuing development and expansion of our company. Our internal computer systems, or those of our third- party vendors, collaborators, consultants, or third parties performing services for us with which we interact, may fail or suffer security breaches, which could result in a material disruption of the development of our product candidates and program research programs, compromise sensitive information related to our business, or prevent us from accessing critical information, potentially exposing us to liability or otherwise adversely affecting our business. Our internal computer systems, and those of our current and any future third- party vendors, collaborators, eonsultants, and third parties performing services for us with which we interact, including as well as our clinical sites, governmental agencies, CMOs, suppliers, CROs, clinical sites, and regulatory authorities the like, are vulnerable to damage from computer viruses, **ransomware, malware, data corruption, cyber- based attacks, phishing attacks,** unauthorized access, natural disasters, terrorism, war, and telecommunication and electrical failures. Attacks on information technology systems are increasing in their frequency, levels of persistence, sophistication and intensity, and they are being conducted by increasingly sophisticated and organized groups and individuals with a wide range of motives and expertise. The prevalent use of mobile devices and unauthorized applications also increases the risk of data security incidents. In addition, the COVID-19 pandemic increase in the number of our employees, and continued hybrid working environment, has intensified our dependence on information internet technology systems as some of our critical business activities are currently being conducted remotely, which may create additional opportunities for cybercriminals to exploit vulnerabilities. Furthermore, because the techniques used to obtain unauthorized access to, or to sabotage, systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or implement adequate preventative measures. We may also experience security breaches that may remain undetected for an extended period. Even if identified, we may be unable to adequately investigate or remediate incidents or breaches due to attackers increasingly using tools and techniques that are designed to circumvent controls, to avoid detection, and to remove or obfuscate forensic evidence. Although we have not experienced any such material system failure, accident, or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a disruption of our product candidate development and our business operations, whether due to a loss of our trade secrets or other confidential information or other similar disruptions. For example, the loss of clinical trial data from our current or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. To the extent that any disruption or security breach were to result in the theft, **loss**, or destruction of intellectual property, data, or other misappropriation of assets; financial loss; or otherwise compromise our confidential information, including trade secrets, and disrupt our operations, our competitive position could be harmed, and the further development and commercialization of our product candidates could be delayed, any of which could materially adversely affect our business, financial condition, results of operations, and growth prospects. We could be subject to risks caused by misappropriation, misuse, leakage, falsification, or intentional or accidental release or loss of information maintained in the information systems and networks of our company, our third- party vendors, and clinical sites, including personal information of our employees and, potentially, our clinical study patients, and company and vendor confidential data. In addition, third parties may attempt to penetrate our systems or those of our vendors or fraudulently induce our personnel or the personnel of our vendors to disclose sensitive information to gain access to data and systems. We may experience threats to our data and

systems, including malicious codes and viruses, phishing, and other **cyberattacks** cyber- attacks. The number and complexity of these threats continue to increase over time. If a material breach of our information technology systems or those of our vendors occurs, the market perception of the effectiveness of our security measures could be harmed and our reputation and credibility could be damaged. We could be required to expend significant amounts of money and other resources to repair or replace information systems or networks. In addition, we could be subject to regulatory actions or claims made by individuals and groups in private litigation involving privacy issues related to data collection and use practices and other data privacy laws and regulations, including claims for misuse or inappropriate disclosure of data, as well as unfair or deceptive practices. Although we develop and maintain systems and controls designed to prevent these events from occurring, and we have a process to identify and mitigate threats, the development and maintenance of these systems, controls, and processes is costly and requires ongoing monitoring and updating as technologies change and efforts to overcome security measures become increasingly sophisticated. Moreover, despite our efforts, the possibility of these events occurring cannot be eliminated entirely. As we outsource more of our information systems to vendors, engage in more electronic transactions with clinical sites and collaborators, and rely more on cloud- based information systems, the related security risks will increase and we will need to expend additional resources to protect our technology and information systems. In addition, there can be no assurance that our internal information technology systems, or those of third parties with which we conduct business, will be sufficient to protect us against breakdowns, service disruption, data deterioration, or loss in the event of a system malfunction, or prevent data from being stolen or corrupted in the event of a cyberattack, security breach, industrial espionage attacks, or insider threat attacks, which could result in financial, legal, business, or reputational harm. Our employees, clinical trial principal investigators, and consultants may engage in misconduct or other improper activities, including non- compliance with regulatory standards and requirements and insider trading. We are exposed to the risk of fraud or other misconduct by our employees, clinical trial principal investigators, and consultants. Misconduct by these parties could include intentional failures to comply with FDA regulations or the regulations applicable in other jurisdictions, to provide accurate information to the FDA and other regulatory authorities, to comply with healthcare fraud and abuse laws and regulations in the United States and in other jurisdictions, to report financial information or data accurately, or to disclose unauthorized activities to us. Such misconduct could involve the improper use of information obtained in the course of clinical trials or interactions with the FDA or other regulatory authorities, which could result in regulatory sanctions and cause serious harm to our reputation. We may also be subject to federal, state, and foreign laws governing the privacy and security of identifiable patient information. If our operations are found to be in violation of any of these laws that apply to us, we may be subject to significant administrative, civil, and criminal penalties. If we commercialize our products, sales, marketing, and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self- dealing, and other abusive practices. These laws and regulations restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs, and other business arrangements. We have adopted a Code of Business Conduct, Scientific and Data Integrity, and Ethics that is applicable to all of our employees, but it is not always possible to identify and deter employee misconduct. The precautions we take to detect and prevent misconduct may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from government investigations or other actions or lawsuits stemming from a failure to comply with these laws or regulations. Additionally, we are subject to the risk that a person could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, financial condition, results of operations, and prospects, including the imposition of administrative, civil, and criminal penalties; damages; monetary fines; contractual damages; reputational harm; and curtailment of our operations, any of which could adversely affect our business. financial condition, results of operations, and prospects. If we fail to comply with environmental, health, and safety laws and regulations, we could become subject to fines or penalties or incur costs that could harm our business; additionally, our business could be shut down until we are in compliance with those laws and regulations. We are subject to numerous federal, state, and local environmental, health, and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment, and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also produce hazardous waste products. We contract with third parties for the disposal of these materials and wastes. We will not be able to eliminate the risk of contamination or injury from these materials. If contamination or injury results from any use by us of hazardous materials, we could be held liable for any resulting damages. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with these laws and regulations. In addition, we may incur substantial costs to comply with current or future environmental, health, and safety laws and regulations. These current or future laws and regulations may impair our product candidate development and research program efforts. Moreover, there is increasing stakeholder pressure on companies to diligence environmental, social, and governance matters in the supply chain. Negative publicity regarding production methods, alleged practices, or workplace or related conditions of any of our **CMOs**, suppliers, <del>CMOs</del>, CROs, clinical sites, or third parties who perform services for us could adversely affect our reputation. We could be forced to locate alternatives, which could increase our costs and result in delayed supply of components for, and manufacturing of, our product candidates, or other disruptions to our operations. Our insurance policies are expensive and only protect us from some business risks, which may leave us exposed to certain uninsured liabilities. Although we have obtained product liability insurance coverage for our clinical trials, it may not be adequate to cover all expenses or liabilities that we may incur. Furthermore, we anticipate that we will need to increase our insurance coverage if we successfully commercialize any product candidate. Product insurance coverage is increasingly expensive, and we may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise. Once, and if, we obtain marketing approval for a product candidate, we intend to acquire product liability insurance coverage for our commercial products; however, we may be unable to obtain

such product liability insurance on commercially reasonable terms or in adequate amounts. Our insurance policies may also have various exclusions, and we may be subject to a product liability claim for which we have no coverage. Additionally, we may have to pay amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient capital to pay such amounts. Many of our license agreements require us to indemnify our licensors or licensees against certain third- party claims; we may not have insurance for those indemnifications or our insurance may be inadequate should any claim arise. As a public company, it is expensive for us to maintain and, in the future, increase our levels of director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. Any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our cash position and results of operations. As a result, it may be more difficult for us to attract and retain qualified people to serve on our board of directors, our board committees, or as executive officers. Product liability lawsuits against us could cause us to incur substantial liabilities and could limit commercialization of any product candidates that we may develop. We will face an inherent risk of product liability exposure related to the testing of our product candidates in human clinical trials and will face an even greater risk if such product candidates receive marketing approval and are sold commercially. For example, we may be sued if our product candidates cause or are perceived to cause injury or are found to be otherwise unsuitable during clinical testing, manufacturing, marketing, or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability, or a breach of warranties. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against claims that our product candidates caused injuries, we could incur substantial liabilities. Even a successful defense would require significant financial and management resources. Regardless of merit or eventual outcome, liability claims may result in: • decreased demand for any product candidates that we may develop; • injury to our reputation and significant negative media attention; • withdrawal of clinical trial patients; • significant costs to defend the related litigation; • initiation of investigations by regulators; • diversion of our management's time and resources; • substantial monetary awards to clinical trial patients; • product recalls, withdrawals, or labeling, marketing, or promotional restrictions; • exhaustion of any available insurance and our capital resources; • loss of revenue; • the inability to commercialize any product candidates that we may develop; and • a decline in our stock price. As a public company, we are obligated to develop and maintain proper and effective internal controls over financial reporting, and any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our common stock. We are required, pursuant to Section 404 of the Sarbanes- Oxley Act of 2002 ( the " Sarbanes- Oxley Act"), to furnish a report by management on, among other things, the effectiveness of our internal controls over financial reporting. This assessment includes disclosure of any material weaknesses identified by our management in our internal controls over financial reporting. In addition, our independent registered public accounting firm will be required to attest to the effectiveness of our internal controls over financial reporting in our first annual report required to be filed with the SEC following the date we are no longer an emerging growth company if we are not a non- accelerated filer at such time. If we or our independent registered public accounting firm determines we have a material weakness in our internal controls over financial reporting, investors could lose confidence in the accuracy and completeness of our financial reports, the market price of our common stock could decline, and we could be subject to sanctions or investigations by the SEC or other regulatory authorities . Internal control deficiencies could also result in a restatement of our financial results in the future . Failure to remedy any material weakness or significant deficiency in our internal controls over financial reporting, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets. Our effective tax rate may fluctuate, and we may incur obligations in tax jurisdictions in excess of amounts accrued on our financial statements. In addition to federal income tax, we are subject to taxation in various state and local tax jurisdictions. As a result, our effective tax rate is derived from a combination of applicable tax rates in the locations in which we operate. In preparing our financial statements, we estimate the amount of tax that will become payable in each jurisdiction using enacted tax rates as of the balance sheet date. Nevertheless, our effective tax rate may change from year to year due to numerous factors, including changes in the mix of our profitability, if any, from jurisdiction to jurisdiction, the results of examinations and audits of our tax filings, our inability to secure or sustain acceptable agreements with tax authorities, and changes in tax laws. Any of these factors could result in an effective tax rate significantly different from previous periods and may result in tax obligations in excess of amounts accrued in our financial statements. Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited. We have generated, and expect to continue to generate in the future, significant federal and state net operating loss ("NOL") carryforwards that are available to offset taxable income in future years, if any. We have also generated, and expect to continue to generate in the future, significant federal and state research and development tax credit carryforwards, and, beginning in 2022, we began to generate orphan drug credit carryforwards that are available to potentially offset federal and state income taxes, respectively, in future years, if any. Under the Tax Cuts and Jobs Act of 2017 ("TCJA"), as modified by the Coronavirus Aid, Relief and Economic Security Act ( the " CARES Act "), our federal NOLs incurred in taxable years beginning after December 31, 2017 may be carried forward indefinitely. Additionally, for tax years beginning after December 31, 2020, the deductibility of federal NOLs incurred in taxable years beginning after December 31, 2017 is limited to 80 % of our taxable income. It is uncertain if and to what extent various states will conform to the NOL changes contained in the TCJA and the CARES Act. Federal research and development credit and orphan drug credit carryforwards may only be carried forward for 20 years and therefore could expire unused. As a result, they may be unavailable to offset future taxes. In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the "Tax Code"), and corresponding provisions of state law, if a corporation undergoes an "ownership change," which is generally defined as a greater than 50 percentage point change, by value, in its equity ownership by certain stockholders over a rolling three-year period, the corporation's ability to use its pre- change NOL carryforwards and other pre- change tax attributes (such as research

and development tax credits) to offset its post- change income or taxes may be limited. We have experienced prior ownership changes in 2014, 2016, and most recently in July 2021 upon our IPO. We do not expect any permanent limitations on our tax attributes. We have recorded a full valuation allowance for deferred tax assets, including NOLs and tax credits as of December 31, 2022-2023. The issuance of common stock in the future, or shifts in the ownership of our common stock among certain stockholders, either separately or in combination, over time may result in a limitation under Sections 382 and 383 of the Code. In addition, at the state level, there may be periods during which the use of NOL carryforwards is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. For example, California imposed limits on the use of California state NOLs and tax credits to offset California taxable income in years beginning after 2019 and before 2022. If an ownership change occurs and we earn taxable income in future years, the limitation on our ability to use our NOLs and other tax attribute carryforwards could adversely affect our future operating results by increasing our future income tax liabilities. See Note 15 to the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for additional information. The Pandemics or other public health crises, such as the prior COVID-19 pandemic, or other pandemics or public health crises may adversely impact our business, financial condition, and results of operations, including our preclinical studies and clinical trials, and may cause substantial disruption in the financial markets and adversely impact economies worldwide. We may experience disruptions related to the COVID-19 pandemic pandemics or other pandemics or public health crises that could severely impact our business, preclinical studies, clinical trials, and commercialization activities, including: • halting or suspending enrollment in our clinical trials; • delays or difficulties in enrolling and retaining patients in our clinical trials; • interruption of key clinical trial activities, such as clinical trial site data monitoring and efficacy, safety and translational data collection, and processing and analyses, due to limitations on travel imposed or recommended by federal, state, or local governments, employers and others or interruption of clinical trial subject visits, which may impact the collection and integrity of subject data and clinical study endpoints; • requirements to change the ways in which our preclinical studies and clinical trials are conducted due to governmental regulations as part of a response to the COVID-19 pandemic or other pandemics or other public health crises, which may result in unexpected costs, delays, or discontinuation of our preclinical studies and clinical trials altogether; • increased adverse events and deaths in our clinical trials due to COVID-19- related or other pandemic- related infections , which may result in increased complications due to immunosuppression from our lymphodepletion regimen ; • increased rates of patients withdrawing from our clinical trials following enrollment as a result of contracting certain diseases COVID-19-or being forced to quarantine due to other public health crises; • diversion of healthcare resources away from the conduct of clinical trials, including the diversion of hospitals serving as our clinical trial sites and hospital staff supporting the conduct of our clinical trials; • interruption or delays in the operations of the FDA and comparable foreign regulatory agencies and necessary interactions with such regulatory agencies due to limitations in employee resources, limitations on travel, forced furlough of government employees, or diversion of resources, which would impact review and approval timelines; • interruption of, or delays in receiving, supplies of components for our product candidates from our suppliers, including the supply of healthy donor cells, and delays or suspension in manufacturing by our CMOs due to staffing shortages, production slowdowns or stoppages, and disruptions in delivery systems, or due to prioritization of production for COVID-19- specific (or other pandemic-related + therapies or vaccines; • limitations on employee resources that would otherwise be focused on advancing our business, including because of sickness of employees or their families, including our executive officers and other key employees, the desire of employees to avoid contact with large groups of people, an increased reliance on working from home, or mass transit disruptions; and • significant disruptions and volatility in the financial markets. The extent to which the COVID-19 pandemic pandemics or other public health crises may impact our business, research, preclinical studies and clinical trials, productivity of our employees, supply chains, and access to capital or business development activities will depend on future developments, which are highly uncertain at this time. To the extent the COVID-19 pandemic pandemics or other public health crisis adversely affects our business, financial condition, results of operations, and prospects, it may also have the effect of amplifying many of the other risks described in this Risk Factors section, such as those relating to the timing and results of our current and future clinical trials and our financing needs - See the Impact of the COVID- 19 Pandemie in the Management's Discussion and Analysis of Financial Condition and Results of Operations section in Part II, Item 7 of this Annual Report on Form 10-K for more information about the impact of COVID-19 on our business-. Business disruptions could seriously harm our future revenue and financial condition and increase our costs and expenses. In addition to the business disruptions caused by public health crises or potential cybersecurity attacks, our operations, and those of our **CMOs**, suppliers, **CMOs**, CROs, and clinical trial sites, could be subject to disruptions, including those caused by earthquakes, power shortages or outages, telecommunications failures, water shortages or outages, floods, hurricanes, typhoons, fires, extreme weather conditions, epidemics and pandemics, and other natural or man- made disasters or business interruptions. The occurrence of any of these business disruptions could seriously harm our business, financial condition, results of operations, and prospects, and increase our costs and expenses. Our ability to manufacture our product candidates could be disrupted if our operations or those of our **CMOs**, suppliers, <del>CMOs</del>, CROs, or clinical trial sites are affected by a natural or man- made disaster or other business interruption. Our corporate headquarters are located in California near major earthquake faults and fire zones. The ultimate impact on us and our general infrastructure of being located near major earthquake faults and fire zones and being consolidated in certain geographical areas is unknown, but our business, financial condition, results of operations, and prospects could suffer in the event of a major earthquake, fire, or other natural disaster. Furthermore, our preclinical work involves studies in mice. In the past, vivarium sites have been shut down by animal activists, and any disturbance or shut down at sites where our preclinical work is being conducted could jeopardize our data and affect our product candidate timelines. Furthermore, we interact with the FDA and other federal, state, and regulatory agencies, and lack of funding for such agencies or temporary shutdowns can affect our operations. Over the last several years, the U. S. government has shut down several times and certain regulatory agencies, such as the FDA and the SEC, and has had to furlough critical government employees and stop critical activities. The ability of

the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels; ability to hire and retain key personnel; statutory, regulatory, and policy changes; and business disruptions, such as those caused by the COVID-19 pandemic or other public health crises. Average review times at the agency have fluctuated in recent years as a result. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions for our product candidates, which could have a material adverse effect on our business. Adverse developments affecting the financial services industry could adversely affect our current and projected business operations and our financial condition and results of operations. Adverse developments that affect financial institutions, such as events involving liquidity that are rumored or actual, have in the past and may in the future lead to bank failures and market- wide liquidity problems. For example, on March 10, 2023, Silicon Valley Bank ("SVB ") was closed by the California Department of Financial Protection and Innovation, which appointed the Federal Deposit Insurance Corporation (" FDIC ") as receiver. Similarly, on March 12, 2023, Signature Bank and Silvergate Capital Corp. were each put into receivership. Although the U. S. Department of Treasury, FDIC, and Federal Reserve Board have implemented a program to provide up to \$ 25 billion of loans to financial institutions secured by certain of such government securities held by financial institutions to mitigate the risk of potential losses on the sale of such instruments, widespread demands for customer withdrawals or other liquidity needs of financial institutions for immediate liquidity may exceed the capacity of such program, there is no guarantee that such programs will be sufficient. Additionally, it is uncertain whether the U. S. Department of Treasury, FDIC, and Federal Reserve Board will provide access to uninsured funds in the future in the event of the closure of other banks or financial institutions, or that they would do so in a timely fashion. Although we have not experienced any adverse impact to our liquidity or to our current and projected business operations, financial condition, or results of operations as a result of the matters relating to these banks, uncertainty remains over liquidity concerns in the broader financial services industry, and our industry as a whole may be adversely impacted in ways that we cannot predict at this time. Although we assess our banking relationships as we believe necessary or appropriate, our access to cash in amounts adequate to finance our current and projected future business operations could be significantly impaired by factors that affect the financial institutions with which we have banking relationships. These factors could include, among others, events such as liquidity constraints or failures, the ability to perform obligations under various types of financial, credit or liquidity agreements or arrangements, disruptions or instability in the financial services industry or financial markets, or concerns or negative expectations about the prospects for companies in the financial services industry. These factors could also include factors involving financial markets or the financial services industry generally. The results of events or concerns that involve one or more of these factors could include a variety of material and adverse impacts on our current and projected business operations and our financial condition and results of operations. These could include, but may not be limited to, delayed access to deposits or other financial assets or the uninsured loss of deposits or other financial assets, termination of cash management arrangements, and / or delays in accessing or actual loss of funds subject to cash management arrangements. In addition, widespread investor concerns regarding the U.S. or international financial systems could result in less favorable commercial financing terms, including higher interest rates or costs and tighter financial and operating covenants, or systemic limitations on access to credit and liquidity sources, thereby making it more difficult for us to acquire financing on acceptable terms or at all. Any decline in available funding or access to our cash and liquidity resources could, among other risks, adversely impact our ability to meet our operating expenses, financial obligations or fulfill our other obligations, result in breaches of our financial and / or contractual obligations or result in violations of federal or state wage and hour laws. Any of these impacts, or any other impacts resulting from the factors described above or other related or similar factors not described above, could have material adverse impacts on our liquidity and our current and / or projected business operations and financial condition and results of operations. We maintain our cash at financial institutions, often in balances that exceed federally insured limits. We maintain the majority of our cash and cash equivalents in accounts at banking institutions in the United States that we believe are of high quality. Cash held in these accounts often exceed the FDIC insurance limits. If such banking institutions were to fail, we could lose all or a portion of amounts held in excess of such insurance limitations. As noted above, the FDIC recently took control of certain banks. In the event of failure of any of the financial institutions where we maintain our cash and cash equivalents, there can be no assurance that we would be able to access uninsured funds in a timely manner or at all. Any inability to access or delay in accessing these funds could adversely affect our business and financial **position.** Unfavorable global economic conditions could adversely affect our business, financial condition, or results of operations. Our business, financial condition, results of operations, or prospects could be adversely affected by general conditions in the global economy and in the global financial markets. A severe or prolonged economic downturn, including as a result of the COVID-19 pandemics pandemics or other public health crises, the ongoing war in between Russia and Ukraine and the ongoing conflict in the Middle East, interest rate fluctuations, rising inflation, recession, or other global financial or, geopolitical crises or macroeconomic factors, could result in a variety of risks to our business, including weakened demand for our product candidates, if approved, or our ability to raise additional capital when needed on acceptable terms, if at all. A Recent global events such as supply chain constraints have led to higher inflation, which, if sustained, could have a negative impact on our product development and operations. If inflation or other factors were to significantly increase our business costs, our ability to develop our current pipeline and new therapeutic product candidates may be negatively affected. Global conflicts or a weak or declining economy may increase the likelihood disruptions of our clinical trials or manufacturing and supply of our product candidates. We are currently conducting our ANTLER clinical trial at sites in Israel and, although we have not experienced delays or interruptions to date, given the conflict in the Middle East, we may experience disruptions at these sites in the future. Additionally, any supply disruptions could make it more difficult

for us to find favorable pricing and reliable sources for the materials we need, which would increase pressure on our costs and increase the risk that we may be unable to acquire the necessary materials to successfully manufacture our product candidates. Current capital market conditions, including the impact of inflation, have increased borrowing rates and can be expected to significantly increase the cost of capital as compared to prior periods and could also strain affect our ability to raise capital on favorable terms, <del>our</del>- or at all, in order to fund our operations. Similarly, these macroeconomic factors could affect the ability of our third- party suppliers and CMOs to, possibly resulting in supply or manufacturing-manufacture disruption clinical trial materials for our product candidates. Furthermore, we currently conduct some clinical trials outside of the United States, and unfavorable global conditions could affect these trials . Any of the foregoing could harm our business and we cannot anticipate all of the ways in which such conditions could adversely impact our business. Risks Relating to Ownership of our Common Stock The market price of our common stock has been, and may continue to be, volatile, and our investors may suffer substantial losses if the price of our common stock drops significantly. Due to the volatility of the market price for our common stock, investors may suffer substantial losses if the price drops significantly. Some of the factors that may cause the market price of our common stock to fluctuate include: • the timing and results of preclinical studies and clinical trials for any product candidates that we develop; • delay, failure, or discontinuation of any of our product candidates or research programs; • results of preclinical studies, clinical trials, or regulatory approvals of product candidates of our competitors, or announcements about new research programs or product candidates of our competitors; • adverse regulatory decisions, including failure to receive regulatory approval of one or more of our product candidates; • unanticipated or serious safety concerns related to our product candidates; • developments or changing views regarding the use of biologics, including those that involve genome editing; • commencement or termination of collaborations; • regulatory or legal developments in the United States and other countries; • assertions that our product candidates infringe third- party patents; • invalidity challenges to our intellectual property, including intellectual property that we have in- licensed; • manufacturing delays; • acceptance or lack of acceptance of allogeneic products; • inability to meet the obligations under our collaboration agreement with AbbVie; • inability to obtain additional collaboration partners; • the recruitment and retention of key personnel; • the level of expenses related to any of our product candidates, including preclinical studies and clinical trials, as well as the level related to our research programs; • the results of our efforts to develop additional product candidates or technologies; • actual or anticipated changes in estimates as to financial results, development timelines, or recommendations by securities analysts; • announcements or expectations of additional financing efforts; • significant lawsuits, including contract disputes with our licensors, licensees, assignors, assignees, suppliers, CMOs, CROs, clinical sites, or stockholder litigation; • sales of our common stock by us, our insiders, or other stockholders; • variations in our financial results or those of companies that are perceived to be similar to us; • changes in the structure of healthcare payment systems; • market conditions in the pharmaceutical and biotechnology sectors; • general economic , industry, and market political conditions such as recessions, inflationary pressures, interest rates, fuel prices, elections, drug pricing policies, international currency fluctuations, acts of war or terrorism, geopolitical events and public health crises; and • the other factors described in this Risk Factors section. We are subject to securities class action litigation, which may result in substantial costs and a diversion of management's attention and resources, which could harm our business. In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities, and we are **currently** litigating a class action complaint in the United States U. S. District Court for the Northern District of California, filed by a purported stockholder stockholders against us and certain of our directors and, officers, and underwriters. See Legal Proceedings in Item 3 of this Annual Report on Form 10-K for additional information. We may face additional securities class action litigation in the future. This risk is especially relevant for us because biotechnology and pharmaceutical companies have experienced significant stock price volatility in recent years, and we expect to experience continued stock price volatility. Defending against the current litigation and any future litigation could result in substantial costs and a diversion of management's attention and resources, which could harm our business. If securities analysts do not publish research or reports about our business or if they publish negative evaluations of our stock, the price of our stock could decline. We currently have research coverage by several biotechnology research analysts. If any of those analysts discontinue coverage, we could lose visibility in the market for our stock, which in turn could cause our stock price to decline. If one or more of the analysts covering our business downgrade or adjust the price target as part of their evaluations of our stock, the price of our stock could decline. If a significant amount of our shares of common stock are sold, or it is perceived that they will be sold, in the public market, the market price of our common stock could decline. Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares of common stock intend to sell shares, could reduce the market price of our common stock. As of March 3.5, 2023-2024, we had 61-90, 299-314, 687-501 shares of common stock outstanding. Most of these shares can be sold at any time unless held by one of our affiliates, in which case the resale of those securities will be subject to volume limitations and other restrictions under Rule 144 of the Securities Act of 1933, as amended (the "Securities Act "). We have also registered all shares of common stock that we may issue under our equity compensation plans or that are issuable upon exercise of outstanding options or other equity awards. Therefore, these shares can be freely sold in the public market upon issuance and, once vested, subject to volume limitations applicable to our affiliates. If significant amounts of our 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. We are an "emerging growth company" under the JOBS ACT and a "smaller reporting company" and the reduced disclosure requirements and exemptions from certain governance requirements applicable to emerging growth companies and smaller reporting companies may make our common stock less attractive to investors. We are an "emerging growth company," as defined in the JOBS Act, and may remain an emerging growth company for up to five years following our IPO. For as long as we remain an emerging growth company, we are permitted and plan to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth

companies. These exemptions include not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes- Oxley Act; not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board (" PCAOB ") regarding mandatory audit firm rotation or a supplement to the auditor' s report providing additional information about the audit and the financial statements; reduced disclosure obligations regarding executive compensation; and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. As a result, the information we provide stockholders will be different than the information that is available with respect to some other public companies. In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our consolidated financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates. We are also a "smaller reporting company," as defined by applicable rules of the SEC. Even after we no longer qualify as an emerging growth company, we may still qualify as a smaller reporting company and would be permitted to continue to take advantage of many of the same reporting exemptions, including the exemption from the auditor attestation requirements of Section 404 (b) of the Sarbanes- Oxley Act as long as we do not otherwise also qualify as an "accelerated filer" or "large accelerated filer" for SEC reporting purposes, and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. In addition, as a smaller reporting company, we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K. We cannot predict if investors will find our common stock less attractive if we rely on emerging growth company or smaller reporting company exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We have incurred, and will continue to incur, increased costs as a result of operating as a public company, and our management will continue to devote substantial time to compliance initiatives and corporate governance practices. As a public company, we have and will continue to incur significant legal, accounting, and other expenses that we did not incur as a private company. The Dodd- Frank Wall Street Reform and Consumer Protection Act, the Sarbanes-Oxley Act, the listing requirements of Nasdaq, and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. We have had to hire additional accounting, finance, legal, and other personnel in connection with our efforts to comply with the requirements of being, a public company. Our management and other personnel devote a substantial amount of time toward maintaining compliance with these requirements. These requirements have increased our legal and financial compliance costs and have made some activities more time- consuming and costly. Operating as a public company also makes it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain coverage. This may make it more difficult for us to attract and retain qualified people to serve on our board of directors or as executive officers. As a public company, we are subject to Section 404 of the Sarbanes- Oxley Act and the related rules of the SEC, which generally require our management and independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting. However, for so long as we remain an emerging growth company as defined in the JOBS Act or a smaller reporting company, we intend to take advantage of certain exemptions from various reporting requirements that are applicable to public companies that are not emerging growth companies or smaller reporting companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404. Once we are no longer either an emerging growth company or a smaller reporting company or, if prior to such date, we opt to no longer take advantage of the applicable exemption, we will be required to include an opinion from our independent registered public accounting firm on the effectiveness of our internal control over financial reporting. During the course of our review and testing, we may identify deficiencies and be unable to remediate them before we must provide the required reports. Furthermore, if we identify any material weaknesses, we may not detect errors on a timely basis and our financial statements may be materially misstated. We or our independent registered public accounting firm may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting, which could materially and adversely affect our business, financial condition, results of operations, and prospects; cause investors to lose confidence in our reported financial information; and cause the trading price of our stock to fall. In addition, as a public company we are required to file accurate and timely quarterly and annual reports with the SEC under the Exchange Act. In order to report our results of operations and financial statements on an accurate and timely basis, we depend in part on third parties to provide timely and accurate notice of their costs to us. Any failure to report our financial results on an accurate and timely basis could result in sanctions, lawsuits, delisting of our shares from Nasdaq, or other adverse consequences that would materially and adversely affect our business, financial condition, results of operations, and prospects. We do not expect to pay any dividends for the foreseeable future. Investors may never obtain a return on their investment. You should not rely on an investment in our common stock to provide dividend income. We do not anticipate that we will pay any dividends to holders of our common stock in the foreseeable future. Instead, we plan to retain any earnings to maintain and expand our existing operations. In addition, any future credit facility may contain terms prohibiting or limiting the amount of dividends that may be declared or paid on our common stock. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any return on their investment. As a result, investors seeking cash dividends should not invest in our common stock. Provisions in our amended and restated certificate of incorporation, our amended and restated bylaws, and Delaware law may have anti- takeover effects that could

discourage an acquisition of us by others, even if an acquisition would be beneficial to our stockholders. These provisions may prevent attempts by our stockholders to replace or remove our current management. Our amended and restated certificate of incorporation, amended and restated bylaws, and Delaware law contain provisions that may have the effect of discouraging, delaying, or preventing a change in control of us or changes in our management that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares. Our amended and restated certificate of incorporation and bylaws include provisions that: • authorize " blank check " preferred stock, which could be issued by our board of directors without stockholder approval and may contain voting, liquidation, dividend, and other rights superior to our common stock; • established a classified board of directors whose members serve staggered three- year terms; • specify that special meetings of our stockholders can be called only by our board of directors, the chair of our board, or our chief executive officer; • prohibit stockholder action by written consent; • establish an advance notice procedure for stockholder matters to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors; • provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum; • provide that our directors may be removed only for cause; • expressly authorized our board of directors to make, alter, amend, or repeal our amended and restated bylaws; and • require supermajority votes of the holders of our common stock to amend our amended and restated bylaws and specified provisions of our amended and restated certificate of incorporation. These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, because we are incorporated in the State of Delaware, we are governed by the provisions of Section 203 of the General Corporation Law of the State of Delaware, which prohibits a person who owns in excess of 15 % of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15 % of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner. Any provision of our amended and restated certificate of incorporation, amended and restated bylaws, or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock. Our failure to meet the continued listing requirements of Nasdaq could result in a delisting of our common stock. Our common stock is currently listed on the Nasdaq Global Select Market. In order to maintain this listing, we must continue to satisfy minimum financial and other continued listing requirements and standards, including corporate governance requirements, director diversity requirements, and a minimum closing bid price requirement. There can be no assurance that we will continue to be able to comply with the applicable Nasdaq listing requirements. If we fail to comply with the continued listing requirements of Nasdaq, Nasdaq may take steps to delist our common stock. In the event that our common stock is delisted from Nasdaq and is not eligible for quotation or listing on another market or exchange, trading of our common stock could be conducted only in the over- thecounter market or on an electronic bulletin board established for unlisted securities such as the Pink Sheets or the OTC Bulletin Board. If this were to occur, it could become more difficult to dispose of, or obtain accurate price quotations for, our common stock and there would likely also be a reduction in our coverage by securities analysts and the news media, which could cause the price of our common stock to decline further. Furthermore, if we were to be delisted from Nasdaq, our common stock would cease to be recognized as " covered securities " and we would be subject to regulation in each state in which we offer our securities. In the future, we may be subject to board of director diversity requirements under California law and, if we are unable to comply with such requirements, we may be exposed to financial penalties and our reputation may be adversely affected. Our success depends in part on our continued ability to attract, retain, and motivate highly qualified individuals to our board of directors. In the future, as a public company domiciled in California, we may be subject to diversity requirements under California law, including having a minimum number of female directors and directors from "underrepresented communities." Although the laws mandating such requirements have to date been ruled unconstitutional by California state courts, these decisions are on appeal. An initial violation of the California laws (if in effect) could result in a fine from the California Secretary of State in the amount of \$ 100, 000, with each subsequent violation resulting in a fine of \$ 300, 000. We cannot ensure that we can recruit, attract, and / or retain qualified members of our board of directors and meet gender and diversity requirements under California law (if applicable), which may expose us to financial penalties and adversely affect our reputation. Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware and the federal district courts will be the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, executive officers, or employees. Our amended and restated certificate of incorporation provides that the Court of Chancery of the State of Delaware is the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: • any derivative claim or action or proceeding brought on our behalf; • any claim or action asserting a breach of fiduciary duty or aiding and abetting a breach of fiduciary duty; • any claim or action against us arising under the Delaware General Corporation Law, our amended and restated certificate of incorporation, or our amended and restated bylaws; and • any action asserting a claim against us that is governed by the internal- affairs doctrine. This provision would not apply to suits brought to enforce a duty or liability created by the Securities Act or the Exchange Act. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated certificate of incorporation further provides that the federal district courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. Although the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive

forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our amended and restated certificate of incorporation. This may require significant additional costs associated with resolving the action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions. This exclusive 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 our directors, executive officers, or other employees, which may discourage lawsuits against us and our directors, executive officers, and other employees. If a court were to find the exclusive forum provision in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur further significant additional costs associated with resolving the dispute in other jurisdictions, all of which could seriously harm our business.