UNITED STATES SECURITIES AND EXCHANGE COMMISSION Form 144 Filer Information 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 CIK 0001276128 Filer CCC XXXXXXXX Is this a LIVE or TEST Filing? LIVE TEST

Submission Contact Information

Name Phone

E-Mail Address

144: Issuer Information

Name of Issuer IONIS PHARMACEUTICALS INC

SEC File Number 000-19125

2855 GAZELLE COURT

CARLSBAD Address of Issuer **CALIFORNIA**

92010

Phone 7609319200

Name of Person for Whose Account the Securities are To Be Sold LOSCALZO JOSEPH

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	Stifel Nicolaus & Company Inc. 501 N Broadway St. Louis MO 63102	13508	525152.00	157897287	11/12/2024	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	Is	Date	Amount of	Date of	Nature of
Class	Acquired	Acquisition	Person from	this	Donor	Securities	Payment	Payment *
	_	Transaction			Acquired	Acquired		

	Whom Acquired	a Gift?		
Common Stock 07/03/2024 Restricted Stock Units	Issuer		3508	11/12/2024 Compensation
Common Stock 11/12/2024 Owned Shares	Issuer		10000	11/12/2024 Cash

^{*} 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

Nothing to Report

144: Remarks and Signature

Remarks

Date of Notice 11/12/2024

Date of Plan Adoption or Giving of Instruction, If

08/13/2024 Relying on Rule 10b5-1

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

/s/ Dominick Iadicicco, as a duly authorized representative of STIFEL, as Signature attorney-in-fact for Joseph Loscalzo

adopted or the instruction given, that person makes such representation as of the plan adoption or instruction date.

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