

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

December 30, 2020

Elizabeth Hougen Chief Financial Officer Ionis Pharmaceuticals, Inc. 2855 Gazelle Court Carlsbad, California

Re: Ionis Pharmaceuticals, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2019
Filed March 2, 2020
File No. 000-19125

Dear Ms. Hougen:

We have limited our review of your filing to the financial statements and related disclosures and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2019

Notes to Consolidated Financial Statements

1. Organization and Significant Accounting Policies
Inventory Valuation, page F-19

1. Your disclosure states that inventory is reflected at the lower of cost or market value under the first-in, first-out method. Please revise your future filings to clarify, if true, that your inventory is measured at the lower of cost or net realizable value consistent with ASC 330-10-35-1B.

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## 3. Long-Term Obligations and Commitments Convertible Notes and Call Spread, page F-26

2. We note your disclosure concerning the call spread transaction that was entered into in conjunction with the December 2019 note exchange. You indicate that the amounts paid/received for the note hedges/warrants was recorded in additional paid-in capital. Please tell us how you determined the appropriate accounting treatment for this transaction, including your consideration of whether these financial instruments meet the definition of a derivative. Please also revise your accounting policy disclosure accordingly in future filings.

In closing, we remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Li Xiao at (202) 551-4391 or Angela Connell, Accounting Branch Chief, at (202) 551-3426 with any questions.

Sincerely,

Division of Corporation Finance Office of Life Sciences