

OMB APPROVAL	
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STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>IONIS PHARMACEUTICALS INC</u> (Last) (First) (Middle) 2855 GAZELLE COURT (Street) CARLSBAD CA 92010 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>AKCEA THERAPEUTICS, INC. [AKCA]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) 10/10/2020	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	10/10/2020		P		21,237,715 ⁽¹⁾	A	\$18.15	98,322,397 ⁽²⁾	I	See Footnote ⁽²⁾

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V	(A)	(D)	Date Exercisable	Expiration Date					

Explanation of Responses:

- Pursuant to an Agreement and Plan of Merger dated as of August 30, 2020, on September 14, 2020, Avalanche Merger Sub, Inc. ("Purchaser"), a wholly owned subsidiary of Ionis Pharmaceuticals, Inc. ("Parent"), commenced a tender offer (the "Offer") to purchase all of the outstanding shares of common stock of Akcea Therapeutics, Inc. ("Akcea") at a purchase price of \$18.15 per share. As of the expiration of the Offer at one minute after 11:59 p.m., Eastern Time, on October 9, 2020, 21,237,715 shares had been tendered and not validly withdrawn pursuant to the Offer. Purchaser accepted for purchase all shares tendered and not validly withdrawn pursuant to the Offer.
- This number reflects 77,094,682 shares owned directly by Parent and 21,237,715 shares, which were tendered in the Offer and accepted for purchase on October 10, 2020, and thereupon owned by Purchaser. Following Purchaser's acceptance for purchase of shares tendered in the Offer, on October 12, 2020, Purchaser was merged with and into Akcea, with Akcea surviving the merger as a wholly owned subsidiary of Parent.

Remarks:

/s/ Elizabeth L. Hougén,
Executive Vice President,
Finance and Chief Financial Officer of Ionis 10/14/2020
Pharmaceuticals, Inc.

** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.