

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

FORM S-8

**REGISTRATION STATEMENT
UNDER THE
SECURITIES ACT OF 1933**

G1 THERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

26-3648180
(I.R.S. Employer
Identification No.)

79 T.W. Alexander Drive
4501 Research Commons, Suite 100
Research Triangle Park, NC 27709
(Address, including zip code, of principal executive offices)

**G1 THERAPEUTICS, INC. 2011 EQUITY INCENTIVE PLAN, AS AMENDED
G1 THERAPEUTICS, INC. 2017 EMPLOYEE, DIRECTOR AND CONSULTANT EQUITY PLAN**
(Full Titles of the Plans)

Mark A. Velleca, M.D., Ph.D.
President and Chief Executive Officer
G1 Therapeutics, Inc.
79 T.W. Alexander Drive
4501 Research Commons, Suite 100

Research Triangle Park, NC 27709
(919) 213-9835
(Name, address and telephone number, including area code, of agent for service)

Copies to:

Jonathan L. Kravetz, Esq.
Megan N. Gates, Esq.
Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.
One Financial Center
Boston, Massachusetts 02111
(617) 542-6000
Facsimile: (617) 542-2241

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

Large accelerated filer Accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company
Emerging Growth Company

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

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share(2)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Common Stock, par value \$0.0001 per share	5,739,556 shares	\$2.33 – 16.73	\$41,193,965.48	\$4,774.38

- (1) The number of shares of common stock, par value \$0.0001 per share (“Common Stock”), of G1 Therapeutics, Inc. (the “Registrant”), stated above consists of the aggregate number of shares which may be sold (i) upon the exercise of options which have been granted under the G1 Therapeutics, Inc. 2011 Equity Incentive Plan, as amended (the “2011 Plan”), and (ii) upon the exercise of options or issuance of stock-based awards which may hereafter be granted under the G1 Therapeutics, Inc. 2017 Employee, Director and Consultant Equity Incentive Plan (the “2017 Plan,” and together with the 2011 Plan, the “Plans”). The maximum number of shares which may be sold upon the exercise of such options or issuance of stock-based awards granted under the Plans is subject to adjustment in accordance with certain anti-dilution and other provisions of the Plans. Accordingly, pursuant to Rule 416 under the Securities Act of 1933, as amended (the “Securities Act”), this Registration Statement covers, in addition to the number of shares stated above, an indeterminate number of shares which may be subject to grant or otherwise issuable after the operation of any such anti-dilution and other provisions.
- (2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(c) and Rule 457(h) promulgated under the Securities Act. The offering price per share and the aggregate offering price (a) for outstanding options granted under the 2011 Plan are based upon the weighted-average exercise price of such outstanding options, and (b) for shares reserved for future grant or issuance under the 2017 Plan are based on the average of the high and the low price of the Registrant’s Common Stock as reported on the NASDAQ Global Select Market as of a date (May 25, 2017) within five business days prior to filing this Registration Statement. The chart below details the calculations of the registration fee:

<u>Securities</u>	<u>Number of Shares</u>	<u>Offering Price Per Share(2)</u>	<u>Aggregate Offering Price</u>
Shares issuable upon the exercise of outstanding options granted under the 2011 Plan	3,807,556	\$ 2.33(2)(a)	\$ 8,871,605.48
Shares reserved for future grant under the 2017 Plan	1,932,000	\$ 16.73(2)(b)	\$32,322,360.00
Proposed Maximum Aggregate Offering Price			\$41,193,965.48
Registration Fee			\$ 4,774.38

EXPLANATORY NOTE

In accordance with the instructional Note to Part I of Form S-8 as promulgated by the Securities and Exchange Commission (the “Commission”), the information specified by Part I of Form S-8 has been omitted from this Registration Statement on Form S-8 for offers of Common Stock pursuant to the Plans. The documents containing the information specified in Part I will be delivered to the participants in the Plans covered by this Registration Statement as required by Rule 428(b)(1) under the Securities Act.

PART II
INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The following documents filed by the Registrant with the Commission are incorporated herein by reference:

(a) The prospectus filed by the Registrant with the Commission pursuant to Rule 424(b)(4) under the Securities Act, on May 17, 2017, relating to the registration statement on Form S-1 originally filed on April 13, 2017, as amended (File No. 333-217285), which contains the Registrant's audited financial statements for the latest fiscal year for which such statements have been filed;

(b) The Registrant's Current Report on Form 8-K filed on May 26, 2017; and

(c) The description of the Registrant's common stock contained in the Registrant's Registration Statement on Form 8-A (File No. 001-38096) filed on May 16, 2017, including any amendments or reports filed for the purpose of updating such description.

All reports and other documents filed by the Registrant after the date hereof pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") (other than Current Reports furnished under Item 2.02 or Item 7.01 of Form 8-K and exhibits furnished on such form that relate to such items), prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be part hereof from the date of filing of such reports and documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this Registration Statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this Registration Statement.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. ("Mintz Levin") has opined as to the legality of the securities being offered by this registration statement.

Item 6. Indemnification of Directors and Officers.

The Registrant's amended and restated certificate of incorporation and amended and restated by-laws provide that each person who was or is made a party or is threatened to be made a party to or is otherwise involved (including, without limitation, as a witness) in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was one of the Registrant's directors or officers or is or was serving at the Registrant's request as a director, officer or trustee of another corporation, or of a partnership, joint venture, trust or other enterprise, including service with respect to an employee benefit plan, whether the basis of such proceeding is alleged action in an official capacity as a director, officer or trustee or in any other capacity while serving as a director, officer or trustee, shall be indemnified and held harmless by the Registrant to the fullest extent authorized by the Delaware General Corporation Law against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by such.

Section 145 of the Delaware General Corporation Law permits a corporation to indemnify any director or officer of the corporation against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred in connection with any action, suit or proceeding brought by reason of the fact that such person is or was a director or officer of the corporation, if such person acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, if he or she had no reasonable cause to believe his or her conduct was unlawful. In a derivative action (i.e., one brought by or on behalf of the corporation), indemnification may be provided only for expenses actually and reasonably incurred by any director or officer in connection with the defense or settlement of such an action or suit if such person acted in good faith and in a manner that he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, except that no indemnification shall be provided if such person shall have been adjudged to be liable to the corporation, unless and only to the extent that the Delaware Chancery Court or the court in which the action or suit was brought shall determine that such person is fairly and reasonably entitled to indemnity for such expenses despite such adjudication of liability.

Pursuant to Section 102(b)(7) of the Delaware General Corporation Law, Article SEVENTH of the Registrant's amended and restated certificate of incorporation eliminates the liability of a director to the Registrant or its stockholders for monetary damages for such a breach of fiduciary duty as a director, except for liabilities arising:

- from any breach of the director's duty of loyalty to the Registrant or its stockholders;
- from acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law;
- under Section 174 of the Delaware General Corporation Law; and
- for any transaction from which the director derived an improper personal benefit.

The Registrant has entered into indemnification agreements with its non-employee directors and with certain officers, in addition to the indemnification provided for in the Registrant's amended and restated certificate of incorporation and restated by-laws, and intends to enter into indemnification agreements with any new directors and executive officers in the future. The Registrant has purchased and intends to maintain insurance on behalf of any person who is or was a director or officer against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

The foregoing discussion of the Registrant's amended and restated certificate of incorporation, restated by-laws, indemnification agreements and Delaware law is not intended to be exhaustive and is qualified in its entirety by such amended and restated certificate of incorporation, restated by-laws, indemnification agreements or law.

Item 7. Exemption from Registration Claimed.

Not applicable.

Item 8. Exhibits.

The Index to Exhibits immediately preceding the exhibits is incorporated herein by reference.

Item 9. 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 of 1933;

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

Provided, however, that Paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the registration statement is on Form S-8, 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 Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

- (2) That, for the purpose of determining any liability under the Securities Act of 1933, 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.

(b) 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 Securities Exchange Act of 1934 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 of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the indemnification provisions summarized in Item 6, 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.

SIGNATURES

The Registrant. 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 Research Triangle Park, North Carolina on June 2, 2017.

G1 THERAPEUTICS, INC.

By /s/ Mark A. Velleca, M.D., Ph.D.

Mark A. Velleca, M.D., Ph.D.

President and Chief Executive Officer

Each person whose signature appears below constitutes and appoints Mark A. Velleca, M.D., Ph.D. and Gregory J. Mossinghoff, and each of them singly, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution in each of them singly, for him or her and in his or her 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 of G1 Therapeutics, Inc., and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting to the attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite or necessary to be done in or about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that the attorneys-in-fact and agents or any of each of them or their substitute may lawfully do or cause to be done by virtue hereof.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Mark A. Velleca, M.D., Ph.D.</u> Mark A. Velleca, M.D., Ph.D.	President, Chief Executive Officer and Director (principal executive officer)	June 2, 2017
<u>/s/ Gregory J. Mossinghoff</u> Gregory J. Mossinghoff	Chief Business Officer (principal financial officer)	June 2, 2017
<u>/s/ Jennifer K. Moses</u> Jennifer K. Moses	Vice President of Finance and Administration (principal accounting officer)	June 2, 2017
<u>/s/ Seth A. Rudnick</u> Seth A. Rudnick	Chairman of the Board	June 2, 2017
<u>/s/ Fredric N. Eshelman, Pharm.D.</u> Fredric N. Eshelman, Pharm.D.	Director	June 2, 2017
<u>/s/ Glenn P. Muir</u> Glenn P. Muir	Director	June 2, 2017
<u>/s/ Tyrell J. Rivers, Ph.D.</u> Tyrell J. Rivers, Ph.D.	Director	June 2, 2017
<u>/s/ Christy L. Shaffer, Ph.D.</u> Christy L. Shaffer, Ph.D.	Director	June 2, 2017

G1 Therapeutics, Inc.
INDEX TO EXHIBITS FILED WITH
FORM S-8 REGISTRATION STATEMENT

<u>Exhibit Number</u>	<u>Exhibit Description</u>	<u>Filed Herewith</u>	<u>Incorporated by Reference herein from Form or Schedule</u>	<u>Filing Date</u>	<u>SEC File/Reg. Number</u>
4.1	Amended and Restated Certificate of Incorporation of the Registrant, as filed with the Secretary of State of the State of Delaware on May 22, 2017.		8-K (Exhibit 3.1)	5/26/2017	001-38096
4.2	Amended and Restated Bylaws of the Registrant.		8-K (Exhibit 3.2)	5/26/2017	001-38096
4.3	Form of Common Stock Certificate.		S-1/A (Exhibit 4.1)	5/8/2017	333-217285
5.1	Opinion of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.	X			
23.1	Consent of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. (included in opinion of counsel filed as Exhibit 5.1).	X			
23.2	Consent of PricewaterhouseCoopers LLP.	X			
24.1	Power of Attorney to file future amendments (set forth on the signature page of this Statement).				
99.1	2011 Equity Incentive Plan, as amended, and forms of award agreements thereunder.		S-1 (Exhibit 10.2)	4/13/2017	333-217285
99.2	2017 Employee, Director and Consultant Equity Plan, and forms of award agreements thereunder.		S-1/A (Exhibit 10.3)	5/8/2017	333-217285

June 2, 2017

G1 Therapeutics, Inc.
79 T.W. Alexander Drive
4501 Research Commons, Suite 100
Research Triangle Park, NC 27709

Ladies and Gentlemen:

We have acted as counsel to G1 Therapeutics, Inc., a Delaware corporation (the “Company”), in connection with the preparation and filing with the Securities and Exchange Commission (the “Commission”) of a Registration Statement on Form S-8 (the “Registration Statement”), pursuant to which the Company is registering the issuance under the Securities Act of 1933, as amended (the “Securities Act”), of an aggregate of 5,739,556 shares (the “Shares”) of the Company’s common stock, \$0.0001 par value per share, that may be issued pursuant to the G1 Therapeutics, Inc. 2011 Equity Incentive Plan, as amended (the “2011 Plan”), and the G1 Therapeutics, Inc. 2017 Employee, Director and Consultant Equity Incentive Plan (the “2017 Plan” and together with the 2011 Plan, the “Plans”). This opinion is being rendered in connection with the filing of the Registration Statement with the Commission. All capitalized terms used herein and not otherwise defined shall have the respective meanings given to them in the Registration Statement.

As counsel to the Company in connection with the Registration Statement, we have examined the actions taken by the Company in connection with the authorization of the issuance of the Shares, and such documents as we have deemed necessary to render this opinion.

In our examination, we have assumed the genuineness of all signatures, the legal capacity of natural persons, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified or photostatic copies and the authenticity of the originals of such copies. As to questions of fact material to this opinion, we have relied upon certificates or comparable documents of public officials and of officers and representatives of the Company. In addition, we have assumed that the Company will receive any required consideration in accordance with the terms of the Plans.

Our opinion is limited to the General Corporation Law of the State of Delaware and we express no opinion with respect to the laws of any other jurisdiction. No opinion is expressed herein with respect to the qualification of the Shares under the securities or blue sky laws of any state or any foreign jurisdiction.

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

BOSTON | LONDON | LOS ANGELES | NEW YORK | SAN DIEGO | SAN FRANCISCO | STAMFORD | WASHINGTON

June 2, 2017

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Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

Based upon the foregoing, we are of the opinion that the Shares, when issued and delivered in accordance with the terms of the Plans, will be validly issued, fully paid and non-assessable.

We understand that you wish to file this opinion with the Commission as an exhibit to the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K promulgated under the Securities Act, and we hereby consent thereto. In giving this consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated February 9, 2017, except for the effects of the reverse stock split described in Note 12, as to which the date is May 11, 2017, relating to the financial statements of G1 Therapeutics, Inc. which appears in the Prospectus filed on May 17, 2017, relating to the Registration Statement on Form S-1, as amended (No. 333-217285).

/s/ PricewaterhouseCoopers LLP

Raleigh, North Carolina

June 2, 2017