AMICUS THERAPEUTICS INC
Form 424B5
February 14, 2018
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Filed pursuant to Rule 424(b)(5)
Registration No.: 333-211005

The information in this preliminary prospectus supplement is not complete and may be changed. This preliminary prospectus supplement and the accompanying prospectus are not an offer to sell these securities, nor are they soliciting offers to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to completion, dated February 14, 2018

Preliminary Prospectus Supplement
(To Prospectus dated April 29, 2016)

AMICUS THERAPEUTICS, INC.

$250,000,000

We are offering shares of our common stock, par value $0.01 per share, at an aggregate public offering price of up to $250,000,000.

Our common stock is listed on The NASDAQ Global Market under the symbol FOLD. On February 14, 2018, the last reported sale price of our common stock on The NASDAQ Global Market was $15.68 per share.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading Risk Factors on page S-6 of this prospectus supplement, page 3 of the accompanying prospectus and under similar headings in the other documents that are incorporated by

reference in this prospectus supplement and the accompanying prospectus.

	Per share	Total
Public offering price	$	$
Underwriting discounts and commissions	$	$
Proceeds to us before expenses	$	$

The underwriters may also purchase up to an additional $37,500,000 of our common stock from us at the public offering price, less underwriting discounts and commissions, within 30 days of the date of this prospectus supplement. If the underwriters exercise this option in full, the total underwriting discounts and commissions will be $, and our total proceeds before expenses, will be $.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares of our common stock on or about February , 2018.

J.P. Morgan **Goldman Sachs & Co. LLC**

The date of this prospectus supplement is February , 2018.

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Prospectus Supplement

Prospectus

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About This Prospectus Supplement

This prospectus supplement and the accompanying prospectus are part of a universal shelf registration statement on Form S-3 (File No. 333-211005) that we filed with the U.S. Securities and Exchange Commission (the SEC) on April 29, 2016, which became effective automatically upon the filing thereof. This document is in two parts. The first part is this prospectus supplement which describes the terms of this offering of our common stock and adds to and updates the information contained in the accompanying prospectus. The second part, the accompanying prospectus, provides more general information, some of which may not apply to this offering. Generally, when we refer to this prospectus, we are referring to both parts of this document combined. To the extent there is a conflict between the information contained in this prospectus supplement and the information contained in the accompanying prospectus or in any document incorporated by reference into this prospectus supplement that was filed with the SEC before the date of this prospectus supplement, you should rely on the information in this prospectus supplement.

This prospectus supplement and the accompanying prospectus relate to the offering of shares of our common stock. Before buying any of the shares of common stock offered hereby, we urge you to read carefully this prospectus supplement and the accompanying prospectus, together with the information incorporated herein by reference as described below under the heading Incorporation of Certain Information by Reference. This prospectus supplement contains information about the common stock offered hereby and may add to, update or change information in the accompanying prospectus.

You should rely only on the information contained in, or incorporated by reference into, this prospectus supplement and the accompanying prospectus. We have not, and the underwriters have not, authorized anyone to provide you with different or additional information.

We are not making offers to sell or solicitations to buy our common stock in any jurisdiction in which an offer or solicitation is not authorized or in which the person making that offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make an offer or solicitation. Persons outside the United States who come into possession of this prospectus supplement and accompanying prospectus must inform themselves about, and observe any restrictions relating to, the offering of our securities and the distribution of this prospectus supplement and accompanying prospectus outside the United States. You should assume that the information in this prospectus supplement and the accompanying prospectus is accurate only as of the date on the front of the respective document and that any information that we have incorporated by reference is accurate only as of the date of the document incorporated by reference, regardless of the time of delivery of this prospectus supplement or the accompanying prospectus or the time of any sale of a security.

This prospectus supplement and the accompanying prospectus contain summaries of certain provisions contained in some of the documents described herein, but reference is made to the actual documents for complete information. All of the summaries are qualified in their entirety by the actual documents. Copies of some of the documents referred to herein have been filed, will be filed or will be incorporated herein by reference as exhibits to the registration statement, and you may obtain copies of those documents as described below under the section entitled Incorporation of Certain Information by Reference.

We further note that the representations, warranties and covenants made by us in any agreement that is filed as an exhibit to any document that is incorporated by reference herein were made solely for the benefit of the parties to such agreement, including, in some cases, for the purpose of allocating risk among the parties to such agreements, and should not be deemed to be a representation, warranty or covenant to you. Moreover, such representations, warranties or covenants were accurate only as of the date when made. Accordingly, such representations, warranties and covenants should not be relied on as accurately representing the current state of our affairs.

This prospectus supplement and the accompanying prospectus contain and incorporate by reference market data and industry statistics and forecasts that are based on independent industry publications and other publicly-available information. Although we believe these sources are reliable, we do not guarantee the accuracy or completeness of this information and we have not independently verified this information.

Although we are not aware of any misstatements regarding the market and industry data presented in this prospectus supplement, accompanying prospectus or the documents incorporated herein by reference, these estimates involve risks and uncertainties and are subject to change based on various factors. Accordingly, investors should not place undue reliance on this information.

Unless the context otherwise requires, in this prospectus supplement the Company, we, us, our and similar names refer to Amicus Therapeutics, Inc., a Delaware corporation, and its consolidated subsidiary.

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This prospectus supplement and the accompanying prospectus and the information incorporated herein by reference include trademarks, service marks and trade names owned by us or other companies. We have registrations and/or filed applications to register certain trademarks in the U.S. and abroad, including AMICUS THERAPEUTICS and designs, AT THE FOREFRONT OF THERAPIES FOR RARE AND ORPHAN DISEASES, CHART and design, HEALING BEYOND DISEASE, OUR GOOD STUFF, ZORBLISA, and GALAFOLD and designs. All other trademarks or trade names referred to in this prospectus are the property of their respective owners.

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Prospectus Supplement Summary

This summary highlights selected information about us and this offering and does not contain all of the information that you should consider in making your investment decision. You should carefully read this entire prospectus supplement and the accompanying prospectus, including the risks and uncertainties discussed under the heading Risk Factors beginning on page S-6 of this prospectus supplement, and the information incorporated by reference in this prospectus supplement, including our financial statements, before making an investment decision. If you invest in our securities, you are assuming a high degree of risk.

Our Company

Overview

We are a global patient-centric biotechnology company engaged in the discovery, development and commercialization of a diverse set of novel treatments for patients living with rare metabolic diseases. The cornerstone of the Amicus portfolio is migalastat HCl (which we may refer to as migalastat), an oral precision medicine for people living with Fabry disease who have amenable genetic mutations. Migalastat is currently approved under the trade name Galafold in the European Union (EU), with additional approvals granted and pending in several geographies. For Fabry patients with non-amenable genetic mutations, a novel proprietary enzyme replacement therapy (ERT) co-formulated with migalastat HCl is currently in late preclinical development.

We believe our lead development candidate and future value driver is ATB200/AT2221, a novel, late-stage, potential best-in-class treatment paradigm for Pompe disease. ATB200/AT2221 leverages our Chaperone-Advanced Replacement Therapy (CHART) platform technology to develop novel ERT products for Pompe disease, Fabry disease, and potentially other lysosomal storage disorders (LSDs). We are also investigating preclinical and discovery programs in other rare diseases including cyclin-dependent kinase-like 5 (CDKL5) deficiency. We believe that our platform technologies and our product pipeline uniquely position us and drive our commitment to advancing and expanding a robust pipeline of cutting-edge, first- or best-in-class medicines for rare metabolic diseases.

Our Strategy

Our strategy is to create, manufacture, test and deliver the highest quality medicines for people living with rare metabolic diseases through internally developed and in-licensed products and product candidates that have the potential to obsolete current treatments, provide significant benefits to patients, and be first- or best-in-class. In addition to our lead programs in Fabry and Pompe, we intend to leverage our global capabilities to develop and expand our robust pipeline, with the goal of entering the clinic with one or more programs in 2019. Since the beginning of our last fiscal year, we made significant progress toward fulfilling our vision to build a leading global biotechnology company focused on rare metabolic diseases. Highlights of our programs include:

- *Commercial success.* Exceeded Target 300 goal with more than 310 people treated with reimbursed Galafold

(migalastat) oral precision medicine for Fabry disease at year-end 2017. Full-year 2017 Galafold revenue totaled approximately $36 million.

- *Regulatory progress.* Completed global regulatory submissions for migalastat in Japan (J-NDA), the U.S. (NDA), and other key geographies.

- *Pompe clinical study.* Established important clinical proof-of-concept for novel, highly differentiated Pompe treatment regimen ATB200/AT2221 on safety, functional outcomes and key disease biomarkers.

- *Manufacturing.* Successfully scaled manufacture of Pompe biologic engineering batches at commercial scale (1,000L) with capacity plans to ensure that entire Pompe population can be served as quickly as possible.

- *Patient-centricity*. We continue to focus on improving the lives of patients living with rare and devastating diseases, which has always been a critical component of the values of our corporate culture. The needs of patients in the rare disease community are at the center of our innovative science, our commercial organization, and our clinical programs.

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Our Commercial Product and Product Candidates

Migalastat for Fabry Disease

Patients with the fatal, X-linked Fabry disease have an inherited deficiency of the alpha-Gal A enzyme that would normally degrade the lipid substrate globotriaosylceramide in the lysosome. Genetic mutations that cause changes in the amino acid sequence of alpha-Gal A result in an unstable enzyme that does not efficiently fold into its correct three-dimensional shape and cannot be trafficked properly in the cell, even if it has the potential for biological activity. Migalastat is an oral small molecule pharmacological chaperone that is designed to bind to and stabilize a patient s own endogenous target protein. This is considered a precision medicine because migalastat targets only patients with amenable mutations.

Migalastat was approved for use in the EU in May 2016 under the brand name Galafold as a first-line therapy for long-term treatment of adults and adolescents aged 16 years and older with a confirmed diagnosis of Fabry disease and who have an amenable mutation. The approved label includes 348 Fabry-causing mutations, which represent up to half of all patients with Fabry disease.

We have launched Galafold in several European countries such as France, Germany, Italy, Switzerland and the UK on a commercial basis, as well as in select other countries through reimbursed EAPs. We have been granted pricing and reimbursement in 17 countries. We expect to continue to launch Galafold in additional countries during 2018. Outside of the EU, Galafold has been approved in Israel, Canada, Australia, South Korea, and Switzerland, and we have regulatory approvals for Galafold pending in additional territories.

Key regulatory submissions in 2017 included our new drug applications (NDAs) in Japan and the United States. We submitted an NDA to the FDA for migalastat for Fabry disease in the fourth quarter of 2017, following a series of discussions with and written communication received from the FDA which informed us that we may submit an NDA for migalastat. The NDA was based on existing data. An additional Phase 3 study previously requested by the FDA to assess GI symptoms was no longer required before an NDA submission. The FDA has accepted the NDA for filing under priority review, and the Prescription Drug User Fee Act goal date for the FDA decision is August 13, 2018.

As an orally administered monotherapy, migalastat is designed to bind to and stabilize an endogenous alpha-galactosidase A (alpha-Gal A) enzyme in those patients with genetic mutations identified as amenable in a GLP cell-based amenability assay. Migalastat is an oral precision medicine intended to treat Fabry disease in patients who have amenable genetic mutations, and at this time, it is not intended for concomitant use with ERT. For patients with non-amenable mutations, we are developing the use of migalastat in combination with a novel Fabry ERT.

We have completed two Phase 3 global registration studies of migalastat monotherapy. We have reported Phase 3 data in both treatment-naïve patients (Study 011) and ERT-switch patients (Study 012). Results from these studies have shown that treatment with migalastat results in reductions in disease substrate, stability of kidney function, reductions in cardiac mass, and improvement in gastrointestinal symptoms in patients with amenable mutations in a validated GLP amenability assay.

We are committed to continued innovation for all people living with Fabry disease. For people living with Fabry disease who have non-amenable mutations, which are not suitable for migalastat as monotherapy, our strategy is to advance next-generation therapies such as our proprietary Fabry-ERT co-formulated with migalastat.

We are leveraging our CHART technology and advanced biologics capabilities to move forward with a proprietary Fabry ERT for co-formulation with migalastat. Master cell banking has been completed, process development work has commenced, and initial preclinical studies have been completed to advance this novel co-formulation toward the clinic in 2019.

Novel ERT for Pompe Disease

We are leveraging our biologics capabilities and CHART platform to develop a novel treatment paradigm for Pompe disease. This ERT consists of a uniquely engineered rhGAA enzyme, ATB200, with an optimized carbohydrate structure to enhance uptake, administered in combination with a pharmacological chaperone AT2221 to improve activity and stability. We acquired ATB200 as well as our enzyme targeting technology through our purchase of Callidus Biopharma. The novel combination has been patented for method of use and ATB200, following significant manufacturing scale-up, is our first biologic to enter clinical development.

The small molecule pharmacological chaperone, AT2221, is not an active ingredient that contributes directly to GAA substrate reduction but instead acts to stabilize ATB200. AT2221 binds and stabilizes ATB200 to improve the uptake of active enzyme in key disease-relevant tissues, resulting in increased clearance of accumulated substrate, glycogen.

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In preclinical studies, ATB200 demonstrated greater tissue enzyme levels and further substrate reduction compared to the currently approved ERT for Pompe disease (alglucosidase alfa), which were further improved with the addition of a chaperone. In 2013, we completed a Phase 2 safety and pharmacokinetics study (Study 010) that investigated single, ascending oral doses of a pharmacological chaperone co-administered with alglucosidase alfa or rhGAA enzyme marketed by Genzyme, in patients with Pompe disease. Each patient received one infusion of ERT alone, and then a single oral dose of the pharmacological chaperone just prior to the next ERT infusion. Results from this study showed an increase in acid alpha glucosidase (GAA) enzyme activity in plasma and muscle when co-administered compared to ERT alone.

Throughout 2017, we have reported a cascade of data from a Phase 1/2 clinical study, ATB200-02, to investigate our novel Pompe treatment paradigm in Pompe patients. The primary objective is to evaluate the safety, tolerability, pharmacokinetics (PK), and pharmacodynamics (PD) of ATB200/AT2221 for an 18-week primary treatment period followed by a long-term extension. The three patient cohorts, enrolling up to ~20 total patients across all cohorts, are ambulatory ERT-switch patients (Cohort 1), non-ambulatory ERT-switch patients (Cohort 2), and ERT-naïve patients (Cohort 3).

As of our interim analysis reported in October 2017, patients who completed six months of treatment with ATB200/AT2221 showed improvements in the 6MWT distance and other measures of motor function, stability or increases in FVC, and further reductions in biomarkers of muscle damage and disease substrate, with consistent results reported in initial patients who completed nine months of treatment.

On February 8, 2018 we reported additional data from our clinical study ATB200-02 at the 14th Annual World*Symposium*. Highlights included safety and tolerability data in all 20 patients (maximum of 20+ months of treatment) as well as PD data (muscle damage biomarker and disease substrate biomarker) for all 20 patients (15 ERT-switch patients and 5 ERT-naïve patients). To date, adverse events have been generally mild and transient. ATB200/AT2221 has resulted in a low rate of infusion-associated reactions (IARs) following 550+ infusions (three events of IARs in two patients; <1% of all 550+ infusions with an IAR). The clinical pharmacokinetic profile has been consistent with previously reported preclinical data. Treatment with ATB200/AT2221 resulted in persistent and durable reductions in creatine kinase, or CK and urine hexose tetrasaccharide, or Hex4 across all patient cohorts out to month 12.

As of the last interim analysis in February 2018, data on functional outcomes are available for 19 of the 20 patients enrolled (one patient dropped out of the extension study due to travel burden and family considerations). Muscle function improved in 16 of 19 patients at month 9. Muscle function improved in 10 out of 10 patients with available data at month 12. Mean six-minute walk test (6MWT) improved in both ERT-naïve and ERT-switch patients with continued benefit observed out to month 12. All 5 ERT-naïve patients showed increases in 6MWT distance at all time points out to month 12. The ERT-naïve patients showed mean increases of 41.8 meters at month 6 (n=5), 63.5 meters at month 9 (n=5), and 86.8 meters at month 12 (n=2). Of the 10 ERT-switch patients, 8 patients showed increases in 6MWT distance and two patients showed decreases at month 9. All eight of the ERT-switch patients with available data at month 12 showed increases in 6MWT distance. The ERT-switch patients showed mean increases of 23.9 meters at month 6 (n=10), 24.5 meters at month 9 (n=10), and 57.4 meters at month 12 (n=8). Other motor function tests generally showed mean improvements consistent with 6MWT distance. Three of the four non-ambulatory ERT-switch patients showed improvements in upper extremity strength (which includes elbow and shoulder) from baseline to month 9, as measured by quantitative muscle testing (QMT) and manual muscle testing (MMT). Pulmonary function improved in ERT-naïve patients and was generally stable in ERT-switch patients. In ERT-naïve patients, mean absolute change in forced vital capacity (FVC) was +4.2% at month 6 (n=5), +6.2% at month 9 (n=5), and +6.0% at month 12 (n=2). In ERT-switch patients mean absolute change in FVC was -1.3% at month 6 (n=9), -1.7% at month 9 (n=9), and -3.1% at month 12 (n=7). Overall, other pulmonary tests of maximal inspiratory pressure (MIP), a measure of inhalation, and maximal expiratory pressure (MEP), a measure of exhalation, were stable or increased in both ERT-naïve and ERT-switch patients.

CDKL5

We are researching a potential first-in-class protein replacement therapy approach for CDKL5 deficiency in preclinical studies. CDKL5 (cyclin-dependent kinase-like 5) is a gene on the X-chromosome encoding the CDKL5 protein that regulates the expression of several essential proteins for normal brain development. Genetic mutations in the CDKL5 gene result in CDKL5 protein deficiency and the disorder manifests clinically as persistent seizures starting in infancy, followed by severe impairment in neurological development. Most children affected by CDKL5 deficiency cannot walk or care for themselves and may also suffer from scoliosis, visual impairment, sensory issues, and gastrointestinal complications.

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Strategic Alliances and Arrangements

We will continue to evaluate other business development opportunities as appropriate that build stockholder value and provide us with access to the financial, technical, clinical, and commercial resources necessary to develop and market pharmacological chaperone therapeutics, ERTs, gene therapies and other technologies or products. We are exploring potential collaborations, alliances, and other business development opportunities on a regular basis. These opportunities may include the acquisition of preclinical-stage, clinical-stage, or marketed products so long as such transactions are consistent with our strategic plan to develop and provide therapies to patients living with rare and orphan diseases, and support our continued transformation from a development-stage company into a commercial biotechnology company.

Cash Position

We had cash and cash equivalents of approximately $427 million as of September 30, 2017. We estimate that we had cash, cash equivalents and investments of approximately $359 million as of December 31, 2017. Our estimate of our cash, cash equivalents and investments as of December 31, 2017 is an estimate prepared by management in good faith based upon internal reporting and expectations as of and for the three months ended December 31, 2017. This estimate is preliminary, and unaudited, and may be revised as a result of management s further review of our results. We and our auditors have not completed the normal annual audit procedures as of and for the year ended December 31, 2017, and there can be no assurance that our final results for this annual period will not differ from this estimate.

Corporate Information

We were incorporated under the laws of the State of Delaware on February 4, 2002. Our principal executive offices are located at 1 Cedar Brook Drive, Cranbury, NJ 08512 and our telephone number is (609) 662-2000. Our website address is *www.amicusrx.com*. We make available free of charge on our website our annual, quarterly and current reports, including amendments to such reports, as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the SEC. Information contained on our website is not incorporated by reference into this prospectus supplement or the accompanying prospectus, and you should not consider information contained on our website as part of this prospectus supplement or the accompanying prospectus.

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The Offering

Common stock offered by us pursuant to this prospectus supplement	Shares having an aggregate offering price of up to $250,000,000.
Option to purchase additional shares	We have granted the underwriters an option for a period of up to 30 days from the date of this prospectus supplement to purchase up to an additional $37,500,000 of our common stock at the public offering price less the underwriting discounts and commissions.
Common stock to be outstanding immediately after this offering	shares (shares assuming the underwriters exercise in full their option to purchase additional shares).
Use of Proceeds	We currently intend to use the net proceeds of this offering for investment in the U.S. and international commercial infrastructure for migalastat HCl, investment in manufacturing capabilities for ATB200, the continued clinical development of our product candidates, research and development expenditures, clinical and preclinical trial expenditures, commercialization expenditures and for other general corporate purposes, which may include working capital, capital expenditures, the funding of in-licensing agreements for product candidates, additional technologies or other forms of intellectual property, the acquisition of assets or businesses that are complementary to our existing business and general and administrative expenses. See Use of Proceeds on page S-10 of this prospectus supplement.
Risk Factors	An investment in our common stock involves a high degree of risk. See the information contained in or incorporated by reference under Risk Factors on page S-6 of this prospectus supplement, page 3 of the accompanying prospectus, page 34 of our Annual Report on Form 10-K for the year ended December 31, 2016, as amended, and under similar headings in the other documents that are incorporated by reference herein, as well as the other information included in or incorporated by reference in this prospectus supplement and the accompanying prospectus.
Market for the common stock	Our common stock is quoted and traded on The NASDAQ Global Market under the symbol FOLD.

The number of shares of our common stock to be outstanding immediately after this offering is based on 165,491,141 shares of common stock outstanding as of September 30, 2017. Unless specifically stated otherwise, the information in this prospectus supplement is as of September 30, 2017 and excludes:

- 16,212,065 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2017, at a weighted average exercise price of $7.13 per share, of which options to purchase 8,679,230 shares of our common stock were then exercisable;

- 3,110,000 shares of our common stock issuable upon the exercise of warrants to purchase common stock, at a weighted-average exercise price of $7.59 per share;

- 2,690,314 shares of our common stock issuable upon the vesting of restricted stock units outstanding as of September 30, 2017;

- an aggregate of 7,980,967 shares of our common stock reserved for future grants of stock options (or other similar equity instruments) under the Amended and Restated Equity Incentive Plan;

- 40,849,675 shares of common stock, which represents the maximum number of shares of common stock issuable upon conversion of our 3.00% Convertible Senior Notes due 2023; and

- 1,498,649 shares of our common stock issued since September 30, 2017 upon the exercise of outstanding stock options or vesting of restricted stock units.

Except as otherwise indicated, all information in this prospectus supplement assumes no exercise by the underwriters of their option to purchase additional shares of common stock.

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Risk Factors

Investing in our common stock involves a high degree of risk. Before investing in our common stock, you should carefully consider the risks described below, together with all of the other information contained in this prospectus supplement and the accompanying prospectus and incorporated by reference herein and therein, including from our most recent Annual Report on Form 10-K, as amended, and subsequent Quarterly Reports on Form 10-Q. Some of these factors relate principally to our business and the industry in which we operate. Other factors relate principally to your investment in our securities. The risks and uncertainties described therein and below are not the only risks facing us. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also materially and adversely affect our business and operations.

If any of the matters included in the following risks were to occur, our business, financial condition, results of operations, cash flows or prospects could be materially and adversely affected. In such case, you may lose all or part of your investment.

Risks related to this offering

The exercise of options and warrants and other issuances of shares of common stock or securities convertible into or exercisable for shares of common stock following this offering will dilute your ownership interests and may adversely affect the future market price of our common stock.

Sales of our common stock in the public market, either by us or by our current stockholders, or the perception that these sales could occur, could cause a decline in the market price of our securities. All of the shares of our common stock held by those of our current stockholders who have not entered into lock-up agreements with the underwriters may be immediately eligible for resale in the open market either in compliance with an exemption under Rule 144 promulgated under the Securities Act of 1933, as amended (the Securities Act), or pursuant to an effective resale registration statement that we have previously filed with the SEC. Such sales, along with any other market transactions, could adversely affect the market price of our common stock.

In addition, as of September 30, 2017, there were outstanding options to purchase an aggregate of 16,212,065 shares of our common stock at a weighted average exercise price of $7.13 per share, of which options to purchase 8,679,230 shares of our common stock were then exercisable and 2,690,314 shares of our common stock issuable upon the vesting of restricted stock units outstanding as of September 30, 2017. As of September 30, 2017, there were warrants outstanding to purchase 3,110,000 shares of our common stock, with a weighted-average exercise price of $7.59 per share, and a maximum of 40,849,675 shares of common stock issuable upon conversion of our 3.00% Convertible Senior Notes due 2023. The exercise of options and warrants or conversion of notes at prices below the market price of our common stock could adversely affect the price of shares of our common stock. Additional dilution may result from the issuance of shares of our common stock in connection with collaborations or manufacturing arrangements or in connection with other financing efforts.

Any issuance of our common stock that is not made solely to then-existing stockholders proportionate to their interests, such as in the case of a stock dividend or stock split, will result in dilution to each stockholder by reducing his, her or its percentage ownership of the total outstanding shares. Moreover, if we issue options or warrants to purchase our common stock or notes convertible into our common stock in the future and those options or warrants are exercised or convertible notes are converted, you may experience further dilution. Holders of shares of our

common stock have no preemptive rights that entitle them to purchase their pro rata share of any offering of shares of any class or series.

You will suffer immediate and substantial dilution in the securities you purchase.

The public offering price of $ per share of our common stock is substantially higher than the pro forma net tangible book value per share of our outstanding shares immediately after this offering. As a result, investors purchasing securities in this offering will incur immediate and substantial dilution of approximately $ per share of common stock, or approximately % of the public offering price. Accordingly, existing stockholders will benefit disproportionately from this offering. If we raise additional capital through the sale of equity, including convertible securities, or if our convertible securities are exchanged for equity, your percentage of ownership will be diluted. You may also experience additional dilution if stock options or warrants to purchase our shares are exercised or convertible notes are converted at less than the offering price. As of September 30, 2017, we had reserved 7,980,967 shares of our common stock for issuance under our Amended and Restated Equity Incentive Plan, 40,849,675 shares of our common stock for issuance upon conversion of our 3.00% Convertible Senior Notes due 2023 and 3,110,000 shares of our common stock for issuance upon exercise of outstanding warrants.

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We have broad discretion in the use of the net proceeds of this offering and, despite our efforts, we may use the proceeds in a manner that does not increase the value of your investment.

We currently anticipate that the net proceeds from the sale of our common stock will be used for investment in the United States and international commercial infrastructure for migalastat HCl, manufacturing for ATB200, the continued clinical development of our product candidates, research and development expenditures, clinical and preclinical trial expenditures, commercialization expenditures and for other general corporate purposes, which may include working capital, capital expenditures, the funding of in-licensing agreements for product candidates, additional technologies or other forms of intellectual property, the acquisition of assets or businesses that are complementary to our existing business and general and administrative expenses. However, we have not determined the specific allocation of the net proceeds among these potential uses. Our management will have broad discretion over the use and investment of the net proceeds of this offering, and, accordingly, investors in this offering will need to rely upon the judgment of our management with respect to the use of proceeds, with only limited information concerning our specific intentions. These proceeds could be applied in ways that do not improve our operating results or increase the value of your investment. Please see the section entitled Use of Proceeds on page S-10 of this prospectus supplement for further information.

Risks Related to our Business

Our business currently depends on sales of migalastat HCl.

We rely upon sales of our lead product, migalastat HCl, for the treatment of Fabry disease, which is the only product for which we have received commercial approval. We began the commercial launch of migalastat HCl in the EU in May 2016 and continue to seek commercial approval in multiple jurisdictions, including the United States and Japan. Accordingly, we have only generated limited revenue from product sales. Any adverse market event with respect to migalastat HCl, including failure to obtain sufficient market acceptance, could have a material adverse effect on our business, financial condition and results of operations. If our sales of migalastat HCl were to decrease, or such sales were substantially or completely displaced in the market, if we are unable to achieve sufficient market acceptance of migalastat HCl by physicians, patients, third party payors and others in the medical community, or if we fail to receive commercial approval in any additional jurisdictions, it could have a material adverse effect on our business, financial condition and results of operations. In addition, if migalastat HCl or similar products from our competitors were to become the subject of litigation and/or an adverse governmental action requiring us or such competitors, as applicable, to cease sales of migalastat HCl, such an event could have a material adverse effect on our business, financial condition and results of operations.

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Special Note Regarding Forward-Looking Statements

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein contain forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management are forward-looking statements. The words anticipate, believe, estimate, expect, potential, intend, may, plan, predict, project, w and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein include, among other things, statements about:

- our expectations related to the use of proceeds, if any, from this offering;
- the progress and results of our clinical trials of our drug candidates;
- the cost of manufacturing drug supply for our clinical and preclinical studies, including the significant cost of new Fabry ERT cell line development and manufacturing as well as the cost of manufacturing Pompe ERT;
- our ability to manufacture sufficient quantities of ATB200 for clinical and commercial purposes;
- the scope, progress, results and costs of preclinical development, laboratory testing and clinical trials for our product candidates including those testing the use of pharmacological chaperones co-formulated and co-administered with ERT and for the treatment of LSDs;
- the future results of on-going preclinical research and subsequent clinical trials for CDKL5, including our ability to obtain regulatory approvals and commercialize CDKL5 and obtain market acceptance for CDKL5;
- the costs, timing and outcome of regulatory review of our product candidates, including in the United States and Japan;

- the number and development requirements of other product candidates that we pursue;

- the costs of commercialization activities, including product marketing, sales and distribution;

- the emergence of competing technologies and other adverse market developments;

- our ability to meet revenue and cash spend guidance;

- our ability to obtain reimbursement for migalastat HCI;

- our ability to obtain market acceptance of migalastat HCl in the EU;

- the costs of preparing, filing and prosecuting patent applications and maintaining, enforcing and defending intellectual property-related claims;

- the extent to which we acquire or invest in businesses, products and technologies;

- our ability to successfully integrate our acquired products and technologies into our business, including the possibility that the expected benefits of the transactions will not be fully realized by us or may take longer to realize than expected; and

- our ability to establish collaborations and obtain milestone, royalty or other payments from any such collaborators.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the

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cautionary statements included in this prospectus supplement, particularly under Risk Factors that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, collaborations or investments we may make.

You should read this prospectus supplement, the accompanying prospectus and the documents that we incorporate by reference herein and therein completely and with the understanding that our actual future results may be materially different from what we expect.

Except as required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. You should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. Before deciding to purchase our securities, you should carefully consider the risk factors discussed and incorporated by reference in this prospectus supplement and the accompanying prospectus and in the registration statement of which this prospectus supplement and the accompanying prospectus form a part.

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Use of Proceeds

We expect to receive net proceeds of approximately $ from the sale of shares of our common stock in this offering, or $ if the underwriters exercise in full their option to purchase additional shares of common stock, based on a public offering price of $ per share after deducting the estimated expenses related to this offering and the underwriting discounts and commissions payable by us.

We currently intend to use the net proceeds from the sale of the shares of common stock offered by us hereunder for, without limitation:

- investment in the U.S. and international commercial infrastructure for migalastat HCl;
- investment in manufacturing capabilities for ATB200;
- the continued clinical development of our product candidates;
- research and development expenditures;
- clinical and preclinical trial expenditures;
- commercialization expenditures; and
- for other general corporate purposes, which may include working capital, capital expenditures, the funding of in-licensing agreements for product candidates, additional technologies or other forms of intellectual property, the acquisition of assets or businesses that are complementary to our existing business and general and administrative expenses.

The amounts and timing of our use of the net proceeds from this offering will depend on a number of factors, such as the timing and progress of our research and development efforts, the timing and progress of any partnering and commercialization efforts, technological advances and the competitive environment for our product candidates. As of the date of this prospectus supplement, we cannot specify with certainty all of the particular uses for the net proceeds to us from the sale of the shares of common stock offered by us hereunder. Accordingly, our management will have broad discretion in the timing and application of these proceeds. Pending application of the net proceeds as described above, we intend to temporarily invest the proceeds in short-term, interest-bearing instruments.

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Dilution

Purchasers of common stock in this offering will experience immediate dilution to the extent of the difference between the public offering price per share of common stock, and the net tangible book value per share of common stock immediately after this offering.

Our net tangible book value as of September 30, 2017 was approximately $189 million, or $1.14 per share of common stock. Net tangible book value per share is determined by dividing total tangible assets less total liabilities by the aggregate number of shares of common stock outstanding as of September 30, 2017. After giving effect to the sale by us of shares of common stock at the public offering price of $ per share of common stock and after deducting the underwriting discounts and commissions and estimated offering expenses, our net tangible book value as of September 30, 2017 would have been approximately $ million, or $ per share of common stock. This represents an immediate increase in net tangible book value of $ per share to our existing stockholders and an immediate dilution of $ per share of common stock issued to the new investors purchasing securities in this offering.

The following table illustrates this per share dilution:

Public offering price per share of common stock		$
Net tangible book value per share as of September 30, 2017	$ 1.14	
Increase per share attributable to new investors	$	
Net tangible book value per share after this offering		$
Dilution per share to new investors		$

If the underwriters exercise their option in full to purchase additional shares of common stock in this offering at the public offering price of $ per share, the net tangible book value per share after the offering would be $ per share, the increase in the net tangible book value per share to existing stockholders would be $ per share and the dilution to new investors purchasing securities in this offering would be $ per share.

The number of shares of our common stock to be outstanding immediately after this offering is based on 165,491,141 shares of common stock outstanding as of September 30, 2017. Unless specifically stated otherwise, the information in this prospectus supplement is as of September 30, 2017 and excludes:

- 16,212,065 shares of our common stock issuable upon the exercise of stock options outstanding as of September 30, 2017, at a weighted average exercise price of $7.13 per share, of which options to purchase 8,679,230 shares of our common stock were then exercisable;
- 3,110,000 shares of our common stock issuable upon the exercise of warrants to purchase common stock, at a weighted-average exercise price of $7.59 per share;
- 2,690,314 shares of our common stock issuable upon the vesting of restricted stock units outstanding as of September 30, 2017;

- an aggregate of 7,980,967 shares of our common stock reserved for future grants of stock options (or other similar equity instruments) under the Amended and Restated Equity Incentive Plan;

- 40,849,675 shares of common stock, which represents the maximum number of shares of common stock issuable upon conversion of our 3.00% Convertible Senior Notes due 2023; and

- 1,498,649 shares of our common stock issued since September 30, 2017 upon the exercise of outstanding stock options or vesting of restricted stock units.

To the extent that options or warrants are exercised, new options are issued under our equity incentive plans, or we issue additional shares of common stock in the future, there may 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.

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Underwriting

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

Name	Number of Shares
J.P. Morgan Securities LLC	
Goldman Sachs & Co. LLC	
Total	

The underwriters are committed to purchase all the common shares offered by us if they purchase any shares. The underwriting agreement also provides that if an underwriter defaults, the purchase commitments of non-defaulting underwriters may also be increased or the offering may be terminated. The offering of the shares by the underwriters is subject to receipt and acceptance of orders and subject to the underwriters right to reject any order in whole or in part.

The underwriters propose to offer the common shares directly to the public at the initial public offering price set forth on the cover page of this prospectus supplement and to certain dealers at that price less a concession not in excess of $ per share. After the initial public offering of the shares, the offering price and other selling terms may be changed by the underwriters.

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

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

	Without exercise	With full exercise
Per Share	$	$
Total	$	$

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

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

We have agreed that we will not (i) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase or otherwise dispose of, directly or indirectly, or file with the SEC a registration statement under the Securities Act relating to, any shares of our common stock or securities convertible into or exchangeable or exercisable for any shares of our common stock, or publicly disclose the intention to make any offer, sale, pledge, disposition or filing, or (ii) enter into any swap or other arrangement that transfers all or a portion of the economic consequences associated with the ownership of any shares of common stock or any such other securities (regardless of whether any of these transactions are to be settled by the delivery of shares of common stock

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or such other securities, in cash or otherwise), in each case without the prior written consent of J.P. Morgan Securities LLC and Goldman Sachs & Co. LLC for a period of 60 days after the date of this prospectus supplement, other than (A) the shares of our common stock to be sold hereunder; (B) any shares of our common stock issued upon the exercise or conversion of any options, warrants, rights or convertible securities granted under our existing stock-based compensation plans; or (C) (x) the aggregate number of securities issued in connection with any acquisition or strategic investment (including any joint venture, collaboration, partnership, alliance or other strategic or commercial relationship) existing on or following the date of the underwriting agreement; provided, however, that in the case of this clause (C), (x) the aggregate number of our securities issued does not exceed 10% of the number of shares of our common stock outstanding immediately after the issuance and sale of the shares and (y) any recipient of such securities agrees to be bound in writing by the restrictions on the resale of securities consistent with the lock-up letters described below for the lock-up period.

Our directors and executive officers have entered into lock-up agreements with the underwriters prior to the commencement of this offering pursuant to which each of these persons or entities, with limited exceptions, including permitting sales of shares of common stock pursuant to existing trading plans established pursuant to Rule 10b5-1 of the Exchange Act and the establishment of trading plans under Rule 10b5-1 of the Exchange Act (provided that no sales are made thereunder during the lock-up period), for a period of 60 days after the date of this prospectus supplement, may not, without the prior written consent of J.P. Morgan Securities LLC and Goldman Sachs & Co. LLC, (1) offer, pledge, announce the intention to sell, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for our common stock (including, without limitation, common stock or such other securities which may be deemed to be beneficially owned by such directors, executive officers, managers and members in accordance with the rules and regulations of the SEC and securities which may be issued upon exercise of a stock option or warrant) or (2) enter into any swap or other agreement that transfers, in whole or in part, any of the economic consequences of ownership of the common stock or such other securities, whether any such transaction described in clause (1) or (2) above is to be settled by delivery of common stock or such other securities, in cash or otherwise, or (3) make any demand for or exercise any right with respect to the registration of any shares of our common stock or any security convertible into or exercisable or exchangeable for our common stock.

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

Our common stock is listed on The NASDAQ Global Market under the symbol FOLD .

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

The underwriters have advised us that, pursuant to Regulation M of the Securities Act of 1933, they may also engage in other activities that stabilize, maintain or otherwise affect the price of the common stock, including the imposition of penalty bids. This means that if the

representatives of the underwriters purchase common stock in the open market in stabilizing transactions or to cover short sales, the representatives can require the underwriters that sold those shares as part of this offering to repay the underwriting discount received by them.

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

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

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

This document is only being distributed to and is only directed at (i) persons who are outside the United Kingdom or (ii) to investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the Order) or (iii) high net worth entities, and other persons to whom it may lawfully be communicated, falling with Article 49(2)(a) to (d) of the Order (all such persons together being referred to as relevant persons). The securities are only available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such securities will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this document or any of its contents.

Notice to Prospective Investors in the European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a Relevant Member State) an offer to the public of our common shares may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of our common shares may be made at any time under the following exemptions under the Prospectus Directive:

(a) to any legal entity which is a qualified investor as defined in the Prospectus Directive;

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

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of shares of our common stock shall result in a requirement for the publication by us or any underwriter of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an offer to the public in relation to our common shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and our common shares to be offered so as to enable an investor to decide to purchase our common shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression Prospectus Directive means Directive 2003/71/EC (as amended), including by Directive 2010/73/EU, and includes any relevant implementing measure in the Relevant Member State.

This European Economic Area selling restriction is in addition to any other selling restrictions set out below.

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

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Notice to Prospective Investors in Hong Kong, Singapore and Japan

The shares may not be offered or sold 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 Ordinance (Cap.32, Laws of Hong Kong), or (ii) to professional investors within the meaning of the Securities and Futures Ordinance (Cap.571, Laws of Hong Kong) and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a prospectus within the meaning of the Companies Ordinance (Cap.32, Laws of Hong Kong), 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 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 within the meaning of the Securities and Futures Ordinance (Cap. 571, Laws of Hong Kong) and any rules made thereunder.

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 under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the SFA), (ii) to a relevant person, or any person pursuant to Section 275(1A), 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.

Where the shares are subscribed or purchased under Section 275 by a relevant person which is: (a) a corporation (which is not an accredited investor) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an accredited investor, shares, debentures and units of shares and debentures of that corporation or the beneficiaries rights and interest in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the shares under Section 275 except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person, or any person pursuant to Section 275(1A), and in accordance with the conditions, specified in Section 275 of the SFA; (2) where no consideration is given for the transfer; or (3) by operation of law.

The securities have not been and will not be registered under the Financial Instruments and Exchange Law of Japan (the Financial Instruments and Exchange Law) and each underwriter has agreed that it will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Law and any other applicable laws, regulations and ministerial guidelines of Japan.

Notice to Prospective Investors in Canada

The shares offered in this prospectus supplement may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus supplement (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser s province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser s province or territory for particulars of these rights or consult with a legal advisor. Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

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Legal Matters

The validity of the securities we are offering will be passed upon by Pepper Hamilton LLP, Philadelphia, Pennsylvania. In connection with this offering, Dechert LLP, Philadelphia, Pennsylvania advised the underwriters with respect to certain U.S. securities law matters.

Experts

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2016, as amended, and the effectiveness of our internal control over financial reporting as of December 31, 2016, as set forth in their reports, which are incorporated by reference in this prospectus supplement and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP s reports, given on their authority as experts in accounting and auditing.

Where You Can Find More Information

This prospectus supplement and the accompanying prospectus are part of the registration statement on Form S-3 we filed with the SEC under the Securities Act and do not contain all the information set forth in the registration statement. Whenever a reference is made in this prospectus supplement and the accompanying prospectus to any of our contracts, agreements or other documents, the reference may not be complete and you should refer to the exhibits that are a part of the registration statement or the exhibits to the reports or other documents incorporated herein by reference for a copy of such contract, agreement or other document.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, over the Internet at the SEC s website at www.sec.gov. You may also read and copy any document we file with the SEC at its Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room.

We also maintain a website at amicusrx.com, at which you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information contained on, or that can be accessed through, our website is not incorporated by reference into this prospectus supplement, and you should not consider such information contained on, or accessed through, our website as part of this prospectus supplement.

In addition, you may request copies of these filings at no cost, by writing or telephoning us at the following address or telephone number:

Office of the Corporate Secretary
Amicus Therapeutics, Inc.
1 Cedar Brook Drive
Cranbury, NJ 08512
(609) 662-2000

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Incorporation of Certain Information by Reference

The SEC allows us to incorporate by reference information into this prospectus supplement. This means that we can disclose important information to you by referring you to other documents we have filed separately with the SEC, without actually including the specific information in this prospectus supplement. The information incorporated by reference is considered to be part of this prospectus supplement, and information that we file later with the SEC (and that is deemed to be filed with the SEC) will automatically update, and may supersede, information in this prospectus supplement.

- Our Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on March 1, 2017 and amended on March 3, 2017;

- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2017, June 30, 2017 and September 30, 2017 filed with the SEC on May 9, 2017, August, 7, 2017 and November 8, 2017, respectively;

- Our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 28, 2017, to the extent incorporated by reference into our Annual Report on Form 10-K for the year ended December 31, 2016, as amended;

- Our Current Reports on Form 8-K filed with the SEC on February 9, 2017, February 15, 2017, February 16, 2017, March 8, 2017, April 3, 2017, April 28, 2017 (Film No. 17793087), May 15, 2017, May 17, 2017, May 19, 2017, May 22, 2017, May 31, 2017, June 14, 2017, June 28, 2017, July 11, 2017, July 13, 2017, September 6, 2017, September 13, 2017, September 19, 2017, September 21, 2017, October 4, 2017, December 14, 2017, December 28, 2017, January 8, 2018, February 7, 2018 and February 12, 2018; and

- The description of our common stock contained in our registration statement on Form 8-A (File No. 001-33497) filed on May 23, 2007, under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference any future filings (except as specifically enumerated above, other than any filings or portions of such reports that are not deemed filed under the Exchange Act in accordance with the Exchange Act and applicable SEC rules, including current reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits filed on such form that are related to such items unless such Form 8-K expressly provides to the contrary) made with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, including those made after the date of the initial filing of the registration statement of which this prospectus supplement forms a part, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus supplement and will become a part of this prospectus supplement from the date that such documents are filed with the SEC. Information in such future filings updates and supplements the information provided in this prospectus supplement. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

To obtain copies of these filings, see Where You Can Find More Information on page S-16 of this prospectus supplement.

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PROSPECTUS

AMICUS THERAPEUTICS, INC.

Common Stock

Preferred Stock

Warrants

Debt Securities

Units

Subscription Rights

We may offer to the public from time to time in one or more series or issuances:

- shares of our common stock;
- shares of preferred stock;
- warrants to purchase shares of our common stock, preferred stock and/or debt securities;
- debt securities consisting of debentures, notes or other evidences of indebtedness;
- units consisting of a combination of the foregoing securities;
- subscription rights to purchase any of the foregoing securities; or

- any combination of these securities.

This prospectus provides a general description of the securities that we may offer. Each time that we offer securities under this prospectus, we will provide the specific terms of the securities offered, including the public offering price, in a supplement to this prospectus. Any prospectus supplement may add to, update or change information contained in this prospectus. You should read this prospectus and any applicable prospectus supplement together with additional information described under the heading Where You Can Find More Information before you make your investment decision.

The securities may be sold by us to or through underwriters or dealers, directly to purchasers or through agents designated from time to time. For additional information on the methods of sale, you should refer to the section entitled Plan of Distribution in this prospectus and the comparable section of any applicable prospectus supplement. If any underwriters are involved in the sale of the securities with respect to which this prospectus is being delivered, the names of such underwriters and any applicable discounts or commissions and over-allotment options will be set forth in the applicable prospectus supplement.

Our common stock is traded on the NASDAQ Global Market under the symbol FOLD. On April 28, 2016, the closing price of our common stock was $7.75.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. RISKS ASSOCIATED WITH AN INVESTMENT IN OUR SECURITIES WILL BE DESCRIBED IN THE APPLICABLE PROSPECTUS SUPPLEMENT AND CERTAIN OF OUR FILINGS WITH THE SECURITIES AND EXCHANGE COMMISSION INCORPORATED BY REFERENCE INTO THIS PROSPECTUS, AS DESCRIBED UNDER RISK FACTORS ON PAGE 3.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is April 29, 2016.

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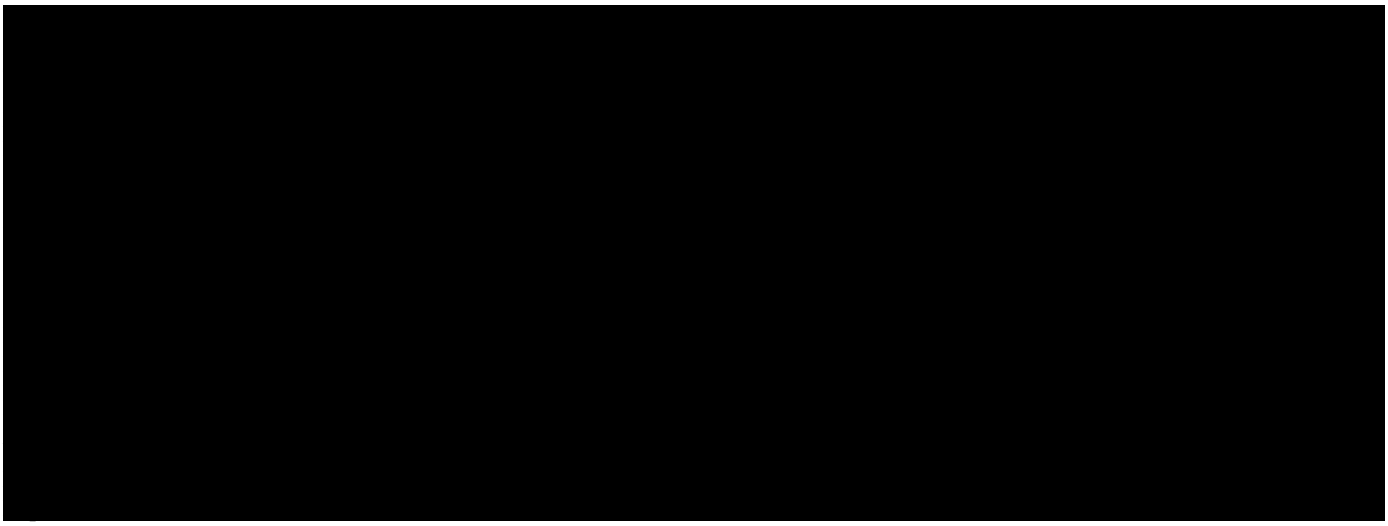
Prospectus



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ABOUT THIS PROSPECTUS

This prospectus is part of a universal shelf registration statement on Form S-3 that we filed with the U.S. Securities and Exchange Commission, or the SEC, under the Securities Act of 1933, as amended, or the Securities Act. To the extent required for any offer and sale, a prospectus supplement will set forth the type and number of securities being offered, the offering price, the names of any underwriters, dealers, brokers or agents and the applicable sales commission or discount. We may offer and sell any combination of the securities described in this prospectus. The prospectus supplement may also add, update or change information contained in this prospectus. You should read carefully the entire prospectus and any prospectus supplement, as well as the documents incorporated by reference into this prospectus and/or any prospectus supplement, before making an investment decision.

This prospectus provides you only with a general description of the securities that we may offer and sell. Each time securities are offered and sold under the shelf registration statement, we will provide a prospectus supplement that will contain specific information about the terms of those securities and the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement, including all documents incorporated herein by reference herein and therein, together with the additional information described under Where You Can Find More Information below.

The information contained in this prospectus is not complete and may be changed. You should rely only on the information provided in or incorporated by reference in this prospectus or in any prospectus supplement, or documents to which we otherwise refer you. We have not authorized anyone else to provide you with different information.

We have not authorized any dealer, agent or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and any accompanying prospectus supplement. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or an accompanying prospectus supplement. This prospectus and the accompanying prospectus supplement, if any, do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and the accompanying prospectus supplement, if any, constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction. You should not assume that the information contained in this prospectus and the accompanying prospectus supplement, if any, is accurate on any date subsequent to the date set forth on the front of such document or that any information we have incorporated by reference is correct on any date subsequent to the date of the document incorporated by reference, even though this prospectus and any accompanying prospectus supplement is delivered or securities are sold on a later date.

References in this prospectus to the terms the Company, Amicus, we, our and us or other similar terms mean Amicus Therapeutics, and our wholly owned subsidiary, unless we state otherwise or the context indicates otherwise.

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THE COMPANY

Overview

We are a global, late-stage, patient-focused biotechnology company engaged in the discovery and development of a diverse set of novel treatments for patients living with devastating rare and orphan diseases. We own exclusive global rights to three clinical programs that have the potential to address significant unmet needs, each with $500 million to $1 billion estimated global market opportunities.

Our lead product candidate, migalastat HCl (migalastat), is an orally administered small molecule pharmacological chaperone for the treatment of Fabry disease, a Lysosomal Storage Disorder (LSD). Migalastat is the first potential personalized medicine for Fabry disease. In April 2016, the European Committee for Medicinal Products for Human Use reviewed our Marketing Authorisation Application and adopted a positive opinion to approve migalastat as a first line therapy for Fabry disease in all patients who have an amenable genetic mutation. A final decision from the European Commission (EC) is expected in the second quarter of 2016.

We are also in Phase 3 clinical development of a novel topical cream, SD-101 (allantoin 6%), for the treatment of the genetic connective tissue disorder Epidermolysis Bullosa for which no other pharmacological therapies are approved. We have also initiated a clinical study in patients with Pompe disease, another LSD, to investigate our novel treatment paradigm that consists of ATB200, a uniquely engineered recombinant human acid alpha-glucosidase (rhGAA) enzyme with an optimized carbohydrate structure to enhance uptake, co-administered with a pharmacological chaperone, AT2221, to improve activity and stability. Leveraging our biologics capabilities and platform technologies, we have the potential to develop additional novel enzyme replacement therapies (ERTs) for Fabry disease and other LSDs.

We believe that our platform technologies and our advanced product pipeline uniquely position us at the forefront of developing therapies to address significant unmet needs for devastating rare and orphan diseases.

Corporate information

We were incorporated under the laws of the State of Delaware on February 4, 2002. Our global headquarters are located at 1 Cedar Brook Drive, Cranbury, NJ 08512 and our telephone number is (609) 662-2000. Our website address is www.amicusrx.com. We make available free of charge on our website our annual, quarterly and current reports, including amendments to such reports, as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the SEC. Information contained on our website is not incorporated by reference into this prospectus, and you should not consider information contained on our website as part of this prospectus.

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RISK FACTORS

Investing in our securities involves risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in our securities. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading Risk Factors in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under the heading Risk Factors in our Annual Report on Form 10-K for the fiscal year ended December 31, 2015 filed on February 29, 2016, with the SEC, which is incorporated herein by reference, and may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future. The risks and uncertainties we have described are not the only risks that we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations.

FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference herein contain forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this prospectus and the documents incorporated by reference herein regarding our strategy, future operations, future financial position, future revenues, projected costs, prospects, plans and objectives of management are forward-looking statements. The words anticipate, believe, estimate, expect, potential, intend, may, plan, predict, should, would and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

The forward-looking statements in this prospectus and the documents incorporated by reference herein include, among other things, statements about:

- the progress and results of our clinical trials of our drug candidates, including our pharmacological chaperone migalastat HCl;

- the cost of manufacturing drug supply for our clinical and preclinical studies, including the significant cost of new Fabry ERT cell line development and manufacturing as well as the cost of manufacturing Pompe ERT;

- the scope, progress, results and costs of preclinical development, laboratory testing and clinical trials for our product candidates including those testing the use of pharmacological chaperones co-formulated and co-administered with ERT and for the treatment of LSDs;

- the future results of on-going or later clinical trials for SD-101 (Zorblisa), including our ability to obtain regulatory approvals and commercialize Zorblisa and obtain market acceptance of Zorblisa

- the costs, timing and outcome of regulatory review of our product candidates, including, without limitation, the expected timing of the EC s final decision with respect to regulatory approval of migalastat in the European Union;

- the number and development requirements of other product candidates that we pursue;

- the costs of commercialization activities, including product marketing, sales and distribution;

- the emergence of competing technologies and other adverse market developments;

- our ability to obtain reimbursement for migalastat HCl;

- our ability to commercialize migalastat HCl in the European Union;

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- the costs of preparing, filing and prosecuting patent applications and maintaining, enforcing and defending intellectual property related claims;

- the extent to which we acquire or invest in businesses, products and technologies;

- our ability to successfully integrate our recent acquisition of Scioderm, Inc. and its products and technology into our business, including the possibility that the expected benefits of the transaction will not be fully realized by us or may take longer to realize than expected; and

- our ability to establish collaborations and obtain milestone, royalty or other payments from any such collaborators.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this prospectus, particularly under Risk Factors that we believe could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, collaborations or investments we may make.

You should read this prospectus and the documents that we incorporate by reference herein and therein completely and with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements.

Except as required by law, we undertake no obligation to update or revise any forward-looking statements to reflect new information or future events or developments. You should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. Before deciding to purchase our securities, you should carefully consider the risk factors discussed and incorporated by reference in this prospectus and in the registration statement of which this prospectus is a part.

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USE OF PROCEEDS

Except as otherwise provided in the applicable prospectus supplement relating to a specific offering, we intend to use the net proceeds from the sale of securities by us under this prospectus for general corporate purposes, which may include working capital, capital expenditures, research and development expenditures, clinical trial expenditures, commercial expenditures, acquisitions of new technologies or businesses, and investments. Additional information on the use of net proceeds from the sale of securities by us under this prospectus shall be set forth in the prospectus supplement relating to the specific offering.

RATIO OF EARNINGS TO FIXED CHARGES

Our ratio of earnings to fixed charges and combined fixed charges and preferred stock dividends for each of the five most recently completed fiscal years and any required interim periods will each be specified in a prospectus supplement or in a document that we file with the SEC and incorporate by reference pertaining to the issuance, if any, by us of debt securities in the future.

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PLAN OF DISTRIBUTION

We may sell the offered securities in any of the ways described below or in any combination or any other way set forth in an applicable prospectus supplement from time to time:

- to or through underwriters or dealers;
- through one or more agents; or
- directly to purchasers or to a single purchaser.

The distribution of the securities may be effected from time to time in one or more transactions:

- at a fixed price, or prices, which may be changed from time to time;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

In connection with each offering, a prospectus supplement will describe the method of distribution of the securities and any applicable restrictions. The prospectus supplement will also describe the specific terms of the offering of the securities, including the following:

- the name or names of any underwriters, dealers or agents and the amounts of securities underwritten or purchased by each of them;

- the public offering price of the securities and the proceeds to us and any discounts, commissions or concessions allowed or reallowed or paid to dealers; and

- any securities exchanges on which the securities may be listed.

Any offering price and any discounts or concessions allowed or reallowed or paid to dealers may be changed from time to time.

In compliance with the guidelines of the Financial Industry Regulatory Authority, the maximum compensation to the underwriters or dealers in connection with the sale by the Company of its securities pursuant to this prospectus and the accompanying supplement to this prospectus may not exceed 8% of the aggregate offering price of the securities as set forth on the cover page of any prospectus supplement.

Only the agents or underwriters named in each prospectus supplement are agents or underwriters in connection with the securities being offered thereby.

Agents and underwriters may be entitled to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or to contribution from us with respect to payments which the agents or underwriters may be required to make in respect thereof. Agents and underwriters may be customers of, engage in transactions with, or perform services for us in the ordinary course of business.

Certain underwriters may use this prospectus and any accompanying prospectus supplement for offers and sales related to market-making transactions in the securities. These underwriters may act as principal or agent in these transactions, and the sales will be made at prices related to prevailing market prices at the time of sale.

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The securities we offer may be new issues of securities and may have no established trading market. The securities may or may not be listed on a securities exchange. Underwriters may make a market in these securities, but will not be obligated to do so and may discontinue any market making at any time without notice. We can make no assurance as to the liquidity of, or the existence of trading markets for, any of the securities.