

ADAGE CAPITAL PARTNERS GP LLC  
 Form 4  
 April 26, 2012

**FORM 4**

UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
 Washington, D.C. 20549

OMB APPROVAL

OMB Number: 3235-0287  
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
 ADAGE CAPITAL PARTNERS GP LLC

2. Issuer Name and Ticker or Trading Symbol  
 PUMA BIOTECHNOLOGY, INC. [PBYI]

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

(Last) (First) (Middle)  
 200 CLARENDON STREET, 52ND FLOOR

3. Date of Earliest Transaction (Month/Day/Year)  
 04/25/2012

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

(Street)  
 BOSTON, MA 02116

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

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

(City) (State) (Zip)

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

| 1. Title of Security (Instr. 3)                             | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Ownership (Instr. 4) |
|---|--------------------------------------|--|--------------------------------|---|---|--|--|
|   |                                      |  | Code                           | V   | Amount  | (A) or (D)   | Price                                      |
| Common Stock, par value \$0.0001 per share ("Common Stock") | 04/25/2012                           |  | P                              |   | 200,000   | A  | \$ 13.97                                   |
|   |                                      |  |                                |   | 3,500,000   | I  |  |

See Footnote (1)

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not required to respond unless the form

SEC 1474 (9-02)

displays a currently valid OMB control number.

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

| 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 Underlying Securities (Instr. 3 and 4) | 8. Price of Derivative Security (Instr. 5) | 9. Number of Derivative Securities Beneficially Owned (Instr. 6) |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|--|--|
|  |  |                                      |  | Code                           | V (A) (D)   | Date Exercisable   | Expiration Date   | Title                                      | Amount or Number of Shares                                       |

## Reporting Owners

| Reporting Owner Name / Address   | Relationships |           |         |       |
|--|---------------|-----------|---------|-------|
|  | Director      | 10% Owner | Officer | Other |
| ADAGE CAPITAL PARTNERS GP LLC<br>200 CLARENDON STREET<br>52ND FLOOR<br>BOSTON, MA 02116  |               | X         |         |       |
| Adage Capital Partners, L.P.<br>200 CLARENDON STREET, 52ND FLOOR<br>BOSTON, MA 02116     |               | X         |         |       |
| Adage Capital Advisors, L.L.C.<br>200 CLARENDON STREET<br>52ND FLOOR<br>BOSTON, MA 02116 |               | X         |         |       |
| Atchinson Robert<br>200 CLARENDON STREET<br>52ND FLOOR<br>BOSTON, MA 02116               |               | X         |         |       |
| Gross Phillip<br>200 CLARENDON STREET<br>52ND FLOOR<br>BOSTON, MA 02116                  |               | X         |         |       |

## Signatures

|  |            |
|--|------------|
| /s/ Adage Capital Partners GP, L.L.C.; By its managing member Adage Capital Advisors, L.L.C.; By its managing member Robert Atchinson  | 04/26/2012 |
| __Signature of Reporting Person  | Date       |
| /s/ Adage Capital Partners, L.P.; By its general partner Adage Capital Partners GP, L.L.C.; By its managing member Adage Capital Advisors, L.L.C.; By its managing member Robert Atchinson | 04/26/2012 |
| __Signature of Reporting Person  | Date       |
| /s/ Adage Capital Advisors, L.L.C.; By its managing member Robert Atchinson  | 04/26/2012 |
| __Signature of Reporting Person  | Date       |
| /s/ Robert Atchinson   | 04/26/2012 |
| __Signature of Reporting Person  | Date       |
| /s/ Phillip Gross  | 04/26/2012 |
| __Signature of Reporting Person  | Date       |

## Explanation of Responses:

\* 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).

(1) Adage Capital Partners GP, L.L.C., a Delaware limited liability company ("ACPGP"), serves as the general partner of Adage Capital Partners, L.P., a Delaware limited partnership (the "Fund"), and as such has discretion over the portfolio securities beneficially owned by the Fund. Adage Capital Advisors, L.L.C., a Delaware limited liability company ("ACA"), is the managing member of ACPGP and directs ACPGP's operations. Robert Atchinson and Phillip Gross are the managing members of ACPGP and ACA and general partners of the Fund. ACPGP, ACA, Robert Atchinson and Phillip Gross disclaim beneficial ownership of the reported securities except to the extent of their pecuniary interest therein.

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.