

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

**FORM S-8  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

**Infinity Pharmaceuticals, Inc.**

(Exact Name of Registrant as Specified in Its Charter)

Delaware  
(State or Other Jurisdiction of  
Incorporation or Organization)  
  
784 Memorial Drive  
Cambridge, Massachusetts  
(Address of Principal Executive Offices)

33-0655706  
(I.R.S. Employer  
Identification No.)

02139  
(Zip Code)

Infinity Pharmaceuticals, Inc. 2019 Equity Incentive Plan  
Infinity Pharmaceuticals, Inc. 2013 Employee Stock Purchase Plan  
(Full Title of the Plan)

Seth A. Tasker, Esq.  
Vice President, General Counsel  
Infinity Pharmaceuticals, Inc.  
784 Memorial Drive  
Cambridge, Massachusetts 02139  
(Name and Address of Agent For Service)

(617) 453-1000  
(Telephone Number, Including Area Code, of Agent For Service)

*With copies to:*  
Cynthia T. Mazareas, Esq.  
Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, MA 02109  
Telephone: (617) 526-6000

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  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	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.001 par value per share	15,561,971 shares(2)	\$1.57(3)	\$24,432,294.47(3)	\$2,961.20

- (1) In accordance with Rule 416 under the Securities Act of 1933, as amended, this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.
- (2) Consists of (i) 5,800,000 shares issuable under the Infinity Pharmaceuticals, Inc. 2019 Equity Incentive Plan (the "2019 Plan"), (ii) 200,000 shares issuable under the Infinity Pharmaceuticals, Inc. 2013 Employee Stock Purchase Plan (the "ESPP") and (iii) an additional 9,561,971 shares under the 2019 Plan comprising: (A) shares reserved for issuance under the Infinity Pharmaceuticals, Inc. 2010 Stock Incentive Plan, as amended (the "2010 Plan"), that remained available for grant as of June 13, 2019 and (B) shares subject to awards granted under the 2010 Plan and the Infinity Pharmaceuticals, Inc. 2000 Stock Incentive Plan, as amended, which awards expire, terminate or are otherwise surrendered, cancelled, forfeited or repurchased pursuant to contractual repurchase right, which awards shall thereafter become issuable under the 2019 Plan.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act of 1933, as amended, and based upon the average of the high and low prices of the Registrant's Common Stock as reported on the Nasdaq Global Market on June 7, 2019.

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**PART I**  
**INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS**

**Item 1. Plan Information.**

The information required by Item 1 is included in documents sent or given to participants in the plans covered by this registration statement pursuant to Rule 428(b)(1) of the Securities Act of 1933, as amended (the "Securities Act").

**Item 2. Registrant Information and Employee Plan Annual Information.**

The written statement required by Item 2 is included in documents sent or given to participants in the plans covered by this registration statement pursuant to Rule 428(b)(1) of the Securities Act.

**PART II**  
**INFORMATION REQUIRED IN THE REGISTRATION STATEMENT**

**Item 3. Incorporation of Documents by Reference.**

The registrant is subject to the informational and reporting requirements of Sections 13(a), 14, and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith files reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). The following documents, which are on file with the Commission, are incorporated in this registration statement by reference:

(a) The registrant's latest annual report filed pursuant to Section 13(a) or 15(d) of the Exchange Act or the latest prospectus filed pursuant to Rule 424(b) under the Securities Act that contains audited financial statements for the registrant's latest fiscal year for which such statements have been filed.

(b) All other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the document referred to in (a) above.

(c) The description of the securities contained in the registrant's registration statements on Form 8-A filed under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

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 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 in this registration statement and to be part hereof from the date of the filing of such 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.**

Wilmer Cutler Pickering Hale and Dorr LLP ("WilmerHale") has opined as to the legality of the securities being offered by this registration statement.

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**Item 6. Indemnification of Directors and Officers.**

Section 145 of the General Corporation Law of the State of Delaware (the "DGCL") provides, generally, that a corporation shall have 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 (except actions by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation against all expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful. A corporation may similarly indemnify such person for expenses actually and reasonably incurred by such person in connection with the defense or settlement of any action or suit by or in the right of the corporation, provided that 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 the case of claims, issues and matters as to which such person shall have been adjudged liable to the corporation, provided that a court shall have determined, upon application, 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 such court shall deem proper.

Section 102(b)(7) of the DGCL provides, generally, that the certificate of incorporation may contain a provision eliminating or limiting the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provision may not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the DGCL, or (iv) for any transaction from which the director derived an improper personal benefit. No such provision may eliminate or limit the liability of a director for any act or omission occurring prior to the date when such provision became effective.

The registrant's certificate of incorporation provides that a member of its board of directors will not be personally liable to the registrant or its stockholders for monetary damages for breaches of their fiduciary duties to the registrant or its stockholders as a director, except for liability:

- for any breach of the director's duty of loyalty to the registrant or its stockholders;
- for acts or omissions by the director not in good faith or which involve intentional misconduct or a knowing violation of law;
- for declaring dividends or authorizing the purchase or redemption of shares in violation of Delaware law; or
- for transactions where the director derived any improper personal benefit. The registrant's certificate of incorporation also allows it to indemnify directors and officers to the fullest extent authorized by Delaware law.

The registrant's bylaws provide that it shall, to the fullest extent authorized by the DGCL, indemnify its directors and executive officers; provided, however, that it may limit the extent of such indemnification by individual contracts with its directors and executive officers; and, provided, further, that the registrant shall not be required to indemnify any director or executive officer in connection with any proceeding (or part thereof) initiated by such person or any proceeding by such person against the registrant or its directors, officers, employees or other agents unless (i) such indemnification is expressly required to be made by law, (ii) the proceeding was authorized by the registrant's board of directors, or (iii) such indemnification is provided by the registrant, in its board's sole discretion, pursuant to its powers under the DGCL.

The registrant's bylaws also permit it to maintain insurance to protect it and any director, officer, employee or agent against any liability with respect to which the registrant would have the power to indemnify such persons under the DGCL. The registrant maintains an insurance policy insuring its directors and officers against certain liabilities.

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**Item 7. Exemption from Registration Claimed.**

Not applicable.

**Item 8. Exhibits.**

<u>Number</u>	<u>Description</u>
4.1	<a href="#"><u>Restated Certificate of Incorporation of the Registrant dated May 30, 2007. (Previously filed as Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2007 (File No. 000-31141) and incorporated herein by reference.)</u></a>
4.2	<a href="#"><u>Amended and Restated Bylaws of the Registrant. (Previously filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K filed on March 17, 2009 (File No. 000-31141) and incorporated herein by reference.)</u></a>
5.1	<a href="#"><u>Opinion of Wilmer Cutler Pickering Hale and Dorr LLP, counsel to the Registrant.</u></a>
23.1	<a href="#"><u>Consent of Wilmer Cutler Pickering Hale and Dorr LLP (included in Exhibit 5.1).</u></a>
23.2	<a href="#"><u>Consent of Ernst &amp; Young LLP, independent registered public accounting firm to the Registrant.</u></a>
24	<a href="#"><u>Power of attorney (included on the signature pages of this registration statement).</u></a>
99.1	<a href="#"><u>2019 Equity Incentive Plan. (Previously filed as Exhibit A to the Registrant's Definitive Proxy Statement filed on April 24, 2019 (File No. 000-31141) and incorporated herein by reference.)</u></a>
99.2	<a href="#"><u>2013 Employee Stock Purchase Plan, as amended by Amendment No. 1 and Amendment No. 2 thereto. (Previously filed as Exhibit 99.1 to the Registrant's Current Report on Form 8-K filed on June 16, 2015 (File No. 000-31141) and incorporated herein by reference.)</u></a>
99.3	<a href="#"><u>Amendment No. 3 to 2013 Employee Stock Purchase Plan. (Previously filed as Exhibit B to the Registrant's Definitive Proxy Statement filed on April 24, 2019 (File No. 000-31141) and incorporated herein by reference.)</u></a>

**Item 9. Undertakings.**

1. *Item 512(a) of Regulation S-K.* 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; 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)(i) and (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.

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(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.

2. Item 512(b) of Regulation S-K. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act 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 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.

## 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 Cambridge, Commonwealth of Massachusetts, on this 14th day of June, 2019.

### INFINITY PHARMACEUTICALS, INC.

By: /s/ Lawrence E. Bloch, M.D., J.D.

Lawrence E. Bloch, M.D., J.D.

President

## POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Infinity Pharmaceuticals, Inc., hereby severally constitute and appoint Adelene Q. Perkins, Lawrence E. Bloch, M.D., J.D., and Seth A. Tasker, and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names in the capacities indicated below, the registration statement on Form S-8 filed herewith and any and all subsequent amendments to said registration statement, and generally to do all such things in our names and on our behalf in our capacities as officers and directors to enable Infinity Pharmaceuticals, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

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/ Adelene Q. Perkins</u> Adelene Q. Perkins	Chief Executive Officer and Chair of the Board of Directors (Principal Executive Officer)	June 14, 2019
<u>/s/ Lawrence E. Bloch, M.D., J.D.</u> Lawrence E. Bloch, M.D., J.D.	President (Principal Financial Officer and Principal Accounting Officer)	June 14, 2019
<u>/s/ David Beier, J.D.</u> David Beier, J.D.	Director	June 14, 2019
<u>/s/ Jeffrey Berkowitz, J.D.</u> Jeffrey Berkowitz, J.D.	Director	June 14, 2019
<u>/s/ Anthony B. Evnin, Ph.D.</u> Anthony B. Evnin, Ph.D.	Director	June 14, 2019
<u>/s/ Michael G. Kauffman, M.D., Ph.D.</u> Michael G. Kauffman, M.D., Ph.D.	Director	June 14, 2019
<u>/s/ Norman C. Selby</u> Norman C. Selby	Director	June 14, 2019
<u>/s/ Michael C. Venuti, Ph.D.</u> Michael C. Venuti, Ph.D.	Director	June 14, 2019

WILMERHALE

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wilmerhale.com

June 14, 2019

Infinity Pharmaceuticals, Inc.  
784 Memorial Drive  
Cambridge, Massachusetts 02139

Re: 2019 Equity Incentive Plan  
2013 Employee Stock Purchase Plan

Ladies and Gentlemen:

We have assisted in the preparation of a Registration Statement on Form S-8 (the "Registration Statement") to be filed with the Securities and Exchange Commission (the "Commission") under the Securities Act of 1933, as amended (the "Securities Act"), relating to an aggregate of 15,561,971 shares of common stock, \$0.001 par value per share (the "Shares"), of Infinity Pharmaceuticals, Inc., a Delaware corporation (the "Company"), issuable under the Company's 2019 Equity Incentive Plan and 2013 Employee Stock Purchase Plan (collectively, the "Plans").

We have examined the Certificate of Incorporation and By-Laws of the Company, each as amended and restated to date, and originals, or copies certified to our satisfaction, of all pertinent records of the meetings of the directors and stockholders of the Company, the Registration Statement and such other documents relating to the Company as we have deemed material for the purposes of this opinion.

In our examination of the foregoing documents, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to original documents of all documents submitted to us as certified, photostatic or other copies, the authenticity of the originals of any such documents and the legal competence of all signatories to such documents.

We assume that the appropriate action will be taken, prior to the offer and sale of the Shares in accordance with the Plans, to register and qualify the Shares for sale under all applicable state securities or "blue sky" laws.

We express no opinion herein as to the laws of any state or jurisdiction other than the state laws of the Commonwealth of Massachusetts, the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

Wilmer Cutler Pickering Hale and Dorr LLP, 60 State Street, Boston, Massachusetts 02109  
Beijing Berlin Boston Brussels Denver Frankfurt London Los Angeles New York Palo Alto San Francisco Washington

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Infinity Pharmaceuticals, Inc.

June 14, 2019

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It is understood that this opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

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.

Based on the foregoing, we are of the opinion that the Shares have been duly authorized for issuance and, when the Shares are issued and paid for in accordance with the terms and conditions of the Plans, the Shares will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion with the Commission in connection with the Registration Statement in accordance with the requirements of Item 601(b)(5) of Regulation S-K under the Securities Act. In giving such consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission.

Very truly yours,

WILMER CUTLER PICKERING HALE AND DORR LLP

By: /s/ Cynthia T. Mazareas

Cynthia T. Mazareas, a Partner

**Consent of Independent Registered Public Accounting Firm**

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the Infinity Pharmaceuticals, Inc. 2019 Equity Incentive Plan and the Infinity Pharmaceuticals, Inc. 2013 Employee Stock Purchase Plan of our reports dated March 14, 2019 with respect to the consolidated financial statements of Infinity Pharmaceuticals, Inc. and the effectiveness of internal control over financial reporting of Infinity Pharmaceuticals, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2018, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Boston, Massachusetts  
June 13, 2019