SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 8-K

CURRENT REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of report (Date of earliest event reported): August 9, 2016

IONIS PHARMACEUTICALS, INC.

(Exact Name of Registrant as Specified in Charter)

Delaware

(State or Other Jurisdiction of Incorporation)

000-19125

(Commission File No.)

provisions:

33-0336973 (IRS Employer Identification No.)

2855 Gazelle Court

Carlsbad, CA 92010 (Address of Principal Executive Offices and Zip Code)

Registrant's telephone number, including area code: (760) 931-9200

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

□ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

□ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 2.02. Results of Operations and Financial Condition.

On August 9, 2016, Ionis Pharmaceuticals, Inc. (the "Company") issued a press release announcing the Company's financial results for the quarter ended June 30, 2016. In addition to disclosing results that are determined in accordance with Generally Accepted Accounting Principles (GAAP), the Company also discloses pro forma or non-GAAP results of operations, which are adjusted from GAAP to exclude non-cash compensation related to stock awards. The Company is presenting pro forma information excluding non-cash compensation because the Company believes it is useful for investors in assessing the Company's operating results compared to the prior year. A copy of the release is furnished with this report as an exhibit pursuant to "Item 2.02. Results of Operations and Financial Condition" of Form 8-K in accordance with SEC Release Nos. 33-8216 and 34-47583.

The information in this Current Report on Form 8-K and the Exhibit attached hereto shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, regardless of any general incorporation language in such filing.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

99.1 Press Release dated August 9, 2016.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Ionis Pharmaceuticals, Inc.

By: /s/ B. Lynne Parshall

B. LYNNE PARSHALL Chief Operating Officer

INDEX TO EXHIBITS

<u>99.1</u> Press Release dated August 9, 2016.

Dated: August 9, 2016



IONIS PHARMACEUTICALS REPORTS FINANCIAL RESULTS AND HIGHLIGHTS FOR SECOND QUARTER 2016

Conference Call Webcast Tuesday, August 9, 11:30 a.m. ET at www.ionispharma.com

CARLSBAD, Calif., August 9, 2016 – Ionis Pharmaceuticals, Inc. (Nasdaq: IONS) today reported that its financial results for the first half of 2016 were in line with the Company's expectations and the Company is on track to meet its pro forma NOL and cash guidance for the year.

"The recent announcement to file for regulatory approval of nusinersen based on positive results from an interim analysis of the Phase 3 ENDEAR study was an important next step in our goal to bring this potentially transformational medicine to the patients who desperately need it as quickly as possible. This is the first time a potential treatment for infantile-onset SMA has demonstrated a clinical benefit in a controlled clinical study," said B. Lynne Parshall, chief operating officer of Ionis Pharmaceuticals. "We are excited about the opportunity we now have to accelerate the advancement of nusinersen into regulatory review. We and Biogen are well along in preparing the U.S. and E.U. regulatory dossiers, and Biogen plans to file marketing applications in the U.S. and E.U. in the next few months, with other countries to follow. We are very pleased that our interactions with the FDA remain very constructive as we and Biogen continue to explore possible expedited mechanisms to accelerate the regulatory review timeline."

Biogen has exercised its option to license nusinersen and will be responsible for all development, regulatory and commercialization activities and costs going forward. Over the next several months, Ionis will be working closely with Biogen to transition patients in the ENDEAR and EMBRACE studies to an open-label study that will allow all patients in these studies to have access to nusinersen. Once these patients have been transitioned into an open-label study, Biogen plans to open an expanded access program to make nusinersen available to eligible patients with infantile-onset SMA (consistent with type 1). Ionis will continue to conduct the Phase 3 CHERISH study in childhood-onset SMA patients. Biogen will also continue to conduct the NURTURE study in pre-symptomatic SMA infants.

"We believe that Biogen is the right company to bring nusinersen to patients with this devastating disease. They understand the unique needs of the SMA community and the impact SMA has on patients and their families. Importantly, Biogen has the global commercial infrastructure and expertise needed to successfully launch and commercialize nusinersen. Nusinersen is the first antisense drug from our neurological disease collaboration with Biogen that we expect to advance to regulatory review, and we are excited about the possibility of bringing other therapies to patients with severe neurological diseases with limited or no treatment options," continued Ms. Parshall.

Financial Results

"We finished the second quarter in a strong financial position. In the first half of this year, we earned \$75 million of revenue, including more than \$15 million in milestone payments, the majority of which were related to the progression of our Phase 3 program for nusinersen, and \$15 million from Kastle when Kastle acquired the global rights to develop and commercialize Kynamro. Consistent with the guidance we have provided, we expect our revenue to be significantly higher in the second half of this year. We are well on our way to achieving our second half projections with the revenue we have already earned in the third quarter from the nusinersen and Janssen license fees, which total \$85 million. " said Elizabeth L. Hougen, chief financial officer of Ionis Pharmaceuticals. "We have continued to advance our Phase 3 programs and to prepare to commercialize volanesorsen through Akcea while prudently managing our expenses. As a result, we finished the first half of 2016 with a GAAP loss from operations of \$104 million, which included nearly \$40 million in non-cash compensation expense related to equity awards, that when excluded, resulted in a pro forma net operating loss of \$64 million. We also ended the first half of this year with more than \$660 million in cash. Neither our operating loss nor our cash balance at June 30th included the \$85 million in license fees we have earned already in the third quarter. We are on track to meet our guidance of a pro forma NOL in the low \$60 million range and a year-end cash balance in excess of \$600 million. Importantly, with the projected accelerated timeline for approval of nusinersen, we have the opportunity to begin earning commercial revenue next year." concluded Ms. Hougen.

All pro forma amounts referred to in this press release exclude non-cash compensation expense related to equity awards. Please refer to the reconciliation of GAAP to pro forma measures, which is provided later in this release.

<u>Revenue</u>

Ionis' revenue for the three and six months ended June 30, 2016 was \$38.5 million and \$75.3 million, compared to \$120.4 million and \$183.0 million for the same periods in 2015. Ionis' revenue in the first half of 2016 consisted of the following:

- \$15 million from Kastle Therapeutics in an upfront payment for Kynamro;
- \$14.5 million from Biogen for advancing the Phase 3 program for nusinersen and advancing IONIS-BIIB4_{Rx};
- \$1.5 million from GSK for advancing IONIS-HBV-L_{Rx}; and
- \$44.3 million primarily from the amortization of upfront fees and manufacturing services Ionis performed for its partners.

Ionis' revenue in the first half of 2015 included \$91.2 million in connection with the exclusive license agreement with Bayer, \$56.8 million in milestone payments from partnered programs and \$35.0 million, primarily from the amortization of upfront fees and manufacturing services Ionis performed for its partners.

Ionis' revenue fluctuates based on the nature and timing of payments under agreements with its partners and consists primarily of revenue from the amortization of upfront fees, milestone payments and license fees. Already in the third quarter of 2016, Ionis has earned \$85 million in license fee revenue consisting of \$75 million from Biogen for nusinersen and \$10 million from Janssen for the Company's first oral antisense drug designed to act locally in the GI tract.

Operating Expenses

Ionis' operating expenses included costs to support the Company's five ongoing Phase 3 studies and three open-label extension studies related to its Phase 3 programs for nusinersen, IONIS-TTR_{Rx} and volanesorsen. In addition, Akcea continued to build its operations in preparation for the commercial launch of volanesorsen. As such, Ionis' operating expenses increased for the three and six months ended June 30, 2016 and on a GAAP basis were \$87.4 million and \$178.9 million, respectively, and on a pro forma basis, were \$68.1 million and \$139.6 million, respectively. This is compared to GAAP operating expenses of \$75.8 million and \$147.7 million and pro forma operating expenses of \$62.2 million and \$120.8 million for the same periods in 2015. In addition, Ionis' operating expenses on a GAAP basis increased due to an increase in non-cash compensation expense that resulted from an increase in the exercise price of the stock options the Company has granted over the past several years.

Net Income (Loss)

Ionis reported a net loss of \$56.9 million and \$119.8 million for the three and six months ended June 30, 2016, respectively, compared to net income of \$35.6 million and \$18.9 million for the same periods in 2015. Basic net loss per share for the three and six months ended June 30, 2016 was \$0.47 and \$0.99, respectively, compared to basic net income per share of \$0.30 and \$0.16 for the same periods in 2015. Diluted net loss per share for the three and six months ended June 30, 2016 was \$0.47 and \$0.99, respectively, compared to diluted net income per share of \$0.29 and \$0.15 for the same periods in 2015. Ionis had a net loss for the three and six months ended June 30, 2016 compared to net income for the same periods in 2015 primarily due to variations in the timing of revenue from license fees and milestone payments. For example, in the second quarter of 2015, the Company recognized \$91.2 million in revenue related to its exclusive license agreement with Bayer.

Balance Sheet

As of June 30, 2016, Ionis had cash, cash equivalents and short-term investments of \$664.1 million compared to \$779.2 million at December 31, 2015. Ionis' cash balance decreased in the first half of 2016 primarily due to spending to support the Company's ongoing Phase 3 programs for nusinersen, IONIS-TTR_{Rx} and volanesorsen. Ionis' working capital was \$586.9 million at June 30, 2016 compared to \$688.1 million at December 31, 2015. The decline in Ionis' working capital was a result of the cash used in operations and a decline in the Company's investment in Regulus Therapeutics resulting from a decline in Regulus' share price. Ionis' cash balance at June 30, 2016 did not include \$85 million, comprised primarily of the \$75 million from Biogen for the license of nusinersen, which it will add to its balance sheet in the third quarter.

Conference Call

At 11:30 a.m. Eastern Time today, August 9, 2016, Ionis will conduct a live webcast conference call to discuss this earnings release and related activities. Interested parties may listen to the call by dialing 877-443-5662 or access the webcast at <u>www.ionispharma.com</u>. A webcast replay will be available for a limited time at the same address.

ABOUT IONIS PHARMACEUTICALS, INC.

Ionis is the leading company in RNA-targeted drug discovery and development focused on developing drugs for patients who have the highest unmet medical needs, such as those patients with severe and rare diseases. Using its proprietary antisense technology, Ionis has created a large pipeline of first-in-class or best-in-class drugs, with over a dozen drugs in mid- to late-stage development. Drugs currently in Phase 3 development include volanesorsen, a drug Ionis is developing and plans to commercialize through its wholly owned subsidiary, Akcea Therapeutics, to treat patients with either familial chylomicronemia syndrome or familial partial lipodystrophy; IONIS-TTR_{Rx}, a drug Ionis is developing with GSK to treat patients with all forms of TTR amyloidosis; and nusinersen, a drug Ionis is developing with Biogen to treat infants and children with spinal muscular atrophy. Ionis' patents provide strong and extensive protection for its drugs and technology. Additional information about Ionis is available at <u>www.ionispharma.com</u>.

FORWARD-LOOKING STATEMENT

This press release includes forward-looking statements regarding Ionis Pharmaceuticals' financial position and outlook, Ionis' business, the business of Akcea Therapeutics, Inc., a subsidiary of Ionis Pharmaceuticals, and the therapeutic and commercial potential of Ionis' technologies and products in development, including nusinersen, IONIS-TTR_{Rx} and volanesorsen. Any statement describing Ionis' goals, expectations, financial or other projections, intentions or beliefs is a forward-looking statement and should be considered an at-risk statement. Such statements are subject to certain risks and uncertainties, particularly those inherent in the process of discovering, developing and commercializing drugs that are safe and effective for use as human therapeutics, and in the endeavor of building a business around such drugs. Ionis' forward-looking statements also involve assumptions that, if they never materialize or prove correct, could cause its results to differ materially from those expressed or implied by such forward-looking statements. Although Ionis' forward-looking statements reflect the good faith judgment of its management, these statements are based only on facts and factors currently known by Ionis. As a result, you are cautioned not to rely on these forward-looking statements. These and other risks concerning Ionis' programs are described in additional detail in Ionis' annual report on Form 10-K for the year ended December 31, 2015, and its most recent quarterly report on Form 10-Q, which are on file with the SEC. Copies of these and other documents are available from the Company.

In this release, unless the context requires otherwise, "Ionis," "Company," "we," "our," and "us" refers to Ionis Pharmaceuticals and its subsidiaries.

Ionis Pharmaceuticals™ is a trademark of Ionis Pharmaceuticals, Inc. Akcea Therapeutics™ is a trademark of Ionis Pharmaceuticals, Inc.

Investor and Media Contact:

D. Wade Walke, Ph.D. Vice President, Corporate Communications and Investor Relations 760-603-2741

Ionis Pharmaceuticals' Corporate and Drug Development Highlights (<u>Q2 2016 and subsequent activities</u>)

- Ionis reported positive data from an interim analysis of the ENDEAR Phase 3 study in infant-onset SMA. Biogen paid Ionis a \$75 million license fee and plans to file marketing applications in the U.S. and E.U. in the next few months, with other countries to follow.
- Ionis and Dr. Merrill Benson reported positive data from the IONIS-TTR_{Rx} program at the International Symposium on Amyloidosis (ISA) meeting. In line with previously reported data from his investigator-initiated study, Dr. Benson observed continued evidence of cardiac disease stabilization in eight TTR cardiomyopathy patients treated for 12 months with IONIS-TTR_{Rx}.
- Ionis published a paper in Nature Biotechnology on the novel mechanism of action for antisense drugs that significantly expands therapeutic opportunities for the technology.
- · Ionis added to its pipeline its first oral antisense drug acting locally in the GI tract for which Ionis earned a \$10 million license fee from Janssen.
- Ionis reported positive results from studies in normal volunteers with IONIS-ANGPTL3-L_{Rx} and IONIS-GSK4-L_{Rx} that demonstrated these drugs had similar potency to IONIS-APO(a)-L_{Rx}, confirming the high potency of the LICA platform.
- Ionis reported positive interim data from a Phase 2 dose-optimization study of IONIS-GCGR_{Rx} in patients with type 2 diabetes demonstrating that doses of 75 mg and 50 mg could produce reductions in HbA1c of greater than two percent and one percent, respectively, with minimal to no effects on liver enzyme elevations.
- Ionis reported positive data from a Phase 2 study of IONIS-AR-2.5_{Rx} in patients with prostate cancer showing durable prostate-specific antigen (PSA) responses with prolonged stable disease in heavily pre-treated castrate-resistance prostate cancer patients.
- · Ionis and MD Anderson Cancer Center formed a strategic alliance to advance novel cancer therapies.
- Akcea Therapeutics completed enrollment of the Phase 3 COMPASS trial, a study designed to support volanesorsen regulatory filings that is evaluating the effects of volanesorsen on triglyceride lowering in patients with triglycerides greater than 500 mg/dL.
- · Ionis sold the global rights to develop and commercialize Kynamro to Kastle Therapeutics and earned a \$15 million upfront payment.
- Ionis reported data from its ongoing open-label Phase 2 study of nusinersen in infantile-onset SMA patients at the 2016 AAN meeting as well as the latest progress on multiple new antisense drugs designed to treat neurological diseases.

IONIS PHARMACEUTICALS, INC. SELECTED FINANCIAL INFORMATION Condensed Consolidated Statements of Operations (In Thousands, Except Per Share Data)

	Three months ended, June 30,				Six months ended, June 30,			
	2016		2015		2016		2015	
Revenue:	 (unaudited)				(unaudited)			
Research and development revenue under collaborative agreements	\$ 22,455	\$	119,658	\$	57,670	\$	181,551	
Licensing and royalty revenue	 16,015		770		17,675		1,461	
Total revenue	 38,470		120,428		75,345		183,012	
Expenses:						_		
Research, development and patent expenses	77,573		68,007		158,536		132,454	
General and administrative	 9,824		7,775		20,386		15,241	
Total operating expenses	 87,397		75,782		178,922		147,695	
Income (loss) from operations	(48,927)		44,646		(103,577)	_	35,317	
Other income (expense):								
Investment income	1,466		918		2,921		1,762	
Interest expense	 (9,625)		(9,127)		(19,115)		(18,148)	
Income (loss) before income tax benefit	(57,086)		36,437		(119,771)		18,931	
Income tax benefit (expense)	 231		(789)		(1)		-	
Net income (loss)	\$ (56,855)	\$	35,648	\$	(119,772)	\$	18,931	
Basic net income (loss) per share	\$ (0.47)	\$	0.30	\$	(0.99)	\$	0.16	
Diluted net income (loss) per share	\$ (0.47)	\$	0.29	\$	(0.99)	\$	0.15	
Shares used in computing basic net income (loss) per share	 120,798		119,742		120,698		119,348	
Shares used in computing diluted net income (loss) per share	 120,798		127,779		120,698		124,061	

Ionis Pharmaceuticals, Inc. Reconciliation of GAAP to Pro Forma Basis: Condensed Consolidated Operating Expenses, Income (Loss) From Operations, and Net Income (Loss) (In Thousands)

	Three months ended, June 30,				Six months ended, June 30,			
	2016 2015			2016	2015			
	(unaudited)				(unaudited)			
As reported operating expenses according to GAAP	\$	87,397	\$	75,782	\$	178,922	\$	147,695
Excluding compensation expense related to equity awards		(19,260)		(13,605)		(39,364)		(26,910)
Pro forma operating expenses	\$	68,137	\$	62,177	\$	139,558	\$	120,785
As reported income (loss) from operations according to GAAP	\$	(48,927)	\$	44,646	\$	(103,577)	\$	35,317
Excluding compensation expense related to equity awards		(19,260)		(13,605)		(39,364)		(26,910)
Pro forma income (loss) from operations	\$	(29,667)	\$	58,251	\$	(64,213)	\$	62,227
As reported net income (loss) according to GAAP	\$	(56,855)	\$	35,648	\$	(119,772)	\$	18,931
Excluding compensation expense related to equity awards		(19,260)		(13,605)		(39,364)		(26,910)
Pro forma net income (loss)	\$	(37,595)	\$	49,253	\$	(80,408)	\$	45,841

Reconciliation of GAAP to Pro Forma Basis

As illustrated in the Selected Financial Information in this press release, pro forma operating expenses, pro forma income (loss) from operations, and pro forma net income (loss) were adjusted from GAAP to exclude compensation expense related to equity awards, which are non-cash. Ionis has regularly reported non-GAAP measures for operating results as pro forma results. These measures are provided as supplementary information and are not a substitute for financial measures calculated in accordance with GAAP. Ionis reports these pro forma results to better enable financial statement users to assess and compare its historical performance and project its future operating results and cash flows. Further, the presentation of Ionis' pro forma results is consistent with how Ionis' management internally evaluates the performance of its operations.

Ionis Pharmaceuticals, Inc. Condensed Consolidated Balance Sheets (In Thousands)

	 June 30, 2016		December 31, 2015	
Assets:				
Cash, cash equivalents and short-term investments	\$ 664,090	\$	779,183	
Investment in Regulus Therapeutics Inc.	8,217		24,792	
Other current assets	25,664		33,028	
Property, plant and equipment, net	90,602		90,233	
Other assets	22,536		20,664	
Total assets	\$ 811,109	\$	947,900	
Liabilities and stockholders' equity:				
Other current liabilities	\$ 52,608	\$	81,554	
Current portion of deferred contract revenue	58,473		67,322	
1% convertible senior notes	350,800		339,847	
2 3/4% convertible senior notes	50,873		49,523	
Long-term obligations, less current portion	74,706		74,558	
Long-term deferred contract revenue	112,436		134,306	
Stockholders' equity	 111,213		200,790	
Total liabilities and stockholders' equity	\$ 811,109	\$	947,900	

###