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

SCHEDULE 13G

**Under the Securities Exchange Act of 1934
(Amendment No.)***

MIRUM PHARMACEUTICALS, INC.
(Name of Issuer)

Common Stock, par value \$0.0001 per share
(Title of Class of Securities)

604749101
(CUSIP Number)

July 17, 2019
(Date of Event Which Requires Filing of this Statement)

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

- 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 (the 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).

(1)	Names of reporting persons Takeda Pharmaceutical Company Limited
(2)	Check the appropriate box if a member of a group (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>
(3)	SEC use only
(4)	Citizenship or place of organization Japan

Number of shares beneficially owned by each reporting person with:	(5)	Sole voting power 0
	(6)	Shared voting power 1,859,151
	(7)	Sole dispositive power 0
	(8)	Shared dispositive power 1,859,151

(9)	Aggregate amount beneficially owned by each reporting person 1,859,151 (1)
(10)	Check if the aggregate amount in Row (9) excludes certain shares (see instructions) <input type="checkbox"/>
(11)	Percent of class represented by amount in Row (9) 8.1%(2)
(12)	Type of reporting person (see instructions) CO

- (1) Takeda Pharmaceutical Company Limited's beneficial ownership of the issuer's Common Stock is comprised of 1,859,151 shares of Common Stock held by Shire International GmbH, which is a direct, wholly owned subsidiary of Shire Pharmaceuticals International UC, which is a direct subsidiary of Shire Holdings Luxembourg Sarl (60.04%), Shire Ireland Investment Ltd. (28.27%) and Shire Human Genetic Therapies Inc. (11.69%). Shire Human Genetic Therapies Inc. is a direct, wholly owned subsidiary of Shire Holdings US AG, which is a direct, wholly owned subsidiary of Shire Biopharmaceuticals Holdings Ireland Limited, which is a direct, wholly owned subsidiary of Shire North American Group Inc. Each of Shire Holdings Luxembourg Sarl, Shire Ireland Investment Ltd. and Shire North American Group Inc. is a direct, wholly owned subsidiary of Shire Pharmaceutical Holdings Ireland Limited, which is a direct, wholly owned subsidiary of Takeda Pharmaceutical Company Limited.
- (2) Based on 22,989,987 shares of Common Stock outstanding after the issuer's initial public offering, as disclosed in the issuer's final prospectus filed with the Securities and Exchange Commission (the SEC) pursuant to Rule 424(b) under the Securities Act of 1933, as amended, dated July 17, 2019 (Final Prospectus) and in the issuer's quarterly report on Form 10-Q for the quarterly period ended June 30, 2019 filed with the SEC on August 28, 2019 (10-Q).

(1)	Names of reporting persons Shire International GmbH
(2)	Check the appropriate box if a member of a group (see instructions) (a) <input type="checkbox"/> (b) <input type="checkbox"/>
(3)	SEC use only
(4)	Citizenship or place of organization Switzerland

Number of shares beneficially owned by each reporting person with:	(5)	Sole voting power 0
	(6)	Shared voting power 1,859,151
	(7)	Sole dispositive power 0
	(8)	Shared dispositive power 1,859,151

(9)	Aggregate amount beneficially owned by each reporting person 1,859,151
(10)	Check if the aggregate amount in Row (9) excludes certain shares (see instructions) <input type="checkbox"/>
(11)	Percent of class represented by amount in Row (9) 8.1%(1)
(12)	Type of reporting person (see instructions) CO

(1) Based on 22,989,987 shares of Common Stock outstanding after the issuer's initial public offering, as disclosed in the issuer's Final Prospectus and 10-Q.

Item 1(a) Name of issuer:

Mirum Pharmaceuticals, Inc.

Item 1(b) Address of issuer's principal executive offices:

950 Tower Lane, Suite 1050, Foster City, California 94404

Item 2(a) Name of person filing:

Takeda Pharmaceutical Company Limited
Shire International GmbH

Item 2(b) Address of principal business office or, if none, residence:

Takeda Pharmaceutical Company Limited - 1-1, Nihonbashi-Honcho 2-Chome, Chuo-ku, Tokyo 103-8668, Japan
Shire International GmbH - Zahlerweg 10, CH - 6300 Zug, Switzerland

Item 2(c) Citizenship:

Takeda Pharmaceutical Company Limited - Japan
Shire International GmbH - Switzerland

Item 2(d) Title of class of securities:

Common Stock, par value \$0.0001 per share

Item 2(e) CUSIP No.:

604749101

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

Not applicable.

Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

(a) Amount beneficially owned: See the responses to Item 9 on the attached cover pages.

(b) Percent of class: See the responses to Item 11 on the attached cover pages.

(c) Number of shares as to which the person has:

- (i) Sole power to vote or to direct the vote: See the responses to Item 5 on the attached cover pages.
- (ii) Shared power to vote or to direct the vote: See the responses to Item 6 on the attached cover pages.
- (iii) Sole power to dispose or to direct the disposition of: See the responses to Item 7 on the attached cover pages.
- (iv) Shared power to dispose or to direct the disposition of: See the responses to Item 8 on the attached cover pages.

The percentages used herein and in this Item 4 are calculated based on 22,989,987 shares of Common Stock outstanding after the issuer's initial public offering, as disclosed in the issuer's Final Prospectus and 10-Q.

Item 5. Ownership of 5 Percent or Less of a Class.

Not applicable.

Item 6. Ownership of More than 5 Percent on Behalf of Another Person.

Not applicable.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on by the Parent Holding Company or Control Person.

See Exhibit 99.1.

Item 8. Identification and Classification of Members of the Group.

Not applicable.

Item 9. Notice of Dissolution of Group.

Not applicable.

Item 10. Certifications

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above 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, other than activities solely in connection with a nomination under 240.14a-11.

Signatures

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.

Dated: September 10, 2019

TAKEDA PHARMACEUTICAL COMPANY LIMITED

By /s/ Yoshihiro Nakagawa
Name: Yoshihiro Nakagawa
Title: Corporate Officer, Global General Counsel

SHIRE INTERNATIONAL GMBH

By /s/ Remco Lemarcq
Name: Remco Lemarcq
Title: Proxy Holder

INDEX TO EXHIBITS

- Exhibit 99.1 [Identification of the subsidiary which acquired the security being reported on by the parent holding company](#)
- Exhibit 99.2 [Joint Filing Agreement](#)

Identification of the subsidiary which acquired the security being reported on by the parent holding company.

The reported securities are beneficially owned by Shire International GmbH, which is a direct, wholly owned subsidiary of Shire Pharmaceuticals International UC, which is a direct subsidiary of Shire Holdings Luxembourg Sarl (60.04%), Shire Ireland Investment Ltd. (28.27%) and Shire Human Genetic Therapies Inc. (11.69%). Shire Human Genetic Therapies Inc. is a direct, wholly owned subsidiary of Shire Holdings US AG, which is a direct, wholly owned subsidiary of Shire Biopharmaceuticals Holdings Ireland Limited, which is a direct, wholly owned subsidiary of Shire North American Group Inc. Each of Shire Holdings Luxembourg Sarl, Shire Ireland Investment Ltd. and Shire North American Group Inc. is a direct, wholly owned subsidiary of Shire Pharmaceutical Holdings Ireland Limited, which is a direct, wholly owned subsidiary of Takeda Pharmaceutical Company Limited.

JOINT FILING AGREEMENT

The undersigned hereby agree that the Statement on Schedule 13G filed herewith (and any amendments thereto), relating to the Common Stock of Mirum Pharmaceuticals, Inc., a Delaware corporation, is being filed jointly with the Securities and Exchange Commission pursuant to Rule 13d-1(d) under the Securities Exchange Act of 1934, as amended, on behalf of each of the undersigned. 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.

This Agreement may be executed in counterparts and each of such counterparts taken together shall constitute one and the same instrument.

Date: September 10, 2019

TAKEDA PHARMACEUTICAL COMPANY LIMITED

By /s/ Yoshihiro Nakagawa
Name: Yoshihiro Nakagawa
Title: Corporate Officer, Global General Counsel

SHIRE INTERNATIONAL GMBH

By /s/ Remco Lemarcq
Name: Remco Lemarcq
Title: Proxy Holder