

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

FORM S-3

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

AMICUS THERAPEUTICS, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State of incorporation)

71-0869350
(IRS Employer Identification Number)

1 Cedar Brook Drive, Cranbury, NJ 08512
(609) 662-2000
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

John F. Crowley
Chief Executive Officer
Amicus Therapeutics, Inc.
1 Cedar Brook Drive
Cranbury, New Jersey 08512
(609) 662-2000
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Approximate date of commencement of proposed sale to the public:
From time to time after the effective date of this Registration Statement.

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

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

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

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

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

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

Large accelerated filer ☐

Accelerated filer ☒

Non-accelerated filer ☐

Smaller reporting
company ☐

(Do not check if a smaller reporting
company)

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be Registered (1)(2)	Proposed Maximum Offering Price Per Security (3)	Proposed Aggregate Maximum Offering Price (3)	Amount of Registration fee (3)
Common Stock, par value \$0.01 per share	19,277,081	\$ 2.205	\$ 42,505,963.61	\$ 5,475

(1) The Registrant is hereby registering for resale (a) 7,228,899 shares (the "Closing Shares") of its outstanding common stock issued to the former security holders of Callidus Biopharma, Inc. ("Callidus") pursuant to the terms of that certain Agreement and Plan of Merger by and among the Registrant, Callidus and the other parties named therein (the "Merger Agreement") in connection with the closing of the merger transaction contemplated by the Merger Agreement, and (b) up to 12,048,182 shares (the "Milestone Shares") of its common stock that may be issued to the former security holders of Callidus upon achievement of certain performance milestones set forth in the Merger Agreement. The Milestone Shares have not been earned and are not currently outstanding. The actual number of Milestone Shares issued to the selling stockholders, if any, could be materially more or less than 12,048,182 shares of common stock which depends on whether and to what extent the future performance milestones are met, whether and to what extent the Registrant elects to issue shares of its common stock to satisfy any required milestone payments, whether the Registrant seeks and receives any required stockholder approval under the rules of The NASDAQ Global Market and/or the actual average closing bid price per share of the Registrant's common stock at the time such milestones are achieved. This presentation is not intended to constitute an indication or prediction of whether any of the future milestones will be achieved, the Registrant's election to pay the milestone consideration in cash or common stock, whether the Registrant will seek or receive stockholder approval of issuances of its common stock under the Merger Agreement or the future market price of the Registrant's common stock.

(2) Pursuant to Rule 416 under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers an indeterminate number of additional shares of common stock as may be issuable with respect to the shares being issued hereunder as a result of a stock split, stock dividend, capitalization or similar event.

(3) Estimated pursuant to Rule 457(c) solely for purposes of calculating the amount of the registration fee, based on the average of the high and low prices of the Registrant's common stock reported as of December 6, 2013 on The NASDAQ Global Market.

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

The information contained in this prospectus is not complete and may be changed. The selling stockholders named in this prospectus may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting offers to buy these securities in any jurisdiction where such offer or sale is not permitted.

PROSPECTUS

AMICUS THERAPEUTICS, INC.

19,277,081 Shares of Common Stock

This prospectus relates to the offer and sale from time to time of up to 19,277,081 shares of our common stock, par value \$0.01 per share, by the selling stockholders identified in this prospectus. Such shares include (i) 7,228,899 shares of our outstanding common stock that we issued to the former security holders of Callidus Biopharma, Inc., or Callidus, in connection with the closing of the merger described herein, which we refer to as the Merger, pursuant to the terms of that certain Agreement and Plan of Merger, dated as of November 19, 2013, which we refer to as the Merger Agreement, by and among Amicus Therapeutics, Inc., Callidus and the various other parties named therein, and (ii) up to 12,048,182 shares of our common stock that we may issue to the former security holders of Callidus upon the achievement by Callidus of certain performance milestones set forth in the Merger Agreement and described elsewhere in this prospectus, subject to the assumptions described elsewhere in this prospectus.

We are not selling any shares of our common stock under this prospectus and we will not receive any of the proceeds from the sale of shares by the selling stockholders.

The selling stockholders identified in this prospectus, or their pledges, donees, transferees or other successors in interest, may offer and sell the shares of common stock being offered by this prospectus from time to time in public or private transactions, or both. These sales may occur at fixed prices, at market prices prevailing at the time of sale, at prices related to prevailing market prices, or at negotiated prices. The selling stockholders may sell shares being offered by this prospectus to or through underwriters, broker-dealers or agents, who may receive compensation in the form of discounts, concessions or commissions from the selling stockholders, the purchasers of such shares, or both. See “Plan of Distribution” for a more complete description of the ways in which the shares being offered by this prospectus may be sold.

Our common stock is traded on The NASDAQ Global Market under the symbol “FOLD.” On December 6, 2013, the closing price of our common stock was \$2.22.

INVESTING IN OUR SECURITIES INVOLVES A HIGH DEGREE OF RISK. BEFORE INVESTING, YOU SHOULD REFER TO THE RISK FACTORS ON PAGE 5 OF THIS PROSPECTUS.

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

The date of this prospectus is _____, 2013.

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ABOUT THIS PROSPECTUS

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, Inc. and its wholly-owned subsidiaries, Amicus Therapeutics UK Limited and Callidus Biopharma, Inc., unless we state otherwise or

THE COMPANY

Overview

We are a biopharmaceutical company focused on the discovery, development and commercialization of next-generation medicines for a range of rare and orphan diseases, with a focus on improved therapies for lysosomal storage disorders (LSDs). Our development programs include next-generation enzyme replacement therapies (ERTs) for LSDs, including Fabry disease, Pompe disease and Mucopolysaccharoidosis Type I (MPS I). We are also developing novel small molecules as monotherapy treatments for Fabry disease and Parkinson's disease. We believe that our platform technologies and our advanced product pipeline uniquely position us at the forefront of developing therapies for rare and orphan diseases.

In LSDs such as Pompe and Fabry, a mutation in the specific disease-causing gene can lead to the production in the body of a mutant form of the enzyme that is less stable than the normal form, and that may be prematurely degraded before reaching the location in the cell where it is needed. For patients with lysosomal storage diseases who are receiving ERT, the infused (exogenous) protein may unfold and lose activity at any stage in the process—from the infusion bag to the bloodstream, to the eventual uptake into cells and tissue. In both instances, the result is a loss of enzyme activity and disruption of proper trafficking of the enzyme to lysosomes. Our novel treatment approach consists of using pharmacological chaperones that are designed to selectively bind and stabilize either the endogenous or exogenous target proteins and facilitate trafficking to the location in cells where these proteins are needed.

Our Chaperone-Advanced Replacement Therapy, or CHART™, platform has been used to develop our next-generation ERTs by identifying and co-formulating therapeutic enzymes with our proprietary pharmacological chaperones. In each CHART program, a unique pharmacological chaperone is designed to bind to a specific therapeutic (exogenous) enzyme, stabilizing the enzyme in its properly folded and active form. This may allow for enhanced tissue uptake, greater lysosomal activity, more reduction of substrate, and the potential for lower immunogenicity.

Our lead CHART program is a next-generation ERT in preclinical development for Fabry disease. This next-generation ERT consists of a proprietary human recombinant alpha-Gal A (alpha-Gal) enzyme (JR-051, manufactured by JCR Pharmaceutical Co Ltd) co-formulated with our pharmacological chaperone migalastat HCl. We completed an initial human proof-of-concept Phase 2 study (Study 013) that evaluated the effects of a single oral dose of migalastat HCl co-administered with the currently marketed ERTs for Fabry disease (Fabrazyme® or Replagal®) in males with Fabry disease. Results from this study demonstrated a consistent increase in levels of active alpha-Gal activity, the enzyme deficient in Fabry patients, in plasma and increased uptake of alpha-Gal enzyme in skin compared to ERT alone. This study has served as the foundation for further development of our next-generation Fabry ERT, which is expected to enter the clinic in 2014.

We are also developing migalastat HCl as a monotherapy in two Phase 3 global registration studies for Fabry patients with genetic mutations that were amenable to this

pharmacological chaperone in a cell-based assay (Study 011 and Study 012). In Study 011, we are comparing migalastat HCl to placebo. In December 2012, we announced top-line six-month (Stage 1) results from Study 011. While encouraging, these results did not achieve statistical significance ($p=0.3$) according to the pre-specified primary endpoint analysis. This responder analysis compared the number of patients in the migalastat HCl group to the number of patients in the placebo group who showed a 50% or greater reduction in interstitial capillary GL-3 in the kidney biopsies from baseline to month 6. In the 6-month open-label follow up period in Study 011 (Stage 2), all patients received migalastat HCl. Data from Stage 2 and the open label extension for months 13-24 are anticipated in the first half of 2014.

In Study 012, we are comparing open-label migalastat HCl to current standard of care ERTs (Fabrazyme® and Replagal®) to potentially support global registration. In December 2012, this study achieved full enrollment of 60 patients, who were randomized 1.5:1 to switch from ERT to migalastat HCl or remain on ERT. Data are anticipated in the second half of 2014 on the primary outcome measure, which is renal function assessed by measured Glomerular Filtration Rate (GFR) at 18 months.

We are also utilizing our CHART platform to advance a next-generation ERT for Pompe disease. Similar to Study 013 in Fabry disease, we completed a Phase 2 (Study 010) safety and PK study of our pharmacological chaperone AT2220 (duvoglustat HCl) co-administered with currently approved recombinant human acid-alpha glucosidase (rhGAA) Myozyme®/Lumizyme® in Pompe patients. GAA is the enzyme deficient in Pompe patients. Results from Study 010 demonstrated initial human proof-of-concept for this chaperone-ERT combination in Pompe disease, showing an increase in GAA enzyme activity in plasma and muscle compared to ERT alone.

Through our acquisition of Callidus Biopharma, we now own a uniquely-engineered, proprietary recombinant human acid-alpha glucosidase (rhGAA) for Pompe disease in late preclinical development. This Pompe ERT has shown promise in preclinical studies, and will be further evaluated with the addition of Amicus' pharmacological chaperone AT2220.

In addition, through our acquisition of Callidus, we have an enzyme targeting technology that is applicable to multiple ERTs and complementary to our CHART platform for the development of next-generation therapies for multiple LSDs. We believe this approach has the potential to improve the properties of the therapeutic enzymes alone while incorporating small molecule stabilizers to increase circulating exposure and tissue uptake.

Additional preclinical CHART programs include a next-generation ERT for MPS I. We also plan to continue our commitment to the broader application of the CHART technology as a potential next-generation treatment approach for other LSDs.

Although LSDs are relatively rare diseases, they represent a substantial commercial opportunity due to the severity of the symptoms and the chronic nature of the diseases. The publicly-reported worldwide net product sales for currently approved treatments for six LSDs were approximately \$3.5 billion in 2012.

In September 2013, we entered into a collaboration agreement with Biogen Idec (“Biogen”) to discover, develop and commercialize novel small molecules for the treatment of Parkinson’s disease. Under terms of the multi-year agreement, we will collaborate in the discovery of a new class of small molecules that target the GCase enzyme, for further development and commercialization by Biogen. Biogen will be responsible for funding all discovery, development, and commercialization activities.

Collaboration with GSK

On November 19, 2013, we entered into a Revised Agreement with GlaxoSmithKline PLC (GSK) pursuant to which we have obtained global rights to develop and commercialize the investigational pharmacological chaperone migalastat HCl as a monotherapy and in combination with ERT for Fabry disease. The Revised Agreement amends and replaces in its entirety the Expanded Collaboration Agreement entered into between Amicus and GSK on July 17, 2012 for the development and commercialization of migalastat HCl. Under the terms of the Revised Agreement, there is no upfront payment from Amicus to GSK. For the next-generation Fabry ERT (migalastat HCl co-formulated with ERT), GSK is eligible to receive single-digit royalties on net sales in eight major markets outside the U.S. We may also be responsible for milestone payments and single-digit royalties on the net sales of the next-generation Fabry ERT payable to a third party. For migalastat HCl monotherapy, GSK is eligible to receive post-approval and sales-based milestones, as well as tiered royalties in the mid-teens in eight major markets outside the U.S.

Additionally, simultaneous with entry into the Revised Agreement, we entered into a Stock Purchase Agreement with GSK pursuant to which GSK purchased approximately 1.5 million shares of Amicus common stock at a price of \$2.00 per share. The Stock Purchase Agreement provides GSK with customary registration rights for the shares and includes a six-month lock-up provision. As of December 10, 2013, GSK’s ownership position in Amicus is 17.6%.

Recent Acquisition

On November 19, 2013, we acquired Callidus, a privately-held drug discovery company focused on ERTs for lysosomal storage disorders. Under terms of the Merger Agreement, Callidus shareholders received at closing \$15 million in unregistered shares of our common stock. Callidus shareholders are eligible for up to \$10 million in milestone payments through Phase 2 development of the Pompe program and up to \$105 million for the achievement of late-stage development, regulatory, and approval milestones spread across three products. The Company is permitted, at its election, to make certain of these milestone payments in shares of its common stock.

Corporate Information

Our principal executive offices are located at 1 Cedar Brook Drive, Cranbury, NJ 08512, and our phone number is (609) 662-2000.

RISK FACTORS

Investing in our securities involves risk. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed below and under the heading “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2012 filed on March 13, 2013 with the Securities and Exchange Commission (Commission), which is incorporated herein by reference, and may be amended, supplemented or superseded from time to time by other reports we file with the Commission in the future. The risks and uncertainties we have described therein and below 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.

We may not realize all of the anticipated benefits of the Merger.

The success of the Merger will depend, in part, on our ability to realize the anticipated growth opportunities and synergies from combining the businesses of our company and Callidus. Our ability to realize these benefits, and the timing of this realization, depend upon a number of factors and future events, many of which we and Callidus, individually or collectively, cannot control. These factors and events include:

- integrating Callidus’ technology platform into our company;
- obtaining and maintaining patent rights relating to the Callidus technology;
- effectively consolidating research and development operations;
- retaining and attracting key employees;
- consolidating corporate and administrative functions; and
- minimizing the diversion of management’s attention from ongoing business concerns.

We cannot assure you that any of the foregoing factors will not have an adverse effect on our business, financial condition and prospects.

The surviving corporation of the Merger, which is a wholly-owned subsidiary of our company, possesses not only all of the assets, but also all of the liabilities of Callidus. Discovery of previously undisclosed or unknown liabilities could have an adverse effect on our business, financial condition and prospects.

Acquisitions involve risks, including inaccurate assessment of undisclosed, contingent or other liabilities or problems. Following the completion of the Merger, the surviving corporation, which is now a wholly-owned subsidiary of our company, possesses not only all of the assets, but also all of the

If the selling stockholders immediately sell our common stock received in the Merger, they could cause our common stock price to decline.

Once the registration statement, of which this prospectus is a part, is declared effective, all of the shares of common stock issued to the former security holders of Callidus in connection with the closing of the Merger will be available for resale in the public market, subject to certain lockup restrictions applicable to certain of such former security holders of Callidus which will expire 90 days after the effective date of this registration statement. In addition, once the registration statement, of which this prospectus is a part, is declared effective, any shares of our common stock that we issue to former security holders of Callidus in the future upon Callidus' achievement of certain performance milestones set forth in the Merger Agreement will be available for resale in the public market. If the former security holders of Callidus sell significant amounts of our common stock following the effectiveness of the registration statement of which this prospectus is a part, the market price of our common stock could decline. These sales may also make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate to raise funds through future offerings of our common stock.

If the stockholders who participated in our recent private placement immediately sell our common stock received in that offering, they could cause our common stock price to decline.

On November 20, 2013, we entered into a securities purchase agreement (the "Purchase Agreement") with certain investors. Pursuant to the Purchase Agreement, we issued 1,500,000 unregistered shares of our common stock and (b) 6,000,000 units, with each unit consisting of one unregistered share of our common stock and 0.267 warrants resulting in an aggregate of 6,000,000 unregistered shares of common stock and 1,600,000 warrants underlying the units. Each warrant is exercisable between July 1, 2014 and June 30, 2015 with an exercise price of \$2.50, subject to certain adjustments.

In connection with the aforementioned private placement, we agreed to file a registration statement within 60 days after the closing for purposes of registering the shares of common stock issued and shares of common stock underlying the warrants issued. Once that registration statement is declared effective, all of the shares of common stock registered thereunder will be available for resale in the public market. If the investors in that offering sell significant amounts of our common stock following the effectiveness of that registration statement, the market price of our common stock could decline. These sales may also make it more difficult for us to sell equity securities in the future at a time and at a price that we deem appropriate to raise funds through future offerings of our common stock.

FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated herein by reference contain forward-looking statements that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this prospectus or 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," "project," "will," "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 herein by reference include, among other things, statements about:

- the progress and results of our clinical trials of our drug candidates, including migalastat HCl;
- the continuation of our collaboration with GSK and GSK's achievement of milestone payments thereunder;
- 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 diseases of neurodegeneration;
- the costs, timing and outcome of regulatory review of our product candidates;
- 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;
- 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 incorporate Callidus and its products and technology into our business; 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 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.

USE OF PROCEEDS

We will not receive any proceeds from the sale or other disposition by the selling stockholders of the shares of our common stock covered hereby, or interests therein. The selling stockholders will pay any expenses incurred by the selling stockholders for brokerage, accounting, tax or legal services or any other expenses incurred by the selling stockholders in disposing of these shares. We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including, without limitation, all registration fees, listing fees of The NASDAQ Global Market (NASDAQ) and fees and expenses of our counsel and our accountants.

SELLING STOCKHOLDERS

We are registering for resale an aggregate of 19,277,081 shares of our common stock that may be sold by the selling stockholders set forth herein. Such shares include: (i) 7,228,899 shares of our outstanding common stock, which we refer to as the Closing Shares, issued to the former stockholders of Callidus in connection with the closing of the Merger pursuant to the terms of the Merger Agreement; and (ii) up to 12,048,182 shares of our common stock, which we refer to as the Milestone Shares, that we may issue to the former stockholders of Callidus assuming (a) the achievement of each of the regulatory approval and clinical milestones set forth in the Merger Agreement, (b) we elect to issue shares of our common stock to satisfy the maximum amount of milestone payments which are permitted under the terms of the Merger Agreement to be satisfied using shares of our common stock (individual milestone payments, which aggregate to \$40 million, are permitted by the terms of the Merger Agreement, under certain circumstances, to be satisfied in common stock, provided, however, that pursuant to the terms of the Merger Agreement, the maximum dollar amount of the common stock to be issued in connection with any milestone payment, or any combination of milestone payments, cannot exceed \$25 million in any circumstance), subject to the restriction in the Merger Agreement prohibiting us from issuing shares of our common stock exceeding at any time in the aggregate 49.99% of the shares of our common stock outstanding on November 19, 2013 to comply with the rules of NASDAQ, (c) we seek and obtain any required stockholder approval under the rules of NASDAQ in connection with issuing such shares, including the NASDAQ requirement that we obtain stockholder approval in the event that we intend to issue a number of shares under the Merger Agreement in an aggregate amount that equals or exceeds 20% of the shares of our common stock outstanding on November 19, 2013, and (d) the per share price of our common stock used to calculate the number of shares of our common stock that could be issued in connection with the milestone payments is \$2.075, which is the price per share used to calculate the number of Closing Shares issued to the selling stockholders in connection with the closing of the Merger. We refer to these assumptions in the footnotes to the following table as the “milestone assumptions.” As of November 19, 2013, we had 49,631,672 shares of common stock outstanding.

The Milestone Shares have not been earned and are not currently outstanding. The actual number of Milestone Shares issued to the selling stockholders, if any, could be materially more or less than 12,048,182 depending on whether and to what extent the future performance milestones are met, the extent to which we choose to satisfy milestone payments using shares of our common stock, the extent to which we are permitted to issue shares of common stock under the rules of NASDAQ and/or the actual average closing bid price of our common stock used to determine the number of Milestone Shares to be issued. Per the terms of the Merger Agreement, the price per share of our common stock to be used to determine the number of Milestone Shares to be issued, if applicable, will be calculated based on a price per share equal to the average of the last closing bid price per share for our common stock on NASDAQ for the ten (10) trading days immediately preceding the date of payment. As a result, the number of Milestone Shares could change in the event that the issuance price is greater or less than \$2.075. This presentation is not intended to constitute an indication or prediction of whether any of the future milestones will be achieved, our election to pay the milestone consideration in cash or common stock, whether we will seek or receive stockholder approval, or the future market price of our common stock.

Pursuant to Article VII of the Merger Agreement, we agreed to file a registration statement with the Commission to register for resale the shares of our common stock that we issued and that we may issue to the selling stockholders as part of the merger consideration. We agreed to keep such registration statement effective until the earlier of (i) the date on which each selling stockholder is able to dispose of all their shares in any 90 day period pursuant to Rule 144 under the Securities Act of 1933, as amended (Securities Act), and (ii) the date on which all of the shares have been sold pursuant to an effective registration statement or Rule 144 under the Securities Act or any other rule of similar effect.

Beneficial ownership is determined in accordance with the rules of the Commission, and includes voting or investment power with respect to our common stock. To our knowledge, the selling stockholders have sole voting and investment power with respect to their respective shares of common stock, unless otherwise noted below.

The selling stockholders may sell some, all or none of their respective shares of common stock offered by this prospectus from time to time. We do not know how long the selling stockholders will hold their respective shares of common stock covered hereby before selling them. Other than the Merger Agreement and the agreements contemplated thereby, we currently have no agreements, arrangements or understandings with the selling stockholders regarding the sale of any of the shares of common stock being offered hereunder.

Except as otherwise noted below, the address for each person or entity listed in the table is c/o Cuong Do, as the holder representative under the Merger Agreement, 5 India Brook Drive, Mendham, New Jersey 07945.

Name of Selling Stockholder	Number of Shares of Common Stock Beneficially Owned Prior to the Offering	Number of Shares of Common Stock Registered for Sale Hereby	Shares Beneficially Owned After Offering(44)	
			Number	Percent
Cuong Do	1,240,506	3,308,017(15)	—	—
Do Family Trust, dated April 28, 2005	344,107(1)	917,619(1)(16)	—	—
The Benjamin Do SN Trust, dated September 21, 2013	147,474(2)	393,265(2)(17)	—	—
Celebrate the Children, Inc.	49,158(3)	131,088(3)(18)	—	—
Hung Viet Do	1,399,779(4)	3,732,745(4)(19)	—	—
Hung Viet Do Family Trust, dated September 20, 2013	368,686(5)	983,163(5)(20)	—	—
WuXi PharmaTech Healthcare Fund I L.P.	1,917,170(6)	5,112,453(6)(21)	—	—
William Amelio	159,764	426,037(22)	—	—
Carada Inc.	15,976(7)	42,603(7)(23)	—	—
Kwartler Investments LP (1)	63,905(8)	170,414(8)(24)	—	—
Ezra Z. Angrist	29,494	78,652(25)	—	—
Stanley W. Angrist and Shirley S. Angrist	12,781(9)	34,082(9)(26)	—	—
SVIC No. 22 New Technology Business Investment L.L.P.	639,056(10)	1,704,150(10)(27)	—	—
James E. Palastak	25,562(11)	68,165(11)(28)	—	—
Arthur Johnson	9,831	26,217(29)	—	—
Kelley Wilson Moremen	19,663	52,435(30)	—	—
William M. Canfield	9,831	26,217(31)	—	—
Robert Russell Gotschall	96,571(12)	257,523(12)(32)	—	—
Louise Eisenach	2,457(13)	6,553(13)(33)	—	—

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Quyen Hoang	29,494	78,652(34)	—	—
Debra Yu	4,915	13,108(35)	—	—
Jennifer Cakerri	2,457	6,553(36)	—	—
Penny M. Johnson	4,915	13,108(37)	—	—
Kylie Gray	4,915	13,108(38)	—	—
Brian Kelley	4,915	13,108(39)	—	—
Christopher Lee Buie	4,915	13,108(40)	—	—
Paul Antony	218,754	583,344(41)	—	—
Walter C. Greenblatt	200,924	535,797(42)	—	—
Stony Brook Investments LLC	200,924(14)	535,797(14)(43)	—	—

(1) Lori Fran Rickles is the trustee of the Do Family Trust, dated April 28, 2005, and as such possesses the sole power to vote and dispose of such securities.

(2) Lori Fran Rickles is the trustee of The Benjamin Do SN Trust, dated September 21, 2013, and as such possesses the sole power to vote and dispose of such securities.

(3) Monica Osgood is the Executive Director of Celebrate the Children, Inc., and Kenneth Lindsley is the Business Manager of Celebrate the Children, Inc. The Board of Directors of Celebrate the Children, Inc. has authorized each of Monica Osgood and Kenneth Lindsley, individually, to vote and dispose of such securities.

(4) Hung Viet Do is an employee of Amicus Therapeutics, Inc.

(5) Ly Do is the trustee of the Hung Viet Do Family Trust, dated September 20, 2013, and as such possesses the sole power to vote and dispose of such securities.

(6) WuXi PharmaTech Investments (Cayman) Inc. is the general partner of WuXi PharmaTech Fund I General Partner L.P., which is the general partner of WuXi PharmaTech Healthcare Fund I L.P. Through their respective positions with WuXi PharmaTech Investments (Cayman) Inc., Ge Li and Edward Hu share voting and dispositive control over such securities.

(7) Cara Patel is the owner and partner of Carada Inc. and as such possesses the sole power to vote and dispose of such securities.

(8) Jed A. Kwartler, MD is the managing partner and trustee of Kwartler Investments LP 1 and as such has the sole power to vote and the sole power to direct the disposition of such securities.

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(9) Such shares are held by Stanley W. Angrist and Shirley S. Angrist as joint tenants with right of survivorship.

(10) Samsung Venture Investment Corporation is the general partner of SVIC No. 22 New Technology Business Investment L.L.P. and as such possesses the sole power to vote and dispose of such securities.

(11) Such shares are held by the children of James E. Palastak. James E. Palastak possesses the sole power to vote and dispose of such securities.

(12) Robert Russell Gotschall is an employee of Amicus Therapeutics, Inc.

(13) Louise Eisenach is the daughter of, and lives in the same household as, Mark Eisenach (see footnote 14).

(14) Mark Eisenach is the Manager of Stony Brook Investments LLC and as such possesses the sole power to vote and the sole power to direct the disposition of such securities. Mark Eisenach is the father of, and lives in the same household as, Louise Eisenach (see footnote 13).

(15) Consists of 1,240,506 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 2,067,511 additional shares of common stock to be received.

(16) Consists of 344,107 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 573,512 additional shares of common stock to be received.

(17) Consists of 147,474 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 245,791 additional shares of common stock to be received.

(18) Consists of 49,158 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 81,930 additional shares of common stock to be received.

(19) Consists of 1,399,779 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 2,332,966 additional shares of common stock to be received.

(20) Consists of 368,686 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 614,477 additional shares of common stock to be received.

(21) Consists of 1,917,170 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 3,195,283 additional shares of common stock to be received.

(22) Consists of 159,764 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 266,273 additional shares of common stock to be received.

(23) Consists of 15,976 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 26,627 additional shares of common stock to be received.

(24) Consists of 63,905 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 106,509 additional shares of common stock to be received.

(25) Consists of 29,494 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 49,158 additional shares of common stock to be received.

(26) Consists of 12,781 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 21,301 additional shares of common stock to be received.

(27) Consists of 639,056 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 1,065,094 additional shares of common stock to be received.

(28) Consists of 25,562 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 42,603 additional shares of common stock to be received.

(29) Consists of 9,831 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 16,386 additional shares of common stock to be received.

(30) Consists of 19,663 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 32,772 additional shares of common stock to be received.

(31) Consists of 9,831 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 16,386 additional shares of common stock to be received.

(32) Consists of 96,571 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 160,952 additional shares of common stock to be received.

(33) Consists of 2,457 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 4,096 additional shares of common stock to be received.

(34) Consists of 29,494 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 49,158 additional shares of common stock to be received.

(35) Consists of 4,915 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 8,193 additional shares of common stock to be received.

(36) Consists of 2,457 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 4,096 additional shares of common stock to be received.

(37) Consists of 4,915 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 8,193 additional shares of common stock to be received.

(38) Consists of 4,915 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 8,193 additional shares of common stock to be received.

(39) Consists of 4,915 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 8,193 additional shares of common stock to be received.

(40) Consists of 4,915 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 8,193 additional shares of common stock to be received.

(41) Consists of 218,754 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 364,590 additional shares of common stock to be received.

(42) Consists of 200,924 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 334,873 additional shares of common stock to be received.

(43) Consists of 200,924 shares of common stock received in connection with the closing of the Merger, and, based on the milestone assumptions, 334,873 additional shares of common stock to be received.

(44) Assumes all shares of common stock are sold in this offering.

PLAN OF DISTRIBUTION

The selling stockholders and any of their pledgees, assignees and successors-in-interest may, from time to time in one or more transactions on NASDAQ or any other organized market where our shares of common stock may be traded, sell any or all of its shares of our common stock offered hereby through underwriters, dealers or agents, directly to one or more purchasers or through a combination of any such methods of sale. The selling stockholders may distribute the shares of our common stock offered hereby from time to time in one or more transactions:

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

The selling stockholders may use any one or more of the following methods when selling the shares offered hereby:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- one or more block trades in which the broker-dealer will attempt to sell such shares as agent or principal of all of such shares held by the selling stockholder;
- purchases by a broker-dealer as principal and resale by such broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;
- agreements between broker-dealers and the selling stockholder to sell a specified number of such shares at a stipulated price per share; and
- any other method permitted pursuant to applicable law.

If the selling stockholders effect such transactions by selling shares of common stock offered hereby to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the shares of common stock

offered hereby for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of common stock offered hereby or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of common stock offered hereby in the course of hedging in positions they assume. The selling stockholders may also sell shares of common stock offered hereby short and deliver shares of common stock covered by this prospectus to close out short positions and to return borrowed shares in connection with such short sales. The selling stockholders may also loan or pledge shares of common stock offered hereby to broker-dealers that in turn may sell such shares.

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

The selling stockholders and any broker-dealer participating in the distribution of the shares of common stock offered hereby may be deemed to be “underwriters” within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of common stock offered hereby is made, a prospectus supplement, if required, will be distributed which will set forth the aggregate amount of shares of common stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling stockholders and any discounts, commissions or concessions allowed or reallocated or paid to broker-dealers.

Under the securities laws of some states, the shares of common stock offered hereby may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of common stock offered hereby may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with.

There can be no assurance that the selling stockholders will sell any or all of the shares of common stock registered pursuant to the registration statement of which this prospectus forms a part.

The selling stockholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended (Exchange

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Act), and the rules and regulations thereunder, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of common stock offered hereby by the selling stockholders and any other participating person. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of common stock offered hereby to engage in market-making activities with respect to the shares of common stock offered hereby. All of the foregoing may affect the marketability of the shares of common stock offered hereby and the ability of any person or entity to engage in market-making activities with respect to the shares of common stock offered hereby.

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

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WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports, proxy statements and other information with the Commission. You may read and copy information filed by us with the Commission at the Commission’s public reference section, 100 F Street, N.E., Washington, D.C. 20549. Information regarding the operation of the public reference section can be obtained by calling 1-800-SEC-0330. The Commission also maintains an Internet site at <http://www.sec.gov> that contains reports, statements and other information about issuers, such as us, who file electronically with the Commission. We maintain an Internet site at <http://www.amicustherapeutics.com>. However, the information on our Internet site is not incorporated by reference in this prospectus and any prospectus supplement and you should not consider it a part of this prospectus or any accompanying prospectus supplement.

The Commission allows us to “incorporate by reference” into this prospectus the information in other documents that we file with it. This means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information in documents that we file later with the Commission will automatically update and supersede information contained in documents filed earlier with the Commission or contained in this prospectus. We incorporate by reference in this prospectus (i) the documents listed below, (ii) all documents that we file with the Commission under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the initial filing of the registration statement of which this prospectus is included and prior to the effectiveness of such registration statement, and (iii) any future filings that we may make with the Commission under Sections 13(a), 13(c), 14, or 15(d) of the Exchange Act prior to the termination of the offering under this prospectus; provided, however, that we are not incorporating, in each case, any documents or information deemed to have been furnished and not filed in accordance with Commission rules:

- Our Annual Report on Form 10-K for the year ended December 31, 2012 filed with the Commission on March 13, 2013;
- Our Quarterly Reports on Form 10-Q for the quarters ended March 31, 2013, June 30, 2013 and September 30, 2013, filed with the Commission on May 9, 2013, August 7, 2013 and November 12, 2013, respectively;
- Our Current Reports on Form 8-K filed with the Commission on January 7, 2013, February 22, 2013, April 24, 2013, May 22, 2013, June 17, 2013, June 18, 2013, September 10, 2013, November 20, 2013, November 21, 2013 and December 5, 2013; and

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

You may obtain a copy of any or all of the documents referred to above which may have been or may be incorporated by reference into this prospectus, except for exhibits to those documents (unless the exhibits are specifically incorporated by reference into those documents) at no cost to you by writing or telephoning us at the following address: Office of the Corporate Secretary, Amicus Therapeutics, Inc., 1 Cedar Brook Drive, Cranbury, NJ 08512, telephone (609)-662-2000.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon for us by Lowenstein Sandler LLP, New York, New York. As appropriate, legal counsel representing the selling stockholders, underwriters, dealers or agents will be named in the accompanying prospectus supplement and may opine to certain legal matters.

EXPERTS

The consolidated financial statements of the Company appearing in the Company's Annual Report (Form 10-K) for the year ended December 31, 2012 and the effectiveness of the Company's internal control over financial reporting as of December 31, 2012 have been audited by Ernst & Young LLP, independent registered public accounting firm, as set forth in their reports thereon, included therein, and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon such reports given on the authority of such firm as experts in accounting and auditing.

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

Set forth below is an estimate (except in the case of the registration fee) of the amount of fees and expenses to be incurred in connection with the issuance and distribution of the offered securities registered hereby, other than underwriting discounts and commission, if any, incurred in connection with the sale of the offered securities. All such amounts will be borne by Amicus Therapeutics, Inc.

SEC Registration Fee	\$	5,475
Legal Fees and Expenses	\$	20,000
Accounting Fees and Expenses	\$	10,000
Miscellaneous Fees and Expenses	\$	2,000
Total:	\$	37,475

Item 15. Indemnification of Directors and Officers.

Section 102 of the Delaware General Corporation Law permits a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. The Registrant's restated certificate of incorporation provides that no director of the Registrant shall be personally liable to it or its stockholders for monetary damages for any breach of fiduciary duty as director, notwithstanding any provision of law imposing such liability, except to the extent that the Delaware General Corporation Law prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit or proceeding to which he or she is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Delaware Court of Chancery or

other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Delaware Court of Chancery or such other court shall deem proper.

The Registrant's restated certificate of incorporation provides that the Registrant will, to the fullest extent permitted by Section 145 of the Delaware General Corporation Law and the Registrant's by-laws (each as amended from time to time), indemnify each person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was, or has agreed to become, a director or officer of the Registrant, or is or was serving, or has agreed to serve, at the request of the Registrant, as a director, officer, partner, or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, including any employee benefit plan (all such persons being referred to hereafter as an "Indemnitee"), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by, or on behalf of, the Indemnitee in connection with such action, suit or proceeding and any appeal therefrom. Such indemnification may include payment by the Registrant of expenses in defending an action or proceeding in advance of the final disposition of such action or proceeding upon receipt of an undertaking by the Indemnitee (such undertaking acceptable by the Registrant without reference to the financial ability of the Indemnitee) to repay such payment if it is ultimately determined that the Indemnitee is not entitled to indemnification under the Registrant's restated certificate of incorporation; however, the Registrant will not indemnify any person seeking indemnification in connection with a proceeding (or part thereof) initiated by such person, unless such initiation was approved by the Registrant's board of directors. Also, the indemnification rights provided in the Registrant's restated certificate of incorporation (i) are not exclusive of any other rights to which those indemnified may be entitled under any law, agreement or vote of stockholders or disinterested directors or otherwise, and (ii) will inure to the benefit of the heirs, executors and administrators of such persons. The Registrant may, to the extent authorized from time to time by its board of directors, grant indemnification rights to other employees of the Registrant or other persons serving the Registrant and such rights may be equivalent to, or greater or less than, those set forth in the Registrant's restated certificate of incorporation.

The Registrant has entered into indemnification agreements with each of its directors. These agreements, among other things, require the Registrant to indemnify each director to the fullest extent permitted by Delaware law, including indemnification of expenses such as attorneys' fees, judgments, fines and settlement amounts incurred by the director in any action or proceeding, including any action or proceeding by or in right of the Registrant, arising out of the person's services as a director.

The Registrant maintains a general liability insurance policy that covers certain liabilities of the Registrant's directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers. In any underwriting agreement that the Registrant enters into in connection with the sale of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, the Registrant, its directors, its officers and persons who control the Registrant within the meaning of the Securities Act, against certain liabilities.

Item 16. Exhibits

Exhibit	Description
2.1	Agreement and Plan of Merger, dated November 19, 2013, by and among Amicus Therapeutics, Inc., Callidus Biopharma, Inc. and the other parties named therein (to be filed by amendment or as an exhibit to a Current Report on Form 8-K and incorporated herein by reference)
3.1	Restated Certificate of Incorporation of the registrant (incorporated by reference to Exhibit 3.1 of the registrant's Annual Report on Form 10-K filed with the Commission on February 28, 2012)
3.2	Restated By-laws of the of the registrant (incorporated by reference to Exhibit 3.4 of the registrant's Registration Statement on Form S-1/A (Registration No. 333-141700), as amended, originally filed with the Commission on April 27, 2007)
4.1	See Exhibits 3.1 and 3.2 for instruments defining rights of holders of common stock
4.2	Specimen Stock Certificate evidencing shares of common stock (incorporated by reference to Exhibit 4.1 of the registrant's Registration Statement on Form S-1 (Registration No. 333-141700), as amended, originally filed with the Commission on March 30, 2007)
4.3	Third Amended and Restated Investor Rights Agreement, dated as of September 13, 2006, as amended, by and among the registrant and certain stockholders of the registrant (incorporated by reference to Exhibit 4.3 of the registrant's Registration Statement on Form S-1 (Registration No. 333-141700), as amended, originally filed with the Commission on March 30, 2007)
4.4	Form of Warrant (incorporated by reference to Exhibit 4.1 of the registrant's Current Report on Form 8-K filed with the Commission on February 26, 2010)
5.1	Opinion of Lowenstein Sandler LLP (filed herewith)
23.1	Consent of Lowenstein Sandler LLP (included in Exhibit 5.1)
23.2	Consent of Ernst & Young LLP (filed herewith)
24.1	Power of attorney (included on the signature page hereto)

Item 17. Undertakings.

(a) The undersigned Registrant hereby undertakes:

(1) to file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement: (i) to include any prospectus required by Section 10(a)(3) of the Securities Act; (ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and (iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement; *provided, however*, that paragraphs (i), (ii) and (iii) do not apply if the registration statement is on Form S-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement;

(2) that, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;

(3) to remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering; and

(4) that, for the purpose of determining liability under the Securities Act to any purchaser: (A) Each prospectus filed by the Registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and (B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5) or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii) or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which the prospectus relates, and the offering of such securities at that time

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shall be deemed to be the initial *bona fide* offering thereof. *Provided, however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described under Item 15 above, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant, Amicus Therapeutics, Inc., certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the township of Cranbury, New Jersey, on the 10th day of December, 2013.

AMICUS THERAPEUTICS, INC.

By: /s/ John F. Crowley
John F. Crowley
Chairman and Chief Executive Officer

POWER OF ATTORNEY

We, the undersigned officers and directors of Amicus Therapeutics, Inc., hereby severally constitute and appoint John F. Crowley and William D. Baird, III, and both or either one of them, our true and lawful attorneys-in-fact and agents, with full power of substitution and re-substitution in for him and in his name, place and stead, and in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement,

and any subsequent registration statements pursuant to Rule 462 of the Securities Act, and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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

Signature	Title	Date
<u>/s/ John F. Crowley</u> John F. Crowley	Chairman and Chief Executive Officer (Principal Executive Officer)	December 10, 2013
<u>/s/ William D. Baird, III</u> William D. Baird, III	Chief Financial Officer (Principal Financial Officer)	December 10, 2013
<u>/s/ Daphne Quimi</u> Daphne Quimi	Corporate Controller (Principal Accounting Officer)	December 10, 2013
<u>/s/ Sol J. Barer Ph.D.</u> Sol J. Barer Ph.D.	Director	December 10, 2013
<u>/s/ James Barrett Ph.D.</u>	Director	December 10, 2013

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James Barrett Ph.D.

<u>/s/ Robert Essner</u> Robert Essner	Director	December 10, 2013
<u>/s/ Donald J. Hayden , Jr.</u> Donald J. Hayden , Jr.	Director	December 10, 2013
<u>/s/ Ted W. Love, M.D.</u> Ted W. Love, M.D.	Director	December 10, 2013
<u>/s/ Margaret G. McGlynn, R.Ph.</u> Margaret G. McGlynn, R.Ph.	Director	December 10, 2013
<u>/s/ Michael G. Raab</u> Michael G. Raab	Director	December 10, 2013
<u>/s/ Glenn Sblendorio</u> Glenn Sblendorio	Director	December 10, 2013
<u>/s/ James N. Topper, M.D., Ph.D.</u> James N. Topper, M.D., Ph.D.	Director	December 10, 2013

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EXHIBIT INDEX

Exhibit	Description
2.1	Agreement and Plan of Merger, dated November 19, 2013, by and among Amicus Therapeutics, Inc., Callidus Biopharma, Inc. and the other parties named therein (to be filed by amendment or as an exhibit to a Current Report on Form 8-K and incorporated herein by reference)
3.1	Restated Certificate of Incorporation of the registrant (incorporated by reference to Exhibit 3.1 of the registrant's Annual Report on Form 10-K filed with the Commission on February 28, 2012)
3.2	Restated By-laws of the of the registrant (incorporated by reference to Exhibit 3.4 of the registrant's Registration Statement on Form S-1/A (Registration No. 333-141700), as amended, originally filed with the Commission on April 27, 2007)
4.1	See Exhibits 3.1 and 3.2 for instruments defining rights of holders of common stock
4.2	Specimen Stock Certificate evidencing shares of common stock (incorporated by reference to Exhibit 4.1 of the registrant's Registration Statement on Form S-1 (Registration No. 333-141700), as amended, originally filed with the Commission on March 30, 2007)
4.3	Third Amended and Restated Investor Rights Agreement, dated as of September 13, 2006, as amended, by and among the registrant and certain

stockholders of the registrant (incorporated by reference to Exhibit 4.3 of the registrant's Registration Statement on Form S-1 (Registration No. 333-141700), as amended, originally filed with the Commission on March 30, 2007)

- 4.4 Form of Warrant (incorporated by reference to Exhibit 4.1 of the registrant's Current Report on Form 8-K filed with the Commission on February 26, 2010)
- 5.1 Opinion of Lowenstein Sandler LLP (filed herewith)
- 23.1 Consent of Lowenstein Sandler LLP (included in Exhibit 5.1)
- 23.2 Consent of Ernst & Young LLP (filed herewith)
- 24.1 Power of attorney (included on the signature page hereto)

December 10, 2013

Amicus Therapeutics, Inc.
1 Cedar Brook Drive
Cranbury, NJ 08512

Re: Resale Registration

Ladies and Gentlemen:

We have acted as counsel to Amicus Therapeutics, Inc., a Delaware corporation (the “**Company**”), in connection with the preparation of a registration statement (the “**Registration Statement**”) of the Company on Form S-3 under the Securities Act of 1933, as amended (the “**Act**”), and the filing of the Registration Statement with the Securities and Exchange Commission. The Registration Statement relates to the registration for resale of up to 19,277,081 shares (the “**Shares**”) of the Company’s common stock, par value \$0.01 per share (the “**Common Stock**”), to be issued to the selling stockholders identified in the Registration Statement pursuant to the Agreement and Plan of Merger, dated as of November 19, 2013, by and among the Company, Callidus Biopharma, Inc. and the other parties named therein (the “**Merger Agreement**”).

The Company has calculated the number of Shares being registered based on (i) 7,228,899 shares of Common Stock (the “**Closing Shares**”) issuable to the selling stockholders in connection with the closing of the merger transaction contemplated by the Merger Agreement and (ii) 12,048,182 shares of Common Stock (the “**Milestone Shares**”) that may be issued to the selling stockholders assuming each of the assumptions set forth in the Registration Statement.

In connection with this opinion, we have examined the originals or copies, certified or otherwise identified to our satisfaction, of the Registration Statement, the Restated Certificate of Incorporation and the Amended and Restated By-laws of the Company, the Merger Agreement, resolutions of the Company’s Board of Directors and such other documents and corporate records relating to the Company as we have deemed appropriate. We have assumed that all signatures are genuine, that all documents submitted to us as originals are authentic, and that all copies of documents submitted to us conform to the originals. We have relied as to certain matters on information obtained from public officials, officers of the Company, and other sources believed by us to be reliable.

We express no opinion herein as to the law of any state or jurisdiction other than the laws of the State of Delaware, including statutory provisions and all applicable provisions of the Delaware Constitution and reported judicial decisions interpreting such laws of the State of Delaware, and the federal laws of the United States of America.

Based on the foregoing, and in reliance thereon, we are of the opinion that the Closing Shares, when issued in accordance with the Merger Agreement, will be duly authorized and validly issued and will be fully paid and nonassessable, and the Milestone Shares, if and when issued in accordance with the Merger Agreement, will be duly authorized and validly issued and will be fully paid and nonassessable.

We assume no obligation to supplement this opinion if any applicable law changes after the date hereof or if we become aware of any fact that might change the opinion expressed herein after the date hereof.

We hereby consent to the reference to our firm under the section “Legal Matters” in the prospectus included in the Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement. In giving this consent, we do not admit that we are within the category of persons whose consent is required by Section 7 of the Act.

Very truly yours,

/s/ Lowenstein Sandler LLP

Lowenstein Sandler LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the reference to our firm under the caption “Experts” in this Registration Statement (Form S-3) and related Prospectus of Amicus Therapeutics, Inc. for the registration of up to 19,277,081 shares of common stock of Amicus Therapeutics, Inc. and to the incorporation by reference therein of our reports dated March 12, 2013, with respect to the consolidated financial statements of Amicus Therapeutics, Inc., and the effectiveness of internal control over financial reporting of Amicus Therapeutics, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2012, filed with the Securities and Exchange Commission.

/s/ ERNST & YOUNG LLP

Metropark, New Jersey

December 10, 2013
