

INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

OMB APPROVAL	
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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>GLAXOSMITHKLINE PLC</u> (Last) (First) (Middle) <u>980 GREAT WEST ROAD</u> (Street) <u>BRENTFORD X0 TW8 9GS</u> <u>MIDDLESEX</u> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) <u>06/28/2017</u>	3. Issuer Name and Ticker or Trading Symbol <u>AILERON THERAPEUTICS INC [ALRN]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input checked="" type="checkbox"/> 10% Owner Officer (give title below) Other (specify below)	5. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
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Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Series D Preferred Stock	(1)	(1)	Common Stock	682,476	(1)	D ⁽⁵⁾	
Series E-2 Preferred Stock	(2)	(2)	Common Stock	148,088	(2)	D ⁽⁵⁾	
Series E-3 Preferred Stock	(3)	(3)	Common Stock	128,448	(3)	D ⁽⁵⁾	
Series F Preferred Stock	(4)	(4)	Common Stock	199,173	(4)	D ⁽⁵⁾	

Explanation of Responses:

- The Series D Preferred Stock is convertible into Common Stock on 9.937-for-one basis into the number of share of Common Stock shown in column 3 at any time at the holder's election and automatically upon the closing of the Issuer's initial public offering. The shares have no expiration date.
- The Series E-2 Preferred Stock is convertible into Common Stock on 9.937-for-one basis into the number of share of Common Stock shown in column 3 at any time at the holder's election and automatically upon the closing of the Issuer's initial public offering. The shares have no expiration date.
- The Series E-3 Preferred Stock is convertible into Common Stock on 9.937-for-one basis into the number of share of Common Stock shown in column 3 at any time at the holder's election and automatically upon the closing of the Issuer's initial public offering. The shares have no expiration date.
- The Series F Preferred Stock is convertible into Common Stock on 9.937-for-one basis into the number of share of Common Stock shown in column 3 at any time at the holder's election and automatically upon the closing of the Issuer's initial public offering. The shares have no expiration date.
- The shares reported herein are held of record by S.R. One, Limited, an indirect, wholly-owned subsidiary of GlaxoSmithKline plc (the "Reporting Person").

/s/ Victoria Whyte 06/28/2017
 ** 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 5 (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.