

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

**FORM S-3
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

BEAM THERAPEUTICS INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

81-5238376
(I.R.S. Employer
Identification 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
Beam Therapeutics Inc.
26 Landsdowne Street
Cambridge, MA 02139
(857) 327-8775

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

With copies to:

Marc Rubenstein
Thomas J. Danielski
Ropes & Gray LLP
800 Boylston Street
Boston, Massachusetts 02199-3600
(617) 951-7000

Approximate date of commencement of proposed sale to the public: From time to time after this registration statement becomes effective

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

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, other than securities offered only in connection with dividend or interest reinvestment plans, 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.

If this form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

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

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered(1)	Proposed maximum offering price per share(2)	Proposed maximum aggregate offering price(2)	Amount of registration fee(2)
Common Stock, par value \$0.01 per share	349,650	\$82.48	\$28,839,132	\$3,147

(1) The shares of common stock, par value \$0.01 per share will be offered for resale by the selling stockholders pursuant to the prospectus contained herein. Pursuant to Rule 416 under the Securities Act of 1933, as amended, or the Securities Act, this registration statement also covers any additional securities that may be offered or issued in connection with any stock split, stock dividend or similar transaction.

(2) Calculated pursuant to Rule 457(c) under the Securities Act based on the average of the high and low prices of our common stock as reported on the Nasdaq Global Select Market on June 4, 2021.

PROSPECTUS

349,650 Shares

BEAM THERAPEUTICS INC.



Common Stock

This prospectus relates to the offer and sale from time to time by The Broad Institute, Inc., or The Broad Institute, and President and Fellows of Harvard College, or Harvard, and together with The Broad Institute, the Selling Stockholders, of up to 349,650 shares of our common stock, par value \$0.01 per share, or the Common Stock. We are registering the offer and sale of these shares of Common Stock pursuant to that certain license agreement, or Broad License, dated May 9, 2018, as amended, to which The Broad Institute is a party, and that certain license agreement, or Harvard License, dated June 27, 2017, as amended, to which Harvard is a party, and together with the Broad License, the License Agreements. Such shares were issued in satisfaction of the success payments, pursuant to the License Agreements. See “Selling Stockholders.” The registration of these shares of Common Stock does not necessarily mean that any of the shares of Common Stock will be offered or sold by the Selling Stockholders. We will not receive any proceeds from the sale of the shares of Common Stock by the Selling Stockholders.

The Selling Stockholders may, from time to time, sell, transfer, or otherwise dispose of any or all of their securities on any stock exchange, market, or trading facility on which the securities are traded or in private transactions. These dispositions may be at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices. See “Plan of Distribution.”

Our Common Stock is listed on The Nasdaq Global Select Market under the symbol “BEAM.” On June 9, 2021, the last reported sale price of our Common Stock on The Nasdaq Global Select Market was \$85.80 per share.

Investing in our securities involves a high degree of risk. Please carefully read the information under the heading “[Risk Factors](#)” beginning on page 8 of this prospectus before you invest in our securities. This information may also be included in any supplement, any related free writing prospectus and/or any other future filings we make with the Securities and Exchange Commission that are incorporated by reference into this prospectus.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this Prospectus is June 10, 2021.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or the SEC, using a “shelf” registration process. Under this shelf process, the Selling Stockholders named in this prospectus may, from time to time, offer or sell the Common Stock described in this prospectus in one or more offerings or resales.

You should only rely on the information contained or incorporated by reference in this prospectus and any prospectus supplement or any related free writing prospectus. Neither we nor the Selling Stockholders have authorized any other person to provide you with different information. We take no responsibility for, and can provide no assurance as to the reliability of, any information that others may give you. You should read the entire prospectus and any prospectus supplement and any related issuer free writing prospectus, as well as the documents incorporated by reference into this prospectus or any prospectus supplement, before making an investment decision. The prospectus and the accompanying prospectus supplement, if any, do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and any accompanying prospectus supplement constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should assume that the information in this prospectus or any prospectus supplement is accurate only as of the date on the front of the document and that any information we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus or any sale of a security. We do not imply or represent by delivering this prospectus that Beam Therapeutics Inc., or its business, financial condition or results of operations, are unchanged after the date on the front of this prospectus or that the information in this prospectus is correct as any time after such date.

In this prospectus, unless the context otherwise requires, “Beam”, “Beam Therapeutics”, the “Company”, “we”, “us”, “our” and similar names refer to Beam Therapeutics Inc.

PROSPECTUS SUMMARY

This summary highlights selected information appearing elsewhere or incorporated by reference in this prospectus and any free writing prospectus that we have authorized for use in connection with this offering; it may not contain all of the information that is important to you. This prospectus includes information about the shares offered by the Selling Stockholders as well as information regarding our business and financial data. You should read this prospectus, including the information incorporated by reference and any free writing prospectuses we have authorized for use in connection with this offering, in their entirety. Investors should carefully consider the information set forth under “Risk Factors” in this prospectus.

The Company

Overview

We are a biotechnology company committed to establishing the leading, fully integrated platform for precision genetic medicines. Our vision is to provide life-long cures to patients suffering from serious diseases. To achieve this vision, we have assembled a platform that includes a suite of gene editing and delivery technologies and are in the process of developing internal manufacturing capabilities. Our suite of gene editing technologies is anchored by our proprietary base editing technology, which potentially enables an entirely new class of precision genetic medicines that target a single base in the genome without making a double-stranded break in the deoxyribonucleic acid, or 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 clustered regularly interspaced short palindromic repeats, or CRISPR, protein, bound to a guide ribonucleic acid, or 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 broad suite of clinically validated and novel delivery modalities. For a given tissue type, we use the delivery modality with the most compelling biodistribution. Our current 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, or 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 three development candidates to date — two candidates targeting hemoglobinopathies and one candidate in our T-cell therapy program:

- BEAM-101 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 beta thalassemia. 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 preclinical 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 initiated IND-enabling studies in 2020 and expect to file an IND for BEAM-101 during the second half of 2021.

- BEAM-102 directly corrects the causative mutation in sickle cell disease by recreating a naturally-occurring normal human hemoglobin variant, HbG-Makassar. During the second quarter of 2020, we published preclinical data on BEAM-102 demonstrating that our adenine base editors, or ABEs, can efficiently convert the causative Hemoglobin S, or HbS, point mutation, to HbG-Makassar, with high efficiency (more than 80%). In this preclinical study, the Makassar variant does not cause hemoglobin to polymerize and red blood 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 (with one sickle allele and one corrected allele). We plan to initiate IND-enabling studies for BEAM-102 during 2021.
- BEAM-201 is a potent and specific anti-CD7, multiplex edited, allogeneic chimeric antigen receptor T cell, or CAR-T, development candidate for the treatment of relapsed/refractory T-cell acute lymphoblastic leukemia, or T-ALL, a severe disease affecting children and adults with a five-year overall survival of less than 25%. BEAM-201 is produced using a Good Manufacturing Practice, or GMP, compliant, clinical-scale process in which T-cells derived from healthy donors are simultaneously base edited at four genomic loci, then transduced with a lentivirus coding for an anti-CD7 CAR. The resulting cells are universally-compatible, allogeneic (“off the shelf”) CD7-targeting CAR-T cells, resistant to both fratricide and immunosuppression. We plan to initiate IND-enabling studies for BEAM-201 during 2021.

We also continue to advance our liver disease programs. In 2020, we showed the ability to directly correct the mutation causing Alpha-1 antitrypsin deficiency, providing both *in vitro* and *in vivo* preclinical proof-of-concept for base editing to correct this disease. We have also achieved editing levels *in vivo*, in preclinical models, for the correction of the two most prevalent mutations causing Glycogen Storage Disease Type IA, or GSDIa, 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. In addition, in May 2021, we announced initial data from our evaluation of various LNP formulations and mRNA production processes using an mRNA-encoding ABE and guide RNA to target the ALAS1 gene, a surrogate payload for genetic liver diseases. The data showed improved *in vivo* editing in the livers of non-human primates from less than 10% initially to 52% at a total RNA dose of 1.5 mg/kg. The data also demonstrated that these formulations were well tolerated by non-human primates at 1.5 mg/kg with mild and transient liver enzyme elevations, and showed promising interim stability, maintaining potency after 8 weeks at -20°C. We are continuing to work on optimizing our LNP formulations and believe we are on track to nominate our first development candidate from our liver portfolio in the second half of 2021.

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.

Our Base Editing Portfolio

We believe building a diversified portfolio leveraging the full breadth of our delivery technologies in parallel will maximize our ability to provide life-long therapies to patients over the broadest possible range of diseases. We plan to advance multiple programs through clinical development in parallel, with each one potentially capable of delivering proof-of-concept in Phase 1 clinical studies in genetically defined patient populations and potentially reaching approval on an accelerated pathway. Our portfolio is purposefully built around a mix of strategic and technical profiles, creating significant optionality and risk diversification. We prioritize and advance programs based on a number of criteria, including high unmet medical need, editing feasibility, clinically validated delivery modalities, favorable clinical and regulatory development pathways, and evidence that base editing offers potentially compelling advantages for patients over available standards-of-care and novel therapeutic modalities in development.

Our programs are organized by delivery modality into three distinct pipelines: electroporation for hematology and oncology cell therapy, LNP for the liver, and AAV for the eye and CNS. The following table summarizes the status of certain of our most advanced programs:

DELIVERY	THERAPEUTIC AREA	PROGRAM / DISEASE	APPROACH	RESEARCH	LEAD OPTIMIZATION	IND ENABLING	PHASE III	PIVOTAL
ELECTROPORATION	Hematology	BEAM-101	Sickle Cell Disease Beta Thalassemia	Fetal hemoglobin activation	[Progress bar]			
		BEAM-102	Sickle Cell Disease	Direct correction of sickle-causing mutation	[Progress bar]			
	Oncology	BEAM-201	T-cell Acute Lymphoblastic Leukemia	Multiplex silenced CD7 CAR-T	[Progress bar]			
			Acute Myeloid Leukemia	Multiplex silenced CAR-T	[Progress bar]			
NON-VIRAL (LNP)	Liver Diseases		Alpha-1 Antitrypsin Deficiency	Precise correction of E342K	[Progress bar]			
			Glycogen Storage Disease 1a	Precise correction of Q347X	[Progress bar]			
				Precise correction of R33C	[Progress bar]			
			Undisclosed	Multiplex editing	[Progress bar]			
VIRAL (AAV)	Ocular and CNS		Strabismic Disease	Precise correction of D1961E	[Progress bar]			
			Undisclosed	Precise correction	[Progress bar]			
			Undisclosed	Gene silencing	[Progress bar]			

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 potentially 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 anticipate investing up to \$83.0 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 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.

COVID-19

With the ongoing concern related to the coronavirus disease of 2019, or COVID-19, pandemic, we have maintained and expanded the 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-day-week protocol. In June 2020, as certain states have continued to ease restrictions, we have started to allow for our broader workforce to work on-site at our facilities, with less restrictions, particularly for vaccinated employees. We expect to continue incurring additional costs to ensure we adhere to the guidelines instituted by the CDC and to provide a safe working environment to our on-site 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 duration, scope and severity of the pandemic, the duration and extent of travel restrictions and social distancing in the United States and other countries, business closures and business disruptions, the effectiveness of actions taken in the United States and other countries to contain and treat the disease, periodic spikes in infection rates, new strains of the virus that cause outbreaks of COVID-19, and the broad availability of effective vaccines. 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 quarter ended March 31, 2021, the length and extent of the pandemic, its consequences, and containment efforts will determine the future impact on our operations and financial condition.

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 address is www.beamtx.com, and our investor relations website is located at investors.beamtx.com. Information on our website is not incorporated by reference herein.

Implications of Being an Emerging Growth 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.

THE OFFERING

Common stock offered by the Selling Stockholders	349,650 shares of our common stock.
Common stock to be outstanding after this offering	62,877,803 shares. All shares offered by the Selling Stockholders are issued and outstanding as of the date of this prospectus.
Use of proceeds	We will not receive any proceeds from the sale of any shares of Common Stock by the Selling Stockholders. Please see “Use of Proceeds”.
Risk factors	You should read the “Risk Factors” section on page 7 of this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.
Nasdaq Global Select Market symbol	“BEAM”

The number of shares of our common stock to be outstanding immediately after this offering as shown above is based on 62,528,153 shares outstanding as of March 31, 2021, which includes 793,034 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. This number of shares excludes the following:

- 6,108,126 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2021 under our 2019 Equity Incentive Plan, or the 2019 Plan, at a weighted average exercise price of \$21.30 per share;
- 9,594,873 shares of common stock reserved for issuance under our 2019 Plan; and
- 1,049,460 shares of common stock reserved for issuance under our 2019 Employee Stock Purchase Plan, or the 2019 ESPP.

RISK FACTORS

An investment in our common stock involves risks. Prior to making a decision about investing in our common stock, you should consider carefully the risks together with all of the other information contained or incorporated by reference in this prospectus, including any risks described in the section entitled “Risk Factors” contained in any supplements to this prospectus, in our Annual Report on Form 10-K for the year ended December 31, 2020, in our Quarterly Report on Form 10-Q for the period ended March 31, 2021 and in our subsequent filings with the SEC. Each of the referenced risks and uncertainties could adversely affect our business, prospects, operating results and financial condition, as well as adversely affect the value of an investment in our securities. Please also refer to the section below titled “Cautionary Note Regarding Forward-Looking Statements.” Additional risks not known to us or that we believe are immaterial may also adversely affect our business, operating results and financial condition and the value of an investment in our securities.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the SEC filings that are incorporated by reference into this prospectus contain or incorporate by reference “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. You can generally identify these forward-looking statements by forward-looking words such as “believe,” “anticipate,” “expect,” “intend,” “plan,” “will,” “may,” “estimate,” “could,” “continue,” “ongoing,” “predict,” “potential,” “likely,” “seek” and other similar expressions, as well as variations or negatives of these words. You should read these statements carefully because they discuss future expectations, contain projections of future results of operations or financial condition, or state other “forward-looking” information. These statements relate to our future plans, objectives, expectations, intentions and financial performance and the assumptions that underlie these statements. Such forward-looking statements reflect, among other things:

- our current expectations and anticipated results of operations;
- our expectations regarding the initiation, timing, progress and results of our research and development programs and preclinical and clinical studies, including our intention to file an Investigational New Drug or IND, application for BEAM-101 during the second half of 2021, our plans to initiate IND-enabling studies for BEAM-102 and BEAM-201 during 2021, and our belief that we are on track to nominate our first development candidate from our liver portfolio in the second half of 2021;
- our ability to develop a sustainable portfolio;
- our ability to create a hub for partnering with other companies;
- our plans for pre-clinical studies for product candidates in our pipeline;
- 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 broad suite of clinically validated delivery modalities;
- our expectations regarding our ability to generate additional novel LNPs that we believe could accelerate novel nonviral delivery of gene editing payloads to tissues beyond the liver and our ability to expand the reach of gene editing, including as a result of our acquisition of Guide Therapeutics;
- 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;
- the expected timing, progress and success of our collaborations with third parties and 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 establish and maintain a commercial-scale current Good Manufacturing Practice, or cGMP, manufacturing facility and that this facility will be operational in 2023;
- regulatory developments in the United States and foreign countries;
- our ability to attract and retain key scientific and management personnel;
- our expectations regarding the strategic and other potential benefits of our acquisition of Guide Therapeutics, and
- the impact of the COVID-19 pandemic on our business.

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All forward-looking statements contained herein are expressly qualified in their entirety by this cautionary statement, the risk factors set forth under the heading “Risk Factors” in this prospectus supplement, and in the section entitled “Risk Factors” incorporated herein by reference to our most recent Annual Report on Form 10-K, and our subsequent filings with the SEC, incorporated by reference in this prospectus supplement. Please reference “Where You Can Find Additional Information”. These forward-looking statements speak only as of the date of this prospectus supplement. Except to the extent required by applicable laws and regulations of the SEC, we undertake no obligation to update these forward-looking statements to reflect new information, events or circumstances after the date of this prospectus supplement or to reflect the occurrence of unanticipated events. In light of these risks and uncertainties, the forward-looking events and circumstances described in this prospectus supplement may not occur and actual results could differ materially from those anticipated or implied in the forward-looking statements. Accordingly, you are cautioned not to place undue reliance on these forward-looking statements.

USE OF PROCEEDS

The Selling Stockholders will receive all of the net proceeds from the sale of any shares of Common Stock under this prospectus. We are not selling any shares of Common Stock under this prospectus and we will not receive any proceeds from the sale of any shares of Common Stock by the Selling Stockholders. We will, however, bear certain costs associated with the registration of shares of Common Stock by the Selling Stockholders.

SELLING STOCKHOLDERS

The registration statement of which this prospectus forms a part covers the public resale of the shares of Common Stock beneficially owned by the Selling Stockholders.

We are registering 174,825 shares of Common Stock issued to The Broad Institute and 174,825 shares of Common Stock issued to Harvard, each in private placements. Such shares were issued in satisfaction of success payments, which were payable in Common Stock at our discretion.

The Selling Stockholders may sell some, all or none of its shares of our Common Stock. We do not know how long the Selling Stockholders will hold the shares before selling them, and we currently have no agreements, arrangements or understandings with the Selling Stockholders regarding the sale or other disposition of any of the shares of Common Stock. The shares of our Common Stock covered hereby may be offered from time to time by the Selling Stockholders. The Selling Stockholders make no representations that such shares will be offered for sale.

When we refer to “Selling Stockholders” in this prospectus, we mean the entities listed in the table below, as well as its transferees, pledgees or donees or their successors. The information regarding shares beneficially owned after the offering assumes the sale of all shares offered by the Selling Stockholders. To our knowledge, the Selling Stockholders named in the table have sole voting and investment power with respect to the shares of Common Stock set forth opposite the Selling Stockholders’ names.

The following table sets forth the names of the Selling Stockholders, the number and percentage of our Common Stock beneficially owned by the Selling Stockholders as of June 8, 2021, the number of shares of our Common Stock that may be offered under this prospectus, and the number and percentage of our Common Stock beneficially owned by the Selling Stockholders assuming all of the shares of our Common Stock registered hereunder are sold. As of March 31, 2021, a total of 62,528,153 shares of our Common Stock were outstanding. Beneficial ownership is determined in accordance with the rules of the SEC and includes voting or investment power with respect to our Common Stock. Generally, a person “beneficially owns” shares of our Common Stock if the person has or shares with others the right to vote those shares or to dispose of them, or if the person has the right to acquire voting or disposition rights within 60 days. The number of shares of our Common Stock in the column “Number of Shares Offered” represents all of the shares of our Common Stock that the Selling Stockholders may offer and sell from time to time under this prospectus.

<u>Selling Stockholder</u>	<u>Shares of Common Stock Beneficially Owned Prior to Offering</u>		<u>Shares of Common Stock Being Offered</u>	<u>Shares of Common Stock Beneficially Owned After Offering</u>	
	<u>Number</u>	<u>Percentage</u>		<u>Number</u>	<u>Percentage</u>
The Broad Institute, Inc.(1)	—	—%	174,825	—	—%
President and Fellows of Harvard College(2)	—	—%	174,825	—	—%

(1) The address of The Broad Institute, Inc. is 415 Main St, Cambridge, MA 02142.

(2) The address of President and Fellows of Harvard College is 1350 Massachusetts Avenue, Cambridge, MA 02138.

DESCRIPTION OF CAPITAL STOCK

General

The following is a summary of the material rights of our capital stock and related provisions of our certificate of incorporation and bylaws. The following description of our capital stock does not purport to be complete and is subject to, and qualified in its entirety by, our fourth amended and restated certificate of incorporation, or our certificate of incorporation, and our amended and restated bylaws, or our bylaws, both of which are included as exhibits to the registration statement of which this prospectus is a part.

Our authorized capital stock consists of 275,000,000 shares, each with a par value of \$0.01 per share, including 250,000,000 shares of common stock and 25,000,000 shares of preferred stock.

As of March 31, 2021, we had 62,528,153 shares of common stock and no shares of preferred stock outstanding.

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 uncontested election of directors by our stockholders shall be determined by a majority of the votes cast by the stockholders entitled to vote on the election provided, however, that directors shall be elected by a plurality of the votes properly cast at any meeting of stockholders at which there is a contested election of directors. 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

Terms of any series of preferred stock will be described in the prospectus supplement relating to that series of preferred stock and in any related free writing prospectus that we may authorize to be distributed to purchasers. The terms of any series of preferred stock may differ from the terms described below.

Under the terms of our 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.

If we offer a specific class or series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate of

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designation establishing the terms of the preferred stock with the SEC. To the extent required, the description will include:

- the title and stated value;
- the number of shares offered, the liquidation preference per share and the purchase price;
- the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing, if any;
- the provisions for a sinking fund, if any;
- the provisions for redemption, if applicable;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price (or how it will be calculated) and conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price (or how it will be calculated) and exchange period;
- voting rights, if any, of the preferred stock;
- a discussion of any material U.S. federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the affairs of the Company; and
- any material limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the Company.

The preferred stock offered by this prospectus, when issued, will not have, or be subject to, any preemptive or similar rights.

Anti-Takeover Effects of our Certificate of Incorporation and Bylaws and Delaware Law

Our certificate of incorporation and bylaws 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

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incorporation and our bylaws also provide 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 bylaws 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 our 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 our bylaws 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, our bylaws 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 Delaware General Corporation Law, or 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 bylaws, unless either a corporation's certificate of incorporation or bylaws requires a greater percentage. Our certificate of incorporation and bylaws 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 bylaws 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

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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 bylaws also provide that unless we consent in writing to the selection of an alternative forum, the federal district courts of the United States shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act. 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.

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 becoming an interested 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 bylaws 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.”

PLAN OF DISTRIBUTION

The Selling Stockholders, which, as used herein, includes donees, pledgees, transferees or other successors-in-interest selling shares of Common Stock previously issued or interests in shares of Common Stock received after the date of this prospectus from the Selling Stockholders as a gift, pledge, partnership distribution or other transfer, may, from time to time, sell, transfer or otherwise dispose of any or all of their shares of Common Stock or interests in shares of Common Stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. The Selling Stockholders may sell their shares of our Common Stock pursuant to this prospectus at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market price, at varying prices determined at the time of sale, or at negotiated prices.

The Selling Stockholders may use any one or more of the following methods when disposing of shares or interests therein:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales effected after the date the registration statement of which this prospectus is a part is declared effective by the SEC;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- broker-dealers may agree with the Selling Stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted by applicable law.

If the Selling Stockholders effect such transactions by selling shares of Common Stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the Selling Stockholders or commissions from purchasers of the shares of Common Stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved).

Broker-dealers engaged by the Selling Stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated.

The Selling Stockholders may, from time to time, pledge or grant a security interest in some or all of the shares of Common Stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of Common Stock, from time to time, under this prospectus, or under an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The Selling Stockholders also may transfer the shares of Common Stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus.

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In connection with the sale of our Common Stock or interests therein, the Selling Stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of our Common Stock in the course of hedging the positions they assume. The Selling Stockholders may also sell shares of our Common Stock short and deliver these securities to close out their short positions, or loan or pledge our common stock to broker-dealers that in turn may sell these securities. The Selling Stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or the creation of one or more derivative securities which require the delivery to such broker-dealer or other financial institution of shares offered by this prospectus, which shares such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The aggregate proceeds to the Selling Stockholders from the sale of the Common Stock offered by them will be the purchase price of the Common Stock less discounts or commissions, if any. The Selling Stockholders reserve the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of Common Stock to be made directly or through agents. We will not receive any of the proceeds from this offering.

The Selling Stockholders also may resell all or a portion of the shares of Common Stock in open market transactions in reliance upon Rule 144 under the Securities Act, provided that they meet the criteria and conform to the requirements of that rule. In addition, the Selling Stockholders may transfer the shares of Common Stock by other means not described in this prospectus.

The Selling Stockholders and any underwriters, broker-dealers or agents that participate in the sale of the Common Stock or interests therein may be “underwriters” within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. If the Selling Stockholders are deemed an “underwriters” within the meaning of Section 2(11) of the Securities Act, the Selling Stockholders will be subject to the prospectus delivery requirements of the Securities Act.

To the extent required, the shares of our Common Stock to be sold, the name of the Selling Stockholders, the respective purchase prices and public offering prices, the names of any agents, dealer or underwriter, any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement that includes this prospectus.

In order to comply with the securities laws of some states, if applicable, the Common Stock may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the Common Stock may not be sold unless it has been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

We have advised the Selling Stockholders that the anti-manipulation rules of Regulation M under the Exchange Act may apply to sales of shares in the market and to the activities of the Selling Stockholders and its affiliates. In addition, to the extent applicable we will make copies of this prospectus (as it may be supplemented or amended from time to time) available to the Selling Stockholders for the purpose of satisfying the prospectus delivery requirements of the Securities Act.

The Selling Stockholders may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities Act.

Once sold under the registration statement of which this prospectus forms a part, the shares of Common Stock will be freely tradable in the hands of persons other than our affiliates.

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We will pay all expenses of the registration of the shares of Common Stock, including, without limitation, SEC filing fees. We have agreed with the Selling Stockholders to keep the registration statement of which this prospectus constitutes a part effective until such time as the shares offered by the Selling Stockholders have been effectively registered under the Securities Act and disposed of in accordance with such registration statement, the shares offered by the Selling Stockholders have been disposed of pursuant to Rule 144 under the Securities Act or the shares offered by the Selling Stockholders may be resold pursuant to Rule 144 without restriction or limitation (including without any limitation as to volume of sales and without the Selling Stockholders complying with any method of sale requirements or notice requirements under Rule 144).

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon for us by Ropes & Gray LLP, Boston, Massachusetts.

EXPERTS

The financial statements incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein 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 MORE INFORMATION

We have filed a registration statement on Form S-3 with the SEC for the shares of common stock offered by this prospectus. This prospectus, including the information incorporated by reference herein and therein, do not include all of the information contained in the registration statement. You should refer to the registration statement and its exhibits for additional information.

We file annual, quarterly and current reports, proxy statements and other information with the SEC under the Exchange Act. Our SEC filings are available to the public over the Internet at the SEC's website at <http://www.sec.gov>. Our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge on our website at <http://www.beamtx.com> under the "Investor Center — Financials & Filings" caption. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. Information contained on our website is not part of this prospectus supplement.

You should rely only on the information provided in, and incorporated by reference in, this prospectus supplement and the accompanying prospectus and the registration statement to which this prospectus supplement and accompanying prospectus form a part. We have not authorized anyone else to provide you with different information. Our securities are not being offered in any jurisdiction where the offer is not permitted. The information contained in documents that are incorporated by reference in this prospectus supplement is accurate only as of the dates of those documents. Our business, financial condition, results of operations and prospects may have changed since those dates.

INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to another document that we have filed separately with the SEC. You should read the information incorporated by reference because it is an important part of this prospectus supplement and the accompanying prospectus. We incorporate by reference the following information or documents that we have filed with the SEC:

- our Annual Report on [Form 10-K](#) for the fiscal year ended December 31, 2020, filed with the SEC on March 15, 2021;
- our Quarterly report on [Form 10-Q](#) for the quarter ended March 31, 2021, filed with the SEC on May 11, 2021;

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- the information specifically incorporated by reference into our Annual Report on [Form 10-K](#) for the year ended December 31, 2020 from our Definitive Proxy Statement on [Schedule 14A](#), filed with the SEC on April 23, 2021;
- our Current Reports on Form 8-K, as filed with the SEC on [January 11, 2021](#), [January 19, 2021](#), [February 23, 2021](#), [April 1, 2021](#), [April 23, 2021](#) and [May 24, 2021](#) (except, with respect to each of the foregoing, for portions of such reports which were deemed to be furnished and not filed); and
- the description of our common stock contained in our Registration Statement on [Form S-3](#) (File No. 333-254946), as filed with the SEC on April 1, 2021.

All reports and other documents we subsequently file pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the termination of this offering, but excluding any information furnished to, rather than filed with, the SEC, will also be incorporated by reference into this prospectus supplement and deemed to be part of this prospectus supplement and accompanying prospectus from the date of the filing of such reports and documents.

Any statement contained in any document incorporated by reference herein filed before the date of this prospectus supplement shall be deemed to be modified or superseded for purposes of this prospectus supplement to the extent that a statement contained in this prospectus supplement or accompanying prospectus 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 prospectus supplement and accompanying prospectus.

We will provide without charge to each person, including any beneficial owner, to whom this prospectus supplement and accompanying prospectus is delivered, upon written or oral request, a copy of any or all documents that are incorporated by reference into this prospectus supplement and accompanying prospectus, but not delivered with the prospectus supplement and accompanying prospectus, other than exhibits to such documents unless such exhibits are specifically incorporated by reference into the documents that this prospectus supplement and accompanying prospectus incorporates. You should direct written requests to: Beam Therapeutics Inc., 26 Landsdowne Street, 2nd Floor, Cambridge, MA 02139, or you may call us at (857) 327-8775.

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****Item 14. Other Expenses of Issuance and Distribution.**

The following table sets forth the various costs and expenses payable by the company in connection with the issuance and registration of securities registered hereby. All amounts are estimates.

SEC registration fee	\$ 3,147
Transfer agent's and trustee's fees and expenses	\$ 5,000
Printing costs	\$ 10,000
Legal fees and expenses	\$ 45,000
Accounting fees and expenses	\$ 10,000
Total	\$ 73,147

Item 15. Indemnification of Directors and Officers.

As permitted by Section 102(b)(7) of the DGCL, the registrant includes in its amended and restated certificate of incorporation a provision to eliminate the personal liability of its directors for monetary damages for breach of their fiduciary duties as directors, subject to certain exceptions. In addition, the registrant's amended and restated certificate of incorporation and bylaws provide that it is required to indemnify its officers and directors under certain circumstances, including those circumstances in which indemnification would otherwise be discretionary, and it is required to advance expenses to its 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 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 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

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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.

The registrant has entered into indemnification agreements with its directors and with each of our officers. These indemnification agreements provide broader indemnity rights than those provided under the DGCL and the registrant's amended and restated certificate of incorporation. These indemnification agreements are not intended to deny or otherwise limit third-party or derivative suits against the registrant or its 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 the registrant, and the registrant would not benefit from derivative recoveries against the director or officer. Such recoveries would accrue to the registrant's benefit but would be offset by its obligations to the director or officer under the indemnification agreement.

The registrant maintains directors' and officers' liability insurance for the benefit of its directors and officers.

Item 16. Exhibits.

Exhibit Number	Exhibit Description	Incorporated by Reference to Filings Indicated				Provided Herewith
		Form	File No.	Exhibit	Filing Date	
4.1	Amended and Restated Certificate of Incorporation of Beam Therapeutics Inc.	8-K	001-39208	3.1	2/11/20	
4.2	Amended and Restated Bylaws of Beam Therapeutics Inc.	8-K	001-39208	3.2	2/11/20	
4.3	Form of Specimen Certificate for Common Stock	S-1	333-233985	4.1	9/27/19	
4.4	License Agreement, by and between The Broad Institute, Inc. and Blink Therapeutics Inc., dated as of May 9, 2018	S-1	333-233985	10.5	9/27/19	
4.5	First Amendment to License Agreement, between The Broad Institute, Inc. and Blink Therapeutics Inc., dated September 4, 2018	10-K	00139208	10.8	3/15/21	
4.6	License Agreement, between President and Fellows of Harvard College and Beam Therapeutics Inc., dated June 27, 2017	S-1	333-233985	10.4	9/27/19	
4.7	Amendment No. 1 to License Agreement, between President and Fellows of Harvard College and Beam Therapeutics Inc., dated December 12, 2017	10-K	001-39208	10.5	3/15/21	
4.8	Amendment No. 2 to License Agreement, between President and Fellows of Harvard College and Beam Therapeutics Inc., dated March 27, 2020	10-K	001-39208	10.6	3/15/21	
4.9	Letter Agreement, between President and Fellows of Harvard College, The Broad Institute, Inc., and Beam Therapeutics Inc., dated January 7, 2021	10-K	001-39208	10.11	3/15/21	
5.1	Opinion of Ropes & Gray LLP					X
23.1	Consent of Deloitte and Touche LLP, independent registered public accounting firm					X
23.2	Consent of Ropes & Gray LLP (included in Exhibit 5.1)					X
24.1	Power of Attorney (contained on signature page)					X

Item 17. Undertakings.

The undersigned registrant hereby undertakes:

1. To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (i), (ii) and (iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

2. That, for the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment 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.

3. To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

4. That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

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5. That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

6. That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement 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.

7. Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the forgoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission 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 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.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Cambridge, Commonwealth of Massachusetts, on June 10, 2021.

BEAM THERAPEUTICS INC.

By: /s/ John Evans

John Evans

Chief Executive Officer

SIGNATURES AND POWERS OF ATTORNEY

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, with full power of substitution and resubstitution and full power to act without the other, as his or her true and lawful attorney-in-fact and agent to act in his or her name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file, any and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorneys-in-fact and agents or any of them or their and his or her substitute or substitutes, may lawfully do or cause to be done by virtue thereof.

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

Signature	Title	Date
<u>/s/ John Evans</u> John Evans	Chief Executive Officer, Director (Principal Executive Officer)	June 10, 2021
<u>/s/ Terry-Ann Burrell</u> Terry-Ann Burrell	Chief Financial Officer (Principal Financial and Accounting Officer)	June 10, 2021
<u>/s/ Kristina Burow</u> Kristina Burow	Director	June 10, 2021
<u>/s/ Graham Cooper</u> Graham Coper	Director	June 10, 2021
<u>/s/ Mark Fishman, M.D.</u> Mark Fishman, M.D.	Director	June 10, 2021
<u>/s/ Carole Ho, M.D.</u> Carole Ho, M.D.	Director	June 10, 2021
<u>/s/ Kathleen Walsh</u> Kathleen Walsh	Director	June 10, 2021



ROPES & GRAY LLP
PRUDENTIAL TOWER
800 BOYLSTON STREET
BOSTON, MA 02199-3600
WWW.ROPESGRAY.COM

June 10, 2021

Beam Therapeutics Inc.
26 Landsdowne St.
Cambridge, Massachusetts 02139

Re: Registration of Securities by Beam Therapeutics Inc.

Ladies and Gentlemen:

We have acted as counsel to Beam Therapeutics Inc., a Delaware corporation (the "Company"), in connection with the registration statement on Form S-3 (the "Registration Statement") filed on the date hereof by the Company with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to the registration under the Securities Act and the offer and sale from time to time pursuant to Rule 415 under the Securities Act of shares of the Company's common stock, \$0.01 par value per share (the "Common Stock") by the selling stockholders set forth in the Registration Statement (the "Selling Stockholders").

In connection with this opinion letter, we have examined such certificates, documents and records and have made such investigation of fact and such examination of law as we have deemed appropriate in order to enable us to render the opinions set forth herein. In conducting such investigation, we have relied, without independent verification, upon certificates of officers of the Company, public officials and other appropriate persons.

The opinions expressed below are limited to the Delaware General Corporation Law.

Based upon and subject to the foregoing and the assumptions, qualifications and limitations set forth below, we are of the opinion that, as of the date hereof, the Shares to be sold by the Selling Stockholders have been validly issued, fully paid and non-assessable.

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement and to the use of our name therein and in the related prospectus under the caption "Legal Matters" In giving such consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission thereunder.

Very truly yours,

/s/ Ropes & Gray LLP

Ropes & Gray LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated March 15, 2021 relating to the financial statements of Beam Therapeutics Inc., appearing in the Annual Report on Form 10-K of Beam Therapeutics Inc. for the year ended December 31, 2020. We also consent to the reference to us under the heading “Experts” in such Registration Statement.

/s/ Deloitte & Touche LLP

Boston, Massachusetts
June 10, 2021