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 0001206369 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 KLEIN JOSEPH III

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.

Relationship to Issuer Director

144: Securities Information

Title of the Class of Securities To Be Sold	Name and Address of the Broker		Aggregate Market Value			Name the Securities Exchange
COMMON STOCK	INSIGHT SECURITIES, INC. 600 CENTRAL STE 293 HIGHLAND PARK IL 60035	2000	90254.00	143100000	09/26/2023	NYSE

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

	a Gift?	Securitie Acquire	-
COMMON 107/01/2018 COMPENSATION PHARMACEUTICALS, INC.		1416	07/01/2018 COMPENSATION
COMMON 07/03/2018 COMPENSATION IONIS PHARMACEUTICALS,INC		584	07/03/2018 COMPENSATION

^{*} 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	Securities Sold	Gross Proceeds
JOSEPH KLEIN III				
2855 GAZELLE COURT	COMMON STOCK	07/18/2023	3555	149310.00
CARLSBAD CA 92010				

Amount of

144: Remarks and Signature

Remarks INSIGHT SECURITIES SOLD 2,000 SHARES OF IONIS PHARMACEUTICALS, INC. FOR JOSEPH KLEIN III

PHARMACEUTICALS, INC. FOR JOSEPH KLEIN III

Date of Notice 09/26/2023

Date of Plan Adoption or Giving of Instruction, If

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

Signature MICHAEL MAKULA

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