Form 144 Filer Information UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Form 144

FORM 144

NOTICE OF PROPOSED SALE OF SECURITIES PURSUANT TO RULE 144 UNDER THE SECURITIES ACT OF 1933

144: Filer Information

Filer CIK0001970151Filer CCCXXXXXXXIs this a LIVE or TEST Filing?Is LIVE INFORMATIONSubmission Contact InformationIs the second second

Name Phone E-Mail Address

144: Issuer Information

Name of Issuer	IONIS PHARMACEUTICALS INC
SEC File Number	000-19125
Address of Issuer	2855 GAZELLE COURT CARLSBAD CALIFORNIA 92010
Phone	7609319200
Name of Person for Whose Account the Securities are To Be Sold	Birchler Brian

See the definition of "person" in paragraph (a) of Rule 144. Information is to be given not only as to the person for whose account the securities are to be sold but also as to all other persons included in that definition. In addition, information shall be given as to sales by all persons whose sales are required by paragraph (e) of Rule 144 to be aggregated with sales for the account of the person filing this notice.

Officer

Relationship to Issuer

144: Securities Information

Title of the Class of Securities To Be Sold	Name and Address of the Broker	Number of Shares or Other Units To Be Sold	Aggregate Market Value		Approximate Date of Sale	Name the Securities Exchange
Common Stock	ETrade by Morgan Stanley 200 Hudson Street, Suite 501 Jersey City CA 07311	713	26937.14	142950000	04/17/2023	NASDAQ

Furnish the following information with respect to the acquisition of the securities to be sold and with respect to the payment of all or any part of the purchase price or other consideration therefor:

144: Securities To Be Sold

Title of the	Date you	Nature of	Name of Person	Is	Date	Amount of	Date of	Nature of
Class	Acquired	Acquisition	from Whom	this	Donor	Securities	Payment	Payment *

	Transaction	Acquired a Ac Gift?	equired Acquired	
Common	04/17/2023 RSUs granted under the 2011 Equity Incentive Plan	Ionis Pharmaceuticals, 🔲 Inc.	713	04/17/2023 Services rendered

* If the securities were purchased and full payment therefor was not made in cash at the time of purchase, explain in the table or in a note thereto the nature of the consideration given. If the consideration consisted of any note or other obligation, or if payment was made in installments describe the arrangement and state when the note or other obligation was discharged in full or the last installment paid.

Furnish the following information as to all securities of the issuer sold during the past 3 months by the person for whose account the securities are to be sold.

144: Securities Sold During The Past 3 Months

Name and Address of Seller	Title of Securities Sold	Date of Sale	Amount of Securities Sold	Gross Proceeds
Brian Birchler 2855 GAZELLE COURT Carlsbad CA 92010	Common	01/18/2023	3836	151466.38

144: Remarks and Signature

Remarks Date of Notice *ATTENTION:*

The person for whose account the securities to which this notice relates are to be sold hereby represents by signing this notice that he does not know any material adverse information in regard to the current and prospective operations of the Issuer of the securities to be sold which has not been publicly disclosed. If such person has adopted a written trading plan or given trading instructions to satisfy Rule 10b5-1 under the Exchange Act, by signing the form and indicating the date that the plan was adopted or the instruction given, that person makes such representation as of the plan adoption or instruction date. Signature
Brian Birchler

04/17/2023

ATTENTION: Intentional misstatements or omission of facts constitute Federal Criminal Violations (See 18 U.S.C. 1001)