

**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

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|---|---|---|--|
| 1. Name and Address of Reporting Person*<br><u>RA CAPITAL MANAGEMENT, L.P.</u><br><hr/> (Last) (First) (Middle)<br>200 BERKELEY STREET, 18TH FLOOR<br><hr/> (Street)<br>BOSTON MA 02116<br><hr/> (City) (State) (Zip) | 2. Date of Event Requiring Statement (Month/Day/Year)<br>06/30/2021 | 3. Issuer Name and Ticker or Trading Symbol<br><u>Acumen Pharmaceuticals, Inc. [ ABOS ]</u>   |  |
|   |   | 4. Relationship of Reporting Person(s) to Issuer (Check all applicable)<br><input checked="" type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner<br>Officer (give title below) Other (specify below) | 5. If Amendment, Date of Original Filed (Month/Day/Year)<br><br>6. Individual or Joint/Group Filing (Check Applicable Line)<br><input type="checkbox"/> Form filed by One Reporting Person<br><input checked="" type="checkbox"/> 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) |
|---------------------------------|---|--|---|
|---------------------------------|---|--|---|

**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 B Preferred Stock                   | (1)  | (1)             | Common Stock  | 6,122,557 <sup>(2)</sup>   | (1)  | I  | See footnotes <sup>(2)</sup><br>(3)                   |
| Series B Preferred Stock                   | (1)  | (1)             | Common Stock  | 1,184,366 <sup>(4)</sup>   | (1)  | I  | See footnote <sup>(3)</sup> (4)                       |
| Series B Preferred Stock                   | (1)  | (1)             | Common Stock  | 588,850 <sup>(5)</sup>     | (1)  | I  | See footnote <sup>(3)</sup> (5)                       |

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|---|
| 1. Name and Address of Reporting Person*<br><u>RA CAPITAL MANAGEMENT, L.P.</u><br><hr/> (Last) (First) (Middle)<br>200 BERKELEY STREET, 18TH FLOOR<br><hr/> (Street)<br>BOSTON MA 02116<br><hr/> (City) (State) (Zip) |
|---|

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|--|
| 1. Name and Address of Reporting Person*<br><u>RA Capital Healthcare Fund LP</u><br><hr/> (Last) (First) (Middle)<br>C/O RA CAPITAL MANAGEMENT, L.P.<br>200 BERKELEY STREET, 18TH FLOOR<br><hr/> (Street)<br>BOSTON MA 02116<br><hr/> (City) (State) (Zip) |
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1. Name and Address of Reporting Person\*  
RA Capital Nexus Fund II, L.P.

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(Last) (First) (Middle)  
C/O RA CAPITAL MANAGEMENT, L.P.  
200 BERKELEY STREET, 18TH FLOOR

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(Street)  
BOSTON MA 02116

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(City) (State) (Zip)

1. Name and Address of Reporting Person\*  
Kolchinsky Peter

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(Last) (First) (Middle)  
C/O RA CAPITAL MANAGEMENT, L.P.  
200 BERKELEY STREET, 18TH FLOOR

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(Street)  
BOSTON MA 02116

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(City) (State) (Zip)

1. Name and Address of Reporting Person\*  
Shah Rajeev M.

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(Last) (First) (Middle)  
C/O RA CAPITAL MANAGEMENT, L.P.  
200 BERKELEY STREET, 18TH FLOOR

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(Street)  
BOSTON MA 02116

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(City) (State) (Zip)

**Explanation of Responses:**

1. Each share of Series B Preferred Stock will automatically convert into one share of Common Stock of the Issuer upon the closing of the Issuer's initial public offering. The Series B preferred Stock has no expiration date.
2. Shares held directly by RA Capital Healthcare Fund, L.P. (the "Fund").
3. RA Capital Management, L.P. (the "Adviser") is the investment manager for the Fund, RA Capital Nexus Fund II, L.P. (the "Nexus Fund II") and a separately managed account (the "Account"). The general partner of the Adviser is RA Capital Management GP, LLC (the "Adviser GP"), of which Dr. Peter Kolchinsky and Mr. Rajeev Shah are the managing members. The Adviser, the Adviser GP, Dr. Kolchinsky, and Mr. Shah disclaim beneficial ownership of any of the reported securities, except to the extent of their pecuniary interest therein.
4. Shares held directly by the Nexus Fund II.
5. Shares held directly by the Account.

/s/ Peter Kolchinsky,  
Manager of RA Capital 06/29/2021  
Management, L.P.

/s/ Peter Kolchinsky,  
Manager of RA Capital  
Healthcare GP, LLC, the 06/29/2021  
General Partner of RA  
Capital Healthcare Fund,  
L.P.

/s/ Peter Kolchinsky,  
Manager of RA Capital 06/29/2021  
Nexus Fund GP, LLC, the  
General Partner of RA  
Capital Nexus Fund, L.P.

/s/ Peter Kolchinsky, 06/29/2021  
individually.

/s/ Rajeev Shah, 06/29/2021  
individually.

\*\* Signature of Reporting 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.

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