1. Name and Address of Reporting Person

Mahony Susan

(City) NEW YORK
(State) NY
(Street) ONE WORLD TRADE CENTER, 22ND FLOOR
(Zip) 10007

2. Issuer Name and Ticker or Trading Symbol

Axsome Therapeutics, Inc. [ AXSM ]

5. Relationship of Reporting Person(s) to Issuer

X Director 10% Owner
Officer (give title below)
Other (specify below)

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

10/10/2023

6. Individual or Joint/Group Filing (Check Applicable Line)

Form filed by One Reporting Person
Form filed by More than One Reporting Person

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

Rule 10b5-1(c) Transaction Indication

Check this box to indicate that a transaction was made pursuant to a contract, instruction or written plan that is intended to satisfy the affirmative defense conditions of Rule 10b5-1(c). See Instruction 10.

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

<table>
<thead>
<tr>
<th>1. Title of Security (Instr. 3)</th>
<th>2. Transaction Date (Month/Day/Year)</th>
<th>2A. Deemed Execution Date, if any (Month/Day/Year)</th>
<th>3. Transaction Code (Instr. 8)</th>
<th>4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)</th>
<th>5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)</th>
<th>6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)</th>
<th>7. Nature of Indirect Beneficial Ownership (Instr. 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Option (Right to Buy)</td>
<td>10/10/2023</td>
<td></td>
<td>A</td>
<td>1,502</td>
<td>1,502</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td></td>
<td>$70.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></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>1. Title of Derivative Security (Instr. 3)</th>
<th>2. Conversion or Exercise Price of Derivative Security</th>
<th>3. Transaction Date (Month/Day/Year)</th>
<th>3A. Deemed Execution Date, if any (Month/Day/Year)</th>
<th>4. Transaction Code (Instr. 8)</th>
<th>5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)</th>
<th>6. Date Exercisable and Expiration Date (Month/Day/Year)</th>
<th>7. Title and Amount of Securities Underlying Derivative Security Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)</th>
<th>8. Price of Derivative Security (Instr. 5)</th>
<th>9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)</th>
<th>10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)</th>
<th>11. Nature of Indirect Beneficial Ownership (Instr. 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Option (Right to Buy)</td>
<td>$70.56</td>
<td>10/10/2023</td>
<td>A</td>
<td>5,873</td>
<td>5,873</td>
<td>10/10/2023</td>
<td>Common Stock</td>
<td>$0.00</td>
<td>5,873</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

Explanation of Responses:

1. The option vests in full on the one-year anniversary of the date of grant, October 10, 2024.

2. The option will vest in equal annual installments over three years such that the option will be fully vested on October 10, 2026.

Remarks:

As/ Nick Pizzie, Attorney-in-Fact

** Signature of Reporting Person

Date 10/12/2023

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.