

December 30, 2020

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

Pharmaceuticals, Inc.
Fiscal Year Ended December 31, 2019

Re: Ionis
Form 10-K for the
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.

Elizabeth Hougen
FirstName LastNameElizabeth Hougen
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FirstName LastName

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.

Corporation Finance
Sciences

Sincerely,
Division of
Office of Life