1. Name and Address of Reporting Person
   **MCARTHUR JOHN H**
   (Last) (First) (Middle)
   C/O AILERON THERAPEUTICS, INC.
   281 ALBANY STREET
   CAMBRIDGE MA 02139

2. Issuer Name and Ticker or Trading Symbol
   AILERON THERAPEUTICS INC [ ALRN ]

3. Date of Earliest Transaction (Month/Day/Year)
   06/21/2018

4. If Amendment, Date of Original Filed (Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer
   (Check all applicable)
   X Director
   10% Owner
   Officer (give title below) Other (specify below)

6. Individual or Joint/Group Filing (Check Applicable Line)
   X Form filed by One Reporting Person
   Form filed by More than One Reporting Person

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

<table>
<thead>
<tr>
<th>Title of Security (Instr. 3)</th>
<th>Transaction Date (Month/Day/Year)</th>
<th>Deemed Execution Date, if any (Month/Day/Year)</th>
<th>Transaction Code (Instr. 8)</th>
<th>Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)</th>
<th>Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)</th>
<th>Ownership Form: Direct (D) or Indirect (I) (Instr. 4)</th>
<th>Nature of Indirect Beneficial Ownership (Instr. 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Option (right to buy)</td>
<td>$6.02</td>
<td>06/21/2018</td>
<td>A</td>
<td>10,000</td>
<td>10,000</td>
<td>D</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Title of Derivative Security (Instr. 3)</th>
<th>Conversion or Exercise Price of Derivative Security</th>
<th>Transaction Date (Month/Day/Year)</th>
<th>Deemed Execution Date, if any (Month/Day/Year)</th>
<th>Transaction Code (Instr. 8)</th>
<th>Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)</th>
<th>Date Exercisable and Expiration Date (Month/Day/Year)</th>
<th>Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)</th>
<th>Price of Derivative Security (Instr. 5)</th>
<th>Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)</th>
<th>Ownership Form: Direct (D) or Indirect (I) (Instr. 4)</th>
<th>Nature of Indirect Beneficial Ownership (Instr. 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Option (right to buy)</td>
<td>$6.02</td>
<td>06/21/2018</td>
<td>A</td>
<td>10,000</td>
<td>10,000</td>
<td>06/20/2028</td>
<td>Common Stock 10,000</td>
<td>$0.00</td>
<td>10,000</td>
<td>D</td>
<td></td>
</tr>
</tbody>
</table>

Explanation of Responses:
1. This option was granted on June 21, 2018. The shares underlying the option are scheduled to vest in full on the earlier of (i) June 21, 2019 or (ii) the date of the Issuer’s 2019 Annual Meeting of Stockholders.

Remarks:

/s/ Donald Dougherty, attorney-in-fact for John H. McArthur
06/25/2018

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).


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.