Confidential Treatment Requested by Beam Therapeutics Inc.

Pursuant to 17 CFR 200.83

As confidentially submitted to the Securities and Exchange Commission on September 18, 2020

Registration No. 333-

X

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

FORM S-1

REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

Beam Therapeutics Inc.

(Exact name of registrant as specified in its charter)

2836

81-5238376 (I.R.S. Employer Identification No.)

Delaware (State or other jurisdiction of incorporation or organization)

(Primary Standard Industrial Classification Code Number) 26 Landsdowne Street Cambridge, MA 02139 857-327-8775

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

John Evans

Chief Executive Officer

26 Landsdowne Street Cambridge, MA 02139

857-327-8775

(Name, address, including zip code, and telephone number, including area code, of agent for service)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. 🗆 If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. \Box

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the

earlier effective registration statement for the same offering. X

Large accelerated filer Accelerated filer □ Non-accelerated filer Smaller reporting company Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

	Proposed maximum	
Title of each class of	aggregate	Amount of
securities to be registered	offering price(1)	registration fee(2)
Common Stock, par value \$0.01 per share	\$	\$

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.

(2) Calculated pursuant to Rule 457(o) based on an estimate of the proposed maximum aggregate offering price.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

Subject to completion, dated , 2020

Preliminary prospectus

shares



Beam Therapeutics Inc.

Common stock

We are offering shares of our common stock.

Our common stock is listed on the Nasdaq Global Select Market ("Nasdaq") under the symbol "BEAM." The last reported sale of our common stock on Nasdaq on , 2020 was \$ per share.

We are an "emerging growth company" and a "smaller reporting company" under federal securities laws and are subject to reduced public company reporting requirements. See "Summary—Implications of being an emerging growth company and smaller reporting company."

	Per share	Total
Public offering price	\$	\$
Underwriting discounts and commissions(1)	\$	\$
Proceeds to Beam Therapeutics Inc., before expenses	\$	\$

(1) See "Underwriting" for additional disclosure regarding underwriting compensation.

We have granted the underwriters an option for a period of 30 days to purchase up to public offering price, less underwriting discounts and commissions.

additional shares of common stock from us at the

Investing in our common stock involves a high degree of risk. See the section titled "<u>Risk factors</u>" beginning on page 18 of this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities, or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares to purchasers on or about , 2020.

Joint bookrunning managers

J.P. Morgan

Jefferies

Barclays

Lead manager

Wedbush PacGrow

, 2020.

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Neither we nor the underwriters have authorized anyone to provide any information other than that contained or incorporated by reference in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus or incorporated by reference is accurate only as of the date on the front cover of this prospectus, regardless of the time of delivery of this prospectus or any sale of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside of the United States: Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside of the United States.

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Trademarks

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

Market and industry data

Unless otherwise indicated, information contained in this prospectus or incorporated by reference concerning our industry and the markets in which we operate, including our general expectations, market position and market opportunity, is based on our management's estimates and research, as well as industry and general publications and research, surveys and studies conducted by third parties. We believe that the information from these third-party publications, research, surveys and studies included in this prospectus is reliable. Management's estimates are derived from publicly available information, their knowledge of our industry and their assumptions based on such information and knowledge, which we believe to be reasonable. This data involves a number of assumptions and limitations which are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section titled "Risk factors." These and other factors could cause our future performance to differ materially from our assumptions and estimates.

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Summary

This summary highlights information contained elsewhere in this prospectus or incorporated by reference into this prospectus from our Annual Report on Form 10-K for the year ended December 31, 2019, our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020 and our other filings with the Securities and Exchange Commission (the "SEC") listed in the section of this prospectus entitled "Incorporation of certain information by reference" and is qualified in its entirety by the more detailed information and consolidated financial statements included or incorporated by reference elsewhere in this prospectus. This summary does not contain all of the information that may be important to you. You should read and carefully consider the following summary together with the entire prospectus and the documents incorporated herein by reference, including our consolidated financial statements and the notes thereto incorporated herein by reference and the matters discussed under the sections titled "Risk factors," "Selected financial data" and "management's discussion and analysis of financial condition and results of operations" appearing elsewhere in this prospectus, in our Annual Report on Form 10-K for the year ended December 31, 2019, in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, or in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, each incorporated by reference herein, before deciding to invest in our common stock. Some of the statements in this prospectus constitute forward-looking statements that involve risks and uncertainties. See "Special note regarding forward-looking statements." Our actual results could differ materially from those anticipated in such forward-looking statements as a result of certain factors, including those discussed in "Risk factors" and other sections of this prospectus and the documents incorporated herein by reference.

Unless the context otherwise requires, the terms "Beam," "Beam Therapeutics," the "Company," "we," "us" and "our" relate to Beam Therapeutics Inc., together with its consolidated subsidiaries.

Overview

We are a biotechnology company committed to creating a new class of precision genetic medicines based on our proprietary base editing technology, with a vision of providing life-long cures to patients suffering from serious diseases. Our proprietary base editing technology potentially enables an entirely new class of precision genetic medicines that targets a single base in the genome without making a double-stranded break in the DNA. This approach uses a chemical reaction designed to create precise, predictable and efficient genetic outcomes at the targeted sequence. Our novel base editors have two principal components: (i) a CRISPR protein, bound to a guide RNA, that leverages the established DNA-targeting ability of CRISPR, but modified to not cause a double-stranded break, and (ii) a base editing enzyme, such as a deaminase, which carries out the desired chemical modification of the target DNA base. We believe this design contributes to a more precise and efficient edit compared to traditional gene editing methods, which operate by creating targeted double-stranded breaks in the DNA; these breaks can result in unwanted DNA modifications. We believe that the precision of our editors will dramatically increase the impact of gene editing for a broad range of therapeutic applications.

To unlock the full potential of our base editing technology across a wide range of therapeutic applications, we are pursuing a comprehensive suite of clinically validated delivery modalities in parallel. For a given tissue type, we use the delivery modality with the most compelling biodistribution. Our programs are organized by delivery modality into three distinct pipelines: electroporation for efficient delivery to blood cells and immune cells *ex vivo*; lipid nanoparticles, or LNPs, for non-viral *in vivo* delivery to the liver and potentially other organs in the future; and adeno-associated viral vectors, or AAV, for *in vivo* viral delivery to the eye and central nervous system, or CNS.

The elegance of the base editing approach combined with a tissue specific delivery modality, provides the basis for a targeted, efficient, precise, and highly versatile gene editing system, capable of gene correction, gene silencing/gene activation, and multiplex editing of several genes simultaneously. We are currently advancing a broad, diversified portfolio of base editing programs against distinct editing targets, utilizing the full range of our development capabilities. We believe the flexibility and versatility of our base editors may lead to broad therapeutic applicability and transformational potential for the field of precision genetic medicines.

We continue to make meaningful advancements across our programs. Within our *ex vivo* platform, we have identified two development candidates to date: BEAM-101, our program that reproduces single base changes seen in individuals with Hereditary Persistence of Fetal Hemoglobin, or HPFH, to potentially protect them from the effects of mutations causing sickle cell disease or thalassemia, and BEAM-102, our program to directly correct the causative mutation in sickle cell disease by recreating a naturally-occurring normal human hemoglobin variant, Hb-G Makassar. We have achieved proof-of-concept *in vivo* with long-term engraftment of base edited human CD34 cells in mice for BEAM-101. Persistence of engraftment and high levels of editing have been confirmed in several studies, including in studies using material generated at a clinically relevant scale. Following conversations with regulators and supported by our off-target biology assays, we are planning to initiate IND-enabling studies in 2020 and expect to file an IND for BEAM-101 during the second half of 2021. During the second quarter of 2020, we also published data on BEAM-102 demonstrating that our adenine base editors, or ABEs, can efficiently convert the causative Hemoglobin S, or HbS, point mutation, to the normal HbG-Makassar, with high efficiency (more than 80%). The Makassar variant does not cause hemoglobin to polymerize, or red cells to sickle and, therefore, edited cells are cured through elimination of the disease-causing protein. The results from this study confirmed the ability of the Makassar variant to protect cells from sickling, even in the context of mono-allelic editing.

We are also progressing our cell therapy programs in oncology, engineering CAR-T cells for pediatric leukemias with a high level of multiplex editing, and plan to publish data describing our editing targets and initial *in vivo* proof of concept data during the fourth quarter of 2020. Additionally, we expect to nominate our first CAR-T development candidate by year-end 2020, bringing to three the number of development candidates from our *ex vivo* portfolio.

We also continue to advance our liver disease programs. During the second quarter of 2020, we showed the ability to directly correct the mutation causing alpha-1 antitrypsin deficiency, providing both *in vitro* and *in vivo* proof of concept for base editing to correct this disease. We have also achieved editing levels, in preclinical models, for the correction of the two most prevalent mutations causing GSD1A disease that could be clinically relevant if reproduced in humans. An important next step for the liver disease programs is finalizing our LNP formulation, and we are making progress on developing a formulation using proof of concept targets. To date, with this formulation, we have shown high levels of editing in mice at doses consistent with clinical use. We are currently conducting non-human primate studies to evaluate our LNP formulation and anticipate initial data in early 2021. We believe we are on track to nominate our first development candidate from our liver portfolio in 2021.

DELIVERY	THERAPEUTIC AREA	PROGRAM / DISEASE	APPROACH	RESEARCH LEAD ND PHASE III PIVOTAL
ELECTRO-	Hematology	BEAM-101 Sickle Cell Disease Beta Thalassemia	Fetal hemoglobin activation	
PORATION	$\langle \rangle$	BEAM-102 Sickle Cell Disease	Direct correction of sickle- causing mutation	
\mathbf{O}	Oncology	T-Cell Acute Lymphoblastic Leukemia	Multiplex silenced CAR-T	
	O	Acute Myeloid Leukemia	Multiplex silenced CAR-T	
NON-VIRAL	Liver Diseases	Alpha-1 Antitrypsin Deficiency	Precise correction of E342K	
(LNP)		Glycogen Storage Disorder 1a	Precise correction of Q347X	
Θ		-, -, -, -, -, -, -, -, -, -, -, -, -, -	Precise correction of R83C	
		Undisclosed	Multiplex editing	
VIRAL	Ocular and CNS	Stargardt Disease	Precise correction of G1961E	
(AAV)		Undisclosed	Precise correction	
	C.	Undisclosed	Gene silencing	

The modularity of our platform means that establishing preclinical proof-of-concept of base editing using a particular delivery modality will potentially reduce risk and accelerate the timeline for additional product candidates that we may develop targeting the same tissue. In some cases, a new product candidate may only require changing the guide RNA. Subsequent programs using the same delivery modality can also take advantage of shared capabilities and resources of earlier programs. In this way, we view each delivery modality as its own unique pipeline, where the success of any one program may pave the way for a large number of additional programs to progress quickly to the clinic.

Ex vivo electroporation for hematology: sickle cell disease and beta-thalassemia

Sickle cell disease, a severe inherited blood disease, is caused by a single point mutation, E6V, in the beta globin gene. This mutation causes the mutated form of hemoglobin, or HbS, to aggregate into long, rigid molecules that bend red blood cells into a sickle shape under conditions of low oxygen. Sickled cells obstruct blood vessels and die prematurely, ultimately resulting in anemia, severe pain (crises), infections, stroke, organ failure, and early death. Sickle cell disease is the most common inherited blood disorder in the United States, affecting an estimated 100,000 individuals, of which a significant proportion are of African-American descent (1:365 births). Beta-thalassemia is another inherited blood disorder characterized by severe anemia caused by reduced production of functional hemoglobin due to insufficient expression of the beta globin protein. Transfusion-dependent beta-thalassemia, or TDBT, is the most severe form of this disease, often requiring multiple transfusions per year. Patients with TDBT suffer from failure to thrive, persistent infections, and life-threatening anemia. The incidence of symptomatic beta-thalassemia is estimated to be 1:100,000 worldwide, including 1:10,000 in Europe. In the United States, based on affected birth incidence of 0.7 in 100,000 births, and increasing survival rates, we expect the population of individuals affected by this disease to be more than 1,400 and rising. The only potentially curative therapy currently available for patients with sickle cell disease or beta-thalassemia is allogeneic Hematopoietic Stem Cell Transplant, or HSCT; however, this procedure holds a high level of risk, particularly Graft-versus-Host Disease, or GvHD, resulting in a low number of patients opting for this treatment.

We are using base editing to pursue two complementary approaches to treating sickle cell disease and one to treat beta-thalassemia:

- a differentiated approach to elevating fetal hemoglobin which could be used in treatments for both sickle cell disease and betathalassemia (BEAM-101); and
- · a novel approach to directly correcting the sickle mutation (BEAM-102).

BEAM-101: Recreating naturally-occurring protective mutations to activate fetal hemoglobin

The beneficial effects of the fetal form of hemoglobin, or HbF, to compensate for mutations in adult hemoglobin were first identified in individuals with a condition known as HPFH. Individuals who carry mutations that would have typically caused them to be beta-thalassemia or sickle cell disease patients, but who also have HPFH, are asymptomatic or experience a much milder form of their disease. HPFH is caused by single base changes in the regulatory region of the genes, HBG1 and HBG2, which prevents binding of one or more repressor proteins and increases the expression of gamma globin, which forms part of the HbF tetramer.

Using base editing, we reproduce these specific, naturally occurring base changes in the regulatory elements of the gamma globin genes, preventing binding of repressor proteins and leading to re-activation of gamma globin expression, and thus the increase in gamma globin levels. Our in vitro and in vivo characterization of BEAM-101 using ex vivo delivery achieved precise and efficient editing of human CD34+ hematopoietic stem and progenitor cells, or HSPCs, resulting in long-term engraftment and therapeutically-relevant increases in target gene expression in mice.

In vitro characterization of BEAM-101:

- We demonstrated greater than 90% editing in healthy donor CD34 cells in vitro.
- We demonstrated gamma globin upregulation following erythroid differentiation is highly correlated (R2=0.993) with editing rates, where, at greater than 90% editing, we achieve greater than 60% increase in gamma globin in healthy donor CD34+ cells.
- Successful editing of CD34+ cells from a homozygous sickle cell disease patient, demonstrating a greater than 60% increase in gamma globin levels with a concomitant decrease to less than 40% sickle beta globin levels in vitro after in vitro differentiation.

In vivo performance of BEAM-101:

- We demonstrated that edited CD34+ cells from a healthy human donor engraft with high chimerism and maintain greater than 90% editing after 16 weeks in immunocompromised mice.
- We demonstrated after 16-week engraftment that base edited cells lead to successful multilineage reconstitution with greater than 90% base editing achieved in sorted human HSPCs, myeloid, lymphoid and erythroid cells.
- We replicated these findings with cells from a second donor at 18 weeks post-engraftment.

BEAM-102: Direct correction of the sickle cell mutation

Our second base editing approach for sickle cell disease, BEAM-102, is a direct correction of the causative sickle mutation at position 6 of the beta globin gene. By making a single A-to-G edit, we have demonstrated in

primary human CD34+ cells isolated from sickle cell disease patients the ability to create the naturally occurring Makassar variant of hemoglobin. This variant, which was originally identified in humans in 1970, has the same function as the wild-type variant and does not cause sickle cell disease. Distinct from other approaches, cells that are successfully edited in this way are fully corrected, no longer containing the sickle protein.

BEAM-102 uses ex vivo delivery of our adenine base editor, or ABE, to edit CD34+ HSPCs. In cells isolated from donors with sickle cell disease, we achieved greater than 80% correction of the sickle point mutation to the HbG-Makassar variant, following in vitro erythroid differentiation. As expected, we observed the simultaneous reduction of HbS to less than 20% of control levels. More than 70% of erythroid colonies derived from edited patient cells showed biallelic editing (yielding cells that are potentially cured, no longer producing any sickle protein at all) and another 20% of cells had monoallelic editing (with one sickle allele and one corrected allele, conferring a level of protection similar to patients with "sickle cell trait" who do not show significant symptoms of disease) – adding up to 93% of cells with potential elimination of sickle cell disease. Further, the correction of the HbS protein to the HbG-Makassar variant was shown to significantly reduce the propensity of in vitro differentiated erythroid cells to sickle when subjected to hypoxia. These findings represent therapeutic levels of correction and support advancement of this program to potentially address the underlying genetic cause of sickle cell disease. Published modeling studies suggest that at least 20% of cells expressing HbF may be sufficient to cure the disease. With upregulation levels of more than 60% of gamma globin, we have shown, in preclinical models correction levels significantly above these levels.

Ex vivo electroporation for multiplex editing: CAR-T cell therapies for T-ALL/AML

We believe base editing is an ideal tool to simultaneously multiplex edit many genes without unintended on-target effects, such as genomic rearrangements or activation of the p53 pathway, that can result from simultaneous editing with nucleases through the creation of double strand breaks. The ability to create a large number of multiplex edits in T cells could endow CAR-T cells and other cell therapies with combinations of features that may dramatically enhance their therapeutic potential in treating hematological or solid tumors.

Proof-of-concept experiments have now demonstrated the ability of base editors to efficiently modify up to 8 genomic loci simultaneously in primary human T cells with efficiencies ranging from 85-95% as measured by flow cytometry of target protein knockdown. Importantly, these results are achieved without the generation of chromosomal rearrangements, as detected by a sensitive method (UDiTaSTM) and with no loss of cell viability from editing. The proof-of-concept experiments have also demonstrated robust T cell killing of target tumor cells.

Our initial focus will be on hematologic malignancies, and we are developing allogeneic CAR-T product candidates that have four edits each. This multiplex editing will enable a high degree of engineering and functionality, including the following simultaneous edits:

- Prevent graft-vs-host. Elimination of the existing TCR to ensure that the CAR-T cell only attacks the CAR antigen on the tumor and not the patient's healthy cells.
- · Enable allogeneic cell source. Another edit to enable the use of healthy donor cells.
- Minimize interference by the tumor microenvironment. An additional edit to minimize exhaustion by the T cell and prolong efficacy for attacking the tumor.
- Prevent fratricide. Additional edits to eliminate antigens that are shared between malignant cells and CAR-T cells, to prevent fratricide (i.e., CAR-T cells attacking each other before they can attack the tumor).

The initial indications that we plan to target with these product candidates are relapsed, refractory, pediatric T-cell Acute Lymphoblastic Leukemia, or T-ALL, and pediatric Acute Myeloid Leukemia, or AML. We believe that our approach has the potential to produce higher response rates and deeper remissions than existing approaches.

Non-viral delivery for liver diseases: alpha-1 antitrypsin deficiency and glycogen storage disorder 1a

Alpha-1 Antitrypsin Deficiency, or Alpha-1, is a severe inherited genetic disorder that can cause progressive lung and liver disease. The most severe form of Alpha-1 arises when a patient has a point mutation in both copies of the SERPINA1 gene at amino acid 342 position (E342K, also known as the PiZ mutation or the "Z" allele). This point mutation causes alpha-1 antitrypsin, or AAT, to misfold, accumulating inside liver cells rather than being secreted, resulting in very low levels (10%-15%) of circulating AAT. As a consequence, the lung is left unprotected from neutrophil elastase, resulting in progressive, destructive changes in the lung, such as emphysema, which can result in the need for lung transplants. The mutant AAT protein also accumulates in the liver, causing liver inflammation and cirrhosis, which can ultimately cause liver failure or cancer and require patients to undergo a liver transplant. It is estimated that approximately 60,000 individuals in the United States have two copies of the Z allele. There are currently no curative treatments for patients with Alpha-1.

With the high efficiency and precision of our base editors, we aim to utilize our ABEs to enable the programmable conversion of A-to-T and G-to-C base pairs and precisely correct the E342K point mutation back to the wild type sequence.

For a recent study, we engineered novel ABEs and guide RNAs capable of correcting the PiZ mutation, and then used a proprietary non-viral lipid nanoparticle formulation to deliver the optimized reagents to the livers of a PiZ transgenic mouse model. This direct editing approach resulted in an average of 16.9% correction of beneficial alleles at 7 days and 28.8% at three months. This significant increase over the period suggests that corrected hepatocytes may have a proliferative advantage relative to uncorrected cells. In addition, treated mice demonstrate decreased alpha-1 antitrypsin, or A1AT, globule burden within the liver and a durable, significant increase in serum A1AT active protein at three months, roughly 4.9-fold higher than in controls, levels which we believe would be clinically relevant if achieved in patients. These data indicate the potential for base editing as a one-time therapy to treat both lung and liver manifestations of Alpha-1.

Glycogen Storage Disease Type 1A, also known as Von Gierke disease, is an inborn disorder of glucose metabolism caused by mutations in the G6PC gene, which results in low blood glucose levels that can be fatal if patients do not adhere to a strict regimen of slow-release forms of glucose, administered every one to four hours (including overnight). There are no disease-modifying therapies available for patients with GSD1a. Our approach to treating patients with glycogen storage disease 1a, or GSD1a, is to apply base editing via LNP delivery to repair the two most prevalent mutations that cause the disease, R83C and Q347X. It is estimated that these two-point mutations account for 900 and 500 patients, respectively, in the United States, representing approximately 59% of all GSD1a patients. Animal studies have shown that as little as 11% of normal G6Pase activity in liver cells is sufficient to restore fasting glucose; however, this level must be maintained in order to preserve glucose control and alleviate other serious, and potentially fatal, GSD1a sequelae.

We have identified product candidates that can correct up to 80% of the alleles in cells harboring the Q347X point mutation and approximately 60% of the alleles in cells harboring the R83C mutation as shown in the

figures below. Correction of at least 11% is expected to be clinically relevant and potentially disease modifying for GSD1a patients.

Viral delivery for ocular and CNS disorders: Stargardt disease

The most prevalent mutation in the ABCA4 gene that leads to Stargardt disease is the G1961E point mutation. Approximately 5,500 individuals in the United States are affected by this mutation. Our base editing approach is to repair the G1961E point mutation in the ABCA4 gene. Disease modeling using tiny spot stimuli, or light stimuli through holes that are equivalent in size to a single photoreceptor cell, suggests that only 12%-20% of these cells are sufficient to preserve vision. We anticipate, therefore, that editing percentages in the range of 12%-20% of these cells would be disease-modifying, since each edited cell will be fully corrected and protected from the biochemical defect.

We have identified a base editor that is able to edit approximately 45% of the alleles in recombinant cells carrying the human mutated sequence. Given that the base editor is larger than the packaging capacity of a single AAV, we use a split AAV system that delivers the base editor via two AAV vectors. Once inside the cell, the two halves of the editor are recombined to create a functional base editor. In a human retinal pigment epithelial cell line (ARPE-19 cells) in which we have knocked in the ABCA4 G1961E point mutation, we have demonstrated the precise correction of approximately 75% of the disease alleles at 5 weeks after dual infection with the split AAV system.

Collaborations

We believe our base editing technology has potential across a broad array of genetic diseases. To fully realize this potential, we have established and will continue to seek out innovative collaborations, licenses, and strategic alliances with pioneering companies and with leading academic and research institutions. Additionally, we have and will continue to pursue relationships that potentially allow us to accelerate our preclinical research and development efforts. These relationships will allow us to aggressively pursue our vision of maximizing the potential of base editing to provide life-long cures for patients suffering from serious diseases.

Ex vivo electroporation for hematologic diseases and oncology

Boston Children's Hospital

In July 2020, we formed a strategic alliance with Boston Children's Hospital. Under the terms of the agreement, we will sponsor research programs at Boston Children's to facilitate development of disease-specific therapies using our proprietary base editing technology. Boston Children's will also serve as a clinical site to advance bench-to-bedside translation of our pipeline across certain therapeutic areas of interest, including programs in sickle cell disease and pediatric leukemias and exploration of new programs targeting other diseases.

Magenta Therapeutics

In June 2020, we announced a non-exclusive research and clinical collaboration agreement with Magenta Therapeutics to evaluate the potential utility of MGTA-117, Magenta's novel targeted ADC for conditioning of patients with sickle cell disease and beta-thalassemia receiving our base editing therapies. Conditioning is a critical component necessary to prepare a patient's body to receive the edited cells, which carry the corrected gene and must engraft in the patient's bone marrow in order to be effective. Today's conditioning regimens rely

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on nonspecific chemotherapy or radiation, which are associated with significant toxicities. MGTA-117 precisely targets only hematopoietic stem and progenitor cells, sparing immune cells, and has shown high selectivity, potent efficacy, wide safety margins and broad tolerability in non-human primate models. MGTA-117 may be capable of clearing space in bone marrow to support long-term engraftment and rapid recovery in patients. Combining the precision of our base editing technology with the more targeted conditioning regimen enabled by MGTA-117 could further improve therapeutic outcomes for patients suffering from these severe diseases. We will be responsible for clinical trial costs related to development of our base editors when combined with MGTA-117, while Magenta will continue to be responsible for all other development costs of MGTA-117.

Non-Viral delivery for liver diseases

Verve Therapeutics

In April 2019, we entered into a collaboration and license agreement with Verve Therapeutics, or Verve, a company focused on developing genetic medicines to safely edit the genome of adults to permanently lower LDL cholesterol and triglyceride levels and thereby treat coronary heart disease. This collaboration allows us to fully realize the potential of base editing in treating cardiovascular diseases, an area outside of our core focus where the Verve team has significant, world-class expertise. Under the terms of the agreement, Verve received exclusive access to our base editing technology, gene editing, and delivery technologies for human therapeutic applications against certain cardiovascular targets. In exchange, we received 2,556,322 shares of Verve common stock. Additionally, we will receive milestone payments for certain clinical and regulatory events and we retain the option, after the completion of Phase 1 studies, to participate in future development and commercialization, and share 50 percent of U.S. profits and losses, for any product directed against these targets. Verve granted to us a non-exclusive license under know-how and patents controlled by Verve, and an interest in joint collaboration technology. Either party may owe the other party other milestone payments for certain clinical and regulatory technology products. Royalty payments may become due by either party to the other based on the net sales of any commercialized delivery technology products under the agreement.

In June 2020, Verve reported preclinical proof-of-concept data in non-human primates that demonstrated the successful use of adenine base editors to turn off a gene in the liver. Utilizing ABE technology licensed from us and an optimized guide RNA packaged in an engineered lipid nanoparticle, Verve evaluated *in vivo* liver base editing to turn off proprotein convertase subtilisin/kexin type 9 (PCSK9), a gene whose protein product elevates blood LDL cholesterol or angiopoietin-like protein 3 (ANGPTL3), a gene whose protein product elevates blood triglyceride-rich lipoproteins. We believe these proof-of-concept data, which show we can safely edit the primate genome, represent the first successful application of the base editing technology in non-human primates.

In two separate studies, seven animals were treated with the drug product targeting the PCSK9 gene and seven additional animals with the drug product targeting the ANGPTL3 gene. Whole liver editing, blood protein and lipid levels were measured at two weeks and compared to baseline. The program targeting PCSK9 showed an average of 67% whole liver PCSK9 editing, which translated into an 89% reduction in plasma PCSK9 protein and resulted in a 59% reduction in blood LDL cholesterol levels. The program targeting ANGPTL3 showed an average of 60% whole liver ANGPTL3 editing, which translated into a 95% reduction in plasma ANGPTL3 protein and resulted in a 64% reduction in blood triglyceride levels and 19% reduction in LDL cholesterol levels. In addition, in studies in primary human hepatocytes, clear evidence of on-target editing was observed with no evidence of off-target editing.

Per the terms of our agreement with Verve, we can exercise our right to participate in the future development and commercialization of any programs at the completion of Phase I studies.

Viral delivery for ophthalmology and CNS diseases

IОВ

In July 2020, we announced a research collaboration with the Institute of Molecular and Clinical Ophthalmology Basel (IOB). Founded in 2018 by a consortium that includes Novartis, the University Hospital of Basel and the University of Basel, IOB is a leader in basic and translational research aimed at treating impaired vision and blindness. Clinical scientists at IOB have also helped to develop better ways to measure how vision is impacted by Stargardt disease. Additionally, researchers at IOB have developed living models of the retina, known as organoids, which can be used to test novel therapies. Under the terms of the agreement, the companies will leverage IOB's unique expertise in the field of ophthalmology along with our novel base editing technology to advance programs directed to the treatment of certain ocular diseases, including Stargardt disease.

Manufacturing

To realize the full potential of base editors as a new class of medicines and to enable our parallel investment strategy in multiple delivery modalities, we are building customized and integrated capabilities across discovery, manufacturing, and preclinical and clinical development. Due to the critical importance of high-quality manufacturing and control of production timing and know-how, we have taken steps toward establishing our own manufacturing facility, which will provide us the flexibility to manufacture numerous different drug product modalities. We believe this investment will maximize the value of our portfolio and capabilities, the probability of technical success of our programs, and the speed at which we can provide life-long cures to patients.

In August 2020, we entered into a lease agreement with Alexandria Real Estate Equities, Inc. to build a 100,000 square foot current Good Manufacturing Practice, or cGMP, compliant manufacturing facility in Research Triangle Park, North Carolina intended to support a broad range of clinical programs. We will invest up to \$83 million over a five-year period and anticipate that the facility will be operational by the first quarter of 2023. The project will be facilitated, in part, by a Job Development Investment Grant (JDIG) approved by the North Carolina Economic Investment Committee, which authorizes potential reimbursements based on new tax revenues generated through the project. The facility will be designed to support manufacturing for our *ex vivo* cell therapy programs in hematology and oncology and *in vivo* non-viral delivery programs for liver diseases, with flexibility to support manufacturing of our viral delivery programs, and ultimately, scale-up to support potential commercial supply.

For our initial waves of clinical programs, we will use contract manufacturing organizations, or CMOs, with relevant manufacturing experience in genetic medicines.

Our strategy

Our mission is to become the leading company in precision genetic medicines by discovering, developing, manufacturing, and ultimately commercializing a new class of medicines through our proprietary base editing technology, with the goal of providing life-long cures to patients suffering from serious diseases. Key components of our strategy are as follows:

Build a highly innovative, fully integrated genetic medicines company

- · Advance "waves" of programs into clinical development through a highly efficient discovery and development engine
- · Access the broadest range of therapeutic areas by leveraging clinically validated delivery modalities
- · Reinforce our leadership position in base editing through strategic investment in our platform and new technologies
- · Further expand patient access to our medicines through innovative strategic partnerships with both established and emerging companies
- · Maintain a culture of innovation that captures the best of academic science and translational medicine

As of August 31, 2020, we have attracted a talented group of industry experts and scientists as part of a highly innovative organization of 158 employees. We have developed and consolidated significant technology and intellectual property covering the elements of base editing, as well as additional gene editing technologies and delivery modalities, with exclusive licenses from Harvard University, Broad Institute of MIT and Harvard, Editas Medicine Inc., and Bio Palette Co., Ltd.

Recent developments

COVID-19

With the ongoing concern related to the COVID-19 pandemic, we have maintained and expanded our business continuity plans to address and mitigate the impact of the COVID-19 pandemic on our business. In March 2020, to protect the health of our employees, and their families and communities, we restricted access to our offices to personnel who performed critical activities that must be completed on-site, limited the number of such personnel that can be present at our facilities at any one time, and requested that most of our employees work remotely. In May 2020, as certain states eased restrictions, we established new protocols to better allow our full laboratory staff access to our facilities. These protocols included several shifts working over a seven days week protocol. We expect to continue incurring additional costs to ensure we adhere to the guidelines instituted by the Centers for Disease Control and to provide a safe working environment to our onsite employees.

The extent to which the COVID-19 pandemic impacts our business, our corporate development objectives, results of operations and financial condition, including and the value of and market for our common stock, will depend on future developments that are highly uncertain and cannot be predicted with confidence at this time, such as the ultimate duration of the pandemic, travel restrictions, quarantines, social distancing and business closure requirements, and the effectiveness of actions taken globally to contain and treat the disease. Disruptions to the global economy, disruption of global healthcare systems, and other significant impacts of the COVID-19 pandemic could have a material adverse effect on our business, financial condition, results of operations and growth prospects.

While the COVID-19 pandemic did not significantly impact our business or results of operations during the six months ended June 30, 2020, the length and extent of the pandemic, its consequences, and containment efforts will determine the future impact on our operations and financial condition.

Risks associated with our business

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in the "Risk factors" section of this prospectus and in our Annual

Report on Form 10-K for the year ended December 31, 2019, our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020 (collectively, our "Risk Factors"). These risks include the following:

- Base editing is a novel technology that is not yet clinically validated for human therapeutic use. The approaches we are taking to discover and develop novel therapeutics are unproven and may never lead to marketable products.
- We have incurred significant losses since inception. We expect to incur losses for the foreseeable future and may never achieve or maintain profitability.
- We will need substantial additional funding. If we are unable to raise capital when needed, we would be forced to delay, reduce, or eliminate our research and product development programs or future commercialization efforts.
- · Our short operating history may make it difficult for you to evaluate the success of our business to date and to assess our future viability.
- We may not be successful in our efforts to identify and develop potential product candidates. If these efforts are unsuccessful, we may
 never become a commercial stage company or generate any revenues.
- We are very early in our development efforts. All of our product candidates are still in preclinical development or earlier stages and it will be many years before we or our collaborators commercialize a product candidate, if ever. If we are unable to advance our product candidates to clinical development, obtain regulatory approval and ultimately commercialize our product candidates, or experience significant delays in doing so, our business will be materially harmed.
- If any of the product candidates we may develop or the delivery modalities we rely on cause serious adverse events, undesirable side
 effects or unexpected characteristics, such events, side effects or characteristics could delay or prevent regulatory approval of the
 product candidates, limit the commercial potential, or result in significant negative consequences following any potential marketing
 approval.
- We face significant competition in an environment of rapid technological change, and there is a possibility that our competitors may
 achieve regulatory approval before us or develop therapies that are safer or more advanced or effective than ours, which may harm our
 financial condition and our ability to successfully market or commercialize any product candidates we may develop.
- The continuing effects and impacts of the COVID-19 pandemic could have a material adverse effect on our business, financial condition, results of operations and growth prospects.
- We have not tested any of our proposed delivery modes and product candidates in clinical trials and any favorable preclinical results are not predictive of results that may be observed in clinical trials.
- Adverse public perception of genetic medicines, and gene editing and base editing in particular, may negatively impact regulatory approval of, and/or demand for, our potential products.
- The gene editing field is relatively new and is evolving rapidly. We are focusing our research and development efforts on gene editing using base editing technology, but other gene editing technologies may be discovered that provide significant advantages over base editing, which could materially harm our business.

- Because base editing is novel and the regulatory landscape that will govern any product candidates we may develop is uncertain and may change, we cannot predict the time and cost of obtaining regulatory approval, if we receive it at all, for any product candidates we may develop.
- Genetic medicines are novel, and any product candidates we develop may be complex and difficult to manufacture. We could experience
 delays in satisfying regulatory authorities or production problems that result in delays in our development or commercialization programs,
 limit the supply of our product candidates we may develop, or otherwise harm our business.
- We currently contract with third parties for the manufacture of materials for our research programs and preclinical studies and unless and until our in-house manufacturing facility becomes operational, we expect to continue to do so for clinical trials of all of our product candidates. Even if our in-house manufacturing facility becomes operational, we may contract with third parties for manufacturing of materials for clinical trials and potential commercialization of certain of our viral delivery product candidates. This reliance on third parties, and the risk that we are not able to successfully build-out our in-house manufacturing facility, increases the risk that we will not have sufficient quantities of such materials, product candidates, or any medicines that we may develop and commercialize, or that such supply will not be available to us at an acceptable cost, which could delay, prevent, or impair our development or commercialization efforts.
- Because we are developing product candidates in the field of genetics medicines, a field that includes gene therapy and gene editing, in
 which there is little clinical experience, there is increased risk that the FDA, the EMA, or other regulatory authorities may not consider the
 endpoints of our clinical trials to provide clinically meaningful results and that these results may be difficult to analyze.
- If we are unable to obtain and maintain patent protection for any product candidates we develop and for our technology, or if the scope of
 the patent protection obtained is not sufficiently broad, or if we or our licensors are unable to successfully defend our or our licensors'
 patents against third-party challenges or enforce our or our licensors' patents against third parties our competitors could develop and
 commercialize products and technology similar or identical to ours, and our ability to successfully commercialize any product candidates
 we may develop, and our technology may be adversely affected.
- Our rights to develop and commercialize technology and product candidates are subject, in part, to the terms and conditions of licenses granted to us by others.
- The intellectual property landscape around genome editing technology, including base editing, is highly dynamic, and third parties may
 initiate legal proceedings alleging that we are infringing, misappropriating, or otherwise violating their intellectual property rights, the
 outcome of which would be uncertain and may prevent, delay or otherwise interfere with our product discovery and development efforts.
- Our owned and in-licensed patents and other intellectual property may be subject to priority disputes or inventorship disputes or we may be subject to claims that we have infringed, misappropriated or otherwise violated the intellectual property of a third party and similar proceedings. If we or our licensors are unsuccessful in any of these proceedings, we may be required to obtain licenses from third parties, which may not be available on commercially reasonable terms or at all, or to cease the development, manufacture, and commercialization of one or more of the product candidates we may develop, which could have a material adverse impact on our business.

The foregoing is only a summary of some of our risks. For a more detailed discussion of these and other risks you should consider before making an investment in our common stock, see our Risk Factors.

Implications of being an emerging growth company and smaller reporting company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. As an emerging growth company, we may take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies, including reduced disclosure about our executive compensation arrangements, exemption from the requirements to hold non-binding advisory votes on executive compensation and golden parachute payments and exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting.

We may take advantage of these exemptions until the last day of the fiscal year following the fifth anniversary of our initial public offering or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company earlier if we have more than \$1.07 billion in annual revenue, we have more than \$700.0 million in market value of our stock held by non-affiliates (and we have been a public company for at least 12 months and have filed one annual report on Form 10-K) or we issue more than \$1.0 billion of non-convertible debt securities over a three-year period. For so long as we remain an emerging growth company, we are permitted, and intend, to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. We may choose to take advantage of some, but not all, of the available exemptions.

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 not to "opt out" of such extended transition period, which means that when a standard is issued or revised and it has different application dates for public or private companies, we will adopt the new or revised standard at the time private companies adopt the new or revised standard and will do so until such time that we either (i) irrevocably elect to "opt out" of such extended transition period or (ii) no longer qualify as an emerging growth company. Therefore, the reported results of operations contained in our consolidated financial statements may not be directly comparable to those of other public companies.

We are also a "smaller reporting company," meaning that the market value of our stock held by non-affiliates plus the proposed aggregate amount of gross proceeds to us as a result of this offering is less than \$700 million and our annual revenue is less than \$100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company after this offering if either (i) the market value of our stock held by non-affiliates is less than \$250 million or (ii) our annual revenue is less than \$100 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than \$700 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

Our corporate information

We were incorporated in Delaware in January 2017. Our principal executive offices are located at 26 Landsdowne Street, 2nd Floor, Cambridge, MA 02139, and our telephone number is 857-327-8775. Our website is www.beamtx.com. Information contained on, or that can be accessed through, our website is not part of this prospectus.

The offering	
Common stock offered by us	shares.
Common stock to be outstanding after this offering	shares (shares if the underwriters exercise their option to purchase additional shares in full).
Underwriters' option to purchase additional shares of common stock from us	We have granted the underwriters an option to purchase up to an aggregate of additional shares of common stock from us at the public offering price, less the estimated underwriting discounts and commissions, for a period of 30 days after the date of this prospectus.
Use of proceeds	We estimate that our net proceeds from the sale of our common stock in this offering will be approximately \$, assuming a public offering price of \$ per share (the last reported sale price of our common stock on Nasdaq on , 2020), and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.
	We intend to use the net proceeds from this offering for continued advancement of our platform technology, for continued research and development of our current portfolio of base editing programs and for other potential programs, for conducting preclinical studies, including potential preclinical proof-of-concept of our three delivery modalities, for IND-enabling studies and the potential initiation of clinical studies for certain of our current programs, for building-out our in-house manufacturing facility, and for general corporate purposes. See "Use of proceeds."
Dividend policy	We do not anticipate declaring or paying any cash dividends on our capital stock in the foreseeable future. See "Dividend policy."
Risk factors	You should carefully read the "Risk factors" section of this prospectus and the other information included in this prospectus for a discussion of factors that you should consider before deciding to invest in our common stock.
Nasdaq Global Select Market symbol	BEAM

The number of shares of common stock to be outstanding following this offering is based on 51,525,807 shares of common stock outstanding as of June 30, 2020, which includes 1,880,070 shares of unvested restricted stock, which are not included as outstanding for accounting purposes and are not included as outstanding shares in our consolidated financial statements, and excludes:

 5,646,046 shares of common stock issuable upon the exercise of stock options outstanding as of June 30, 2020 under our 2019 Equity Incentive Plan, or the 2019 Plan, at a weighted average exercise price of \$7.44 per share;

Tabl	e of	Con	tents

- 2,605,173 shares of common stock reserved for issuance under our 2019 Plan; and
- 465,000 shares of common stock reserved for issuance under our 2019 Employee Stock Purchase Plan, or the 2019 ESPP. Unless otherwise noted, the information in this prospectus assumes:
- no exercise of the outstanding stock options described above; and
- no exercise by the underwriters of their option to purchase additional shares.

Summary consolidated financial data

The following tables set forth, for the periods and as of the dates indicated, our summary historical financial data. The statements of operations data for the years ended December 31, 2018 and 2019 have been derived from our audited financial statements incorporated by reference in this prospectus. The statements of operations data for the six months ended June 30, 2019 and 2020 and the balance sheet data as of June 30, 2020 have been derived from our unaudited financial statements incorporated by reference in this prospectus. The unaudited financial statements have been prepared on a basis consistent with our audited financial statements and, in our opinion, contain all adjustments, consisting only of normal and recurring adjustments, necessary for a fair presentation of such financial data.

Our historical results are not necessarily indicative of future operating results, and our operating results for the six months ended June 30, 2020 are not necessarily indicative of the results that may be expected for the year ending December 31, 2020 or any other periods or any future year or period. You should read the information set forth below in conjunction with "Management's discussion and analysis of financial condition and results of operations" and our financial statements and the related notes thereto appearing in our Annual Report on Form 10-K for the year ended December 31, 2019 and our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2002 and June 30, 2020, each of which is incorporated by reference in this prospectus. For more details on how you can obtain the documents incorporated by reference in this prospectus, see "Where you can find more information" and "Incorporation of certain information by reference" appearing elsewhere in this prospectus.

	Six months ended June 30,				Year ended December 31,		Year ended December 31,	
in thousands, except share and per share data)		2020		2019		2019		2018
Consolidated Statement of Operations and Other Comprehensive Loss:								
License revenue	\$	12	\$	6	\$	18	\$	—
Operating expenses:								
Research and development		40,903		21,859		54,619		33,873
General and administrative		13,749		8,906		20,553		11,868
Total operating expenses		54,652		30,765		75,172		45,741
Loss from operations		(54,640)		(30,759)		(75,154)		(45,741)
Other income (expense):								
Change in fair value of derivative liabilities		(11,400)		(2,000)		(5,400)		(11,749)
Loss on issuance of preferred stock in connection with Blink Merger(1)				_		_		(49,500)
Loss on issuance of preferred stock to investors		—		_		_		(5,715)
Change in fair value of preferred stock tranche liabilities		—				_		(4,325)
Interest and other income, net		1,364		1,288		2,228		292
Total other income (expense)		(10,036)		(712)		(3,172)		(70,997)
Net loss		(64,676)		(31,471)		(78,326)		(116,738)
Unrealized gain on marketable securities		157		83		16		_
Comprehensive loss	\$	(64,519)	\$	(31,388)	\$	(78,310)	\$	(116,738)
Net loss per common share attributable to common								
stockholders, basic and diluted(2)	\$	(1.65)	\$	(6.26)	\$	(14.05)	\$	(40.54)
Weighted-average common shares used in net loss per share attributable to common stockholders, basic and								
diluted(2)	4(),077,788	6	,018,364		6,479,591		2,893,978

- (1) See Note 10 to our consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2019 for a description of the Blink Merger.
- (2) See Note 14 to our consolidated financial statements in our Annual Report on Form 10-K for the year ended December 31, 2019 and Note 12 to our unaudited interim statements for the period ended June 30, 2020 for a description of the method used to calculate basic and diluted net loss per share attributable to common stockholders.

	As	As of June 30, 2020				
	Actual	As adjusted(4)				
	(in thousands)					
Balance Sheet Data:						
Cash, cash equivalents and marketable securities	\$ 227,950	\$				
Working capital(3)	195,879					
Total assets	299,975					
Total stockholders' equity	230,822					
(3) We define working capital as current assets less current liabilities.						

(4) The adjusted Balance Sheet Data reflects the issuance and sale of shares of our common stock in this offering.

Risk factors

Investing in our common stock involves a high degree of risk. Before investing in our common stock, you should consider carefully the risks described below, together with the other information contained in this prospectus and incorporated by reference in this prospectus, including the risk factors incorporated by reference from our Annual Report on Form 10-K for the year ended December 31, 2019, our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020 and other filings we make with the SEC.

We believe the risks described below and incorporated by reference herein are the risks that are material to us as of the date of this prospectus. If any of the following risks or the risks incorporated by reference herein occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment.

Risks related to this offering and ownership of our common stock

You will incur immediate and substantial dilution as a result of this offering.

If you purchase common stock in this offering, you will incur immediate and substantial dilution of \$ per share, representing the difference between the assumed public offering price of \$ per share, (the last reported sale price of our common stock on Nasdaq on , 2020), and our net tangible book value per share after giving effect to this offering. To the extent outstanding stock options are exercised, new investors may incur further dilution. For a further description of the dilution you will experience immediately after this offering, see "Dilution."

The market price of our common stock may be volatile, which could result in substantial losses for investors purchasing shares in this offering.

If you purchase shares of common stock in this offering you may be unable to sell those shares of common stock at or above the public offering price. The trading price of our common stock has fluctuated, and it is likely to continue to be subject to substantial fluctuations in response to various factors, some of which are beyond our control. Since the shares were sold in our initial public offering in February 2020 at a price of \$17.00 per share, the price per share of our common stock has ranged as low as \$ and as high as \$ through , 2020. Some of the factors that may cause the market price of our common stock to fluctuate include, but are not limited to:

- · the success of existing or new competitive product candidates or technologies;
- the timing and results of preclinical studies for any product candidates that we may develop;
- · failure or discontinuation of any of our product development and 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;
- · developments or changing views regarding the use of genetic medicines, including those that involve gene editing;
- · commencement or termination of collaborations for our product development and research programs;
- · regulatory or legal developments in the United States and other countries;
- · developments or disputes concerning patent applications, issued patents, or other proprietary rights;

- · the recruitment or departure of key personnel;
- · the level of expenses related to any of our research programs, clinical development programs, or product candidates that we may develop;
- · the results of our efforts to develop additional product candidates or products;
- actual or anticipated changes in estimates as to financial results, development timelines, or recommendations by securities analysts;
- announcement or expectation of additional financing efforts;
- sales of our common stock by us, our insiders or other stockholders;
- expiration of market stand-off or lock-up agreement;
- variations in our financial results or those of companies that are perceived to be similar to us;
- · changes in estimates or recommendations by securities analysts, if any, that cover our stock;
- changes in the structure of healthcare payment systems;
- · market conditions in the pharmaceutical and biotechnology sectors;
- · general economic, industry, and market conditions; and
- · the other factors described or incorporated by reference in this "Risk Factors" section.

In recent years, the stock market in general, and the market for pharmaceutical and biotechnology companies in particular, has experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to changes in the operating performance of the companies whose stock is experiencing those price and volume fluctuations. Additionally, the extent and duration of the impact of the COVID-19 pandemic on our stock price and other biopharmaceutical companies is uncertain and may make us look less attractive to investors and, as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. Broad market and industry factors may seriously affect the market price of our common stock, regardless of our actual operating performance. These fluctuations may be even more pronounced in the trading market for our stock shortly following this offering. Following periods of such volatility in the market price of a company's securities, securities class action litigation has often been brought against that company. Because of the potential volatility of our stock price, we may become the target of securities litigation in the future.

Securities litigation could result in substantial costs and divert management's attention and resources from our business.

A significant portion of our total outstanding shares is restricted from immediate resale but may be sold into the market in the near future, which could cause the market price of our common stock to decline significantly, even if our business is doing well.

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. After this offering we will have shares of common stock outstanding, or shares if the underwriters exercise their option to purchase additional shares in full, in each case based on the 51,525,807 shares of our common stock outstanding as of June 30, 2020. Common stock outstanding includes 1,880,070 shares of unvested restricted

stock, which are not included as outstanding for accounting purposes and are not included as outstanding shares in our consolidated financial statements. Subject to the restrictions set forth in the 90-day lock-up agreements to be entered into by each of our directors and officers in connection with this offering as described elsewhere in this prospectus under the heading "Underwriting" (which restrictions may be waived, with or without notice, by J.P. Morgan Securities and Jefferies LLC), outstanding shares of our common stock may be freely sold in the public market at any time to the extent permitted by Rules 144 and 701 under the Securities Act of 1933, as amended, or the Securities Act, or to the extent that such shares have already been registered under the Securities Act and are held by non-affiliates of ours.

Moreover, after this offering, holders of an aggregate of 15,231,958 shares of our common stock will have rights, subject to conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also have registered all shares of common stock that we may issue under our equity compensation plans or that are issuable upon exercise of outstanding options. These shares can be freely sold in the public market upon issuance and once vested, subject to volume limitations applicable to affiliates and the lock-up agreements described in the "Underwriting" Section of this prospectus. If any of these additional shares are sold, or if it is perceived that they will be sold, in the public market, the market price of our common stock could decline.

Insiders will continue to have substantial influence over us after this offering, which could limit your ability to affect the outcome of key transactions, including a change of control.

After this offering, our directors and executive officers and their affiliates will beneficially own shares representing approximately % of our outstanding common stock. As a result, these stockholders, if they act together, will be able to influence our management and affairs and all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. This concentration of ownership may have the effect of delaying or preventing a change in control of our company and might affect the market price of our common stock.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

We cannot specify with certainty the particular uses of the net proceeds we will receive from this offering. Our management will have broad discretion in the application of the net proceeds, including for any of the purposes described in "Use of proceeds." Accordingly, you will have to rely upon the judgment of our management with respect to the use of the proceeds, with only limited information concerning management's specific intentions. Our management may spend a portion or all of the net proceeds from this offering in ways that our stockholders may not desire or that may not yield a favorable return. The failure by our management to apply these funds effectively could harm our business, financial condition, results of operations and prospects. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

Risks related to our relationships with third parties

Public health epidemics or outbreaks, including COVID-19, could adversely impact our business.

Due to the evolving and uncertain global impacts of the COVID-19 pandemic, we cannot precisely determine or quantify the impact this pandemic will have on our business operations for the remainder of our fiscal year ending December 31, 2020 or beyond. The extent to which COVID-19 may impact our business, results of operations and future growth prospects will depend on a variety of factors and future developments, which are highly uncertain and cannot be predicted with confidence, including the ultimate geographic spread of the disease, the duration, scope and severity of the pandemic, the duration and extent of travel restrictions and

social distancing in the U.S. and other countries, business closures or business disruptions and the effectiveness of actions taken in the U.S. and other countries to contain and treat COVID-19.

The rapid spread of the virus has led to the implementation of various responses, including government-imposed quarantines, including shelter-in-place mandates, sweeping restrictions on travel, and other public health safety measures, as well as reported adverse impacts on healthcare resources, facilities and providers, in Massachusetts, where our primary offices and laboratory spaces are located, across the United States, and in other countries. The extent to which COVID-19 continues to impact our operations and those of our third-party partners will depend on future developments, which are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak, additional or modified government actions, new information which may emerge concerning the severity of COVID-19 and the actions taken to contain COVID-19 or treat its impact, among others. As interventions to contain the spread of the virus are lifted or reduced, new COVID-19 outbreaks may result in new or heightened restrictions.

To protect the health of our employees and their families, and our communities, in accordance with direction from state and local government authorities, we restricted access to our facilities to personnel and third parties who must perform critical activities that must be completed on-site, limited the number of such personnel that can be present at our facilities at any one time, and requested that some of our personnel work remotely. We plan to maintain these or similar restrictions until we believe employees can fully resume such activities in accordance with federal, state and local requirements. In the event that governmental authorities were to increase current restrictions, our employees conducting research and development, or manufacturing activities may not be able to access our laboratory or manufacturing space, and our core activities may be significantly limited or curtailed, possibly for an extended period of time.

The COVID-19 pandemic has also impacted, and may continue to impact, our third-party suppliers, including through the effects of facility closures, reductions in operating hours, staggered shifts and other social distancing efforts, labor shortages, decreased productivity and unavailability of materials or components. While we maintain an inventory of materials necessary to conduct our pre-clinical studies, a prolonged outbreak could lead to shortages in these materials.

Additionally, timely completion of preclinical activities is dependent upon the availability of, for example, preclinical sites, researchers and investigators, regulatory agency personnel, and materials, which may be adversely affected by global health matters, such as pandemics. We plan to conduct preclinical activities for our programs in geographies which are currently being affected by COVID-19.

Some factors from the COVID-19 pandemic that could delay or otherwise adversely affect the completion of our preclinical activities and, depending on the duration of the outbreak, the initiation of any future clinical trials, as well as our business generally, include:

- business disruptions caused by potential workplace, laboratory and office closures and an increased reliance on employees working from home, disruptions to or delays in ongoing laboratory experiments and operations, staffing shortages, travel limitations, cyber security and data accessibility, or communication or mass transit disruptions, any of which could adversely impact our business operations or delay necessary interactions with local regulators, ethics committees, manufacturing sites, research sites and other important agencies and contractors;
- limitations on our business operations by local, state, or the federal government that could impact our ability to conduct our preclinical activities, including completing our IND-enabling studies;
- · limitations on travel that could hinder our timelines;
- · interruption in global shipping affecting the transport of key materials; and

 interruption of, or delays in receiving, key materials from our contract manufacturing organizations due to staffing shortages, production slowdowns or stoppages and disruptions in delivery systems.

These and other factors arising from COVID-19 could worsen in countries that are already afflicted with COVID-19 or could continue to spread to additional countries, each of which could further adversely impact our ability to conduct preclinical or any future clinical trials, and, in general, our business, and could have a material adverse impact on our operations and financial condition and results.

Additionally, the extent and duration of the impact of COVID-19 pandemic on our stock price and other biopharmaceutical companies is uncertain and may make us look less attractive to investors and, as a result, there may be a less active trading market for our common stock, our stock price may be more volatile, and our ability to raise capital could be impaired.

COVID-19 outbreak continues to rapidly evolve. The extent to which the outbreak may impact our business, preclinical studies and any future clinical trials will highly depend on future developments, which are very uncertain and cannot be predicted with confidence, such as the ultimate geographic spread of the disease, the duration of the outbreak, travel restrictions and other actions to contain the outbreak or address its impact, such as social distancing and quarantines or lockdowns in the United States and other countries, business closures or business disruptions and the effectiveness of actions taken in the United States and other countries to contain and address the disease.

The COVID-19 pandemic may also have the effect of heightening many of the other risks described in this section titled "Item 1A. Risk Factors", such as risks related to our need to raise additional funding, fluctuation of our quarterly financial results, and our ability to obtain and maintain regulatory approvals.

Special note regarding forward-looking statements

This prospectus and documents incorporated by reference herein contain forward-looking statements. All statements other than statements of historical facts contained in this prospectus and the documents incorporated by reference herein are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "contemplate," "believe," "estimate," "predict," "potential" or "continue" or the negative of these terms or other similar expressions, although not all forward-looking statements contain these words. Forward-looking statements include, but are not limited to, statements concerning:

- the initiation, timing, progress and results of our research and development programs and preclinical and clinical studies;
- · our ability to demonstrate, and the timing of, preclinical proof-of-concept in vivo for multiple programs;
- our ability to advance any product candidates that we may develop and successfully complete any clinical studies, including the manufacture
 of any such product candidates;
- · our ability to pursue a comprehensive suite of clinically validated delivery modalities;
- our ability to quickly leverage our initial programs and to progress additional programs to create a clinical portfolio;
- · the timing of our "waves" of investigational new drug applications filings;
- · the implementation of our strategic plans for our business, programs, product candidates, and technology;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- · developments related to our competitors and our industry;
- our ability to leverage the clinical, regulatory, and manufacturing advancements made by gene therapy and gene editing programs to
 accelerate our clinical trials and approval of product candidates;
- · our ability to identify and enter into future license agreements and collaborations;
- developments related to base editing technologies;
- · our ability to successfully develop our three distinct pipelines and obtain and maintain approval for our product candidates;
- · our ability to successfully build-out our in-house manufacturing facility;
- · regulatory developments in the United States and foreign countries;
- our ability to attract and retain key scientific and management personnel; and
- · our use of proceeds from this offering, estimates of our expenses, capital requirements, and needs for additional financing.

The forward-looking statements in this prospectus are only predictions and are based largely on our current expectations and projections about future events and financial trends that we believe may affect our business, financial condition and results of operations. These forward-looking statements speak only as of the date of this prospectus or the documents incorporated by reference herein and are subject to a number of known and

unknown risks, uncertainties and assumptions, including those described in this prospectus and in Company's Annual Report on Form 10-K for the year ended December 31, 2019, the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020 and other filings we make with the SEC. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

Use of proceeds

We estimate that the net proceeds to us from the sale of the shares of common stock in this offering will be approximately \$. or approximately \$ if the underwriters exercise their option to purchase additional shares in full, assuming a public offering price of \$ per , 2020), and after deducting estimated underwriting discounts share (the last reported sale price of our common stock on Nasdag on and commissions and estimated offering expenses. Each \$1.00 increase (decrease) in the assumed public offering price of \$ per share would increase (decrease) the net proceeds to us from this offering by approximately \$ assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. We may also increase or decrease the number of shares we are offering. Each increase (decrease) of 1,000,000 shares in the number of shares offered by us would increase (decrease) the net proceeds to us from this , assuming that the assumed public offering price remains the same, and after deducting the estimated offering by approximately \$ underwriting discounts and commissions and estimated offering expenses payable by us.

As of June 30, 2020, we had cash, cash equivalents, and marketable securities of \$228.0 million. We currently expect to use the net proceeds from this offering, together with our existing cash, cash equivalents, and marketable securities as of June 30, 2020 for continued advancement of our platform technology, for continued research and development of our current portfolio of base editing programs and for other potential programs, for conducting preclinical studies, including potential preclinical proof-of-concept of our three delivery modalities, for IND-enabling studies and the potential initiation of clinical studies for certain of our current programs, for building-out our in-house manufacturing facility, and for general corporate purposes

All of our programs are currently in preclinical stage of development. The specific allocation of the proceeds from this offering and our current cash, cash equivalents, and marketable securities towards specific programs will depend on, among other things, results from our research and development efforts for each program, the timing and success of our preclinical studies and the timing and outcome of regulatory submissions. As a result, and due to the number of our programs currently in preclinical development, we currently are unable to specify to what stage of development the proceeds from this offering and our current cash, cash equivalents, and marketable securities will bring any particular program. We expect the net proceeds from this offering, together with our existing cash, cash equivalents, and marketable securities, will not be sufficient for us to advance any of our programs through regulatory approval or to complete our planned manufacturing facility, and we will need to raise additional capital to complete the development and potential commercialization of any of our programs and our planned manufacturing facility.

We may also use a portion of the net proceeds from this offering to acquire, in-license or invest in products, technologies or businesses that are complementary to our business. The amounts and timing of our actual expenditures will depend on numerous factors, including the progress of our preclinical development efforts, our operating costs and other factors described under "Risk factors" in this prospectus and the documents incorporated by reference herein.

Our expected use of net proceeds from this offering represents our current intentions based upon our present plans and business condition. As of the date of this prospectus, we cannot predict with complete certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the actual amounts that we will spend on the uses set forth above.

Based on our planned use of the net proceeds from this offering and our existing cash, cash equivalents and marketable securities, we estimate that such funds will be sufficient to enable us to fund our operating expenses, debt service, and capital expenditure requirements through at least the next 12 months. We have

based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect.

We may find it necessary or advisable to use the net proceeds for other purposes, and we will have broad discretion in the application of the net proceeds. Pending the uses described above, we plan to invest the net proceeds from this offering in short-term, interest-bearing obligations, investment-grade instruments, certificates of deposit or direct or guaranteed obligations of the U.S. government.

Dividend policy

We have never declared or paid any cash dividends on our capital stock. We intend to retain future earnings, if any, to finance the operation and expansion of our business and do not anticipate paying any cash dividends in the foreseeable future. Any future determination related to our dividend policy will be made at the discretion of our board of directors after considering our financial condition, results of operations, capital requirements, business prospects and other factors our board of directors deems relevant, and subject to the restrictions contained in any future financing instruments. Our ability to pay cash dividends on our capital stock in the future may also be limited by the terms of any preferred securities we may issue or agreements governing any indebtedness we may incur.

Capitalization

The following table summarizes our cash, cash equivalents, and marketable securities and capitalization as of June 30, 2020:

- on an actual basis;
- on an as adjusted basis, to further reflect the sale and issuance by us of offering price of \$ per share (the last reported sale price of our common stock on Nasdaq on underwriting discounts and commissions and estimated offering expenses.

You should read the information in this table together with the consolidated financial statements and related notes to those statements, as well as the information set forth in Company's Annual Report on Form 10-K for the year ended December 31, 2019, the Company's Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020 and other filings we make with the SEC.

As of June 20, 2020

	4	as of June 30, 2020
(in thousands, except share and per share amounts)	Actual	As adjusted
Cash, cash equivalents and marketable securities	\$ 227,950	
Stockholders' equity:		
Common stock (\$0.01 par value; actual: 250,000,000 shares authorized, 51,525,807 shares issued, and 49,645,737 shares outstanding; as adjusted: 250,000,000 shares authorized,		
shares issued, and shares outstanding)	496	
Additional paid-in capital	497,873	
Accumulated other comprehensive income	173	
Accumulated deficit	(267,720)	
Total stockholders' equity	<u>\$ 230,822</u>	
Total capitalization	\$ 230,822	

The outstanding share information in the table above excludes as of June 30, 2020:

- 5,646,046 shares of common stock issuable upon the exercise of stock options outstanding as of June 30, 2020 under our 2019 Plan, at a weighted average exercise price of \$7.44 per share;
- 2,605,173 shares of common stock reserved for issuance under our 2019 Plan; and
- 465,000 shares of common stock reserved for issuance under our 2019 ESPP.

Dilution

If you invest in our common stock in this offering, you will experience immediate and substantial dilution in the adjusted net tangible book value of your shares of common stock. Dilution in adjusted net tangible book value represents the difference between the assumed initial price to the public per share of our common stock and the adjusted net tangible book value per share of our common stock immediately after this offering.

Net tangible book value per share represents our total tangible assets, including operating lease right-of-use assets of \$22.9 million, less total liabilities divided by the number of shares of outstanding common stock as of June 30, 2020, or 49,645,737 shares. The historical net tangible book value of our common stock as of June 30, 2020 was \$230.8 million, or \$4.65 per share.

After giving effect to our sale of shares of common stock in this offering at an assumed public offering price \$ per share (the last reported sale price of our common stock on Nasdaq on , 2020), and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us, our adjusted net tangible book value as of June 30, 2020 would have been approximately \$, or \$ per share. This represents an immediate increase in adjusted net tangible book value of \$ per share to existing stockholders and an immediate dilution of \$ per share to investors participating in this offering.

The following table illustrates this dilution on a per share basis to new investors:

Assumed public offering price per share		\$
Historical net tangible book value per share of common stock as of June 30, 2020	\$4.65	
Increase in net tangible book value per share of common stock attributable to this offering		
Adjusted net tangible book value per share of common stock after this offering		
Dilution per share of common stock to new investors participating in this offering		\$

If the underwriters exercise in full their option to purchase additional shares of common stock from us in this offering, our adjusted net tangible book value per share after the offering would be \$, and the dilution per share to new investors would be \$, in each case assuming an public offering price of \$ per share (the last reported sale price of our common stock on Nasdaq on estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The following table summarizes, on the as adjusted basis as of June 30, 2020, the differences between the number of shares of common stock purchased from us, the total consideration paid to us in cash and the average price per share paid by existing stockholders and by investors participating in this offering. The table below excludes 3,616,519 shares, as of June 30, 2020, for which no cash consideration was received.

	Shares p	urchased					
	Common and	Common and preferred		Total consideration		Average price	
	Number	Percent	Amount	Percent		per share	
Existing stockholders	46,029,218		\$431,280,327		\$	9.37	
New investors							
Total			\$	100.0%	\$		

In addition, if the underwriters' option to purchase additional shares is exercised in full, the number of shares held by existing stockholders will be reduced to % of the total number of shares of common stock to be outstanding upon completion of this offering, and the number of shares of common stock held by investors

participating in this offering will be further increased to % of the total number of shares of common stock to be outstanding upon completion of the offering.

The outstanding share information in the tables above excludes:

- 5,646,046 shares of common stock issuable upon the exercise of stock options outstanding as of June 30, 2020 under our 2019 Plan, at a weighted average exercise price of \$7.44 per share;
- · 2,605,173 shares of common stock reserved for issuance under our 2019 Plan; and
- 465,000 shares of common stock reserved for issuance under our 2019 ESPP.

Furthermore, we may choose to raise additional capital through the sale of equity or convertible debt securities due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. New investors will experience further dilution if any of our outstanding options are exercised, new options are issued and exercised under our equity incentive plans or we issue additional shares of common stock, other equity securities or convertible debt securities for lower consideration per share than in this offering in the future.

Market price of our common stock

Our common stock is listed on the Nasdaq Global Select Market under the symbol "BEAM." On September 17, 2020, the closing price for our common stock as reported on the Nasdaq Global Select Market was \$28.39 per share. As of August 31, 2020, we had 69 holders of record of our common stock.

Principal stockholders

The following table sets forth certain information with respect to the beneficial ownership of our common stock at August 31, 2020, as adjusted to reflect the sale of common stock offered by us in this offering, for:

- · each person who we know beneficially owns more than 5% of our common stock;
- · each of our directors;
- · each of our named executive officers; and
- all of our directors and executive officers as a group.

The number of shares beneficially owned by each stockholder is determined under rules issued by the SEC. Under these rules, a person is deemed to be a "beneficial" owner of a security if that person has or shares voting power or investment power, which includes the power to dispose of or to direct the disposition of such security. Except as indicated in the footnotes below, we believe, based on the information furnished to us, that the individuals and entities named in the table below have sole voting and investment power with respect to all shares of common stock beneficially owned by them, subject to any applicable community property laws.

Percentage ownership of our common stock before this offering is based on 51,764,067 shares of our common stock outstanding as of August 31, 2020, assuming a public offering price of \$ per share (the last reported sale price of our common stock on Nasdaq on , 2020). Outstanding common stock as of August 31, 2020 includes 1,621,497 shares of unvested restricted stock, which are not included as outstanding for accounting purposes and are not included as outstanding shares in our consolidated financial statements. Percentage ownership of our common stock after this offering is based on shares of our common stock outstanding as of August 31, 2020, after giving effect to the issuance of shares of our common stock in this offering. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options, warrants or other rights held by such person that are currently exercisable or that will become exercisable within 60 days of August 31, 2020 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person. Unless noted otherwise, the address of all listed stockholders is 26 Landsdowne Street, 2nd Floor, Cambridge, MA 02139.

	Number of shares	Percentage of shares beneficially owned	
Name of beneficial owner	beneficially owned	Before offering	After offering
5% or greater stockholders:			
Funds affiliated with ARCH Venture Partners(1)	8,243,039	15.9%	
F-Prime Capital Partners Healthcare Fund V LP(2)	6,971,912	13.5%	
David Liu	3,258,587	6.3%	
HH Beam Holdings LLC(3)	2,671,403	5.2%	
Feng Zhang	2,588,762	5.0%	
Directors and Named Executive Officers:			
John Evans(4)	1,505,712	2.9%	
Giuseppe Ciaramella(5)	304,877	*	
Terry-Ann Burrell (6)	113,822	*	
Kristina Burow	—		
Graham Cooper	—		
Mark Fishman, M.D.(7)	163,390	*	
Stephen Knight, M.D.	—		
Carole Ho, M.D.(8)	32,334	_	
Robert Nelsen	—	_	
All executive officers and directors as a group (9 persons)(9)	2,120,135	4.1%	

Less than 1%

(1) Represents (a) 4,121,519 shares of common stock held by ARCH Venture Fund IX Overage, L.P., or ARCH IX Overage, and (b) 4,121,520 shares of common stock held by ARCH Venture Fund IX, L.P., or ARCH IX. ARCH Venture Partners IX Overage, L.P., or the GPLP, as the sole general partner of ARCH IX Overage, has the power to vote and dispose of the shares held of record by ARCH IX Overage and may be deemed to beneficially own certain of the shares held of record by ARCH IX Overage. ARCH Venture Partners IX, L.P., or AVP IX LP, has the power top vote and dispose of the shares held of record by ARCH IX Overage and May be deemed to beneficially own certain of the shares held of record by ARCH IX Overage. ARCH Venture Partners IX, L.P., or AVP IX LP, has the power top vote and dispose of the shares held of record by ARCH IX and may be deemed to beneficially own certain of the shares held of record by ARCH IX. GPLP and AVP IX LP disclaim beneficial ownership of all shares held of record by ARCH IX Overage and ARCH IX. The GPLLC, as the sole general partner of the GPLP and AVP IX LP, has the power to vote and dispose of the shares held of record by ARCH IX overage and ARCH IX overage and ARCH IX and may be deemed to beneficially own certain of the shares held of record by ARCH IX. The GPLLC disclaims beneficial ownership of all shares held of record by ARCH IX in which it does not have an actual pecuniary interest. Keith Crandell, Clinton Bybee, and Robert Nelsen are the managing directors of the GPLLC, share the power to vote and dispose of the shares held of record by ARCH IX Overage and ARCH IX overage and ARCH IX overage and ARCH IX. The managing directors disclaim beneficially own certain of the shares held of record by ARCH IX. The GPLLC disclaims beneficial ownership of all shares held of record by ARCH IX Overage and ARCH IX overage

(2) Consists of 6,971,912 shares held by F-Prime Capital Partners Healthcare Fund V LP. F-Prime Capital Partners Healthcare Advisors Fund V LP is the general partner of F-Prime Capital Partners Healthcare Fund V LP. F-Prime Capital Partners Healthcare Advisors Fund V LP is solely managed by Impresa Management LLC, the managing member of its general partner and its investment manager. Impresa Management LLC is

owned, directly or indirectly, by various shareholders and employees of FMR LLC. Each of the entities listed above expressly disclaims beneficial ownership of the securities listed above except to the extent of any pecuniary interest therein. The address of these entities is 245 Summer Street, Boston, MA 02210.

- (3) Consists of 2,671,403 shares held by HH Beam Holdings LLC. HH Beam Holdings LLC is beneficially owned and controlled by Hillhouse Fund IV, L.P. Hillhouse Capital Management, Ltd. acts as the sole management company of Hillhouse Fund IV, L.P., which is in turn ultimately controlled by Mr. Lei Zhang. The registered address of HH Beam Holdings LLC is Citco Trustees (Cayman) Limited, 89 Nexus Way, Camana Bay, PO Box 31106, Grand Cayman KY1-1205, Cayman Islands.
- (4) Includes 351,817 shares of unvested restricted stock as of August 31, 2020 that Mr. Evans has the ability to vote. Includes options to purchase 289,455 shares of common stock that are exercisable within 60 days of August 31, 2020.
- (5) Includes options to purchase 304,877 shares of common stock that are exercisable within 60 days of August 31, 2020.
- (6) Includes options to purchase 113,822 shares of common stock that are exercisable within 60 days of August 31, 2020.
- (7) Includes options to purchase 146,383 shares of common stock that are exercisable within 60 days of August 31, 2020.
- (8) Includes options to purchase 32,334 shares of common stock that are exercisable within 60 days of August 31, 2020.
- (9) Includes 351,817 shares of unvested restricted stock as of June 30, 2020 that Mr. Evans has the ability to vote. Includes options to purchase 886,871 shares of common stock that are exercisable within 60 days of August 31, 2020.

Description of capital stock

General

Our authorized capital stock consists of 275,000,000 shares, all with a par value of \$0.01 per share, of which:

- 250,000,000 shares are designated as common stock; and
- 25,000,000 shares are designated as preferred stock.

Common stock

Holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of stockholders and do not have cumulative voting rights. An election of directors by our stockholders shall be determined by a plurality of the votes cast by the stockholders entitled to vote on the election. Holders of common stock are entitled to receive proportionately any dividends as may be declared by our board of directors, subject to any preferential dividend rights of any series of preferred stock that we may designate and issue in the future.

In the event of our liquidation or dissolution, the holders of common stock are entitled to receive proportionately our net assets available for distribution to stockholders after the payment of all debts and other liabilities and subject to the prior rights of any outstanding preferred stock. Holders of common stock have no preemptive, subscription, redemption or conversion rights. Our outstanding shares of common stock are validly issued, fully paid and nonassessable. The rights, preferences and privileges of holders of common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Preferred stock

Under the terms of our amended and restated certificate of incorporation, our board of directors is authorized to direct us to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our board of directors to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a stockholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third-party to acquire, or could discourage a third-party from seeking to acquire, a majority of our outstanding voting stock.

Anti-takeover effects of our certificate of incorporation and our by-laws

Our certificate of incorporation and by-laws contains certain provisions that are intended to enhance the likelihood of continuity and stability in the composition of our board of directors but which may have the effect of delaying, deferring or preventing a future takeover or change in control of us unless such takeover or change in control is approved by our board of directors. These provisions include:

Classified board. Our certificate of incorporation provides that our board of directors will be divided into three classes of directors, with the classes as nearly equal in number as possible. As a result, approximately one-third of our board of directors are elected each year. The classification of directors will have the effect of making it

more difficult for stockholders to change the composition of our board. Our certificate of incorporation also provides that, subject to any rights of holders of preferred stock to elect additional directors under specified circumstances, the number of directors will be fixed exclusively pursuant to a resolution adopted by our board of directors.

Action by written consent; special meetings of stockholders. Our certificate of incorporation provides that stockholder action can be taken only at an annual or special meeting of stockholders and cannot be taken by written consent in lieu of a meeting. Our certificate of incorporation and the by-laws also provides that, except as otherwise required by law, special meetings of the stockholders can only be called pursuant to a resolution adopted by a majority of our board of directors. Except as described above, stockholders are not permitted to call a special meeting or to require our board of directors to call a special meeting.

Removal of directors. Our certificate of incorporation provides that our directors may be removed only for cause by the affirmative vote of at least 75% of the voting power of our outstanding shares of capital stock, voting together as a single class. This requirement of a supermajority vote to remove directors could enable a minority of our stockholders to prevent a change in the composition of our board.

Advance notice procedures. Our by-laws establish an advance notice procedure for stockholder proposals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to the board of directors. Stockholders at an annual meeting are only able to consider proposals or nominations specified in the notice of meeting or brought before the meeting by or at the direction of our board of directors or by a stockholder who was a stockholder of record on the record date for the meeting, who is entitled to vote at the meeting and who has given our Secretary timely written notice, in proper form, of the stockholder's intention to bring that business before the meeting. Although the by-laws do not give our board of directors the power to approve or disapprove stockholder nominations of candidates or proposals regarding other business to be conducted at a special or annual meeting, the by-laws may have the effect of precluding the conduct of certain business at a meeting if the proper procedures are not followed or may discourage or deter a potential acquirer from conducting a solicitation of proxies to elect its own slate of directors or otherwise attempting to obtain control of us.

Supermajority approval requirements. The DGCL generally provides that the affirmative vote of a majority of the shares entitled to vote on any matter is required to amend a corporation's certificate of incorporation or by-laws, unless either a corporation's certificate of incorporation or by-laws requires a greater percentage. Our certificate of incorporation and by-laws provide that the affirmative vote of holders of at least 75% of the total votes eligible to be cast in the election of directors is required to amend, alter, change or repeal specified provisions. This requirement of a supermajority vote to approve amendments to our certificate of incorporation and by-laws could enable a minority of our stockholders to exercise veto power over any such amendments.

Authorized but unissued shares. Our authorized but unissued shares of common stock and preferred stock are available for future issuance without stockholder approval. These additional shares may be utilized for a variety of corporate purposes, including future public offerings to raise additional capital, corporate acquisitions and employee benefit plans. The existence of authorized but unissued shares of common stock and preferred stock could render more difficult or discourage an attempt to obtain control of a majority of our common stock by means of a proxy contest, tender offer, merger or otherwise.

Exclusive forum. Our certificate of incorporation requires, to the fullest extent permitted by law, that derivative actions brought in the name of the Company, actions against directors, officers and employees for breach of a fiduciary duty and other similar actions may be brought only in specified courts in the State of Delaware. Under our certificate of incorporation, this exclusive forum provision will not apply to claims that are vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery of the State of

Delaware, or for which the Court of Chancery of the State of Delaware does not have subject matter jurisdiction and explicitly does not apply to actions arising under federal securities laws, including suits brought to enforce any liability or duty created by the Securities Act, Exchange Act, or the rules and regulations thereunder. Furthermore, our amended and restated by-laws also provide that unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States shall be the exclusive forum for the resolution of any compliant asserting a cause of action arising under the Securities Act. Although we believe these provisions benefit us by providing increased consistency in the application of Delaware law in the types of lawsuits to which it applies, these provisions may have the effect of discouraging lawsuits against our directors and officers. See "Risk factors-Our amended and restated certificate of incorporation and amended and restated by-laws designate the state or federal courts within the State of Delaware as the exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees."

Section 203 of the DGCL

We are subject to the provisions of Section 203 of the DGCL. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes, among other things, a merger, asset or stock sale or other transaction resulting in a financial benefit to the interested stockholder. An "interested stockholder" is a person who, together with affiliates and associates, owns, or did own within three years prior to the determination of interested stockholder status, 15% or more of the corporation's voting stock.

Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions: before the stockholder became interested, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder; upon consummation of the transaction which resulted in the stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances; or at or after the time the stockholder became interested, the business combination was approved by our board of directors of the corporation and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

A Delaware corporation may "opt out" of these provisions with an express provision in its original certificate of incorporation or an express provision in its certificate of incorporation or by-laws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares. We have not opted out of these provisions. As a result, mergers or other takeover or change in control attempts of us may be discouraged or prevented.

Transfer agent and registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

Listing

Our common stock is listed on the Nasdaq Global Select Market under the symbol "BEAM."

Material U.S. federal income tax consequences to non-U.S. holders of our common stock

The following discussion is a summary of the material U.S. federal income tax consequences to Non-U.S. Holders (as defined below) of the purchase, ownership and disposition of our common stock issued pursuant to this offering, but does not purport to be a complete analysis of all potential tax effects. The effects of other U.S. federal tax laws, such as estate and gift tax laws, and any applicable state, local or non-U.S. tax laws are not discussed. This discussion is based on the U.S. Internal Revenue Code of 1986, as amended, or the Code, Treasury Regulations promulgated thereunder, judicial decisions and published rulings and administrative pronouncements of the U.S. Internal Revenue Service, or the IRS, in each case, in effect as of the date hereof. These authorities may change or be subject to differing interpretations. Any such change or differing interpretation may be applied retroactively in a manner that could adversely affect a Non-U.S. Holder of our common stock. We have not sought and will not seek any rulings from the IRS regarding the matters discussed below. There can be no assurance the IRS or a court will not take a contrary position to that discussed below regarding the tax consequences of the purchase, ownership and disposition of our common stock.

This discussion is limited to Non-U.S. Holders that hold our common stock as a "capital asset" within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all U.S. federal income tax consequences relevant to a Non-U.S. Holder's particular circumstances, including the impact of the Medicare contribution tax on net investment income or the alternative minimum tax. In addition, it does not address consequences relevant to Non-U.S. Holder's uncluding, without limitation:

- · U.S. expatriates and former citizens or long-term residents of the United States;
- persons holding our common stock as part of a hedge, straddle or other risk reduction strategy or as part of a conversion transaction or other integrated investment;
- · banks, insurance companies and other financial institutions;
- · brokers, dealers or traders in securities;
- "controlled foreign corporations," "passive foreign investment companies," and corporations that accumulate earnings to avoid U.S. federal income tax;
- partnerships or other entities or arrangements treated as partnerships for U.S. federal income tax purposes (and investors therein);
- · tax-exempt organizations or governmental organizations;
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- · persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation;
- tax-qualified retirement plans;
- "qualified foreign pension funds" as defined in Section 897(I)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds; and
- persons subject to special tax accounting rules as a result of any item of gross income with respect to our common stock being taken into
 account in an applicable financial statement.

This discussion does not address the tax treatment of partnerships or other pass-through entities, or persons who hold our common stock through partnerships or other pass-through entities, for U.S. federal income tax purposes. If an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds our common stock, the tax treatment of a partner in the partnership will depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Accordingly, partnerships holding our common stock and the partners in such partnerships should consult their tax advisors regarding the U.S. federal income tax consequences to them.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. INVESTORS SHOULD CONSULT THEIR TAX ADVISORS WITH RESPECT TO THE APPLICATION OF THE U.S. FEDERAL INCOME TAX LAWS TO THEIR PARTICULAR SITUATIONS, AS WELL AS ANY TAX CONSEQUENCES OF THE PURCHASE, OWNERSHIP AND DISPOSITION OF OUR COMMON STOCK ARISING UNDER THE U.S. FEDERAL ESTATE OR GIFT TAX LAWS OR UNDER THE LAWS OF ANY STATE, LOCAL OR NON-U.S. TAXING JURISDICTION OR UNDER ANY APPLICABLE INCOME TAX TREATY.

Definition of a non-U.S. holder

For purposes of this discussion, a "Non-U.S. Holder" is any beneficial owner of our common stock that is neither a "U.S. person" nor an entity or arrangement treated as a partnership for U.S. federal income tax purposes (or a partner thereof). A U.S. person is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- · a corporation created or organized under the laws of the United States, any state thereof, or the District of Columbia;
- · an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust that (1) is subject to the primary supervision of a U.S. court and the control of one or more "United States persons" (within the meaning
 of Section 7701(a)(30) of the Code) or (2) has a valid election in effect to be treated as a United States person for U.S. federal income tax
 purposes.

Distributions

As described in the section entitled "Dividend policy," we do not anticipate declaring or paying any distributions to holders of our common stock in the foreseeable future. However, if we do make distributions of cash or property on our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and first be applied against and reduce a Non-U.S. Holder's adjusted tax basis in its common stock, but not below zero. Any excess will be treated as capital gain and will be treated as described below under "—Sale or other taxable disposition of our common stock."

Subject to the discussion below on effectively connected income, FATCA, and backup withholding, dividends paid to a Non-U.S. Holder of our common stock will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends or such lower rate specified by an applicable income tax treaty, provided the Non-U.S. Holder furnishes a valid IRS Form W-8BEN or W-8BEN-E (or other applicable documentation) certifying qualification for the lower treaty rate. A Non-U.S. Holder that does not timely furnish the required documentation, but that qualifies for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS. Non-U.S. Holders should consult their tax advisors regarding their entitlement to benefits under any applicable income tax treaty.

If dividends paid to a Non-U.S. Holder are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such dividends are attributable), the Non-U.S. Holder will be exempt from the U.S. federal withholding tax described above. To claim the exemption, the Non-U.S. Holder must furnish to the applicable withholding agent a valid IRS Form W-8ECI (or successor form), certifying that the dividends are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States.

Any such effectively connected dividends will be subject to U.S. federal income tax on a net income basis at the regular rates. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on its effectively connected earnings and profits attributable to such dividends, as adjusted for certain items. Non-U.S. Holders should consult their tax advisors regarding any applicable tax treaties that may provide for different rules.

Sale or other taxable disposition of our common stock

Subject to the discussion below on backup withholding and FATCA, a Non-U.S. Holder will not be subject to U.S. federal income tax on any gain realized upon the sale or other taxable disposition of our common stock unless:

- the gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an
 applicable income tax treaty, the Non-U.S. Holder maintains a permanent establishment in the United States to which such gain is
 attributable);
- the Non-U.S. Holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition and certain other requirements are met; or
- our common stock constitutes a U.S. real property interest, or USRPI, by reason of our status as a U.S. real property holding corporation, or USRPHC, for U.S. federal income tax purposes.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular graduated rates. A Non-U.S. Holder that is a corporation also may be subject to a branch profits tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty) on its effectively connected earnings and profits attributable to such gain, as adjusted for certain items.

Gain described in the second bullet point above will be subject to U.S. federal income tax at a rate of 30% (or such lower rate specified by an applicable income tax treaty), but may be offset by certain U.S.-source capital losses (even though the individual is not considered a resident of the United States), provided that the Non-U.S. Holder has timely filed U.S. federal income tax returns with respect to such losses.

With respect to the third bullet point above, we believe we currently are not, and we do not anticipate becoming, a USRPHC. Because the determination of whether we are a USRPHC depends on the fair market value of our USRPIs relative to the fair market value of our non-U.S. real property interests and our other business assets, there can be no assurance we are not currently a USRPHC or will not become a USRPHC in the future. Even if we are or were to become a USRPHC, gain arising from the sale or other taxable disposition by a Non-U.S. Holder of our common stock will not be subject to U.S. federal income tax if our common stock is "regularly traded" (as defined by applicable Treasury Regulations) on an established securities market, and such Non-U.S. Holder owned, actually and constructively, 5% or less of our common stock throughout the shorter of the five-year period ending on the date of the sale or other taxable disposition or the Non-U.S. Holder's holding period.

Non-U.S. Holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

Information reporting and backup withholding

Payments of dividends on our common stock will not be subject to backup withholding, provided the holder either certifies its non-U.S. status by furnishing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI (or successor forms) or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any dividends on our common stock paid to a Non-U.S. Holder, regardless of whether any tax was actually withheld. In addition, proceeds of the sale or other taxable disposition of our common stock within the United States or conducted through certain U.S.-related brokers generally will not be subject to backup withholding or information reporting, if the applicable withholding agent receives the certification described above or the holder otherwise establishes an exemption. Proceeds of a disposition of our common stock conducted through a non-U.S. office of a non-U.S. broker generally will not be subject to backup withholding or information reporting.

Copies of information returns that are filed with the IRS may also be made available under the provisions of an applicable treaty or agreement to the tax authorities of the country in which the Non-U.S. Holder resides or is established.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules may be allowed as a refund or a credit against a Non-U.S. Holder's U.S. federal income tax liability, provided the required information is timely furnished to the IRS.

Additional withholding tax on payments made to foreign accounts

Withholding taxes may be imposed under Sections 1471 to 1474 of the Code and related Treasury Regulations and guidance, or FATCA, on certain types of payments made to non-U.S. financial institutions and certain other non-U.S. entities. Specifically, a 30% withholding tax may be imposed on dividends on our common stock paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (1) the foreign financial institution undertakes certain diligence and reporting obligations, (2) the non-financial foreign entity either certifies it does not have any "substantial United States owners" (as defined in the Code) or furnishes identifying information regarding each substantial United States owner, or (3) the foreign financial institution or non-financial foreign entity otherwise qualifies for an exemption from these rules. If the payee is a foreign financial institution and is subject to the diligence and reporting requirements in (1) above, it must enter into an agreement with the U.S. Department of the Treasury requiring, among other things, that it undertake to identify accounts held by certain "specified United States persons" or "United States-owned foreign entities" (each as defined in the Code), annually report certain information about such accounts, and withhold 30% on certain payments to non-compliant foreign financial institutions and certain other account holders. Foreign financial institutions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules.

Under the applicable Treasury Regulations and administrative guidance, withholding under FATCA generally applies to payments of dividends on our common stock. While withholding under FATCA would have also applied to payments of gross proceeds from the sale or other disposition of stock on or after January 1, 2019, recently proposed Treasury Regulations eliminate FATCA withholding on payments of gross proceeds entirely. Taxpayers generally may rely on these proposed Treasury Regulations until final Treasury Regulations are issued.

Prospective investors should consult their tax advisors regarding the potential application of withholding under FATCA to their investment in our common stock.

Underwriting

We are offering the shares of common stock described in this prospectus through a number of underwriters. J.P. Morgan Securities LLC, Jefferies LLC and Barclays Capital Inc. are acting as joint book-running managers of the offering and as representatives of the underwriters. We have entered into an underwriting agreement with the underwriters. Subject to the terms and conditions of the underwriting agreement, we have agreed to sell to the underwriters, and each underwriter has severally agreed to purchase, at the public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus, the number of shares of common stock listed next to its name in the following table:

	Number of
Name	shares
J.P. Morgan Securities LLC	
Jefferies LLC	
Barclays Capital Inc.	
Wedbush Securities Inc.	
Total	

The underwriters are committed to purchase all the common shares offered by us if they purchase any shares. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated.

The underwriters propose to offer the common shares directly to the public at the public offering price set forth on the cover page of this prospectus and to certain dealers at that price less a concession not in excess of \$ per share. After the offering of the shares to the public, if all of the shares of common stock are not sold at the public offering price, the underwriters may change the offering price and the other selling terms. Sales of shares made outside of the United States may be made by affiliates of the underwriters.

The underwriters have an option to buy up to additional shares of common stock from us to cover sales of shares by the underwriters which exceed the number of shares specified in the table above. The underwriters have 30 days from the date of this prospectus to exercise this option to purchase additional shares. If any shares are purchased with this option to purchase additional shares, the underwriters will purchase shares in approximately the same proportion as shown in the table above. If any additional shares of common stock are purchased, the underwriters will offer the additional shares on the same terms as those on which the shares are being offered.

The underwriting fee is equal to the public offering price per share of common stock less the amount paid by the underwriters to us per share of common stock. The underwriting fee is \$ per share. The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	Without	With full
	option to	option to
	purchase	purchase
	additional	additional
	shares	shares
	exercise	exercise
Per Share	\$	\$
Total	\$	\$

We estimate that the total expenses of this offering, including registration, filing and listing fees, printing fees and legal and accounting expenses, but excluding the underwriting discounts and commissions, will be



approximately \$. We have also agreed to reimburse the underwriters for certain of their expenses in an amount of up to \$40,000.

A prospectus in electronic format may be made available on the web sites maintained by one or more underwriters, or selling group members, if any, participating in the offering. The underwriters may agree to allocate a number of shares to underwriters and selling group members for sale to their online brokerage account holders. Internet distributions will be allocated by the representatives to underwriters and selling group members that may make Internet distributions on the same basis as other allocations.

We have agreed that we will not (i) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise dispose of, directly or indirectly, or file with the Securities and Exchange Commission a registration statement under the Securities Act relating to, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, or (ii) enter into any swap or other arrangement that transfers all or a portion of the economic consequences associated with the ownership of any shares of common stock or any such other securities (regardless of whether any of these transactions are to be settled by the delivery of shares of common stock or such other securities, in cash or otherwise), in each case without the prior written consent of J.P. Morgan Securities LLC and Jefferies LLC, for a period of 90 days after the date of this prospectus, other than (A) the shares of our common stock to be sold hereunder. (B) any shares of our common stock issued upon the exercise of options granted under our existing stock compensation plans, or Company Share Plans, (C) any options and other awards granted under a Company Share Plan, (D) the filing by us of any registration statement on Form S-8 or a successor form thereto relating to a Company Share Plan, and (E) shares of our common stock or other securities issued in connection with a transaction with an unaffiliated third party that includes a bona fide commercial relationship (including joint ventures, marketing or distribution arrangements, collaboration agreements or licensing agreements) or any acquisition of assets of not less than a majority or controlling portion of the equity of another entity, provided that (x) the aggregate number of the shares issued pursuant to clause (E) shall not exceed more than ten percent (10%) of the total number of outstanding shares of our common stock immediately following this offering, and (y) the recipient of any such shares of our common stock or securities issued pursuant to clauses (B), (C), and (E) during the lock-up period shall enter into (if it has not previously entered into) a lock-up agreement.

Our directors and executive officers, and certain of our significant shareholders have entered into lock-up agreements with the underwriters prior to the commencement of this offering pursuant to which each of these persons or entities, with limited exceptions, for a period of 90 days after the date of this prospectus, may not, without the prior written consent of J.P. Morgan Securities LLC and Jefferies LLC, and will not cause any direct or indirect affiliate to, (1) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock (including, without limitation, common stock or such other securities which may be deemed to be beneficially owned by such directors, executive officers, managers and members in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant) or (2) enter into any hedging, swap or other agreement or transaction that transfers, in whole or in part, any of the economic consequences of ownership of the common stock or such other securities, in cash or otherwise, (3) make any demand for or exercise any right with respect to the registration of any shares of our common stock or any security convertible into or exercisable or exchangeable for our common stock, or (4) publicly disclose the intention to do any of the foregoing.

Notwithstanding the foregoing, the terms of the lock-up agreements generally do not apply to or prohibit, among others, the items described below:

(A) transfers of shares of common stock or any security convertible into or exercisable or exchangeable for common stock as a bona fide gift or gifts or for bona fide estate planning purposes, including without limitation transfers to charitable organizations,

(B) transfers or distributions of shares of common stock or any security convertible into or exercisable or exchangeable for common stock to (a) limited partners, members, stockholders or holders of similar equity interests or (b) to another corporation, partnership, limited liability company, trust or other business entity that is an affiliate (as defined in Rule 405 promulgated under the Securities Act of 1933, as amended) of the lock-up party, including without limitation any general partner, limited partner, managing member, manager, member, employee, officer or director of such entity or any trust for the benefit of any of the foregoing or any affiliate of the foregoing, or to any investment fund or other entity controlled or managed by the lock-up party or affiliates of such party,

(C) transactions relating to common stock acquired in this offering or open market transactions after the completion of this offering,

(D) transfers or dispositions of common stock or any security convertible into or exercisable or exchangeable for common stock by will or intestacy, provided that any required filing under the Exchange Act, shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this clause and no other public filing, report or announcement shall be required or made voluntarily in connection with such transfer or disposition or (ii) to any family member or to a trust whose beneficiaries consist exclusively of one or more of the lock-up party and/or a family member,

(E) transfers of common stock or any security convertible into or exercisable or exchangeable for common stock pursuant to a domestic order or negotiated divorce settlement, provided that any required filing under the Exchange Act shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this clause and no other public filing, report or announcement shall be required or made voluntarily in connection with such transfer or disposition,

(F) the exercise of a warrant or the exercise of a stock option granted under a stock incentive plan described in this prospectus, provided that the underlying common stock received shall continue to be subject to the lock-up restrictions, and provided further that no filing under the Exchange Act or other public filing, report or announcement shall be voluntarily made during the period beginning on the date hereof and continuing to and including the date that is 30 days after the date of this prospectus, or the 30-Day Period, and after the 30-Day Period no public filing, report or announcement is voluntarily made, and if the lock-up party is required to make any public filing, report or announcement under the Exchange Act, such public filing, report or announcement shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this clause, that no common stock was sold by the reporting person and that common stock so received is subject to the lock-up restrictions,

(G) transfers or dispositions of restricted stock to the company pursuant to any contractual arrangement in effect on the date of this offering and described in this prospectus that provides for the repurchase of the common stock in connection with the termination of services to the company, provided that no filing under the Exchange Act or other public filing, report or announcement shall be voluntarily made during the 30-Day Period, and after the 30-Day Period no public filing, report or announcement is voluntarily made, and if the lock-up party is required to make any public filing, report or announcement under the Exchange Act, such public filing, report or announcement shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this clause,

(H) the disposition of common stock to the company, or the withholding of common stock by the company, in a transaction exempt from the Exchange Act solely in connection with the payment of taxes due with respect to the vesting of restricted stock granted under a stock incentive plan or pursuant to a contractual employment arrangement described in this prospectus, insofar as such restricted stock is outstanding as of the date of this prospectus, provided that no filing under the Exchange Act or other public filing, report or announcement shall be voluntarily made during the 30-Day Period, and after the 30-Day Period no public filing, report or announcement is voluntarily made, and if the lock-up party is required to make any public filing, report or announcement under Section 16 of the Exchange Act, such public filing, report or announcement shall clearly indicate in the footnotes thereto that the filing relates to the circumstances described in this clause,

(I) the establishment of a trading plan pursuant to Rule 10b5-1 under the Exchange Act for the transfer of common stock, provided that (a) such plan does not provide for the transfer of common stock during the lock-up period and (b) the entry into such plan is not publicly disclosed, included in any filings under the Exchange Act or otherwise, during the lock-up period, and

(J) pursuant to a bona fide third party tender offer for all outstanding common stock of the company, merger, consolidation or other similar transaction approved by the company's Board of Directors and made to all holders of the company's securities involving a change of control of the company (including, without limitation, the entering into of any lock-up, voting or similar agreement pursuant to which the lock-up party may agree to transfer, sell, tender or otherwise dispose of Common Stock or other such securities in connection with such transaction, or vote any Common Stock or other such securities in favor of any such transaction), provided that in the event that such tender offer, merger, consolidation or other such transaction is not completed, such securities shall remain subject to the lock-up restrictions;

provided that in the case of any transfer or distribution pursuant to clause (A), (B), (D) or (E), each donee or distributee shall be subject to the lock-up restrictions; and provided, further, that in the case of any transfer or distribution pursuant to clause (A), (B), (C) or (D)(ii), no filing by any party (donor, donee, transferor or transferee) under the Exchange Act or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on a Form 5 made after the expiration of the 30-Day Period); and provided, further, in the case of clauses (B) and (D)(ii), any such transfer shall not involve a disposition for value.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

Our common stock is listed on the Nasdaq Global Select Market under the symbol "BEAM."

In connection with this offering, the underwriters may engage in stabilizing transactions, which involves making bids for, purchasing and selling shares of common stock in the open market for the purpose of preventing or retarding a decline in the market price of the common stock while this offering is in progress. These stabilizing transactions may include making short sales of the common stock, which involves the sale by the underwriters of a greater number of shares of common stock than they are required to purchase in this offering, and purchasing shares of common stock on the open market to cover positions created by short sales. Short sales may be "covered" shorts, which are short positions in an amount not greater than the underwriters' option to purchase additional shares referred to above, or may be "naked" shorts, which are short positions in excess of that amount. The underwriters may close out any covered short position either by exercising their option to purchase additional shares, in whole or in part, or by purchasing shares in the open market. In making this determination, the underwriters will consider, among other things, the price of shares available for purchase in the open market compared to the price at which the underwriters may purchase shares through the option to purchase additional shares. A naked short position is more likely to be created if the underwriters are

concerned that there may be downward pressure on the price of the common stock in the open market that could adversely affect investors who purchase in this offering. To the extent that the underwriters create a naked short position, they will purchase shares in the open market to cover the position.

The underwriters have advised us that, pursuant to Regulation M of the Securities Act of 1933, they may also engage in other activities that stabilize, maintain or otherwise affect the price of the common stock, including the imposition of penalty bids. This means that if the representatives of the underwriters purchase common stock in the open market in stabilizing transactions or to cover short sales, the representatives can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them.

These activities may have the effect of raising or maintaining the market price of the common stock or preventing or retarding a decline in the market price of the common stock, and, as a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. If the underwriters commence these activities, they may discontinue them at any time. The underwriters may carry out these transactions on the Nasdag Global Select Market, in the over-the-counter market or otherwise.

In addition, in connection with this offering certain of the underwriters may engage in passive market making transactions in our common stock on the Nasdaq Global Select Market prior to the pricing and completion of this offering. Passive market making consists of displaying bids on the Nasdaq Global Select Market no higher than the bid prices of independent market makers and making purchases at prices no higher than these independent bids and effected in response to order flow. Net purchases by a passive market maker on each day are generally limited to a specified percentage of the passive market maker's average daily trading volume in the common stock during a specified period and must be discontinued when such limit is reached. Passive market making may cause the price of our common stock to be higher than the price that otherwise would exist in the open market in the absence of these transactions. If passive market making is commenced, it may be discontinued at any time.

Other than in the United States, no action has been taken by us or the underwriters that would permit a public offering of the securities offered by this prospectus in any jurisdiction where action for that purpose is required. The securities offered by this prospectus may not be offered or sold, directly or indirectly, nor may this prospectus or any other offering material or advertisements in connection with the offer and sale of any such securities be distributed or published in any jurisdiction, except under circumstances that will result in compliance with the applicable rules and regulations of that jurisdiction. Persons into whose possession this prospectus comes are advised to inform themselves about and to observe any restrictions relating to the offering and the distribution of this prospectus. This prospectus does not constitute an offer to sell or a solicitation of an offer to buy any securities offered by this prospectus in any jurisdiction in which such an offer or a solicitation is unlawful.

Certain of the underwriters and their affiliates have provided in the past to us and our affiliates and may provide from time to time in the future certain commercial banking, financial advisory, investment banking and other services for us and such affiliates in the ordinary course of their business, for which they have received and may continue to receive customary fees and commissions. In addition, from time to time, certain of the underwriters and their affiliates may effect transactions for their own account or the account of customers, and hold on behalf of themselves or their customers, long or short positions in our debt or equity securities or loans, and may do so in the future.

Notice to prospective investors in the European Economic Area and the United Kingdom

In relation to each Member State of the European Economic Area and the United Kingdom (each a "Relevant State"), no shares have been offered or will be offered pursuant to the offering to the public in that Relevant



State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that offers of shares may be made to the public in that Relevant State at any time under the following exemptions under the Prospectus Regulation:

- a) to any legal entity which is a qualified investor as defined under the Prospectus Regulation;
- b) to fewer than 150 natural or legal persons (other than qualified investors as defined under the Prospectus Regulation), subject to obtaining the prior consent of the underwriters; or
- c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of shares shall require us or any underwriter to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation and each person who initially acquires any shares or to whom any offer is made will be deemed to have represented, acknowledged and agreed to and with each of the underwriters and the Company that it is a "qualified investor" within the meaning of Article 2(e) of the Prospectus Regulation. In the case of any shares being offered to a financial intermediary as that term is used in the Prospectus Regulation, each such financial intermediary will be deemed to have represented, acknowledged and agreed that the shares acquired by it in the offer have not been acquired on a non-discretionary basis on behalf of, nor have they been acquired with a view to their offer or resale to, persons in circumstances which may give rise to an offer of any shares to the public other than their offer or resale in a Relevant State to qualified investors as so defined or in circumstances in which the prior consent of the underwriters have been obtained to each such proposed offer or resale.

For the purposes of this provision, the expression an "offer to the public" in relation to shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression "Prospectus Regulation" means Regulation (EU) 2017/1129.

Notice to prospective investors in the United Kingdom

In addition, in the United Kingdom, this document is being distributed only to, and is directed only at, and any offer subsequently made may only be directed at persons who are "qualified investors" (as defined in the Prospectus Regulation) (i) who have professional experience in matters relating to investments falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Order") and/or (ii) who are high net worth companies (or persons to whom it may otherwise be lawfully communicated) falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons") or otherwise in circumstances which have not resulted and will not result in an offer to the public of the shares in the United Kingdom within the meaning of the Financial Services and Markets Act 2000.

Any person in the United Kingdom that is not a relevant person should not act or rely on the information included in this document or use it as basis for taking any action. In the United Kingdom, any investment or investment activity that this document relates to may be made or taken exclusively by relevant persons.

Notice to prospective investors in Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration

Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Notice to prospective investors in Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange ("SIX") or on any other stock exchange or regulated trading facility in Switzerland. This document does not constitute a prospectus within the meaning of, and has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, the Company, the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA (FINMA), and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes ("CISA"). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Notice to prospective investors in Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) (the "SFO") of Hong Kong and any rules made thereunder; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong) (the "CO") or which do not constitute an offer to the public within the meaning of the CO. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made thereunder.

Notice to prospective investors in Singapore

Each representative has acknowledged that this prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each representative has represented and agreed that it has not

offered or sold any shares or caused the shares to be made the subject of an invitation for subscription or purchase and will not offer or sell any shares or cause the shares to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares, whether directly or indirectly, to any person in Singapore other than:

- (A) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time (the "SFA")) pursuant to Section 274 of the SFA;
- (B) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA; or
- (C) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:
- (A) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (B) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities or securities-based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

- (A) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)
 (B) of the SFA;
- (B) where no consideration is or will be given for the transfer;
- (C) where the transfer is by operation of law;
- (D) as specified in Section 276(7) of the SFA; or
- (E) as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Notice to prospective investors in Japan

The shares have not been and will not be registered pursuant to Article 4, Paragraph 1 of the Financial Instruments and Exchange Act. Accordingly, none of the shares nor any interest therein may be offered or sold, directly or indirectly, in Japan or to, or for the benefit of, any "resident" of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to or for the benefit of a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and any other applicable laws, regulations and ministerial guidelines of Japan in effect at the relevant time.

Notice to prospective investors in the United Arab Emirates

The shares have not been, and are not being, publicly offered, sold, promoted or advertised in the United Arab Emirates (including the Dubai International Financial Centre) other than in compliance with the laws of the United Arab Emirates (and the Dubai International Financial Centre) governing the issue, offering and sale of securities. Further, this prospectus does not constitute a public offer of securities in the United Arab Emirates (including the Dubai International Financial Centre) and is not intended to be a public offer. This prospectus has not been approved by or filed with the Central Bank of the United Arab Emirates, the Securities and Commodities Authority or the Dubai Financial Services Authority.

Legal matters

The validity of the shares of common stock offered by this prospectus will be passed upon for us by Ropes & Gray, LLP, Boston, Massachusetts. Certain legal matters will be passed upon for the underwriters by Davis Polk & Wardwell LLP.

Experts

The financial statements incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2019 have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated by reference. Such financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

Where you can find additional information

We have filed with the SEC a registration statement on Form S-1 under the Securities Act of 1933, as amended, with respect to the shares of common stock offered hereby. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement or the exhibits and schedules filed therewith. For further information about us and the shares of common stock offered hereby, we refer you to the registration statement and the exhibits and schedules filed thereto or incorporated by reference therein. Statements contained or incorporated by reference in this prospectus regarding the contents of any contract or any other document that is filed or incorporated by reference as an exhibit to the registration statement are not necessarily complete, and each such statement is qualified in all respects by reference to the full text of such contract or other document filed as an exhibit to the registration statement. The SEC also maintains an Internet website that contains reports, proxy statements and other information about registrants, like us, that file electronically with the SEC. The address of that site is *www.sec.gov*.

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, and, in accordance with the Exchange Act, are required to file reports, proxy and information statements and other information with the SEC. Such annual, quarterly and special reports, proxy and information statements and other information can be inspected and copied at the locations set forth above. This information is also available on the investor relations section of our website, which is located at *www.beamtx.com*. Information on, or accessible through, our website is not part of this prospectus.

Incorporation of certain information by reference

The SEC allows us to "incorporate by reference" information we have filed with it into our registration statement of which this prospectus is a part, which means that we can disclose important information to you by referring you to other documents. The information incorporated by reference is considered to be part of this prospectus. We incorporate by reference into this prospectus the documents listed below and any additional documents that we file with the SEC pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act on or after the date we file this prospectus and prior to the termination of this offering, except for information "furnished" under Items 2.02, 7.01 or 9.01 on Form 8-K or other information "furnished" to the SEC which is not deemed filed and not incorporated in this prospectus.

We hereby incorporate by reference the following documents and information:

• our Annual Report on Form 10-K for the year ended December 31, 2019, filed on March 30, 2020;

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- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020, filed on May 12, 2020 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, filed on August 12, 2020;
- our Current Report on Form 8-K, filed on February 11, 2020; and
- the description of our common stock contained in our Registration Statement on Form 8-A, filed with the SEC on January 31, 2020, as supplemented by the description of our common stock contained in Exhibit 4.3 to our Annual Report for the year ended December 31, 2019, filed with the SEC on March 30, 2020, and any amendment or report filed with the SEC for the purpose of updating such description.

We will provide to each person, including any beneficial owners, to whom a prospectus is delivered, upon written or oral request of any such person, a copy of the reports and documents that have been incorporated by reference into this prospectus, at no cost. Any such request should be directed to: Beam Therapeutics Inc., 26 Landsdowne Street Cambridge, MA 02139; Attention: Investor Relations. These documents are also available on the Investor Relations section of our website, which is located at http://investors.beamtx.com, or as described under "Where You Can Find More Information" above. The reference to our website address does not constitute incorporation by reference of the information contained on our websites.

Any statement in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this registration statement to the extent that a statement contained herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

Beam Therapeutics Inc.



shares of common stock

Joint bookrunning managers

J.P. Morgan

Jefferies

Barclays

Lead manager

Wedbush PacGrow

, 2020

Part II Information not required in prospectus

Item 13. other expenses of issuance and distribution.

The following table sets forth the costs and expenses, other than the underwriting discounts and commissions, payable by the registrant in connection with the sale of common stock being registered. All amounts are estimates except for the SEC registration fee and the FINRA filing fee:

Item	Amount to	o be paid
SEC registration fee	\$	*
FINRA filing fee		*
Printing and engraving expenses		*
Legal fees and expenses		*
Accounting fees and expenses		*
Transfer Agent fees and expenses		*
Miscellaneous expenses		*
Total	\$	*

* To be filed by amendment

Item 14. indemnification of directors and officers.

As permitted by Section 102(b)(7) of the DGCL, we include in our amended and restated certificate of incorporation a provision to eliminate the personal liability of our directors for monetary damages for breach of their fiduciary duties as directors, subject to certain exceptions. In addition, our amended and restated certificate of incorporation and by-laws provide that we are required to indemnify our officers and directors under certain circumstances, including those circumstances in which indemnification would otherwise be discretionary, and we are required to advance expenses to our officers and directors as incurred in connection with proceedings against them for which they may be indemnified, in each case except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145(a) of the DGCL provides that a corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interest of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit or proceeding by judgment, order, settlement, conviction or upon a plea of nolo contendere or its equivalent shall not, of itself, create a presumption that the person did not act in good faith and in a manner which the person reasonably believed to be in or not opposed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that his conduct was unlawful.

Section 145(b) of the DGCL provides that a corporation shall have the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in

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the right of the corporation to procure a judgment in its favor by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action or suit if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation and except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

We have entered into indemnification agreements with our directors and with each of our officers. These indemnification agreements provide broader indemnity rights than those provided under the DGCL and our amended and restated certificate of incorporation. These indemnification agreements are not intended to deny or otherwise limit third-party or derivative suits against us or our directors or officers, but to the extent a director or officer were entitled to indemnity or contribution under the indemnification agreement, the financial burden of a third-party suit would be borne by us, and we would not benefit from derivative recoveries against the director or officer. Such recoveries would accrue to our benefit but would be offset by our obligations to the director or officer under the indemnification agreement.

The underwriting agreement will provide that the underwriters are obligated, under certain circumstances, to indemnify our directors, officers and controlling persons against certain liabilities, including liabilities under the Securities Act.

We maintain directors' and officers' liability insurance for the benefit of our directors and officers.

Item 15. recent sales of unregistered securities.

The following list sets forth information regarding all unregistered securities sold by us since January 25, 2017, the date or our inception. No underwriters were involved in the sales and the certificates representing the securities sold and issued contain legends restricting transfer of the securities without registration under the Securities Act or an applicable exemption from registration.

Issuances of capital stock

In 2017 and 2018, we issued an aggregate of 26,833,324 shares of our Series A-1 convertible preferred stock for aggregate considerations of \$25.0 million to 20 investors.

In 2018, we issued an aggregate of 33,604,886 shares of our Series A-2 convertible preferred stock for aggregate consideration of \$48.6 million to 21 investors, and Blink Therapeutics Inc., or Blink, issued an aggregate of 15,000,000 even shares of its series A convertible preferred stock for aggregate consideration of \$15.0 million to 19 investors, each of which converted into two shares of our Series A-2 convertible preferred stock upon our exercise of our option to acquire Blink pursuant to a merger option agreement.

In 2018 and 2019, we issued an aggregate of 40,178,574 shares of our Series B convertible preferred stock for aggregate consideration of \$135.0 million to 27 investors.

No underwriters were used in the foregoing transactions. All sales of securities described above were made in reliance upon the exemption from registration provided by Section 4(a)(2) of the Securities Act for transactions by an issuer not involving a public offering.

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Grants of stock options and restricted stock

Since January 1, 2019, we have granted stock options to purchase an aggregate of 3,541,125 shares of our common stock at a weightedaverage exercise price of \$9.97 to employees and directors.

In 2018, we granted stock options to purchase an aggregate of 2,382,067 shares of our common stock at a weighted-average exercise price of \$0.90 to employees, directors and consultants. Also in 2018 we granted 3,056,583 shares of restricted stock to scientific founders, the scientific founders of Blink, and an employee.

In 2017, we granted stock options to purchase an aggregate of 120,340 shares of our common stock at a weighted-average exercise price of \$0.49 to employees, directors and consultants. Also in 2017 we granted 4,040,354 shares of restricted stock to our scientific founders, a director and a consultant.

The issuances of the above securities were exempt either pursuant to Rule 701, as transactions pursuant to a compensatory benefit plan, or pursuant to Section 4(a)(2), as transactions by an issuer not involving a public offering.

Item 16. exhibits and consolidated financial statement schedules.

(a) Exhibits

See the Exhibit Index attached to this Registration Statement, which is incorporated by reference herein.

(b) Consolidated Financial Statement Schedules

Schedules not listed above have been omitted because the information required to be set forth therein is not applicable or is shown in the consolidated financial statements or notes thereto.

Item 17. undertakings.

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer, or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

1. For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

2. For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

Exhibit index

Exhibit number	Description of document
1.1*	Form of Underwriting Agreement
3.1	Fourth Amended Certificate of Incorporation of Beam Therapeutics Inc. (previously filed as Exhibit 3.1 to the Current Report Form 8-K filed on February 11, 2020 (File No. 001-39208) and incorporated herein by reference)
3.2	Amended and Restated By-laws of Beam Therapeutics Inc. (previously filed as Exhibit 3.2 to the Current Report Form 8-K filed on February 11, 2020 (File No. 001-39208) and incorporated herein by reference)
4.1	Specimen stock certificate evidencing shares of common stock (previously filed as Exhibit 4.1 to the Registration Statement on Form S-1 filed on September 27, 2019 (File No. 333-233985) and incorporated herein by reference)
4.2	Amended and Restated Investors' Rights Agreement, by and among Beam Therapeutics Inc. and the investors party thereto, dated as of November 8, 2018 (previously filed as Exhibit 4.2 to the Registration Statement on Form S-1 filed on September 27, 2019 (File No. 333-233985) and incorporated herein by reference)
5.1*	Opinion of Ropes & Gray LLP
10.1	Lease, by and between UP 26 Landsdowne, LLC and Beam Therapeutics Inc., dated February 21, 2018 (previously filed as Exhibit 10.1 to the Registration Statement on Form S-1 filed on September 27, 2019 (File No. 333-233985) and incorporated herein by reference)
10.2	Indenture of Lease, by and between Massachusetts Institute of Technology and Beam Therapeutics Inc., dated as of April 24, 2019 (previously filed as Exhibit 10.2 to the Registration Statement on Form S-1 filed on September 27, 2019 (File No. 333-233985) and incorporated herein by reference)
10.3	License Agreement, by and between MIL 21E, LLC and Beam Therapeutics Inc., dated as of June 25, 2019 (previously filed as Exhibit 10.3 to the Registration Statement on Form S-1 filed on September 27, 2019 (File No. 333-233985) and incorporated herein by reference)
10.4++	License Agreement, by and between the President and Fellows of Harvard College and Beam Therapeutics Inc., dated as of June 27, 2017 (previously filed as Exhibit 10.4 to the Registration Statement on Form S-1 filed on September 27, 2019 (File No. 333-233985) and incorporated herein by reference)
10.5++	License Agreement, by and between The Broad Institute, Inc. and Blink Therapeutics Inc., dated as of May 9, 2018 (previously filed as Exhibit 10.5 to the Registration Statement on Form S-1 filed on September 27, 2019 (File No. 333-233985) and incorporated herein by reference)
10.6++	License Agreement, by and between Editas Medicine, Inc. and Beam Therapeutics Inc., dated as of May 9, 2018 (previously filed as Exhibit 10.6 to the Registration Statement on Form S-1 filed on September 27, 2019 (File No. 333-233985) and incorporated herein by reference)

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Exhibit number	Description of document
10.7++	License Agreement, by and between Bio Palette Co., Ltd. and Beam Therapeutics Inc., dated as of March 27, 2019 (previously filed as Exhibit 10.7 to the Registration Statement on Form S-1 filed on September 27, 2019 (File No. 333-233985) and incorporated herein by reference)
10.8	Beam Therapeutics Inc. 2017 Stock Option and Grant Plan (previously filed as Exhibit 10.8 to the Registration Statement on Form S-1 filed on January 27, 2020 (File No. 333-233985) and incorporated herein by reference)
10.9	Form of Restricted Stock Agreement under the Beam Therapeutics Inc. 2017 Stock Option and Grant Plan (previously filed as Exhibit 10.9 to the Registration Statement on Form S-1 filed on September 27, 2019 (File No. 333-233985) and incorporated herein by reference)
10.10	Form of Incentive Stock Option Grant Notice under the Beam Therapeutics Inc. 2017 Stock Option and Grant Plan (previously filed as Exhibit 10.10 to the Registration Statement on Form S-1 filed on September 27, 2019 (File No. 333-233985) and incorporated herein by reference)
10.11	Form of Non-Qualified Stock Option Grant Notice under the Beam Therapeutics Inc. 2017 Stock Option and Grant Plan (previously filed as Exhibit 10.11 to the Registration Statement on Form S-1 filed on September 27, 2019 (File No. 333-233985) and incorporated herein by reference)
10.12	Form of Indemnification Agreement between Beam Therapeutics Inc. and its directors and officers (previously filed as Exhibit 10.12 to the Registration Statement on Form S-1 filed on September 27, 2019 (File No. 333-233985) and incorporated herein by reference)
10.13+	Letter Agreement between Beam Therapeutics Inc. and John Evans, dated January 24, 2020 (previously filed as Exhibit 10.13 to the Registration Statement on Form S-1 filed on January 27, 2020 (File No. 333-233985) and incorporated herein by reference)
10.14+	Amended and Restated Employment Agreement between Beam Therapeutics Inc. and Giuseppe Ciaramella, dated January 24, 2020 (previously filed as Exhibit 10.14 to the Registration Statement on Form S-1 filed on January 27, 2020 (File No. 333-233985) and incorporated herein by reference)
10.15+	Letter Agreement between Beam Therapeutics Inc. and Terry-Ann Burrell, dated January 24, 2020 (previously filed as Exhibit 10.15 to the Registration Statement on Form S-1 filed on January 27, 2020 (File No. 333-233985) and incorporated herein by reference)
10.16+	Beam Therapeutics Inc. 2019 Equity Incentive Plan (previously filed as Exhibit 10.16 to the Registration Statement on Form S-1 filed on January 27, 2020 (File No. 333-233985) and incorporated herein by reference)
10.17+	Form of Incentive Stock Option Agreement under the Beam Therapeutics Inc. 2019 Equity Incentive Plan (previously filed as Exhibit 10.17 to the Registration Statement on Form S-1 filed on January 27, 2020 (File No. 333-233985) and incorporated herein by reference)
10.18+	Form of Non-Statutory Stock Option Agreement under the Beam Therapeutics Inc. 2019 Equity Incentive Plan (previously filed as Exhibit 10.18 to the Registration Statement on Form S-1 filed on January 27, 2020 (File No. 333-233985) and incorporated herein by reference)
10.19+	Form of Non-Statutory Stock Option Agreement (Non-Employee Directors) under the Beam Therapeutics Inc. 2019 Equity Incentive Plan (previously filed as Exhibit 10.19 to the Registration Statement on Form S-1 filed on January 27, 2020 (File No. 333-233985) and incorporated herein by reference)

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Exhibit number	Description of document
10.20+	Beam Therapeutics Inc. 2019 Employee Stock Purchase Plan (previously filed as Exhibit 10.20 to the Registration Statement on Form S-1 filed on January 27, 2020 (File No. 333-233985) and incorporated herein by reference)
10.21+	Beam Therapeutics Inc. 2019 Cash Incentive Plan (previously filed as Exhibit 10.21 to the Registration Statement on Form S-1 filed on January 27, 2020 (File No. 333-233985) and incorporated herein by reference)
10.22+	Beam Therapeutics Inc. Non-Employee Director Compensation Policy (previously filed as Exhibit 10.22 to the Registration Statement on Form S-1 filed on January 27, 2020 (File No. 333-233985) and incorporated herein by reference)
10.23	Lease Agreement between Beam Therapeutics Inc. and ARE-NC Region No. 14, LLC (previously filed as Exhibit 10.1 to the Quarterly Report on Form 10-Q filed on August 12, 2020 (File No. 001-39208) and incorporated herein by reference)
21.1	List of Subsidiaries of Beam Therapeutics Inc. (previously filed as Exhibit 21.1 to the Annual Report on Form 10-K filed on March 30, 2020 (File No. 001-39208) and incorporated herein by reference)
23.1*	Consent of Deloitte & Touche LLP
23.2*	Consent of Ropes & Gray LLP (included in Exhibit 5.1)
24.1*	Power of Attorney

* To be filed by amendment

+ Indicates management contract or compensatory plan

++ Portions of this exhibit (indicated by asterisks) have been omitted because the Registrant has determined they are not material and would likely cause competitive harm to the Registrant if publicly disclosed

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Signatures

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, State of Massachusetts, on , 2020.

BEAM THERAPEUTICS INC.

By:

John Evans Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints John Evans, Terry-Ann Burrell and Christine Bellon, and each of them singly, our true and lawful attorneys, with full power to them, and to each of them singly, to sign for us and in our names in the capacities indicated below, the registration statement on Form S-1 filed herewith, and any and all pre-effective and post-effective amendments to said registration statement, and any registration statement filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, in connection with the registration under the Securities Act of 1933, as amended, of equity securities of the Company, and to file or cause to be filed the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as each of us might or could do in person, and hereby ratifying and confirming all that said attorneys, and each of them, or their substitute or substitutes, shall do or cause to be done by virtue of this Power of Attorney.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date
John Evans	Chief Executive Officer and Director (Principal Executive Officer)	, 2020
Terry-Ann Burrell	Chief Financial Officer and Treasurer (Principal Financial Officer and Principal Accounting Officer)	, 2020
Kristina Burow	Director	, 2020
Graham Cooper	Director	, 2020
Mark Fishman, M.D.	Director	, 2020
Stephen Knight, M.D.	Director	, 2020
Carole Ho, M.D.	Director	, 2020
Robert Nelsen	Director	, 2020