

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

SCHEDULE 13G

**Under the Securities Exchange Act of 1934
(Amendment No. 1)***

Ionis Pharmaceuticals, Inc.
(Name of Issuer)

Common Stock, \$0.001 par value
(Title of Class of Securities)

462222100
(CUSIP Number)

December 31, 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 ("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	Name of Reporting Person: Biogen Inc. I.R.S. Identification No. of above Person (entities only) (voluntary) 33-0112644
2	Check the Appropriate Box if a Member of a Group (a) <input type="checkbox"/> (b) <input type="checkbox"/>
3	SEC USE ONLY
4	Citizenship or Place of Organization Delaware
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5 SOLE VOTING POWER 0
	6 SHARED VOTING POWER 5,750,577
	7 SOLE DISPOSITIVE POWER 0
	8 SHARED DISPOSITIVE POWER 5,750,577
9	AGGREGATE AMOUNT BENEFICIALLY OWNED 5,750,577
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 4.1% *
12	TYPE OF REPORTING PERSON CO

* Based on 140,663,254 shares of Common Stock outstanding as of October 31, 2019, as reported in the Issuer's Report on Form 10-Q for the period ended September 30, 2019 filed with the Securities and Exchange Commission on November 6, 2019.

1	Name of Reporting Person: Biogen MA Inc. I.R.S. Identification No. of above Person (entities only) (voluntary) 04-3002117
2	Check the Appropriate Box if a Member of a Group (a) <input type="checkbox"/> (b) <input type="checkbox"/>
3	SEC USE ONLY
4	Citizenship or Place of Organization Massachusetts
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	5 SOLE VOTING POWER 0
	6 SHARED VOTING POWER 5,750,577
	7 SOLE DISPOSITIVE POWER 0
	8 SHARED DISPOSITIVE POWER 5,750,577
9	AGGREGATE AMOUNT BENEFICIALLY OWNED 5,750,577
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES <input type="checkbox"/>
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 4.1% *
12	TYPE OF REPORTING PERSON CO

* Based on 140,663,254 shares of Common Stock outstanding as of October 31, 2019, as reported in the Issuer's Report on Form 10-Q for the period ended September 30, 2019 filed with the Securities and Exchange Commission on November 6, 2019.

AMENDMENT NO. 1 TO SCHEDULE 13G (FINAL AMENDMENT)

Reference is hereby made to the statement on Schedule 13G relating to the Common Stock of the Issuer filed with the Securities and Exchange Commission by the Reporting Persons on June 7, 2018 (the "Schedule 13G"). Terms defined in the Schedule 13G are used herein as so defined.

The following items of the Schedule 13G are hereby amended and restated as follows:

Item 4 Ownership:

The information requested in this item is incorporated herein by reference to the cover pages to this Amendment No. 1 to Schedule 13G.

Item 5 Ownership of Five Percent or Less of a Class:

If this statement is being filed to report the fact that the Reporting Persons have ceased to be beneficial owners of more than five percent of the Common Stock, check the following: .

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.

Date: February 11, 2020

BIOGEN INC.

By: /s/ Michael Dambach
Name: Michael Dambach
Title: Vice President, Treasurer

BIOGEN MA INC.

By: /s/ Michael Dambach
Name: Michael Dambach
Title: Vice President, Treasurer