INFINITY PHARMACEUTICALS, INC. Form SC 13G/A July 11, 2016

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

SCHEDULE 13G Under the Securities Exchange Act of 1934 (Amendment No. 4)*

INFINITY PHARMACEUTICALS, INC.

(Name of Issuer)

Common Stock, \$.001 par value

(Title of Class of Securities)

45665G303

(CUSIP Number)

June 30, 2016

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

[X] Rule 13d-1(b)

[_] Rule 13d-1(c)

[_] Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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| CUSIP No. 45665G3 | 03 | 13G | |
|------------------------|--------------------------|---|--------------------|
| | | 195 | |
| Goldman (Goldman | ficati Sachs Sachs | on No. of above Person Asset Management Asset Management, L.P., togethe | |
| | | ategies, LLC, "Goldman Sachs Asset | Management") |
| | 100110 | | (a) [_] (b) [_] |
| 3. SEC Use Only | | | |
| | | | |
| 4. Citizenship o | r Plac | e of Organization | |
| Delaware | ! | | |
| | 5. | Sole Voting Power | |
| Number of | | 0 | |
| Shares Beneficially | 6. | Shared Voting Power | |
| | 0. | 914 | |
| Owned by | | | |
| Each | 7. | Sole Dispositive Power | |
| Reporting | | 0 | |
| Person With: | 8. | Shared Dispositive Power | |
| | | 914 | |
| 9. Aggregate Amo | unt Be | neficially Owned by Each Reporting | Person |
| 914 | | | |
| 10. Check if the | Aggreg | ate Amount in Row (9) Excludes Cer | tain Shares |
| | | | [_] |
| 11. Percent of Cl | ass Re | presented by Amount in Row (9) | |

0.0 % _____ 12. Type of Reporting Person ΙA _____ Page 2 of 9 Item 1(a). Name of Issuer: INFINITY PHARMACEUTICALS, INC. Item 1(b). Address of Issuer's Principal Executive Offices: 784 Memorial Drive Cambridge, MA 02139 Item 2(a). Name of Persons Filing: GOLDMAN SACHS ASSET MANAGEMENT Item 2(b). Address of Principal Business Office or, if none, Residence: Goldman Sachs Asset Management 200 West Street New York, NY 10282 Item 2(c). Citizenship: GOLDMAN SACHS ASSET MANAGEMENT, L.P. - Delaware GS INVESTMENT STRATEGIES, LLC - Delaware Item 2(d). Title of Class of Securities: Common Stock, \$.001 par value Item 2(e). CUSIP Number: 45665G303 Item 3. If this statement is filed pursuant to Rules 13d-1(b) or 13d-2(b) or (c), check whether the person filing is a: (a).[_] Broker or dealer registered under Section 15 of the Act (15 U.S.C. 78o). (b).[_] Bank as defined in Section 3(a)(6) of the Act (15 U.S.C. 78c). (c).[_] Insurance company as defined in Section 3(a)(19) of the Act (15 U.S.C. 78c). (d).[_] Investment company registered under Section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).

- (e).[X] An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E); Goldman Sachs Asset Management, L.P. GS Investment Strategies, LLC
- (f).[_] An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F);
- (g).[_] A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G);
- (h).[_] A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i).[_] A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (k).[_] A group, provided that all the members are persons specified with Rule 13d-1(b)(1)(ii)(A) through (J).

If filing as a non-US institution in accordance with Rule 13d-1(b) (1)(ii)(J), please specify the type of institution:

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Item 4. Ownership.*

- (a). Amount beneficially owned:See the response(s) to Item 9 on the attached cover page(s).
- (b). Percent of Class: See the response(s)to Item 11 on the attached cover page(s).
- (c). Number of shares as to which such person has:
 - (i). Sole power to vote or to direct the vote: See the response(s) to Item 5 on the attached cover page(s).
 - (ii). Shared power to vote or to direct the vote: See the response(s) to Item 6 on the attached cover page(s).
 - (iii). Sole power to dispose or to direct the disposition of: See the response(s) to Item 7 on the attached cover page(s).
 - (iv). Shared power to dispose or to direct the disposition of: See the response(s) to Item 8 on the attached cover page(s).
- Item 5. Ownership of Five Percent or Less of a Class. If this statement is being filed to report the fact that as of the date hereof the reporting persons have ceased to be the beneficial owners of more than five percent of the class of securities, check the following [X].

Item 6. Ownership of More than Five Percent on Behalf of Another

Person.

| | Clients of the Reporting Person(s) have or may have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, securities held in their accounts. Clients known to have such right or power with respect to more than 5% of the class of securities to which this report relates are: NONE |
|----------|--|
| Item 7. | Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company. Not Applicable |
| Item 8. | Identification and Classification of Members of the Group. Not Applicable |
| Item 9. | Notice of Dissolution of Group. Not Applicable |
| Item 10. | Certification. By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect. |

*In accordance with the Securities and Exchange Commission Release No. 34-39538 (January 12, 1998) (the "Release"), this filing reflects the securities beneficially owned by certain operating units (collectively, the "Goldman Sachs Reporting Units") of The Goldman Sachs Group, Inc. and its subsidiaries and affiliates (collectively, "GSG"). This filing does not reflect securities, if any, beneficially owned by any operating units of GSG whose ownership of securities is disaggregated from that of the Goldman Sachs Reporting Units in accordance with the Release. The Goldman Sachs Reporting Units disclaim beneficial ownership of the securities beneficially owned by (i) any client accounts with respect to which the Goldman Sachs Reporting Units or their employees have voting or investment discretion or both, or with respect to which there are limits on their voting or investment authority or both and (ii) certain investment entities of which the Goldman Sachs Reporting Units act as the general partner, managing general partner or other manager, to the extent interests in such entities are held by persons other than the Goldman Sachs Reporting Units.

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SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in

this statement is true, complete and correct.

Date: July 11, 2016

GOLDMAN SACHS ASSET MANAGEMENT, L.P.

By:/s/ Annie (Au) Hsu Name: Annie (Au) Hsu Title: Attorney-in-fact GS INVESTMENT STRATEGIES, LLC By:/s/ Annie (Au) Hsu Name: Annie (Au) Hsu Title: Attorney-in-fact

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INDEX TO EXHIBITS

| Exhibit No. | Exhibit |
|-------------|---|
| | |
| 99.1 | Joint Filing Agreement |
| 99.2 | Power of Attorney, relating to GOLDMAN SACHS ASSET MANAGEMENT, L.P. |
| 99.3 | Power of Attorney, relating to GS INVESTMENT STRATEGIES, LLC |

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EXHIBIT (99.1)

JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k)(1) promulgated under the Securities Exchange Act of 1934, the undersigned agree to the joint filing of a Statement on Schedule 13G (including any and all amendments thereto) with respect to the Common Stock, \$.001 par value, of INFINITY PHARMACEUTICALS, INC. and further agree to the filing of this agreement as an Exhibit thereto. In addition, each party to this Agreement expressly authorizes each other party to this Agreement to file on its behalf any and all amendments to such Statement on Schedule 13G.

Date: July 11, 2016

GOLDMAN SACHS ASSET MANAGEMENT, L.P.

By:/s/ Annie (Au) Hsu Name: Annie (Au) Hsu Title: Attorney-in-fact

GS INVESTMENT STRATEGIES, LLC

By:/s/ Annie (Au) Hsu Name: Annie (Au) Hsu Title: Attorney-in-fact

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EXHIBIT (99.2)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS that GOLDMAN SACHS ASSET MANAGEMENT, L.P. (the "Company") does hereby make, constitute and appoint each of Dan Deluca, Jeremy Kahn and Brian Bae (and any other employee of The Goldman Sachs Group, Inc. or one of its affiliates designated in writing by one of the attorneys-in-fact), acting individually, its true and lawful attorney, to execute and deliver in its name and on its behalf whether the Company is acting individually or as representative of others, any and all filings required to be made by the Company under the Securities Exchange Act of 1934, (as amended, the "Act"), with respect to securities which may be deemed to be beneficially owned by the Company under the Act, giving and granting unto each said attorney-in-fact power and authority to act in the premises as fully and to all intents and purposes as the Company might or could do if personally present by one of its authorized signatories, hereby ratifying and confirming all that said attorney-in-fact shall lawfully do or cause to be done by virtue hereof.

THIS POWER OF ATTORNEY shall remain in full force and effect until either revoked in writing by the undersigned or until such time as the person or persons to whom power of attorney has been hereby granted cease(s) to be an employee of The Goldman Sachs Group, Inc. or one of its affiliates. The Company has the unrestricted right to unilaterally revoke this Power of Attorney.

This Power of Attorney shall be governed by, and construed in accordance with, the laws of the State of New York, without regard to rules of conflicts of law.

IN WITNESS WHEREOF, the undersigned has duly subscribed these presents as of November 30, 2012.

GOLDMAN SACHS ASSET MANAGEMENT, L.P.

By:/s/ Ellen R. Porges

Name: Ellen R. Porges Title: General Counsel

DESIGNATION OF ADDITIONAL ATTORNEY-IN-FACT

KNOW ALL PERSONS BY THESE PRESENTS that Jeremy Kahn, a duly appointed attorney-in-fact of GOLDMAN SACHS ASSET MANAGEMENT, L.P. (the "Company"), pursuant to that Power of Attorney dated November 30, 2012 (the "POA"), does hereby designate Veruna Stanescu and Annie Hsu, employees of the Company, as additional attorneys-in-fact, with the same authority to act as provided to the undersigned and the other to the to the undersigned and the other attorneys-in-fact named in the POA.

This Designation of Additional Attorney-in-Fact (this "Designation") shall not affect the continued power of the undersigned or the other named attorneys-in-fact to act under the POA to the full extent permitted thereby. This Designation shall remain in full force and effect until either it or the POA is revoked in writing by the Company, or until such time as the person or persons to whom power of attorney has been hereby granted cease(s) to be an employee of the Company or one of its affiliates.

IN WITNESS WHEREOF, the undersigned has duly subscribed these presents as of March 9, 2016.

GOLDMAN SACHS ASSET MANAGEMENT, L.P.

By: /s/ Jeremy Kahn

Name: Jeremy Kahn Title: Attorney-In-Fact

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EXHIBIT (99.3)

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS that GS INVESTMENT STRATEGIES, LLC (the "Company") does hereby make, constitute and appoint each of Dan Deluca, Jeremy Kahn and Brian Bae (and any other employee of The Goldman Sachs Group, Inc. or one of its affiliates designated in writing by one of the attorneys-in-fact), acting individually, its true and lawful attorney, to execute and deliver in its name and on its behalf whether the Company is acting individually or as representative of others, any and all filings required to be made by the Company under the Securities Exchange Act of 1934, (as amended, the "Act"), with respect to securities which may be deemed to be beneficially owned by the Company under the Act, giving and granting unto each said attorney-in-fact power and authority to act in the premises as fully and to all intents and purposes as the Company might or could do if personally present by one of its authorized signatories, hereby ratifying and confirming all that said attorney-in-fact shall lawfully do or cause to be done by virtue hereof.

THIS POWER OF ATTORNEY shall remain in full force and effect until either revoked in writing by the undersigned or until such time as the person or persons to whom power of attorney has been hereby granted cease(s) to be an employee of The Goldman Sachs Group, Inc. or one of its affiliates.

IN WITNESS WHEREOF, the undersigned has duly subscribed these presents as of November 30, 2012.

GS INVESTMENT STRATEGIES, LLC

By: /s/ Umit Alptuna

Name: Umit Alptuna Title: Managing Director

DESIGNATION OF ADDITIONAL ATTORNEY-IN-FACT

KNOW ALL PERSONS BY THESE PRESENTS that Jeremy Kahn, a duly appointed attorney-in-fact of GS INVESTMENT STRATEGIES, LLC (the "Company"), pursuant to that Power of Attorney dated November 30, 2012 (the "POA"), does hereby designate Veruna Stanescu and Annie Hsu, employees of the Company, as additional attorneys-in-fact, with the same authority to act as provided to the undersigned and the other attorneys-in-fact named in the POA.

This Designation of Additional Attorney-in-Fact (this "Designation") shall not affect the continued power of the undersigned or the other named attorneys-in-fact to act under the POA to the full extent permitted thereby. This Designation shall remain in full force and effect until either it or the POA is revoked in writing by the Company, or until such time as the person or persons to whom power of attorney has been hereby granted cease(s) to be an employee of the Company or one of its affiliates.

IN WITNESS WHEREOF, the undersigned has duly subscribed these presents as of March 9, 2016.

GS INVESTMENT STRATEGIES, LLC

By: /s/ Jeremy Kahn

Name: Jeremy Kahn Title: Attorney-In-Fact

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