**Filed pursuant to Rule 424(b)(4)**
**Registration No. 333-260508**

# 4,750,000 Shares

## Common Stock

We are offering 4,750,000 shares of our common stock.

Our common stock is listed on the Nasdaq Global Select Market under the symbol "FDMT." On October 28, 2021, the last reported sale price of our common stock on the Nasdaq Global Select Market was $30.85 per share.

We are an "emerging growth company" as defined under the federal securities laws and, as such, have elected to comply with certain reduced public company reporting requirements in this prospectus and may elect to do so in future filings.

*See the section titled "Risk Factors" beginning on page 12 to read about factors you should consider before deciding to invest in shares of our common stock.*

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

| | Per Share | Total |
|---|---|---|
| Public offering price | $ 25.00 | $118,750,000 |
| Underwriting discounts and commissions(1) | $ 1.50 | $ 7,125,000 |
| Proceeds, before expenses, to 4D Molecular Therapeutics, Inc. | $ 23.50 | $111,625,000 |

(1) See the section titled "Underwriting" for a description of the compensation payable to the underwriters.

To the extent that the underwriters sell more than 4,750,000 shares of common stock, the underwriters have an option to purchase up to an additional 712,500 shares from us at the public offering price, less the underwriting discounts and commissions.

The underwriters expect to deliver the shares against payment in New York, New York on November 2, 2021.

**Goldman Sachs & Co. LLC** **SVB Leerink** **Evercore ISI**

Prospectus dated October 28, 2021

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We and the underwriters have not authorized anyone to provide you any information other than that contained 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 is accurate only as of the date on the front cover page of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside of the United States: we have not and the underwriters have not 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.

4D Molecular Therapeutics™, Therapeutic Vector Evolution™, and our logo are some of our trademarks and tradenames used in this prospectus. This prospectus also includes trademarks, tradenames and service marks that are the property of other organizations. Solely for convenience, our trademarks and tradenames referred to in this prospectus may appear without the ® and ™ symbol, but those 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 right of the applicable licensor to these trademarks and tradenames.

## PROSPECTUS SUMMARY

*This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before deciding to invest in our common stock, you should read this entire prospectus carefully, including the information in our filings with the Securities and Exchange Commission (SEC), incorporated by reference in this prospectus. Investors should carefully consider the information set forth under the title "Risk Factors" beginning on page 12 of this prospectus and those identified in our Annual Report on Form 10-K for the year ended December 31, 2020 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2021. Unless the context otherwise requires or as otherwise noted, references in this prospectus to the "company," "4D Molecular Therapeutics" "4DMT," "we," "us" and "our" refer to 4D Molecular Therapeutics, Inc.*

### 4D Molecular Therapeutics, Inc.

**Overview**

We are a clinical-stage gene therapy company pioneering the development of product candidates using our targeted and evolved AAV vectors. We seek to unlock the full potential of gene therapy using our platform, Therapeutic Vector Evolution, which combines the power of directed evolution with our approximately one billion synthetic capsid sequences to invent evolved vectors for use in targeted gene therapy products. Our targeted and evolved vectors are invented with the goals of being delivered through clinically routine, well-tolerated and minimally invasive routes of administration, of transducing diseased cells in target tissues efficiently, of having reduced immunogenicity and, where relevant, of having resistance to pre-existing antibodies. We believe these key features will help us to potentially create targeted gene therapy product candidates with improved therapeutic profiles, and to address a broad range of diseases from rare to large patient populations, including those that other gene therapies are unable to address. Each of our product candidates is created with one of our targeted and evolved AAV vectors. Our platform is designed to be modular, in that an evolved vector invented for a given set of diseases can be equipped with different transgene payloads to treat other diseases affecting the same tissue types. We believe this modularity will help inform the clinical development of subsequent product candidates using the same vector.

We have built a deep portfolio of gene therapy product candidates initially focused in three therapeutic areas: ophthalmology (intravitreal vector), cardiology (intravenous vector) and pulmonology (aerosol vector). We have three product candidates that are in clinical trials: 4D-125 for the treatment of X-linked retinitis pigmentosa (XLRP), in a Phase 1/2 clinical trial, 4D-110 for the treatment of choroideremia in a Phase 1/2 clinical trial, and 4D-310 for the treatment of Fabry disease in a Phase 1/2 clinical trial. In addition, INDs have been cleared by the U.S. Food and Drug Administration (FDA) for both 4D-150 for the treatment of wet age-related macular degeneration (wet AMD) and 4D-710 for the treatment of cystic fibrosis lung disease.

We believe our competitive advantages, combined with our highly experienced team, help to position our company to create, develop, manufacture and, if approved, effectively commercialize targeted gene therapies that could transform the lives of patients suffering from debilitating diseases.

**Our Therapeutic Vector Evolution Platform**

Gene therapy holds tremendous promise as a transformative therapeutic class. However, the majority of gene therapies have encountered limitations such as inflammation and toxicity, high dose

requirements, limited efficacy and neutralization by pre-existing antibodies, due in part to their utilization of conventional AAV vectors that are naturally occurring and non-targeted. Through our Therapeutic Vector Evolution platform, we apply the principles of directed evolution to invent targeted and evolved vectors for the delivery of genes to specific tissue types that are affected by the diseases that we are addressing. Our product candidates are designed and engineered to utilize our targeted and evolved vectors to potentially address the limitations encountered with gene therapies utilizing conventional AAV vectors.

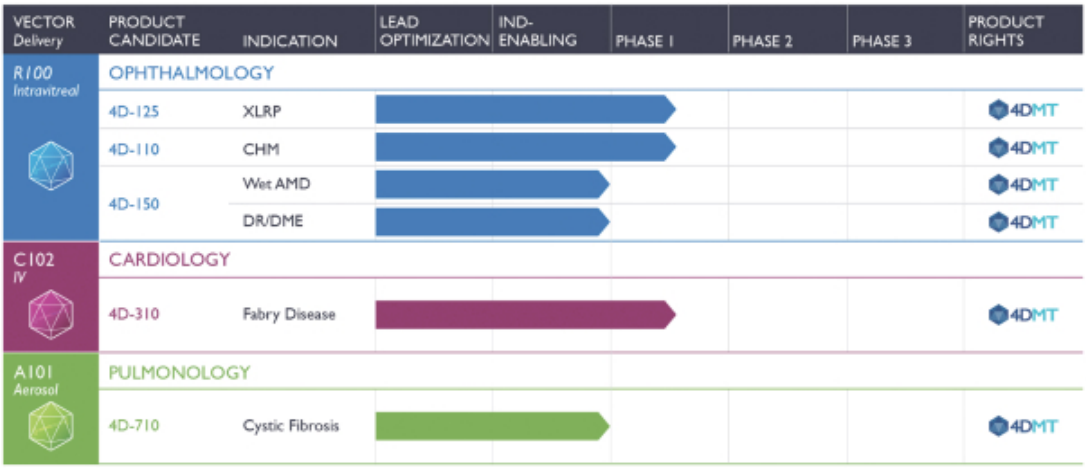
Leveraging a wide range of molecular biology techniques, we have developed a collection of 40 distinct libraries that are comprised of approximately one billion synthetic capsid sequences. We next define a Target Vector Profile that identifies the optimal vector features for the specific tissue type(s) and related set of diseases we seek to target, with the goal of overcoming limitations encountered by conventional AAVs. We then deploy Therapeutic Vector Evolution with our capsid libraries in non-human primates (NHPs) and use competitive selection to identify targeted and evolved vectors from our libraries that demonstrate the strongest match to the Target Vector Profile.

Based on preclinical data reported to date from our NHP and human cell models, including preclinical head-to-head comparisons with relevant conventional AAV vectors, we have observed that our targeted and evolved vectors were well-tolerated and achieved enhanced delivery, increased transgene expression, reduced immunogenicity and/or improved antibody resistance when compared to conventional AAV vectors. We have not compared our targeted and evolved vectors to conventional AAV vectors in patients in clinical studies. As we advance through clinical trials, we plan to evaluate the following potential design features of our targeted and evolved vectors and product candidates:

- Tolerability: Well-tolerated therapies with a low inflammation profile, low dose requirements and routine, safe routes of delivery
- Biologic activity: Effective delivery to targeted tissues, efficient transgene expression in targeted tissues, and/or resistance to neutralization by pre-existing antibodies
- Routine routes of administration: Routine, well-tolerated and minimally invasive routes of administration, including intravitreal, aerosol and intravenous delivery
- Antibody resistance: Resistance to neutralization by pre-existing antibodies, translating into improved efficacy, larger addressable patient populations, and the potential for re-dosing

**Our Product Candidate Pipeline**

We are developing a diverse pipeline of product candidates for both rare and large market diseases, including patient populations that other gene therapies are unable to address. Our initial product candidates are focused on the following therapeutic areas: ophthalmology, cardiology and pulmonology. Each of our product candidates leverages a targeted and evolved vector we invented through our Therapeutic Vector Evolution platform. Below is a summary of our product candidate pipeline:




*Abbreviations: CHM, choroideremia; DR/DME, diabetic retinopathy, diabetic macular edema; IND, investigational new drug; IV, intravenous; Wet AMD, wet age-related macular degeneration; XLRP, x-linked retinitis pigmentosa.*
*Note: For 4D-125, 4D-110, 4D-310, 4D-710 and 4D-150 for Wet AMD, the IND has cleared. For 4D-150 for DME, IND not submitted.*

*Our Ophthalmology Programs: Intravitreal Product Candidates*

We are developing product candidates to treat tissues throughout the retina. Our targeted and evolved AAV vector, R100, was invented for routine intravitreal injection, leading to transgene expression across the entire surface area of the retina, and in the major cell layers of the retina. We currently have four wholly-owned ophthalmology product candidates that utilize our proprietary intravitreal R100 vector:

1. 4D-125: 4D-125 is in an ongoing Phase 1/2 clinical trial in patients with XLRP due to mutations in the *RPGR* gene. XLRP is a rare inherited X-linked recessive genetic disorder that causes progressive vision loss and blindness in boys and young men. There are currently no approved therapies for XLRP. The estimated prevalence of XLRP due to *RPGR* variants is approximately 24,000 patients in the United States, and France, Germany, Italy, Spain and the United Kingdom (EU-5). We expect to enroll patients with a broad range of disease severity, including those earlier in the progression of their disease. We reported initial clinical data from this trial in October 2021 and plan to continue enrolling patients in the dose-expansion portion of the trial.

2. 4D-150: 4D-150 is in clinical development for wet AMD, a large market ophthalmology indication. There are on average 200,000 new incidences of wet AMD per year in the United States alone. The FDA has cleared the IND for this program. The active IND enables the initiation of 4D-150 Phase 1/2 clinical trial sites. We expect to dose the first patient in a Phase 1/2 clinical trial in the first quarter of 2022.

3. 4D-110: 4D-110 is in an ongoing Phase 1/2 clinical trial in patients with choroideremia. Choroideremia is a monogenic blinding disease, affecting approximately 13,000 patients in the United States and EU-5. We expect to enroll patients with a broad range of disease severity, including those earlier in the progression of their disease. On September 16, 2021, the license agreement with Roche was terminated, and we regained full rights to 4D-110. We reported initial clinical data from this trial in October 2021 and expect to continue enrolling patients in the trial.

*Cardiology Pipeline: Intravenous Product Candidates*

With our cardiology product candidates, all of which are wholly owned, we plan to treat patient populations in both primary cardiomyopathies, that involve the heart only, as well as cardiomyopathies that are secondary to systemic diseases, such as lysosomal storage diseases. Our cardiology product candidates utilize our targeted and evolved AAV vector, C102, which was invented for routine low dose intravenous administration and delivery to the heart, leading to transgene expression in heart muscle cells throughout the organ.

Our initial cardiology product candidate, 4D-310, is in an ongoing Phase 1/2 clinical trial in adult patients with classic (severe) Fabry disease. We estimate the potential initial addressable male Fabry patient population in the United States and EU-5 to be up to 19,000 individuals, approximately 57% of whom suffer from classic Fabry disease. 4D-310 is designed to address all critically affected organs, including the heart, kidney and blood vessels through direct intracellular transgene expression. To our knowledge, 4D-310 is the only Fabry product candidate specifically designed to treat cardiomyocytes. We reported initial clinical data from this trial in October 2021. We expect to continue enrolling patients in this trial and to report updated interim clinical data in 2022.

*Pulmonology Pipeline: Aerosol Delivery Product Candidates*

With our pulmonology product candidates, all of which are wholly owned, we plan to treat diseases that affect the lungs. Our pulmonology product candidates utilize our targeted and evolved vector, A101, which was invented for aerosol delivery to all major regions within the lung, including airways and alveoli, and successful penetration of the mucus barrier for transduction of lung airway cells, overcoming potential barriers such as pre-existing AAV antibodies and other inhibitory proteins within the mucus barrier. Our products utilizing A101 are designed for delivery as an aerosol to the lung epithelial cell surface resulting in efficient airway and alveolar cell transduction and transgene expression.

Our initial pulmonology product candidate, 4D-710, is in clinical development for cystic fibrosis lung disease. According to the Cystic Fibrosis Foundation, more than 30,000 people in the United States and more than 70,000 people worldwide are living with cystic fibrosis. The FDA has cleared the IND for this program. The active IND enables the initiation of 4D-710 Phase 1/2 clinical trial sites. We expect to dose the first patient in this trial in the first half of 2022.

**Manufacturing**

We have designed and are continually developing and scaling a robust in-house manufacturing platform for both GMP and non-GMP manufacturing. Our current in-house manufacturing capabilities include GMP manufacturing, production capabilities for IND-enabling GLP toxicology studies and research candidate production. Our team has manufactured over 140 total lots of AAV vectors for research or clinical use. We have in-house cGMP manufacturing capabilities for clinical trial material production. Our manufacturing team has completed and released multiple lots of clinical trial material for our three product candidates in clinical development. Our manufacturing facilities are on-site at our headquarters in

Emeryville, California and include process development labs, an analytical development lab and a 3,200 square feet cGMP manufacturing facility. In addition, the Company recently initiated the expansion of cGMP compliant manufacturing facilities and analytical laboratories at 4DMT headquarters in Emeryville, CA to support manufacturing and analytical testing of current and future product candidates.

**Our Team**

Our experienced team consists of biotherapeutics developers, entrepreneurs, innovative gene therapy scientists and clinicians to execute our platform, product design and development and commercialization strategies. Collectively, our team has more than 100 years of combined experience in the field of viral vector gene therapy, including leadership of over 30 clinical trials from Phase 1 through Phase 3 and product approval. We are led by our Chief Executive Officer and co-founder, David Kirn, M.D., who has over 25 years of experience creating and growing therapeutic platform companies. Our Executive Chairman, John Milligan, Ph.D., is the former CEO and President of Gilead Sciences. Our Chief Scientific Advisor and co-founder, David Schaffer, Ph.D., pioneered the application of directed evolution to the capsid of AAV vectors 20 years ago. Our Chief Operating Officer and Chief Technical Officer, Fred Kamal, Ph.D., has over 25 years of industry experience in product manufacturing and quality, including most recently with AveXis, Inc. where he was a key contributor to the development and biologics license application (BLA) for the AAV product Zolgensma. Our Chief Medical Officer, Robert S. Fishman, M.D., brings over 20 years of clinical trial execution and product development expertise.

**Our Strategy**

Our vision is to unlock the full potential of gene therapy to address as many patient populations as possible in both rare and large market diseases. We have developed the following strategies and guiding principles to achieve our goals:

- Invent targeted and evolved AAV vectors using the power of directed evolution to unlock the full potential of gene therapy with transformative gene therapy products.
- Apply our modular product design to help inform the clinical development of subsequent product candidates using the same vectors used for prior product candidates.
- Develop and commercialize a diverse portfolio of transformative gene therapy products in a broad range of therapeutic areas with significant unmet needs, including rare and large patient populations.
- Build a fully integrated biopharmaceutical company by advancing our capabilities in product development and commercialization, and by expanding our manufacturing facilities and internal proprietary Good Manufacturing Practice (GMP) capabilities.
- Selectively execute strategic collaborations to maximize the potential value of our Therapeutic Vector Evolution platform.

**Certain Preliminary Financial Data**

As of September 30, 2021, we had approximately $227 million of cash and cash equivalents and short term and long term investments. The amount has been prepared by, and is the responsibility of management. This amount is unaudited and preliminary, is subject to completion of financial closing procedures that could result in changes to the amount, and does not present all information necessary for an understanding of our financial condition and liquidity as of September 30, 2021. The preliminary financial data included in this Registration Statement on Form S-1 has been prepared by, and is the responsibility of, 4D Molecular Therapeutics Inc.'s management. PricewaterhouseCoopers LLP has not

audited, reviewed, compiled, or applied agreed-upon procedures with respect to the preliminary financial data. Accordingly, PricewaterhouseCoopers LLP does not express an opinion or any other form of assurance with respect thereto.

**Risks Associated with Our Business**

Our ability to implement our business strategy is subject to numerous risks that you should be aware of before making an investment decision. These risks are described more fully in the section titled "Risk Factors" immediately following this prospectus summary and in our Annual Report on Form 10-K for the year ended December 31, 2020 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2021, which are incorporated by reference herein. These risks include the following, among others:

- We are in the early stages of drug development and have a very limited operating history and no products approved for commercial sale, which may make it difficult to evaluate our current business and predict our future success and viability.
- We have had recurring net losses, and we expect to continue to incur significant net losses for the foreseeable future.
- Even if this offering is successful, we will require substantial additional capital to finance our operations. If we fail or are unable to raise such capital when needed, or on acceptable terms, we may be forced to delay, reduce and/or eliminate one or more of our research and drug development programs, future commercialization efforts or other operations.
- All of our product candidates are based on a novel AAV gene therapy technology with which there is limited regulatory and clinical experience to date, which makes it difficult to predict the time and cost of product candidate development and subsequently obtaining regulatory approval. Further, the regulatory approval process for novel product candidates such as ours can be more expensive and take longer than for other, better known or extensively studied therapeutic modalities.
- Gene therapies are novel, complex and difficult to manufacture. We could experience production problems that result in delays in our development or commercialization programs, limit the supply of our products or otherwise seriously harm our business.
- Adverse public perception or regulatory scrutiny of gene therapy technology may negatively impact the developmental progress or commercial success of products that we develop alone or with collaborators.
- Our clinical trials may fail to demonstrate substantial evidence of the safety and efficacy of our product candidates, which would prevent, delay or limit the scope of regulatory approval and commercialization.
- The regulatory approval processes of the FDA, EMA and comparable foreign regulatory authorities are lengthy, expensive, time consuming, and inherently unpredictable. If we are ultimately unable to obtain regulatory approval for our product candidates, we will be unable to generate product revenue and our business will be substantially harmed.
- Our employees, independent contractors, consultants, research or commercial partners or collaborators and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.
- Our success depends on our ability to protect our intellectual property and our proprietary technologies.
- Our rights to develop and commercialize our product candidates are subject in part to the terms and conditions of licenses granted to us by others, and the patent protection, prosecution and enforcement for some of our product candidates may be dependent on our licensors.

**Corporate Information**

We were formed on September 12, 2013 as a Delaware limited liability corporation under the name 4D Molecular Therapeutics, LLC. On March 11, 2015, 4D Molecular Therapeutics, Inc. was incorporated as a Delaware corporation. On March 20, 2015, 4D Molecular Therapeutics, LLC merged with 4D Molecular Therapeutics, Inc., with 4D Molecular Therapeutics, Inc. being the surviving entity. Our principal executive offices are located at 5858 Horton Street #455, Emeryville, California 94608, and our telephone number is (510) 505-2680. Our website address is www.4dmoleculartherapeutics.com. The information on, or that can be accessed through, our website is not part of this prospectus. We have included our website address as an inactive textual reference only.

**Implications of Being an Emerging Growth Company and a Smaller Reporting Company**

We are an emerging growth company as defined in the Jumpstart Our Business Startups Act of 2012 (the JOBS Act). We will remain an emerging growth company until the earlier of (i) December 31, 2025, (ii) the last day of the year in which we have total annual gross revenue of at least $1.07 billion, (iii) the last day of the year in which we are deemed to be a “large accelerated filer” as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended (the Exchange Act), which would occur if the market value of our common stock held by non-affiliates exceeded $700.0 million as of the last business day of the second fiscal quarter of such year or (iv) the date on which we have issued more than $1.0 billion in non-convertible debt securities during the prior three-year period. An emerging growth company may take advantage of specified reduced reporting requirements and is relieved of certain other significant requirements that are otherwise generally applicable to public companies. As an emerging growth company:

- we will present only two years of audited financial statements, plus unaudited financial statements for any interim period, and related management’s discussion and analysis of financial condition and results of operations;
- we will avail ourselves of the exemption from the requirement to obtain an attestation and report from our auditors on the assessment of our internal control over financial reporting pursuant to the Sarbanes-Oxley Act of 2002 (the Sarbanes-Oxley Act);
- we will provide less extensive disclosure about our executive compensation arrangements;
- we will not require stockholder non-binding advisory votes on executive compensation or golden parachute arrangements; and
- we will take advantage of extended transition periods to comply with new or revised accounting standards, delaying the adoption of these accounting standards until they would apply to private companies.

We are also a “smaller reporting company” as defined in the Securities and Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as the market value of our voting and non-voting common stock held by non-affiliates is less than $250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than $100.0 million during the most recently completed fiscal year and the market value of our voting and non-voting common stock held by non-affiliates is less than $700.0 million measured on the last business day of our second fiscal quarter.

As a result, the information in this prospectus and that we provide to our investors in the future may be different than what you might receive from other public reporting companies.

**The Offering**

| | |
|---|---|
| Common stock offered by us | 4,750,000 shares. |
| Underwriters' option to purchase additional shares | We have granted the underwriters a 30-day option to purchase up to 712,500 additional shares of our common stock. |
| Common stock to be immediately outstanding after the offering | 31,641,857 shares (or 32,354,357 shares if the underwriters exercise their option to purchase additional shares in full). |
| Use of proceeds | We estimate that the net proceeds from this offering will be approximately $110.8 million, or approximately $127.6 million if the underwriters exercise their option to purchase additional shares in full, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.<br>We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, to fund the ongoing and planned clinical and preclinical development of our product candidates, the further development and expansion of our pipeline, the continued expansion of our manufacturing capabilities and facilities and the remainder for working capital and other general corporate purposes. See the section titled "Use of Proceeds" for a more complete description of the intended use of proceeds from this offering. |
| Risk factors | See the section titled "Risk Factors" and other information included in this prospectus for a discussion of factors that you should consider carefully before deciding to invest in our common stock. |
| Nasdaq Global Select Market trading symbol | "FDMT." |

The number of shares of our common stock to be outstanding after this offering is based on 26,891,857 shares of our common stock outstanding as of June 30, 2021, and excludes:

- 4,238,519 shares of our common stock issuable upon the exercise of stock options to purchase common stock that were outstanding as of June 30, 2021, with a weighted-average exercise price of $18.84 per share;
- 98,669 shares of our common stock issuable upon the exercise of outstanding warrants, with a weighted-average exercise price of $6.76 per share;

- 183,600 shares of our common stock issuable upon the exercise of stock options to purchase common stock that were granted after June 30, 2021, each with an exercise price of $28.55 per share;
- 2,726,365 shares of our common stock reserved for issuance pursuant to future awards under our 2020 Equity Incentive Award Plan (the 2020 Plan), as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan; and
- 519,156 shares of our common stock reserved for issuance pursuant to future awards under our 2020 Employee Stock Purchase Plan (the ESPP), as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan.

In addition, unless we specifically state otherwise, all information in this prospectus reflects and assumes the following:

- no exercise of outstanding stock options or warrants described above; and
- no exercise of the underwriters' option to purchase additional shares.

## Summary Financial Data

The following tables summarize our financial data for the periods and as of the dates indicated. We derived the summary statements of operations and comprehensive loss data for the years ended December 31, 2019 and 2020 from our audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2020, which are incorporated by reference herein. We derived the summary statements of operations and comprehensive loss data for the six months ended June 30, 2021 and 2020 and the summary balance sheet data as of June 30, 2021 from our unaudited interim financial statements included in our Quarterly Report on Form 10-Q for the quarter ended June 30, 2021, which are incorporated by reference herein. Our unaudited interim financial statements are prepared in accordance with U.S. generally accepted accounting principles (GAAP) on the same basis as our audited financial statements and include, in the opinion of management, all adjustments, consisting of normal recurring adjustments, that are necessary for the fair statement of the financial information set forth in those financial statements. Our historical results are not necessarily indicative of the results that may be expected in the future, and our interim results should not necessarily be considered indicative of results that may be expected for the full year or any other period.

You should read this data together with our financial statements and related notes included elsewhere in this prospectus and the information under the sections titled “Selected Financial Data” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations.”

| | Six Months Ended June 30, | | Year Ended December 31, | |
|---|---|---|---|---|
| | 2021 | 2020 | 2019 | 2020 |
| | (in thousands, except share and per share data) | | | |
| **Statements of Operations and Comprehensive Loss Data:** | | | | |
| Revenue: | | | | |
| Collaboration and license revenue | $ 16,580 | $ 6,919 | $ 6,960 | $ 13,363 |
| Collaboration and license revenue, related parties | — | 249 | 26 | 249 |
| Total revenue | 16,580 | 7,168 | 6,986 | 13,612 |
| Operating expenses: | | | | |
| Research and development | 27,992 | 28,878 | 38,718 | 53,038 |
| Acquired in-process research and development | — | — | 5,137 | — |
| General and administrative | 12,496 | 6,716 | 13,895 | 17,238 |
| Total operating expenses | 40,488 | 35,594 | 57,750 | 70,276 |
| Loss from operations | (23,908) | (28,426) | (50,764) | (56,664) |
| Other income (expense) | (87) | 113 | 1,458 | (29) |
| Net loss and comprehensive loss | $ (23,995) | $ (28,313) | $ (49,306) | (56,693) |
| Net loss per share attributable to common stockholders, basic and diluted(1) | $ (0.90) | $ (5.46) | $ (9.59) | (8.82) |
| Weighted-average shares outstanding used in computing net loss per share attributable to common stockholders, basic and diluted(1) | 26,715,014 | 5,183,900 | 5,142,560 | 6,430,555 |

| | As of June 30, 2021 | |
|---|---|---|
| | Actual | As Adjusted(1) |
| | (in thousands) | |
| **Balance Sheet Data:** | | |
| Cash and cash equivalents | $ 243,743 | $ 354,568 |
| Working capital(2) | 238,882 | 349,707 |
| Total assets | 254,934 | 365,759 |
| Accumulated deficit | (159,674) | (159,674) |
| Total stockholders' equity | 240,646 | 351,471 |

(1) The as adjusted column in the balance sheet data table above gives effect to the sale and issuance of 4,750,000 shares of our common stock in this offering at a public offering price per share of $25.00 after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

(2) We define working capital as current assets less current liabilities. See our financial statements and related notes incorporated by reference herein for further details regarding our current assets and current liabilities.

## RISK FACTORS

*Investing in our common stock involves a high degree of risk. You should carefully consider the risks described below, as well as the other information in this prospectus, including our financial statements and the related notes and the sections titled "Management's Discussion and Analysis of Financial Condition and Results of Operations," contained in our Annual Report on Form 10-K for the year ended December 31, 2020 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2021, each incorporated by reference herein, before deciding whether to invest in our common stock. If any of the following risks actually occurs, our business, reputation, financial condition, results of operations, revenue and future prospects could be seriously harmed. The risks and uncertainties described below are not the only ones we face. Additional risks and uncertainties that we are unaware of, or that we currently believe are not material, may also become important factors that adversely affect our business. Unless otherwise indicated, references to our business being seriously harmed in these risk factors and elsewhere will include harm to our business, reputation, financial condition, results of operations, future prospects and stock price. In that event, the market price of our common stock could decline, and you could lose part or all of your investment.*

### Risks Related to This Offering and Ownership of Our Common Stock

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

Some of the factors that may cause the market price of our common stock to fluctuate include:

- results from, and any delays in, our clinical trials for our clinical-stage product candidates or any other future clinical development programs, including any delays related to the COVID-19 pandemic;
- the success of existing or new competitive products or technologies;
- commencement or termination of collaborations for our product candidates;
- failure or discontinuation of any of our product candidates;
- failure to develop our Therapeutic Vector Evolution platform technology;
- 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;
- 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 commencement of litigation;
- the level of expenses related to any of the research 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 standoff or lock-up agreements;
- 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 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 significant 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. Further, the stock market in general has been highly volatile due to the COVID-19 pandemic and political uncertainty in the United States. 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.

***If securities analysts do not publish research or reports about our business or if they publish negative evaluations of our stock, the price of our stock could decline.***

The trading market for our common stock will rely in part on the research and reports that industry or financial analysts publish about us or our business. We currently have research coverage by three financial analysts. If one or more of these analysts should drop research coverage of us or if one or more of the analysts covering our business downgrade their evaluations of our stock, the price of our stock could decline. If one or more of these analysts cease to cover our stock, we could lose visibility in the market for our stock, which in turn could cause our stock price to decline.

***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, upon the expiration of the lock-up agreements (described below), the early release of the lock-ups or the perception in the market that the holders of a large number of shares of our common stock intend to sell shares, could reduce the market price of our common stock. After this offering, we will have 31,641,857 shares of our common stock outstanding based on 26,891,857 shares of our common stock outstanding as of June 30, 2021. Of these shares, the 4,750,000 shares we are selling in this offering may be resold in the public market immediately, unless purchased by our affiliates. Approximately 7.0 million shares, or 22.1% of our outstanding shares after this offering, are currently prohibited or otherwise restricted under securities laws, or lock-up agreements entered into by our stockholders with the underwriters. However, subject to applicable securities law restrictions and excluding shares of restricted stock that will remain unvested, prohibitions and restrictions on the sale of these shares in the public market will be lifted beginning 90 days after the date of this prospectus. The representatives may, in their sole discretion, release all or some portion of the shares subject to lock-up agreements at any time and for any reason. Shares

issued upon the exercise of stock options outstanding under our equity incentive plans, or pursuant to future awards granted under those plans, will become available for sale in the public market to the extent permitted by the provisions of applicable vesting schedules, any applicable market standoff and lock-up agreements, and Rule 144 and Rule 701 under the Securities Act of 1933, as amended (the Securities Act). See the section of this prospectus titled “Shares Eligible for Future Sale” for additional information.

Moreover, after this offering, holders of an aggregate of 11.6 million 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 plan to register all shares of our common stock that we may issue under our equity compensation plans. Once we register these shares, they 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 section of this prospectus titled “Underwriters.” 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.

***Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.***

We will seek additional capital through one or a combination of public and private equity offerings, debt financings, strategic partnerships and alliances and licensing arrangements. We, and indirectly, our stockholders, will bear the cost of issuing and servicing such securities. Because our decision to issue debt or equity securities in any future offering will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of any future offerings. To the extent that we raise additional capital through the sale of equity securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder. The incurrence of indebtedness would result in increased fixed payment obligations and could involve restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. Additionally, any future collaborations we enter into with third parties may provide capital in the near term but limit our potential cash flow and revenue in the future. If we raise additional funds through strategic partnerships and alliances and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses on terms unfavorable to us.

***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, executive officers, holders of more than 5% of our outstanding stock and their respective affiliates will beneficially own shares representing approximately 22.1% 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 are an “emerging growth company” and a “smaller reporting company” and as a result of the reduced disclosure and governance requirements applicable to emerging growth companies and smaller reporting companies, our common stock may be less attractive to investors.***

We are an “emerging growth company,” as defined in the JOBS Act, and we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public

companies that are not emerging growth companies including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. In addition, as an "emerging growth company" the JOBS Act allows us to delay adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private companies. We have elected to use this extended transition period under the JOBS Act. As a result, our financial statements may not be comparable to the financial statements of issuers who are required to comply with the effective dates for new or revised accounting standards that are applicable to public companies, which may make comparison of our financials to those of other public companies more difficult.

We cannot predict if investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earlier of (1) December 31, 2025, (2) the last day of the year in which we have total annual gross revenue of at least $1.07 billion, (3) the last day of the year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock held by non-affiliates exceeded $700.0 million as of the last business day of the second fiscal quarter of such year or (4) the date on which we have issued more than $1.0 billion in non-convertible debt securities during the prior three-year period.

Even after we no longer qualify as an "emerging growth company," we may still qualify as a "smaller reporting company," which would allow us to continue to take advantage of many of the same exemptions from disclosure requirements, including, among other things, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act, presenting only the two most recent fiscal years of audited financial statements in our Annual Report on Form 10-K and reduced disclosure obligations regarding executive compensation in this prospectus and our periodic reports and proxy statements.

***We have and will incur significant costs as a result of operating as a public company, and our management will devote substantial time to new compliance initiatives. We may fail to comply with the rules that apply to public companies, including Section 404 of the Sarbanes-Oxley Act of 2002, which could result in sanctions or other penalties that would seriously harm our business.***

We have and will incur significant legal, accounting and other expenses as a public company, including costs resulting from public company reporting obligations under the Exchange Act and regulations regarding corporate governance practices. The listing requirements of the Nasdaq Global Market and the rules of the Securities and Exchange Commission (SEC) require that we satisfy certain corporate governance requirements relating to director independence, filing annual and interim reports, stockholder meetings, approvals and voting, soliciting proxies, conflicts of interest and a code of conduct. Our management and other personnel will need to devote a substantial amount of time to ensure that we comply with all of these requirements. Moreover, the reporting requirements, rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly. Any changes we make to comply with these obligations may not be sufficient to allow us to satisfy our obligations as a public company on a timely basis, or at all. These reporting requirements, rules and regulations, coupled with the increase in potential litigation exposure associated with being a public company, could also make it more difficult for us to attract and retain

qualified persons to serve on our board of directors or board committees or to serve as executive officers, or to obtain certain types of insurance, including directors' and officers' insurance, on acceptable terms.

We are subject to Section 404 of The Sarbanes-Oxley Act of 2002 (Section 404) and the related rules of the SEC, which generally require our management and independent registered public accounting firm to report on the effectiveness of our internal control over financial reporting. Beginning with the second annual report that we will be required to file with the SEC, Section 404 requires an annual management assessment of the effectiveness of our internal control over financial reporting. However, for so long as we remain an emerging growth company as defined in the JOBS Act, we intend to take advantage of certain exemptions from various reporting requirements that are applicable to public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404. Once we are no longer an emerging growth company or, if prior to such date, we opt to no longer take advantage of the applicable exemption, we will be required to include an opinion from our independent registered public accounting firm on the effectiveness of our internal controls over financial reporting.

To date, we have never conducted a review of our internal control for the purpose of providing the reports required by these rules. During the course of our review and testing, we may identify deficiencies and be unable to remediate them before we must provide the required reports. Furthermore, if we have a material weakness in our internal controls over financial reporting, we may not detect errors on a timely basis and our financial statements may be materially misstated. We or our independent registered public accounting firm may not be able to conclude on an ongoing basis that we have effective internal control over financial reporting, which could harm our operating results, cause investors to lose confidence in our reported financial information and cause the trading price of our stock to fall. In addition, as a public company we are required to file accurate and timely quarterly and annual reports with the SEC under the Exchange Act. In order to report our results of operations and financial statements on an accurate and timely basis, we depend in part on CROs to provide timely and accurate notice of their costs to us. Any failure to report our financial results on an accurate and timely basis could result in sanctions, lawsuits, delisting of our shares from the Nasdaq Global Market or other adverse consequences that would seriously harm our business.

***Purchasers in this offering will experience immediate and substantial dilution in the book value of their investment.***

The public offering price of our common stock is substantially higher than the pro forma net tangible book value per share of our common stock before giving effect to this offering. Accordingly, if you purchase our common stock in this offering, you will incur immediate substantial dilution of $13.89 per share, based on the public offering price of $25.00 per share, and our pro forma net tangible book value as of June 30, 2021. In addition, following this offering, purchasers in this offering will have contributed approximately 22.6% of the total gross consideration paid by stockholders to us to purchase shares of our common stock, through June 30, 2021, but will own only approximately 15.0% of the shares of our common stock outstanding immediately after this offering. Furthermore, if the underwriters exercise their option to purchase additional shares, or outstanding options and warrants are exercised, you could experience further dilution. For a further description of the dilution that you will experience immediately after this offering, see the section titled "Dilution."

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

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage, delay, or prevent a merger, acquisition, or other change in control that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares of our common stock. These provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our charter documents:

- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even though less than a quorum;
- eliminate cumulative voting in the election of directors;
- authorize our board of directors to issue shares of preferred stock and determine the price and other terms of those shares, including preferences and voting rights, without stockholder approval;
- provide our board of directors with the exclusive right to elect a director to fill a vacancy or newly created directorship;
- provide that our directors may be removed only for cause;
- permit stockholders to only take actions at a duly called annual or special meeting and not by written consent;
- prohibit stockholders from calling a special meeting of stockholders;
- provide for a staggered board, which will result in only a few directors being up for re-election in each calendar year;
- require that stockholders give advance notice to nominate directors or submit proposals for consideration at stockholder meetings;
- authorize our board of directors, by a majority vote, to amend the bylaws;
- require the affirmative vote of at least 66 2/3% or more of the outstanding shares of our common stock to amend many of the provisions described above; and
- limit the liability of, and provide indemnification to, our directors and officers.

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

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

***Claims for indemnification by our directors and officers may reduce our available funds to satisfy successful third-party claims against us and may reduce the amount of money available to us.***

Our amended and restated certificate of incorporation and amended and restated bylaws provide that we will indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law.

In addition, as permitted by Section 145 of the DGCL, our amended and restated bylaws and our indemnification agreements that we have entered into with our directors and officers provide that:

- We will indemnify our directors and officers for serving us in those capacities or for serving other business enterprises at our request, to the fullest extent permitted by Delaware law. Delaware law provides that a corporation may indemnify such person if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the registrant and, with respect to any criminal proceeding, had no reasonable cause to believe such person's conduct was unlawful.
- We may, in our discretion, indemnify employees and agents in those circumstances where indemnification is permitted by applicable law.
- We are required to advance expenses, as incurred, to our directors and officers in connection with defending a proceeding, except that such directors or officers shall undertake to repay such advances if it is ultimately determined that such person is not entitled to indemnification.
- We will not be obligated pursuant to our amended and restated bylaws to indemnify a person with respect to proceedings initiated by that person against us or our other indemnitees, except with respect to proceedings authorized by our board of directors or brought to enforce a right to indemnification.
- The rights conferred in our amended and restated bylaws are not exclusive, and we are authorized to enter into indemnification agreements with our directors, officers, employees and agents and to obtain insurance to indemnify such persons.
- We may not retroactively amend our amended and restated bylaw provisions to reduce our indemnification obligations to directors, officers, employees and agents.

***Our amended and restated certificate of incorporation and amended and restated bylaws provide that the Court of Chancery of the State of Delaware will be the exclusive forum for certain disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.***

Our amended and restated certificate of incorporation and amended and restated bylaws provide that the Court of Chancery of the State of Delaware (or, in the event that the Court of Chancery does not have jurisdiction, the federal district court for the District of Delaware or other state courts of the State of Delaware) is the exclusive forum for any derivative action or proceeding brought on our behalf, any action asserting a claim of breach of fiduciary duty, any action asserting a claim against us arising pursuant to the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws, or any action asserting a claim against us that is governed by the internal affairs doctrine; provided that, the exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction; and provided further that, if and only if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, such action may be brought in another state or federal court sitting in the State of Delaware. Our amended and restated certificate of incorporation and amended and restated bylaws will also provide that the federal district courts of

the United States of America will be the exclusive forum for the resolution of any complaint asserting a cause of action against us or any of our directors, officers, employees or agents and arising under the Securities Act. Nothing in our amended and restated certificate of incorporation and amended and restated bylaws precludes stockholders that assert claims under the Exchange Act from bringing such claims in state or federal court, subject to applicable law.

This choice of forum provision may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, other employees or stockholders, which may discourage lawsuits with respect to such claims, although our stockholders will not be deemed to have waived our compliance with federal securities laws and the rules and regulations thereunder. Furthermore, the enforceability of similar choice of forum provisions in other companies' certificates of incorporation has been challenged in legal proceedings, and it is possible that a court could find these types of provisions to be inapplicable or unenforceable. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions, and there can be no assurance that such provisions will be enforced by a court in those other jurisdictions. If a court were to find the choice of forum provision that will be contained in our amended and restated certificate of incorporation and amended and restated bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could seriously harm our business.

***We do not currently intend to pay dividends on our common stock, and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.***

We do not currently intend to pay any cash dividends on our common stock for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future. Since we do not intend to pay dividends, your ability to receive a return on your investment will depend on any future appreciation in the market value of our common stock. There is no guarantee that our common stock will appreciate or even maintain the price at which our holders have purchased it.

***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 uses of the majority 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 the section of this prospectus titled "Use of Proceeds." 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 seriously harm our business. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

***Participation in this offering by our existing stockholders and/or their affiliated entities may reduce the public float for our common stock.***

To the extent certain of our existing stockholders and their affiliated entities participate in this offering, such purchases would reduce the non-affiliate public float of our shares, meaning the number of shares of our common stock that are not held by officers, directors and controlling stockholders. A reduction in the public float could reduce the number of shares that are available to be traded at any given time, thereby adversely impacting the liquidity of our common stock and depressing the price at which you may be able to sell shares of common stock purchased in this offering.

## SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain forward-looking statements concerning our business, operations and financial performance and condition, as well as our plans, objectives and expectations for our business operations and financial performance and condition. Any statements contained herein that are not statements of historical facts may be deemed to be forward-looking statements. In some cases, you can identify forward-looking statements by terminology such as “aim,” “anticipate,” “assume,” “believe,” “contemplate,” “continue,” “could,” “due,” “estimate,” “expect,” “goal,” “intend,” “may,” “objective,” “plan,” “predict,” “potential,” “positioned,” “seek,” “should,” “target,” “will,” “would” and other similar expressions that are predictions of or indicate future events and future trends, or the negative of these terms or other comparable terminology. These forward-looking statements include, but are not limited to, statements about:

- the success, cost and timing of our development activities, preclinical studies and clinical trials, including our clinical trials for 4D-310, 4D-125, 4D-110, 4D-150 and 4D-710;
- the translation of our preclinical results and data into future clinical trials in humans;
- the timing of any manufacturing runs for materials to be used in patient trials;
- the number, size and design of our planned clinical trials, and what regulatory authorities may require to obtain marketing approval
- the potential effects of the COVID-19 pandemic on our preclinical and clinical programs and business;
- the timing or likelihood of regulatory filings and approvals;
- our ability to obtain and maintain regulatory approval of our product candidates, and any related restrictions, limitations and/or warnings in the label of any approved product candidate;
- our ability to obtain funding for our operations, including funding necessary to develop and commercialize our product candidates;
- the rate and degree of market acceptance of our product candidates;
- the success of competing products or platform technologies that are or may become available;
- our plans and ability to establish sales, marketing and distribution infrastructure to commercialize any product candidates for which we obtain approval;
- future agreements with third parties in connection with the commercialization of our product candidates;
- the size and growth potential of the markets for our product candidates, if approved for commercial use, and our ability to serve those markets;
- existing regulations and regulatory developments in the United States and foreign countries;
- the expected potential benefits of strategic collaboration agreements, including our relationship with uniQure, and our ability to attract collaborators with development, regulatory and commercialization expertise;
- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- potential claims relating to our intellectual property and third-party intellectual property;
- our ability to contract with third-party suppliers and manufacturers and their ability to perform adequately;
- the pricing and reimbursement of our product candidates, if approved;

- our ability to attract and retain key managerial, scientific and medical personnel;
- the accuracy of our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our financial performance;
- our expectations regarding the period during which we qualify as an emerging growth company under the JOBS Act;
- our anticipated use of the proceeds from this offering; and
- other risks and uncertainties, including those listed under the section titled “Risk Factors” and the documents incorporated by reference herein.

These forward-looking statements are based on management’s current expectations, estimates, forecasts and projections about our business and the industry in which we operate and management’s beliefs and assumptions and are not guarantees of future performance or development and involve known and unknown risks, uncertainties and other factors that are in some cases beyond our control. As a result, any or all of our forward-looking statements in this prospectus may turn out to be inaccurate. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under the section titled “Risk Factors” and elsewhere in this prospectus and the documents incorporated by reference herein. Potential investors are urged to consider these factors carefully in evaluating the forward-looking statements. These forward-looking statements speak only as of the date of this prospectus. Except as required by law, we assume no obligation to update or revise these forward-looking statements for any reason, even if new information becomes available in the future. You should, however, review the factors and risks we describe in the reports we will file from time to time with the SEC after the date of this prospectus. See the section titled “Where You Can Find More Information.”

## INDUSTRY AND MARKET DATA

This prospectus contains estimates, projections and other information concerning our industry, our business, and the markets for our product candidates, including data regarding the estimated patient population and market size for our product candidates, as well as data regarding market research, estimates and forecasts prepared by our management. Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties, and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. Unless otherwise expressly stated, we obtained this industry, business, market and other data from reports, research surveys, studies and similar data prepared by market research firms and other third parties, industry, medical and general publications, government data and similar sources. In some cases, we do not expressly refer to the sources from which this data is derived. In that regard, when we refer to one or more sources of this type of data in any paragraph, you should assume that other data of this type appearing in the same paragraph is derived from the same sources, unless otherwise expressly stated or the context otherwise requires.

## USE OF PROCEEDS

We estimate that the net proceeds from the issuance and sale of 4,750,000 shares of our common stock in this offering will be approximately $110.8 million, or approximately $127.6 million if the underwriters exercise their option to purchase additional shares in full, based on the public offering price of $25.00 per share, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

The principal purposes of this offering are to obtain additional capital to support our operations. We currently intend to use the net proceeds from this offering, together with our existing cash and cash equivalents, as follows:

- $50.0 million to $60.0 million to fund our ongoing and planned clinical and preclinical development of our product candidates, including ongoing clinical trials for 4D-310, 4D-125, 4D-150, 4D-110 and 4D-710;
- $10.0 million to $15.0 million to fund the further development and expansion of our pipeline including to complete lead optimization and IND-enabling studies for potentially other research candidates;
- $10.0 million to $15.0 million to fund the continued expansion of our manufacturing capabilities and facilities; and
- any remaining amounts for working capital and other general corporate purposes.

Based on our current operating plan, we estimate that our current cash and cash equivalents, together with the anticipated net proceeds from this offering, will be sufficient to fund our operating expenses and capital expenditure requirements at least into the second half of 2024.

The amounts and timing of our actual expenditures and the extent of our research and development activities may vary significantly depending on numerous factors, including the progress of our development efforts, the status of and results from any preclinical or clinical trials we may commence in the future, our ability to take advantage of expedited programs or to obtain regulatory approval for any other product candidates we may identify and pursue, the timing and costs associated with the manufacture and supply of any other product candidates we may identify and pursue for clinical development or commercialization, and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

We may also use a portion of the remaining net proceeds and our existing cash and cash equivalents to in-license, acquire, or invest in complementary businesses, technologies, products or assets. However, we have no current commitments or obligations to do so.

This expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth above. If we receive any additional proceeds from this offering, we expect to use such proceeds on a proportional basis to the categories described above (other than funding for manufacturing capabilities and facilities).

Pending their use, we intend to invest the net proceeds of this offering in a variety of capital-preservation investments, including short and intermediate-term, interest-bearing, investment-grade securities, and government securities.

## DIVIDEND POLICY

We have never declared or paid cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings, if any, to fund the development and expansion of our business, and we do not anticipate paying any cash dividends in the foreseeable future. Any future determination related to dividend policy will be made at the discretion of our board of directors.

## CAPITALIZATION

The following table sets forth our cash and cash equivalents and capitalization as of June 30, 2021:

- on an actual basis;
- on an as adjusted basis to give further effect to sale and issuance of 4,750,000 shares of our common stock in this offering, at the public offering price of $25.00 per share, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this information together with our consolidated financial statements and related notes incorporated by reference in this prospectus. For more details on how you can obtain our SEC reports and other information, you should read the section of the prospectus titled “Where You Can Find More Information.”

| | As of June 30, 2021 | |
|---|---|---|
| | Actual | As Adjusted |
| | (in thousands, except share and per share amounts) | |
| Cash and cash equivalents | $ 243,743 | $ 354,568 |
| Stockholders’ equity: | | |
| Preferred stock, $0.0001 par value: 10,000,000 shares authorized and no shares issued or outstanding, actual and as adjusted | — | — |
| Common stock, $0.0001 par value: 300,000,000 shares authorized and as adjusted; 26,891,857 shares issued and outstanding, actual; 31,641,857 shares issued and outstanding, as adjusted | 3 | 3 |
| Additional paid-in capital | 400,317 | 511,142 |
| Accumulated deficit | (159,674) | (159,674) |
| Total stockholders’ equity | 240,646 | 351,471 |
| Total capitalization | $ 240,646 | $ 351,471 |

The number of shares of our common stock issued and outstanding as adjusted in the table above is based on 26,891,857 shares of our common stock outstanding as of June 30, 2021, and excludes:

- 4,238,519 shares of our common stock issuable upon the exercise of stock options to purchase common stock that were outstanding as of June 30, 2021, with a weighted-average exercise price of $18.84 per share;
- 98,669 shares of our common stock issuable upon the exercise of outstanding warrants, with a weighted-average exercise price of $6.76 per share;
- 183,600 shares of our common stock issuable upon the exercise of stock options to purchase common stock that were granted after June 30, 2021, each with an exercise price of $28.55 per share;
- 2,726,365 shares of our common stock reserved for issuance pursuant to future awards under our 2020 Plan, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan; and
- 519,156 shares of our common stock reserved for issuance pursuant to future awards under our ESPP, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan.

## DILUTION

If you invest in our common stock in this offering, your interest will be immediately diluted to the extent of the difference between the public offering price per share of our common stock in this offering and the as adjusted net tangible book value per share of our common stock immediately after the completion of this offering.

As of June 30, 2021, our historical net tangible book value was $240.6 million, or $8.95 per share of our common stock. Our historical net tangible book value per share represents total tangible assets less total liabilities divided by the number of shares of our common stock outstanding on June 30, 2021.

Our as adjusted net tangible book value represents our historical net tangible book value as adjusted to give effect to the sale of 4,750,000 shares of our common stock in this offering at an public offering price of $25.00 per share, after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. We determine dilution per share to investors participating in this offering by subtracting as adjusted net tangible book value per share after this offering from the public offering price per share paid by investors participating in this offering.

The following table illustrates this per share dilution:

| | | |
|---|---|---|
| Public offering price per share | | $25.00 |
| Historical net tangible book value per share as of June 30, 2021 | $8.95 | |
| Increase in as adjusted net tangible book value per share attributable to new investors | 2.16 | |
| As adjusted net tangible book value per share | | 11.11 |
| Dilution per share to new investors participating in this offering | | $13.89 |

If the underwriters fully exercise their option to purchase 712,500 additional shares, as adjusted net tangible book value after this offering would be $11.38 per share, the increase in as adjusted net tangible book value per share to existing stockholders would be $0.27 per share, and the decrease in dilution to investors in this offering would be $13.62 per share.

To the extent that outstanding options with an exercise price per share that is less than the as adjusted net tangible book value per share are exercised, new investors will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

The foregoing tables and calculations (other than the historical net tangible book value calculation) are based on 26,891,857 shares of our common stock outstanding as of June 30, 2021, and excludes:

- 4,238,519 shares of our common stock issuable upon the exercise of stock options to purchase common stock that were outstanding as of June 30, 2021, with a weighted-average exercise price of $18.84 per share;
- 98,669 shares of our common stock issuable upon the exercise of outstanding warrants, with a weighted-average exercise price of $6.76 per share;

- 183,600 shares of our common stock issuable upon the exercise of stock options to purchase common stock that were granted after June 30, 2021, each with an exercise price of $28.55 per share;
- 2,726,365 shares of our common stock reserved for issuance pursuant to future awards under our 2020 Plan, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan; and
- 519,156 shares of our common stock reserved for issuance pursuant to future awards under our ESPP, as well as any automatic increases in the number of shares of our common stock reserved for future issuance under this plan.

To the extent that outstanding options or warrants are exercised, new options or other securities are issued under our equity incentive plans, or we issue additional shares of our common stock in the future, there will be further dilution to investors participating in this offering. In addition, we may choose to raise additional capital because of market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans. If we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

## PRINCIPAL STOCKHOLDERS

The following table sets forth information relating to the beneficial ownership of our common stock as of October 15, 2021 by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our outstanding shares of our common stock;
- each of our directors;
- each of our named executives;
- all directors and executive officers as a group.

The number of shares beneficially owned by each entity, person, director or executive officer is determined in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Under such rules, beneficial ownership includes any shares over which the individual has sole or shared voting power or investment power as well as any shares that the individual has the right to acquire within 60 days after October 15, 2021 through the exercise of any stock option, warrants or other rights. Except as otherwise indicated, and subject to applicable community property laws, the persons named in the table have sole voting and investment power with respect to all shares of our common stock held by that person.

The percentage of shares beneficially owned is computed on the basis of 27,362,008 shares of our common stock outstanding as of October 15, 2021. Shares of our common stock that a person has the right to acquire within 60 days after October 15, 2021 are deemed outstanding for purposes of computing the percentage ownership of the person holding such rights, but are not deemed outstanding for purposes of computing the percentage ownership of any other person, except with respect to the percentage ownership of all directors and executive officers as a group. Unless otherwise indicated below, the address for each beneficial owner listed is c/o 4D Molecular Therapeutics, Inc., 5858 Horton Street #455, Emeryville, California 94608.

| Name of Beneficial Owner | Number of Outstanding Shares Beneficially Owned | Number of Shares Exercisable Within 60 Days | Number of Shares Beneficially Owned | Number of Shares Owned After the Offering | Percentage of Beneficial Ownership | |
|---|---|---|---|---|---|---|
| | | | | | Before Offering | After Offering |
| **5% and Greater Stockholders:** | | | | | | |
| Viking Global Opportunities Illiquid Investments Sub-Master LP(1) | 3,937,914 | — | 3,937,914 | 3,937,914 | 14.39% | 12.26% |
| **Named Executive Officers and Directors:** | | | | | | |
| David Kirn, M.D. | 2,000,000 | 28,125 | 2,028,125 | 2,028,125 | 7.40% | 6.31% |
| John F. Milligan, Ph.D | 100,000 | 104,736 | 204,763 | 204,763 | * | * |
| Jacob Chacko, M.D. | — | 55,833 | 55,833 | 55,833 | * | * |
| Susannah Gray, MBA | — | 19,999 | 19,999 | 19,999 | * | * |
| Nancy Miller-Rich | — | 16,249 | 16,249 | 16,249 | * | * |
| David Schaffer, Ph.D. | 937,500 | — | 937,500 | 937,500 | 3.43% | 2.92% |
| Charles Theuer, M.D., Ph.D. | 32,351 | 68,017 | 100,368 | 100,368 | * | * |
| Shawn Cline Tomasello, MBA | — | 16,249 | 16,249 | 16,249 | * | * |
| August Moretti | 2,000 | 176,231 | 178,231 | 178,231 | * | * |
| Robert Fishman, M.D. | — | — | — | — | * | * |
| All executive officers and directors as a group (13 persons) | 3,431,228 | 964,551 | 4,395,779 | 4,395,779 | 16.03% | 13.67% |

* Indicates beneficial ownership of less than 1% of our total outstanding common stock.

(1) Consists of 3,937,914 shares of our common stock held by Viking Global Opportunities Illiquid Investments Sub-Master LP (Opportunities Fund). Opportunities Fund has the authority to dispose of and vote the shares directly owned by it, which power may be exercised by its general partner, Viking Global Opportunities Portfolio GP LLC (Opportunities GP), and by Viking Global Investors LP (VGI), which provides managerial services to Opportunities Fund. O. Andreas Halvorsen, David C. Ott and Rose Shabet, as Executive Committee members of Viking Global Partners LLC (the general partner of VGI) and Opportunities GP, have shared authority to direct the voting and disposition of investments beneficially owned by the Opportunities Fund and Opportunities GP. The business address of each of the entities is c/o Viking Global Investors LP, 55 Railroad Avenue, Greenwich, CT 06830.

## DESCRIPTION OF CAPITAL STOCK

The following summary describes our capital stock and the material provisions of our amended and restated certificate of incorporation and our amended and restated bylaws, the amended and restated investors' rights agreement to which we and certain of our stockholders are parties and of the DGCL. Because the following is only a summary, it does not contain all of the information that may be important to you. For a complete description, you should refer to our amended and restated certificate of incorporation, amended and restated bylaws and amended and restated investors' rights agreement, copies of which have been filed as exhibits to the registration statement of which this prospectus is part.

### General

Our authorized capital stock consists of 300,000,000 shares of common stock, $0.0001 par value per share, and 10,000,000 shares of preferred stock, $0.0001 par value per share. As of June 30, 2021, there were outstanding:

- 26,891,857 shares of our common stock held by approximately 31 stockholders of record; and
- 4,238,519 shares of our common stock issuable upon exercise of outstanding stock options.

### Common Stock

#### *Voting Rights*

Each holder of our common stock is entitled to one vote for each share on all matters submitted to a vote of the stockholders, including the election of directors. Our stockholders do not have cumulative voting rights in the election of directors. Accordingly, holders of a majority of the voting shares are able to elect all of the directors. In addition, the affirmative vote of holders of 66 2/3% of the voting power of all of the then outstanding voting stock is required to take certain actions, including amending certain provisions of our amended and restated certificate of incorporation, such as the provisions relating to amending our amended and restated bylaws, the classified board and director liability.

#### *Dividends*

Subject to preferences that may be applicable to any then outstanding preferred stock, holders of our common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds.

#### *Liquidation*

In the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities and the satisfaction of any liquidation preference granted to the holders of any then outstanding shares of preferred stock.

#### *Rights and Preferences*

Holders of our common stock have no preemptive, conversion, subscription or other rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights,

preferences and privileges of the holders of our common stock are subject to and may be adversely affected by the rights of the holders of shares of any series of our preferred stock that we may designate in the future.

### *Fully Paid and Nonassessable*

All of our outstanding shares of common stock are, and the shares of our common stock to be issued in this offering will be, fully paid and nonassessable.

### Redeemable Convertible Preferred Stock

Our board of directors has the authority, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of our common stock. The issuance of our preferred stock could adversely affect the voting power of holders of our common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control or other corporate action. As of June 30, 2021, no shares of preferred stock are outstanding, and we have no present plan to issue any shares of preferred stock.

### Options

As of June 30, 2021, we had outstanding options to purchase 4,238,519 shares of our common stock, with a per share weighted-average exercise price of $18.84, under our 2020 Incentive Plan.

### Warrants

As of June 30, 2021, we had warrants outstanding with the option to purchase 98,669 shares of our common stock, with a weighted-average exercise price of $6.76 per share.

### Registration Rights

Under our amended and restated investors' rights agreement, based on the number of shares outstanding as of June 30, 2021, the holders of 11.6 million shares of our common stock, or their transferees, have the right to require us to register their shares under the Securities Act so that those shares may be publicly resold, and the holders of 11.6 million shares of our common stock, or their transferees, have the right to include their shares in any registration statement we file, in each case as described below.

### *Demand Registration Rights*

Based on the number of shares outstanding as of June 30, 2021, after the consummation of this offering, the holders of 11.6 million shares of our common stock (on an as-converted basis), or their transferees, will be entitled to certain demand registration rights. The holders of at least 50% of these shares can, on not more than two occasions, request that we register all or a portion of their shares if the aggregate price to the public of the shares offered is at least $30.0 million (before deductions of underwriters' commissions and expenses).

***Piggyback Registration Rights***

Based on the number of shares outstanding as of June 30, 2021, in the event that we determine to register any of our securities under the Securities Act (subject to certain exceptions), either for our own account or for the account of other security holders, the holders of 11.6 million shares of our common stock (on an as-converted basis), or their transferees, will be entitled to certain "piggyback" registration rights allowing the holders to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act, other than with respect to a registration related to employee benefit plans, the offer and sale of debt securities, or corporate reorganizations or certain other transactions, the holders of these shares are entitled to notice of the registration and have the right, subject to limitations that the underwriters may impose on the number of shares included in the registration, to include their shares in the registration. In an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions, to exclude or limit the number of shares such holders may include.

***Form S-3 Registration Rights***

Based on the number of shares outstanding as of June 30, 2021, the holders of 11.6 million shares of our common stock (on an as-converted basis), or their transferees, will be entitled to certain Form S-3 registration rights. The holders of at least 30% of the registrable securities then outstanding of these shares can make a written request that we register their shares on Form S-3 if we are eligible to file a registration statement on Form S-3 and if the aggregate price to the public of the shares offered is at least $5.0 million (before deductions of underwriters' commissions and expenses). These stockholders may make an unlimited number of requests for registration on Form S-3, but in no event shall we be required to file more than two registrations on Form S-3 in any given twelve-month period.

***Expenses of Registration***

We will pay the registration expenses of the holders of the shares registered pursuant to the demand, piggyback and Form S-3 registration rights described above, including the expenses in an amount not to exceed $25,000 of one special counsel for the selling holders.

***Expiration of Registration Rights***

The demand, piggyback and Form S-3 registration rights described above will expire, with respect to any particular stockholder, upon the earlier of five years after the consummation of our initial public offering or when that stockholder can sell all of its shares under Rule 144 of the Securities Act during any three-month period (and without the requirement for us to be in compliance with the current public information required under Section c(1) of Rule 144 of the Securities Act).

**Anti-Takeover Effects of Provisions of Our Amended and Restated Certificate of Incorporation, Our Amended and Restated Bylaws and Delaware Law**

Certain provisions of Delaware law and our amended and restated certificate of incorporation and our amended and restated bylaws contain provisions that could make the following transactions more difficult: acquisition of us by means of a tender offer; acquisition of us by means of a proxy contest or otherwise; or removal of our incumbent officers and directors. It is possible that these provisions could make it more difficult to accomplish or could deter transactions that stockholders may otherwise consider to be in their best interest or in our best interests, including transactions that might result in a premium over the market price for our shares.

These provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids. These provisions are also designed to encourage persons seeking to

acquire control of us to first negotiate with our board of directors. We believe that the benefits of increased protection of our potential ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure us outweigh the disadvantages of discouraging these proposals because negotiation of these proposals could result in an improvement of their terms.

***Delaware Anti-Takeover Statute***

We are subject to Section 203 of the DGCL, which prohibits persons deemed "interested stockholders" from engaging in a "business combination" with a publicly-held Delaware corporation for three years following the date these persons become interested stockholders unless the business combination is, or the transaction in which the person became an interested stockholder was, approved in a prescribed manner or another prescribed exception applies. Generally, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years prior to the determination of interested stockholder status did own, 15% or more of a corporation's voting stock. Generally, a "business combination" includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. The existence of this provision may have an anti-takeover effect with respect to transactions not approved in advance by our board of directors, such as discouraging takeover attempts that might result in a premium over the market price of our common stock.

***Undesignated Preferred Stock***

The ability to authorize undesignated preferred stock will make it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of us. These and other provisions may have the effect of deterring hostile takeovers or delaying changes in control or management.

***Special Stockholder Meetings***

Our amended and restated bylaws provide that a special meeting of stockholders may be called at any time by our board of directors, or our President or Chief Executive Officer, but such special meetings may not be called by our stockholders or any other person or persons.

***Requirements for Advance Notification of Stockholder Nominations and Proposals***

Our amended and restated bylaws established advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our board of directors or a committee of our board of directors.

***Elimination of Stockholder Action by Written Consent***

Our amended and restated certificate of incorporation and our amended and restated bylaws do not provide for the right of stockholders to act by written consent without a meeting.

***Classified Board; Election and Removal of Directors; Filling Vacancies***

Our board of directors is divided into three classes. The directors in each class serve for a three-year term, one class being elected each year by our stockholders, with staggered three-year terms. Only one class of directors is elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, our stockholders holding a majority of the shares of our common

stock outstanding are able to elect all of our directors. Our amended and restated certificate of incorporation provides for the removal of any of our directors only for cause and requires a stockholder vote by the holders of at least a 66 2/3% of the voting power of the then outstanding voting stock. For more information on the classified board, see the section titled “Management—Board Composition” in our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 6, 2021. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board of directors, may only be filled by a resolution of our board of directors unless our board of directors determines that such vacancies shall be filled by our stockholders. This system of electing and removing directors and filling vacancies may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.

***Choice of Forum***

Our amended and restated certificate of incorporation and amended and restated bylaws provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: any derivative action or proceeding brought on our behalf; any action asserting a claim of breach of fiduciary duty owed by any of our directors, officers or stockholders to us or to our stockholders; any action asserting a claim against us arising pursuant to the DGCL, our amended and restated certificate of incorporation or our amended and restated bylaws (as either may be amended from time to time); or any action asserting a claim against us that is governed by the internal affairs doctrine. As a result, any action brought by any of our stockholders with regard to any of these matters will need to be filed in the Court of Chancery of the State of Delaware and cannot be filed in any other jurisdiction; provided that, the exclusive forum provision will not apply to suits brought to enforce any liability or duty created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction; and provided further that, if and only if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, such action may be brought in another state or federal court sitting in the State of Delaware. Our amended and restated certificate of incorporation and amended and restated bylaws also provide that the federal district courts of the United States of America will be the exclusive forum for the resolution of any complaint asserting a cause of action against us or any of our directors, officers, employees or agents and arising under the Securities Act. Nothing in our amended and restated certificate of incorporation and amended and restated bylaws preclude stockholders that assert claims under the Exchange Act from bringing such claims in state or federal court, subject to applicable law.

If any action the subject matter of which is within the scope described above is filed in a court other than a court located within the State of Delaware, or a Foreign Action, in the name of any stockholder, such stockholder shall be deemed to have consented to the personal jurisdiction of the state and federal courts located within the State of Delaware in connection with any action brought in any such court to enforce the applicable provisions of our amended and restated certificate of incorporation and amended and restated bylaws and having service of process made upon such stockholder in any such action by service upon such stockholder’s counsel in the Foreign Action as agent for such stockholder. Although our amended and restated certificate of incorporation and amended and restated bylaws will contain the choice of forum provision described above, it is possible that a court could find that such a provision is inapplicable for a particular claim or action or that such provision is unenforceable.

This choice of forum provision may limit a stockholder’s ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, other employees or stockholders, which may discourage lawsuits with respect to such claims, although our stockholders

will not be deemed to have waived our compliance with federal securities laws and the rules and regulations thereunder.

***Amendment of Charter Provisions***

The amendment of any of the above provisions in our amended and restated certificate of incorporation, except for the provision making it possible for our board of directors to issue undesignated preferred stock, would require approval by a stockholder vote by the holders of at least a 66 2/3% of the voting power of the then outstanding voting stock.

The provisions of the DGCL, our amended and restated certificate of incorporation and our amended and restated bylaws could have the effect of discouraging others from attempting hostile takeovers and, as a consequence, they may also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions may also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders may otherwise deem to be in their best interests.

**Limitations of Liability and Indemnification Matters**

Our amended and restated certificate of incorporation contains provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by Delaware law. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the DCGL; or
- any transaction from which the director derived an improper personal benefit.

Each of our amended and restated certificate of incorporation and amended and restated bylaws provides that we are required to indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law. Our amended and restated bylaws also obligate us to advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under Delaware law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by our board of directors. With specified exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors and officers for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and our stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damages.

### Listing

Our common stock is listed on the Nasdaq Global Market under the symbol “FDMT.”

### Transfer Agent and Registrar

The transfer agent and registrar for our common stock is American Stock Transfer & Trust Company, LLC. The transfer agent and registrar’s address is 6201 15th Avenue, Brooklyn, New York 11219.

## SHARES ELIGIBLE FOR FUTURE SALE

Future sales of our common stock, including shares issued upon the exercise of outstanding options or warrants, in the public market after this offering, or the perception that those sales may occur, could cause the prevailing market price for our common stock to fall or impair our ability to raise equity capital in the future. As described below, only a limited number of shares of our common stock will be available for sale in the public market for a period of several months after consummation of this offering due to contractual and legal restrictions on resale described below. Future sales of our common stock in the public market either before (to the extent permitted) or after restrictions lapse, or the perception that those sales may occur, could adversely affect the prevailing market price of our common stock at such time and our ability to raise equity capital at a time and price we deem appropriate.

### Sale of Restricted Shares

Based on the number of shares of our common stock outstanding as of June 30, 2021, upon the consummation of this offering and assuming no exercise of the underwriters' option to purchase additional shares, we will have outstanding an aggregate of approximately 31,641,857 shares of common stock. Of these shares, all of the shares of common stock to be sold in this offering, and any shares sold upon exercise of the underwriters' option to purchase additional shares, will be freely tradable in the public market without restriction or further registration under the Securities Act, unless the shares are held by any of our "affiliates" as such term is defined in Rule 144 of the Securities Act. All remaining shares of common stock held by existing stockholders immediately prior to the consummation of this offering will be "restricted securities" as such term is defined in Rule 144. These restricted securities were issued and sold by us, or will be issued and sold by us, in private transactions and are eligible for public sale only if registered under the Securities Act or if they qualify for an exemption from registration under the Securities Act, including the exemptions provided by Rule 144 or Rule 701, which rules are summarized below.

### Lock-Up Agreements

In connection with this offering, we, our executive officers and our directors have agreed, subject to certain exceptions, with the underwriters not to dispose of or hedge any shares of our common stock or securities convertible into or exchangeable for shares of our common stock during the period from the date of the lock-up agreement continuing through the date 90 days after the date of this prospectus, except with the prior written consent of the representatives on behalf of the underwriters.

Certain of our employees, including our executive officers have entered into written trading plans that are intended to comply with Rule 10b5-1 under the Exchange Act. Sales under these trading plans would not be permitted until the expiration of the lock-up agreements relating to the offering described above.

Following the lock-up periods set forth in the agreements described above, and assuming that the representatives do not release any parties from these agreements, all of the shares of our common stock that are restricted securities or are held by our affiliates as of the date of this prospectus will be eligible for sale in the public market in compliance with Rule 144 under the Securities Act.

### Rule 144

In general, under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Exchange Act for at least 90 days, a person (or persons whose shares are required to be aggregated) who is not deemed to have been one of our "affiliates" for purposes of Rule 144 at any time during the three months preceding a sale, and who has beneficially

owned restricted securities within the meaning of Rule 144 for at least six months, including the holding period of any prior owner other than one of our "affiliates," is entitled to sell those shares in the public market (subject to the lock-up agreement referred to above, if applicable) without complying with the manner of sale, volume limitations or notice provisions of Rule 144, but subject to compliance with the public information requirements of Rule 144. If such a person has beneficially owned the shares proposed to be sold for at least one year, including the holding period of any prior owner other than "affiliates," then such person is entitled to sell such shares in the public market without complying with any of the requirements of Rule 144 (subject to the lock-up agreement referred to above, if applicable). In general, under Rule 144, as currently in effect, once we have been subject to the public company reporting requirements of the Exchange Act for at least 90 days, our "affiliates," as defined in Rule 144, who have beneficially owned the shares proposed to be sold for at least six months are entitled to sell in the public market, upon expiration of any applicable lock-up agreements and within any three-month period, a number of those shares of our common stock that does not exceed the greater of:

- 1% of the number of shares of common stock then outstanding, which will equal approximately 0.3 million shares of our common stock immediately after this offering (calculated as of June 30, 2021 on the basis of the assumptions (i)-(iii) described above); or
- the average weekly trading volume of our common stock on The Nasdaq Global Select Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Such sales under Rule 144 by our "affiliates" or persons selling shares on behalf of our "affiliates" are also subject to certain manner of sale provisions, notice requirements and to the availability of current public information about us. Notwithstanding the availability of Rule 144, the holders of substantially all of our restricted securities have entered into lock-up agreements as referenced above and their restricted securities will become eligible for sale (subject to the above limitations under Rule 144) upon the expiration of the restrictions set forth in those agreements.

**Rule 701**

In general, under Rule 701 as currently in effect, any of our employees, directors, officers, consultants or advisors who acquired common stock from us in connection with a written compensatory stock or option plan or other written agreement in compliance with Rule 701 under the Securities Act are entitled to rely on Rule 701 to resell such shares beginning 90 days after the effective date of this public offering, but without compliance with the holding period requirements contained in Rule 144. Accordingly, subject to any applicable lock-up agreements, under Rule 701 persons who are not our "affiliates," as defined in Rule 144, may resell those shares without complying with the minimum holding period or public information requirements of Rule 144, and persons who are our "affiliates" may resell those shares without compliance with Rule 144's minimum holding period requirements (subject to the terms of the lock-up agreement referred to above).

**Registration Rights**

Based on the number of shares outstanding as of June 30, 2021, after the consummation of this offering, the holders of 11.6 million shares of our common stock, or their transferees, will, subject to the lock-up agreements referred to above, be entitled to certain rights with respect to the registration of the offer and sale of those shares under the Securities Act. For a description of these registration rights, see the section titled "Description of Capital Stock—Registration Rights." If the offer and sale of these shares are registered, they will be freely tradable without restriction under the Securities Act.

**Stock Plans**

We have filed with the SEC a registration statement under the Securities Act covering the shares of common stock that we may issue upon exercise of outstanding options reserved for issuance under our 2015 Equity Incentive Plan and our 2020 Plan. Shares registered under such registration statement are available for sale in the open market, subject to Rule 144 volume limitations and the lock-up agreements described above, if applicable.

# MANAGEMENT

## Executive Officers and Directors

The following table sets forth information regarding our executive officers and directors as of October 26, 2021:

| Name | Age | Position(s) |
|---|---|---|
| **Executive Officers and Employee Directors** | | |
| David Kirn, M.D. | 59 | Chief Executive Officer and Director |
| August Moretti | 71 | Chief Financial Officer |
| Fred Kamal, Ph.D. | 58 | Chief Operating Officer and Chief Technical Officer |
| Robert Fishman, M.D. | 58 | Chief Medical Officer |
| **Non-Employee Directors** | | |
| John F. Milligan, Ph.D. | 60 | Executive Chairman |
| Jacob Chacko, M.D., MBA(2) | 43 | Director |
| Susannah Gray, MBA(1)(2) | 61 | Director |
| Nancy Miller-Rich(1)(4) | 62 | Director |
| David Schaffer, Ph.D.(3)(4) | 50 | Director and Chief Scientific Advisor |
| Charles Theuer, M.D., Ph.D.(2)(3)(4) | 58 | Director |
| Shawn Cline Tomasello, MBA(1)(3) | 63 | Director |

(1) Member of compensation committee.
(2) Member of audit committee.
(3) Member of nominating and corporate governance committee.
(4) Member of the science and technology committee.

## Executive Officers and Employee Directors

*David Kirn, M.D.,* is our co-founder and has served as our Chief Executive Officer and served on our board of directors since our inception in 2013. Dr. Kirn previously served as the Executive Chairman of our board until August 2020 when John Milligan, Ph.D. assumed the position. Dr. Kirn is an Adjunct Professor of Bioengineering at U.C. Berkeley. He previously served as Executive Chairman of the board of Ignite Immunotherapy Inc., where he was a co-founder. Dr. Kirn held senior development positions at Onyx Pharmaceuticals and Celgene, and he was a senior advisor on viral vector gene therapeutics and cancer immunotherapy for over 10 years with numerous companies, including Biogen Idec, Novartis, Cell Genesys, Pfizer and Bayer. Dr. Kirn received a B.A. in Physiology (Departmental Citation; Phi Beta Kappa) from U.C. Berkeley in 1985, an M.D. (Alpha Omega Alpha) from U.C. San Francisco Medical School in 1989 and completed internal medicine residency training at Harvard Medical School, Brigham and Women's Hospital (including a term as Chief Medical Resident at affiliated VA hospital). He has also completed hematology-oncology and clinical research fellowships at U.C. San Francisco and completed a certificate of business excellence from the Haas Business School at U.C. Berkeley. In 2013, he was awarded the Johnson & Johnson Entrepreneur Innovator award from the J&J Innovation Center. We believe that Dr. Kirn is qualified to serve as a member of our board of directors based on his perspective and the experience he brings as one of our founders and Chief Executive Officer, and because of his extensive experience at other life science companies.

*August Moretti* has served as our Chief Financial Officer since January 2019. Mr. Moretti previously served as Chief Financial Officer at Assertio Therapeutics (formerly Depomed, Inc.), a publicly held specialty pharmaceuticals company focused in pain and neurology, from January 2012

until August 2018. From 2004 to December 2011, Mr. Moretti served as Chief Financial Officer and Senior Vice President of Alexza Pharmaceuticals, Inc., a publicly-held pharmaceutical company. From 2001 to 2004, Mr. Moretti served as Chief Financial Officer and General Counsel of Alavita, Inc., a privately held personalized medicine company. From 1982 to 2000 Mr. Moretti was a partner in an international law firm. Mr. Moretti received his B.A. in Economics from Princeton University in 1972. He received his J.D. from Harvard Law School in 1975.

*Fred Kamal, Ph.D.,* has served as our Chief Operating Officer since February 2020 and has served as our Chief Technical Officer since October 2018. Dr. Kamal previously served as Senior Vice President of Quality and Regulatory CMC for AveXis Inc., a gene therapy company, from May 2017 through August 2018. Prior to AveXis, Dr. Kamal served as the Vice President of Quality for Juno Therapeutics from May 2015 through April 2017 and prior to that Dr. Kamal served as the Vice President of Quality and Regulatory CMC for Intermune Inc. from January 2013 through March 2015. Dr. Kamal received his B.S. in Chemistry from San Jose State University in 1986. Dr. Kamal received his M.Sc. in Chemistry from The American University in 2000. He received his Ph.D. in Chemistry from The American University in 2003.

*Robert Fishman, M.D.*, has served as our Chief Medical Officer since October 2020. He previously served as the Chief Medical Officer of Xoc Pharmaceuticals, Inc., a private biopharmaceutical company, from February 2019 to October 2020. Prior to that, he served as the Chief Medical Officer of Corcept Therapeutics, a publicly traded biotechnology company, from September 2015 to January 2019. Dr. Fishman received his undergraduate degree in Biology from Harvard University in 1982, and his M.D. from Stanford University School of Medicine in 1986.

**Non-Employee Directors**

*John F. Milligan, Ph.D.* has served as Executive Chairman of our board of directors since August 2020. Dr. Milligan previously served as the President and Chief Executive Officer of Gilead Sciences, Inc. from May 2008 and March 2016, respectively, until February 2019, and spent a total of 29 years at Gilead in various roles since 1990. Prior to joining Gilead, Dr. Milligan was a postdoctoral research fellow at the University of California San Francisco Medical Center. Dr. Milligan has served on the board of directors of Pacific Biosciences of California since July 2013, and also serves as the Chair of the Board of Trustees of Ohio Wesleyan University. Dr. Milligan received his B.A. in Chemistry from Ohio Wesleyan University in 1983 and his Ph.D. from the University of Illinois at Urbana-Champaign in 1988. We believe Dr. Milligan is qualified to serve as a member of our board of directors based on his extensive experience and leadership roles in the biopharmaceutical industry.

*Jacob Chacko, M.D., MBA*, has served as a member of our board of directors since March 2019. Dr. Chacko has served as Chief Executive Officer of ORIC Pharmaceuticals, Inc., a clinical-stage oncology company focused on discovery and development of novel therapies against treatment-resistant cancers, since May 2018. Prior to ORIC, Dr. Chacko served as Chief Financial Officer of Ignyta, Inc., a publicly traded precision oncology company, from May 2014 until February 2018 when Ignyta was acquired by Roche Holdings, Inc. Prior to Ignyta, Dr. Chacko was an investor at TPG Capital from August 2008 until May 2014. From 2002 until 2003, Dr. Chacko was a consultant serving healthcare clients at McKinsey & Company. Dr. Chacko currently serves on the board of directors of Turning Point Therapeutics, Inc., a publicly-traded biotechnology company, from November 2018. Dr. Chacko served on the board of directors of RentPath Inc., a digital media company, from 2011 until 2014, Envision Pharmaceutical Services, LLC from 2013 until 2014, Bonti, Inc., a biotechnology company, from February 2018 until October 2018 and the Packard Children's Health Alliance at the Lucile Packard Children's Hospital Stanford from 2013 until June 2017. Dr. Chacko currently chairs the Western Regional Selection Committee for the Marshall Scholarship. Dr. Chacko concurrently received his M.D. from the U.C. Los Angeles and his M.B.A. from Harvard Business School. Dr. Chacko

received a M.Sc. from Oxford University as a Marshall Scholar. We believe Dr. Chacko is qualified to serve as a member of our board of directors based on his medical and finance background, his experience in investing in life science companies and his service on the boards of public and private companies.

*Susannah Gray, MBA*, has served as a member of our board of directors since July 2020. Ms. Gray served as the Executive Vice President of Finance and Strategy of Royalty Pharma Management, LLC, a buyer of pharmaceutical royalties and a funder across the biopharmaceutical industry, and in various other similar roles from 2005 until 2019. Prior to Royalty Pharma, Ms. Gray served as a managing director and senior analyst covering the healthcare sector of CIBS World Market's high yield group from 2002 to 2004, and also previously served in similar roles at Merrill Lynch and Chase Securities, Inc. (predecessor of JP Morgan Securities, Inc.). Ms. Gray currently serves on the board of directors of Susan G. Komen and serves on the Board of Trustees of Wesleyan University. Ms. Gray received a B.A. from Wesleyan University in 1982 and an M.B.A. from Columbia University in 1990. We believe Ms. Gray is qualified to serve as a member of our board of directors based on her experience in corporate finance and capital markets and previous experience in investment banking covering the healthcare sector.

*Nancy Miller-Rich*, has served as a member of our board of directors since November 2020. She has served as a consultant and advisor to various pharmaceutical and biotechnology companies since September 2017. Previously, Ms. Miller-Rich served in a number of leadership roles at Merck & Co., Inc. and, prior to the merger of the two companies, at Schering-Plough Corporation, including most recently as Senior Vice President, Global Human Health Business Development & Licensing, Strategy and Commercial Support from November 2013 to September 2017 and as Group Vice President, Consumer Care Global New Ventures and Strategic Commercial Development from January 2007 to November 2013. Prior to joining Schering-Plough in 1990, Ms. Miller-Rich served in a variety of commercial and marketing roles at Sandoz Pharmaceuticals and Sterling Drug, Inc. Ms. Miller-Rich has served on the board of directors of several publicly-traded biotechnology companies, such as Intercept Pharmaceuticals, Inc. since April 2018, Aldeyra Therapeutics, Inc. since January 2020, and Kadmon Holdings, Inc. since October 2020. She received her undergraduate degree in Business Administration, Marketing, from Ithaca College in New York in 1981. We believe Ms. Miller-Rich is qualified to serve as a member of our board of directors based on her extensive experience as a director of publicly traded biotechnology companies.

*David Schaffer, Ph.D.* is our co-founder and has served as our Chief Scientific Advisor and a member of our board of directors since our inception in 2013. Dr. Schaffer has served as a Professor of Chemical and Biomolecular Engineering, Bioengineering, Molecular and Cell Biology, and the Helen Wills Neuroscience Institute at the U.C. Berkeley since 1999 and has served as the Director of the Berkeley Stem Cell Center since 2011. He previously served on the board of directors of uniQure NV, a publicly held company, from January 2014 to June 2020. Dr. Schaffer received a B.S. in Chemical Engineering from Stanford University in 1993. He earned his Ph.D. in Chemical Engineering from the Massachusetts Institute of Technology in 1998. We believe Dr. Schaffer is qualified to serve as a member of our board of directors based on his perspective and the experience he brings as one of our founders, and because of his scientific expertise and leading work in directed evolution.

*Charles Theuer, M.D., Ph.D.*, has served as a member of our board of directors since December 2015. Dr. Theuer has served as President and Chief Executive Officer at Tracon Pharmaceuticals, Inc., since June 2006. He previously served as Chief Medical Officer at TargeGen, Inc. until June 2006. He currently serves on the board of directors of the following publicly-held companies: Tracon Pharmaceuticals Inc., since June 2006 and Oncternal Therapeutics Inc. since May 2018, where he serves on the Science and Development and Nominating and Corporate Governance committees. Dr. Theuer received a B.S. in Life Sciences from the Massachusetts Institute of Technology in 1985.

He received his M.D. from U.C. San Francisco in 1989. He received his Ph.D. in Environmental Health Science from U.C. Irvine in 2002. We believe that Dr. Theuer is qualified to serve as a member of our board of directors based on his medical and scientific background and because of his experience in leading and serving on the boards of public and private life science companies.

*Shawn Cline Tomasello, MBA*, has served as a member of our board of directors since November 2020. She served as Chief Commercial Officer of Kite Pharma from December 2015 to July 2018. Before that, Ms. Tomasello served as the Chief Commercial Officer of Commercial and Medical Affairs at Pharmacyclics, LLC from August 2014 to August 2015. She has served on the boards of several publicly traded biotechnology companies including UroGen Pharma since July 2018, Mesoblast Ltd. since July 2018 and Gamida-Cell Ltd. since March 2019. Ms. Tomasello received her undergraduate degree in marketing from the University of Cincinnati in 1982 and her MBA from Murray State University in Kentucky in 1989. We believe Ms. Tomasello is qualified to serve as a member of our board of directors based on her extensive experience in building successful commercial operations for biopharmaceutical companies and her experience as a director of publicly traded life science companies.

## MATERIAL U.S. FEDERAL INCOME TAX CONSEQUENCES TO NON-U.S. HOLDERS

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 (the Code), Treasury Regulations promulgated thereunder, judicial decisions, and published rulings and administrative pronouncements of 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. We have not sought and will not seek any rulings from the Internal Revenue Service (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. In addition, it does not address consequences relevant to Non-U.S. Holders subject to special rules, including, without limitation:

- U.S. expatriates and former citizens or long-term residents of the United States;
- persons subject to the alternative minimum tax;
- 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;
- tax-qualified retirement plans; and
- “qualified foreign pension funds” as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds.

If an entity 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 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 treated as a partnership for U.S. federal income tax purposes. 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 (i) is subject to the primary supervision of a U.S. court and all substantial decisions of which are subject to the control of one or more "United States persons" (within the meaning of Section 7701(a)(30) of the Code), or (ii) 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 titled "Dividend Policy," we do not anticipate paying any cash dividends 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."

Subject to the discussion below on effectively connected income, dividends paid to a Non-U.S. Holder 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 tax treaties.

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, 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 such effectively connected 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**

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 (USRPI) by reason of our status as a U.S. real property holding corporation (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 rates applicable to U.S. persons. 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 such effectively connected gain, as adjusted for certain items.

A Non-U.S. Holder 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) on gain realized upon the sale or other taxable disposition of our common stock, which may be offset by certain U.S. source capital losses of the Non-U.S. Holder (even though the individual is not considered a resident of the United States), provided 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 do not anticipate becoming, a USRPHC. Because the determination of whether we are a USRPHC depends, however, 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 currently are not a USRPHC or will not become one 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 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 tax treaties that may provide for different rules.

**Information Reporting and Backup Withholding**

Payments of distributions on our common stock will not be subject to backup withholding, provided the Non-U.S. Holder certifies its non-U.S. status, such as by furnishing a valid IRS Form W-8BEN, W-8BEN-E or W-8ECI, or otherwise establishes an exemption. However, information returns are required to be filed with the IRS in connection with any distributions on our common stock paid to the Non-U.S. Holder, regardless of whether such distributions constitute dividends or 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 Non-U.S. 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 that does not have certain enumerated relationships with the United States 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 (such Sections commonly referred to as the Foreign Account Tax Compliance Act (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, or (subject to the proposed Treasury Regulations discussed below) gross proceeds from the sale or other disposition of, our common stock paid to a "foreign financial institution" or a "non-financial foreign entity" (each as defined in the Code), unless (i) the foreign financial institution undertakes certain diligence and reporting obligations, (ii) 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 (iii) 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 (i) 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 located in jurisdictions 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 applied also to payments of gross proceeds from the sale or other disposition of our common stock on or after January 1, 2019, 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 and the underwriters have entered into an underwriting agreement with respect to the shares being offered. Subject to certain conditions, the underwriters have agreed to purchase the number of shares indicated in the following table. Goldman Sachs & Co. LLC, SVB Leerink LLC and Evercore Group L.L.C. are the representatives of the underwriters.

| Underwriter | Number of Shares |
|---|---|
| Goldman Sachs & Co. LLC | 2,042,500 |
| SVB Leerink LLC | 1,472,500 |
| Evercore Group L.L.C. | 1,235,000 |
| Total | 4,750,000 |

The underwriters are committed to take and pay for all of the shares being offered, if any are taken, other than the shares covered by the option described below unless and until this option is exercised.

The underwriters have an option to buy up to an additional 712,500 shares from us to cover sales by the underwriters of a greater number of shares than the total number set forth in the table above. They may exercise that option for 30 days from the date of this prospectus.

The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters by us. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to buy up to an additional 712,500 shares from us.

| | No Exercise | Full Exercise |
|---|---|---|
| Per Share | $ 1.50 | $ 1.50 |
| Total | $ 7,125,000 | $ 8,193,750 |

Shares sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover page of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount of up to $0.90 per share from the initial public offering price. After the initial offering of the shares, the representatives may change the offering price and the other selling terms. The offering of the shares by the underwriters are subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

We and our executive officers and directors agreed or will agree with the underwriters, subject to certain exceptions, not to dispose of or hedge any of our or their common stock or securities convertible into or exchangeable for shares of our common stock during the period from the date of this prospectus continuing through the date 90 days after the date of this prospectus, except with the prior written consent of the representatives. This agreement does not apply to any existing employee benefit plans. See the section titled "Shares Eligible for Future Sale" for a discussion of certain transfer restrictions.

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

In connection with the offering, the underwriters may purchase and sell shares of our common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering, and a short position

represents the amount of such sales that have not been covered by subsequent purchases. A “covered short position” is a short position that is not greater than the amount of additional shares for which the underwriters’ option described above may be exercised. The underwriters may cover any covered short position by either exercising their option or purchasing shares in the open market. In determining the source of shares to cover the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase additional shares pursuant to the option described above. “Naked” short sales are any short sales that create a short position greater than the amount of additional shares for which the option described above may be exercised. The underwriters must cover any such naked short position by purchasing shares in the open market. 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 after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by them because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions, as well as other purchases by the underwriters for its own accounts, may have the effect of preventing or retarding a decline in the market price of our common stock, and together with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of our common stock. As a result, the price of our common stock may be higher than the price that otherwise might exist in the open market. The underwriters are not required to engage in these activities and may end any of these activities at any time. These transactions may be effected on The Nasdaq Global Select Market, in the over-the-counter market or otherwise.

We estimate that our share of the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately $800,000. We have agreed to reimburse the underwriters for certain of its expenses in an amount up to $20,000.

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

The underwriters and their affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. The underwriters and their affiliates may in the future provide a variety of these services to the issuer and to persons and entities with relationships with the issuer, for which they will receive customary fees and expenses.

In the ordinary course of its various business activities, the underwriters and their affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for its own account and for the accounts of its customers, and such investment and trading activities may involve or relate to assets, securities or instruments of the issuer (directly, as collateral securing other obligations or otherwise) or persons and entities with relationships with the issuer. The underwriters and their affiliates may also communicate independent investment recommendations, market color or trading ideas or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

**European Economic Area**

In relation to each Member State of the European Economic Area (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 the shares may be offered to the public in that Relevant State at any time:

(a) to any legal entity which is a qualified investor as defined under Article 2 of the Prospectus Regulation;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

(c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

*provided* that no such offer of the shares shall require the company or any of the underwriters to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an "offer to the public" in relation to the 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.

**United Kingdom**

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares which has been approved by the Financial Conduct Authority, except that the shares may be offered to the public in the United Kingdom at any time:

(a) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

(c) in any other circumstances falling within Section 86 of the FSMA,

*provided* that no such offer of the shares shall require the company or any underwriter to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

For the purposes of this provision, the expression an "offer to the public" in relation to the shares in the United Kingdom 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 "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

**Canada**

The shares may be sold in Canada 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 form, 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 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.

**Hong Kong**

The shares may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong) (Companies (Winding Up and Miscellaneous Provisions) Ordinance) or which do not constitute an invitation to the public within the meaning of the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) (Securities and Futures Ordinance), or (ii) to "professional investors" as defined in the Securities and Futures Ordinance and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance, and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case 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 in 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" in Hong Kong as defined in the Securities and Futures Ordinance and any rules made thereunder.

**Singapore**

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined under Section 4A of the Securities and Futures Act, Chapter 289 of Singapore (the SFA)) under Section 274 of the SFA, (ii) 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 (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to conditions set forth in the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is 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, the securities (as defined in Section 239(1) of the SFA) of that corporation shall not be transferable for 6 months after that corporation has acquired the shares under Section 275 of the SFA except: (i) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (ii) where such transfer arises from an offer in that corporation's securities pursuant to Section 275(1A) of the SFA, (iii) where no consideration is or will be given for the transfer, (iv) where the transfer is by operation of law, (v) as specified in Section 276(7) of the SFA, or (vi) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore (Regulation 32).

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is a trust (where the trustee is not an accredited investor (as defined in Section 4A of the SFA)) whose sole purpose is to hold investments and each beneficiary of the trust is an accredited investor, the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferable for 6 months after that trust has acquired the shares under Section 275 of the SFA except: (i) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (ii) where such transfer arises from an offer that is made on terms that such rights or interest are acquired at a consideration of not less than S$200,000 (or its equivalent in a foreign currency) for each transaction (whether such amount is to be paid for in cash or by exchange of securities or other assets), (iii) where no consideration is or will be given for the transfer, (iv) where the transfer is by operation of law, (v) as specified in Section 276(7) of the SFA, or (vi) as specified in Regulation 32.

Solely for the purposes of its obligations pursuant to Section 309B of the SFA, we have determined, and hereby notify all relevant persons (as defined in the CMP Regulations 2018), that the shares are "prescribed capital markets products" (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

**Japan**

The shares have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended) (the FIEA). The shares may not be offered or sold, directly or indirectly, in Japan or to or for the benefit of any resident of Japan (including any person resident in Japan or any corporation or other entity organized under the laws of Japan) or to others for reoffering or resale, directly or indirectly, in Japan or to or for the benefit of any resident of Japan, except pursuant to an exemption from the registration requirements of the FIEA and otherwise in compliance with any relevant laws and regulations of Japan.

**Australia**

No placement document, prospectus, product disclosure statement or other disclosure document has been lodged with the Australian Securities and Investments Commission (ASIC), in relation to the offering. This offering document does not constitute a prospectus, product disclosure statement or other disclosure document under the Corporations Act 2001 (the Corporations Act), and does not purport to include the information required for a prospectus, product disclosure statement or other disclosure document under the Corporations Act.

Any offer in Australia of the shares may only be made to persons (the Exempt Investors) who are "sophisticated investors" (within the meaning of section 708(8) of the Corporations Act), "professional investors" (within the meaning of section 708(11) of the Corporations Act) or otherwise pursuant to one

or more exemptions contained in section 708 of the Corporations Act so that it is lawful to offer the shares without disclosure to investors under Chapter 6D of the Corporations Act.

The shares applied for by Exempt Investors in Australia must not be offered for sale in Australia in the period of 12 months after the date of allotment under the offering, except in circumstances where disclosure to investors under Chapter 6D of the Corporations Act would not be required pursuant to an exemption under section 708 of the Corporations Act or otherwise or where the offer is pursuant to a disclosure document which complies with Chapter 6D of the Corporations Act. Any person acquiring shares must observe such Australian on-sale restrictions.

This offering document contains general information only and does not take account of the investment objectives, financial situation or particular needs of any particular person. It does not contain any securities recommendations or financial product advice. Before making an investment decision, investors need to consider whether the information in this offering document is appropriate to their needs, objectives and circumstances, and, if necessary, seek expert advice on those matters.

**Dubai International Financial Centre**

This offering document relates to an Exempt Offer in accordance with the Offered Securities Rules of the Dubai Financial Services Authority (DFSA). This offering document is intended for distribution only to persons of a type specified in the Offered Securities Rules of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus nor taken steps to verify the information set forth in this prospectus and has no responsibility for the offering document. The shares to which this offering document relates may be illiquid and/or subject to restrictions on their resale. Prospective purchasers of the shares offered should conduct their own due diligence on the shares. If you do not understand the contents of this offering document you should consult an authorized financial advisor.

**Switzerland**

We have not and will not register with the Swiss Financial Market Supervisory Authority (FINMA) as a foreign collective investment scheme pursuant to Article 119 of the Federal Act on Collective Investment Scheme of 23 June 2006, as amended (CISA), and accordingly the shares being offered pursuant to this prospectus have not and will not be approved, and may not be licenseable, with FINMA. Therefore, the shares have not been authorized for distribution by FINMA as a foreign collective investment scheme pursuant to Article 119 CISA and the shares offered hereby may not be offered to the public (as this term is defined in Article 3 CISA) in or from Switzerland. The shares may solely be offered to “qualified investors,” as this term is defined in Article 10 CISA, and in the circumstances set out in Article 3 of the Ordinance on Collective Investment Scheme of 22 November 2006, as amended (CISO), such that there is no public offer. Investors, however, do not benefit from protection under CISA or CISO or supervision by FINMA. This prospectus and any other materials relating to the shares are strictly personal and confidential to each offeree and do not constitute an offer to any other person. This prospectus may only be used by those qualified investors to whom it has been handed out in connection with the offer described in this prospectus and may neither directly or indirectly be distributed or made available to any person or entity other than its recipients. It may not be used in connection with any other offer and shall in particular not be copied and/or distributed to the public in Switzerland or from Switzerland. This prospectus does not constitute an issue prospectus as that term is understood pursuant to Article 652a and/or 1156 of the Swiss Federal Code of Obligations. We have not applied for a listing of the shares on the SIX Swiss Exchange or any other regulated securities market in Switzerland, and consequently, the information presented in this prospectus does not necessarily comply with the information standards set out in the listing rules of the SIX Swiss Exchange and corresponding prospectus schemes annexed to the listing rules of the SIX Swiss Exchange.

## LEGAL MATTERS

The validity of the issuance of our common stock offered in this prospectus will be passed upon for us by Latham & Watkins LLP, Menlo Park, California. Cooley LLP, San Francisco, California, is acting as counsel for the underwriters in connection with this offering.

## EXPERTS

The financial statements incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended December 31, 2020 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

## WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the shares of our 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 with respect to 4D Molecular Therapeutics, Inc. and the common stock offered hereby, reference is made to the registration statement and the exhibits and schedules filed therewith. Statements contained in this prospectus regarding the contents of any contract or any other document that is filed 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 maintains a website that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC. The address is www.sec.gov.

We are subject to the information and periodic reporting requirements of the Exchange Act and, in accordance therewith, file periodic reports, proxy statements and other information with the SEC. Such periodic reports, proxy statements and other information are available for inspection and copying at the public reference room and website of the SEC referred to above. We maintain a website at www.4dmoleculartherapeutics.com. You may access our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The reference to our website address does not constitute incorporation by reference of the information contained on our website, and you should not consider the contents of our website in making an investment decision with respect to our common stock.

## INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" information from other documents that we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus. Information in this prospectus supersedes information incorporated by reference that we filed with the SEC prior to the date of this prospectus. We incorporate by reference into this prospectus and the registration statement of which this prospectus is a part the information or documents listed below that we have filed with the SEC (Commission File No. 001-39782):

- our Annual Report on Form 10-K for the year ended December 31, 2020, filed with the SEC on March 25, 2021;
- our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2021 and June 30, 2021, filed with the SEC on May 13, 2021 and August 12, 2021, respectively;
- our Current Reports on Form 8-K, filed with the SEC on May 20, 2021, June 25, 2021, September 24, 2021, October 13, 2021 and October 26, 2021;
- our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 6, 2021; and
- the description of our common stock contained in our registration statement on Form S-1 filed with the SEC on December 7, 2020, including any amendments or reports filed for the purposes of updating this description.

Notwithstanding the statements in the preceding paragraphs, no document, report or exhibit (or portion of any of the foregoing) or any other information that we have "furnished" to the SEC pursuant to the Exchange Act shall be incorporated by reference into this prospectus.

We will furnish without charge to you, on written or oral request, a copy of any or all of the documents incorporated by reference in this prospectus, including exhibits to these documents. You should direct any requests for documents to 4D Molecular Therapeutics, Inc., Attn: Corporate Secretary, 5858 Horton Street #455, Emeryville, California, 94608.

You also may access these filings on our website at www.4dmoleculartherapeutics.com. We do not incorporate the information on our website into this prospectus or any supplement to this prospectus and you should not consider any information on, or that can be accessed through, our website as part of this prospectus or any supplement to this prospectus (other than those filings with the SEC that we specifically incorporate by reference into this prospectus or any supplement to this prospectus).

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus modifies, supersedes or replaces such statement.

4,750,000 Shares

# 4D Molecular Therapeutics, Inc.

Common Stock


**Goldman Sachs & Co. LLC** **SVB Leerink** **Evercore ISI**