FORM 4

### UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

OMB APPROVAL

OMB Number: 3235-0287 Estimated average burden 0.5 hours per response:

### 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 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) 1. Name and Address of Reporting Person 2. Issuer Name and Ticker or Trading Symbol Eloxx Pharmaceuticals, Inc. [ ELOX ] **Kariv Tomer** Director 10% Owner Officer (give title Other (specify 3. Date of Earliest Transaction (Month/Day/Year) below) below) (Last) (First) (Middle) 04/30/2018 C/O ELOXX PHARMACEUTICALS, INC. 950 WINTER STREET, 4TH FLOOR NORTH 4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable

		.   4. 11	4. II Amendment, Date of Original Filed (Month/Day/Year)								Line)						
(Street) WALTHA	AM M										X For	m filed by N	One Reporting				
(City)	(St	ate) (	Zip)											rei	5011		
		Tabl	e I - No	n-Deriv	ative	Sec	uritie	s Ac	quirec	l, Di	sposed of	f, or B	enefici	ally Own	ed		
Date				Date	Date (Month/Day/Year)		2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) o Disposed Of (D) (Instr. 3, 4 a 5)			I Securit Benefic	ficially ed Following	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	Indirect	
									Code V		Amount	mount (A) or (D) Price			ction(s)		(111511.4)
Common	Stock			04/30/2	2018				P <sup>(1)</sup>		84,041	A	\$9.7	5 46	8,585	I	By Pontifax Investment Fund <sup>(2)</sup>
Common	Stock			04/30/2	2018				p <sup>(1)</sup>		172,626	A	\$9.7	5 96	2,504	I	By Pontifax Investment Fund <sup>(3)</sup>
Common	Stock			04/30/2	2018				P <sup>(1)</sup>		93,333	A	\$9.7	5 52	0,396	I	By Pontifax Investment Fund <sup>(4)</sup>
Common Stock														2,2	87,937	I	By Pontifax Investment Fund <sup>(5)</sup>
Common Stock														4,9	00,249	I	By Pontifax Investment Fund <sup>(6)</sup>
		Ta									osed of, c			y Owned	l	•	<u>'</u>
1. Title of Derivative Security (Instr. 3)	of 2. 3. Transaction 3A. Deemed Execution Date Execution Date, To wor Exercise (Month/Day/Year) if any				4. Transa	ransaction code (Instr. ) Sec Acc (A) Dis		mber ative rities ired osed	6. Date E Expiration (Month/D		6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)		9. Numbe derivative Securities Beneficia Owned Following Reported Transacti (Instr. 4)	Ownershi Form: Direct (D) or Indirect (I) (Instr. 4	Beneficial Ownership rect (Instr. 4)
				İ									Amount	1			

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	Title	Amount or Number of Shares				

## **Explanation of Responses:**

- 1. Reflects the purchase of shares in the follow-on offering of Common Stock of Eloxx Pharmaceuticals, Inc. that closed on April 30, 2018.
- 2. Represents shares of the Issuer held by Pontifax (Cayman) IV, L.P. ("Cayman IV"). Pontifax IV GP L.P. ("Pontifax IV") is the general partner of Cayman IV. Pontifax Management 4 G.P. (2015) Ltd. ("Management 4") is the general partner of Pontifax IV. Mr. Kariv is a Managing Partner of Management 4. By virtue of this relationship, Mr. Kariv may be deemed to share voting and dispositive power with respect to the shares held by Cayman IV. Mr. Kariv disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein, and the inclusion of the shares in this report shall not be deemed to be an admission of beneficial ownership of the reported shares for purposes of Section 16 of the Securities Exchange Act of 1934 or otherwise.
- 3. Represents shares of the Issuer held by Pontifax (Israel) IV, L.P. ("Israel IV"). Pontifax IV is the general partner of Israel IV. Management 4 is the general partner of Pontifax IV. By virtue of this relationship, Mr. Kariv may be deemed to share voting and dispositive power with respect to the shares held by Israel IV. Mr. Kariv disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein, and the inclusion of the shares in this report shall not be deemed to be an admission of beneficial ownership of the reported shares for purposes of Section 16 of the Securities Exchange Act of
- 4. Represents shares of the Issuer held by Pontifax (China) IV, L.P. ("China IV"). Pontifax IV is the general partner of China IV. Management 4 is the general partner of Pontifax IV. By virtue of this relationship, Mr. Kariv may be deemed to share voting and dispositive power with respect to the shares held by China IV. Mr. Kariv disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein, and the inclusion of the shares in this report shall not be deemed to be an admission of beneficial ownership of the reported shares for purposes of Section 16 of the Securities Exchange Act of 1934 or otherwise

5. Represents shares of the Issuer held by Pontifax (Cayman) III, L.P. ("Cayman III"). Pontifax Management Fund III L.P. ("Pontifax III") is the general partner of Cayman III. Pontifax Management III G.P. (2011) Ltd. ("Management III") is the general partner of Pontifax III. Mr. Kariv is a Managing Partner of Management III. By virtue of this relationship, Mr. Kariv may be deemed to share voting and dispositive power with respect to the shares held by Cayman III. Mr. Kariv disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein, and the inclusion of the shares in this report shall not be deemed to be an admission of beneficial ownership of the reported shares for purposes of Section 16 of the Securities Exchange Act of 1934 or otherwise.

Represents shares of the Issuer held by Pontifax (Israel) III, L.P. ("Israel III"). Pontifax III is the general partner of Israel III. Management III is the general partner of Pontifax III. Mr. Kariv is a Managing Partner of Management III. By virtue of this relationship, Mr. Kariv may be deemed to share voting and dispositive power with respect to the shares held by Israel III. Mr. Kariv disclaims beneficial ownership of such shares, except to the extent of his pecuniary interest therein, and the inclusion of the shares in this report shall not be deemed to be an admission of beneficial ownership of the reported shares for purposes of Section 16 of the Securities Exchange Act of 1934 or otherwise.

#### Remarks:

/s/ Gregory Weaver, Attorney in Fact 05/01/2018

Date

\*\* Signature of Reporting Person

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.