As filed with the Securities and Exchange Commission on April 10, 2014

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-8

REGISTRATION STATEMENT UNDER

THE SECURITIES ACT OF 1933

AMICUS THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or formation)

71-0869350 (I.R.S. Employer Identification Number)

08512

(Zip Code)

1 Cedar Brook Drive, Cranbury, NJ (Address of Principal Executive Offices)

> AMICUS THERAPEUTICS, INC. RESTRICTED STOCK UNIT DEFERRAL PLAN (Trill title of the plan)

(Full title of the plan)

John F. Crowley Chief Executive Officer Amicus Therapeutics, Inc. 1 Cedar Brook Drive Cranbury, NJ 08512

(Name and address of agent for service)

(609) 662-2000

(Telephone number, including area code, of agent for service)

Copy to:

Steven J. Abrams Pepper Hamilton LLP 3000 Two Logan Square Eighteenth and Arch Streets Philadelphia, PA 19103 (215) 981-4000

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 o Accelerated filer x N	Ion-accelerated filer o	Smaller reporting company o
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CALCULATION OF REGISTRATION FEE

		Proposed		Proposed	
		maximum		maximum	
		offering		aggregate	Amount of
	Amount to be	price per		offering price	registration
Title of securities to be registered	registered	share		(2)	fee
Deferred compensation obligations (1)	\$ 20,000,000	100)% \$	20,000,000	\$ 2,576.00

(1) The deferred compensation obligations to which this Registration Statement relates (the "Deferred Compensation Obligations") arise under the Amicus Therapeutics, Inc. Restricted Stock Unit Deferral Plan (the "Deferred Compensation Plan") and are unsecured obligations of Amicus Therapeutics, Inc. to pay deferred compensation in the future pursuant to compensation deferral elections made by participants in the Deferred Compensation Plan in accordance with the terms of the Deferred Compensation Plan.

(2) Estimated, pursuant to paragraph (h) of Rule 457 under the Securities Act of 1933, as amended (the "Securities Act"), solely for the purpose of calculating the registration fee.

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Information required in Part I of Form S-8 to be contained in a prospectus meeting the requirements of Section 10(a) of the Securities Act is not required to be filed with the Securities and Exchange Commission (the "Commission") and is omitted from this Registration Statement in accordance with the explanatory note to Part I of Form S-8 and Rule 428 under the Securities Act.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of documents by Reference.

The following documents, which have been filed by the Registrant with the Commission, are hereby incorporated by reference into this Registration Statement:

(a) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2013, filed with the Commission on March 3, 2014; and

(b) The Registrant's Current Reports on Form 8-K filed with the Commission on January 8, 2014, January 13, 2014, March 3, 2014, March 4, 2014 and April 10, 2014, and the Registrant's Amendments to Current Reports on Form 8-K filed with the Commission on February 4, 2014 and February 12, 2014.

All documents subsequently filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a posteffective amendment to this Registration Statement which indicates that all securities offered hereby have been sold or which deregisters all such securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be a part hereof from the date of filing of such documents.

Item 4. Description of Securities.

The following description of the deferred compensation obligations of the Registrant under the Deferred Compensation Plan is qualified by reference to the Deferred Compensation Plan, which is included as an exhibit to this Registration Statement.

Under the Deferred Compensation Plan, the Registrant will provide eligible employees of the Registrant and each of the Registrant's subsidiaries which is a participating company in the Deferred Compensation Plan with the opportunity to defer the receipt of shares of the Registrant's Common Stock (the "Common Stock") upon the vesting of restricted stock units, as such term is defined in the Amended and Restated Amicus Therapeutics, Inc. 2007 Equity Incentive Plan ("Restricted Stock Units") in accordance with the terms of the Deferred Compensation Plan.

The Deferred Compensation Plan provides that the Registrant will offer certain key employees with the opportunity to defer receipt of shares for a period from the date an award of Restricted Stock Units vests (a "Vesting Date"). If Restricted Stock Units do not vest before such date, because of a failure to satisfy any condition, a deferral election will be null and void. Generally, participants in the Deferred Compensation Plan may elect to re-defer receipt of any previously deferred shares of Common Stock for an additional period if the election to defer receipt is made at least 12 months before the year in which the shares would otherwise be paid.

After a deferral election is made, upon the occurrence of a Vesting Date, participants' accounts are credited in the form of Restricted Stock Units. The participant's account is treated as if the account were invested in hypothetical shares of Common Stock, otherwise deliverable as such shares on the Vesting Date associated with the Restricted Stock Units, and all dividends and other distributions paid with respect to Common Stock were credited to the Account.

A participant may elect to receive distributions upon the occurrence of a specific date in the form of a lump sum and such amount will be paid in Common Stock or cash, as determined by the plan administrator. The undistributed balance of a participant's account is also payable as a lump sum following a participant's death, disability or upon such participant separation of service from the Company.

Whether or not the Registrant is a participant's direct employer, all compensation deferred under the Deferred Compensation Plan will continue for all purposes to be a part of the general funds of the Registrant and the participant's account will at all times represent a general obligation of the Registrant. Each participant will be a general creditor of the Registrant with respect to the account of the participant under the Deferred Compensation Plan, and will not have a secured or preferred position with respect to his or her account. Nothing contained in the Deferred Compensation Plan shall be deemed to create an escrow, trust, custodial account or

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fiduciary relationship of any kind or to eliminate any priority or preferred position of a participant in a bankruptcy matter with respect to claims for wages. Under the terms of the Deferred Compensation Plan, the right of a participant in or to an account, benefit or payment under the Deferred Compensation Plan shall not be subject in any manner to attachment or other legal process for the debts of such participant; and no such account, benefit or payment shall be subject to anticipation, alienation, sale, transfer, attachment, execution, garnishment, assignment or encumbrance.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

Section 145 of the Delaware General Corporation Law provides that a Delaware corporation may indemnify its officers and directors and certain other persons to the extent and under the circumstances set forth therein.

Article Seventh of the Registrant's Restated Certificate of Incorporation (the "Certificate"), and Article VII of the Registrant's Amended and Restated By-Laws (the "By-Laws"), provide that the Registrant will indemnify its directors, officers, employees and agents to the full extent permitted by

Delaware General Corporation Law, including in circumstances in which indemnification is discretionary under such law. The indemnification provisions in the Certificate and By-Laws may be sufficiently broad to permit indemnification of said directors and officers for liabilities (including reimbursement for expenses incurred) arising under the Securities Act. The Registrant intends to maintain director and officer liability insurance, if available on reasonable terms, to insure said directors and officers against the costs of defense, settlement, or judgment under certain circumstances.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

Exhibit Number	Description
4.1	Amicus Therapeutics, Inc. Restricted Stock Unit Deferral Plan (incorporated by reference from the Company's current report on
	Form 8-K (file no. 001-33497) filed on April 10, 2014).
5.1	Opinion of Pepper Hamilton LLP*
23.1	Consent of Ernst & Young LLP*
23.2	Consent of Pepper Hamilton LLP (included in Exhibit 5.1 to this Registration Statement)*
24	Power of Attorney (included on the signature page of this Registration Statement)*

* Filed herewith

Item 9. Undertakings.

1. Item 512(a) of Regulation S-K:

The undersigned Registrant hereby undertakes:

(a) 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

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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 percent 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 (1)(a)(i) and (1)(a)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the Registration Statement.

(b) 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.

(c) 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.

2. Item 512(b) of Regulation S-K.

The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933 each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

3. Item 512(h) of Regulation S-K.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being

registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned thereunto duly authorized, in the city of Cranbury, state of New Jersey, on the 10th day of April, 2014.

AMICUS THERAPEUTICS, INC.

By: /s/ John F. Crowley

Name:John F. CrowleyTitle:President 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 on Form S-8, and to file the same, with all exhibits thereto and other documents in connection therewith, with the 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, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ John F. Crowley John F. Crowley	Chairman and Chief Executive Officer (Principal Executive Officer)	April 10, 2014
/s/ William D. Baird, III William D. Baird, III	Chief Financial Officer (Principal Financial Officer)	April 10, 2014
/s/ Daphne Quimi Daphne Quimi	Corporate Controller (Principal Accounting Officer)	April 10, 2014
/s/ Sol J. Barer Ph.D. Sol J. Barer Ph.D.	Director	April 10, 2014
/s/ M. James Barrett Ph.D. M. James Barrett Ph.D.	Director	April 10, 2014
/s/ Robert Essner Robert Essner	Director	April 10, 2014
/s/ Donald J. Hayden , Jr. Donald J. Hayden , Jr.	Director	April 10, 2014
/s/ Ted W. Love, M.D. Ted W. Love, M.D.	Director	April 10, 2014
/s/ Margaret G. McGlynn, R.Ph. Margaret G. McGlynn, R.Ph.	Director	April 10, 2014
/s/ Michael G. Raab Michael G. Raab	Director	April 10, 2014
/s/ Glenn Sblendorio Glenn Sblendorio	Director	April 10, 2014
/s/ James N. Topper, M.D., Ph.D. James N. Topper, M.D., Ph.D.	Director	April 10, 2014

EXHIBIT INDEX

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Filed herewith

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Exhibit 5.1

Pepper Hamilton LLP Attorneys at Law 3000 Two Logan Square Eighteenth and Arch Streets Philadelphia, PA 19103-2799 215.981.4000 Fax 215.981.4750

April 10, 2014

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

Re: <u>Registration Statement on Form S-8</u>

Ladies and Gentlemen:

Reference is made to a registration statement on Form S-8 of Amicus Therapeutics, Inc. (the "Company") which is being filed with the Securities and Exchange Commission (the "Registration Statement"). Capitalized terms not otherwise defined herein shall have the meanings ascribed to them in the Registration Statement.

The Registration Statement relates to \$20,000,000 of deferred compensation obligations which may be incurred by the Company pursuant to the Amicus Therapeutics, Inc. Restricted Stock Unit Deferral Plan (the "Deferred Compensation Plan"). Such deferred compensation obligations are referred to herein as "Deferred Compensation Obligations."

In connection with our representation of the Company, as a basis for our opinions set forth below, we have examined the Registration Statement, including the exhibits thereto, the Company's Restated Articles of Incorporation, the Company's Amended and Restated By-laws, the Deferred Compensation Plan and such other documents as we have deemed appropriate in rendering this opinion. As to matters of fact, we have relied on representations of officers of the Company. In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals and the authenticity of all documents submitted to us as copies of originals.

Based on the foregoing, it is our opinion that the Deferred Compensation Obligations incurred by the Company in accordance with the Deferred Compensation Plan will be valid and binding obligations of the Company enforceable against the Company in accordance with the terms of the Deferred Compensation Plan, except to the extent that enforcement thereof may be limited by (a) bankruptcy, insolvency, reorganization, fraudulent transfer, moratorium or other similar laws relating to or affecting creditors' rights generally and (b) general principles of equity, regardless of whether enforceability is considered in a proceeding at law or in equity. This opinion is being furnished to you solely for submission to the Securities and Exchange Commission as an exhibit to the Registration Statement and, accordingly, may not be relied upon, quoted in any manner to, or delivered to any other person or entity, without in each instance our prior written consent.

Our opinion is limited to the Delaware General Corporation Law, as amended, and as applied by courts located in Delaware, the applicable provisions of the Delaware Constitution and the reported judicial decisions interpreting those laws and the federal securities laws, each as in effect on the date hereof. 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 filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933 or the rules or regulations of the Securities and Exchange Commission thereunder.

Sincerely yours,

/s/ Pepper Hamilton LLP

Pepper Hamilton LLP

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Amicus Therapeutics, Inc. Restricted Stock Unit Deferral Plan of our reports dated March 3, 2014, 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, 2013, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP Metropark, New Jersey April 10, 2014