

OMB APPROVAL

OMB Number: 3235-0287

Estimated average burden  
hours per response: 0.5

☐ 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

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*<br><u>KANZER STEVE H</u><br><br>(Last) (First) (Middle)<br><u>C/O 3930 VARSITY DRIVE</u><br><br>(Street)<br><u>ANN ARBOR MI 48108</u><br><br>(City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol<br><u>PIPEX PHARMACEUTICALS, INC. [ PP ]</u><br><br>3. Date of Earliest Transaction (Month/Day/Year)<br><u>04/11/2008</u><br><br>4. If Amendment, Date of Original Filed (Month/Day/Year) | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable)<br><br><input checked="" type="checkbox"/> Director 10% Owner<br><br><input checked="" type="checkbox"/> Officer (give title below) Other (specify below)<br><br><u>Chief Executive Officer</u><br><br>6. Individual or Joint/Group Filing (Check Applicable Line)<br><br><input checked="" type="checkbox"/> Form filed by One Reporting Person<br><br>Form filed by More than One Reporting Person |
|--|---|--|

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 Beneficial Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|------------|--------|---|--|---|
|                                 |                                      |  | Code                           | V | Amount  | (A) or (D) | Price  |   |  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 500   | A          | \$0.79 | 325,746   | D  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 9,500   | A          | \$0.8  | 335,246   | D  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 500   | A          | \$0.81 | 335,746   | D  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 2,300   | A          | \$0.83 | 338,046   | D  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 1,000   | A          | \$0.85 | 339,046   | D  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 6,200   | A          | \$0.86 | 345,246   | D  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 2,400   | A          | \$0.89 | 347,646   | D  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 500   | A          | \$0.9  | 348,146   | D  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 100   | A          | \$0.91 | 348,246   | D  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 9,900   | A          | \$0.92 | 358,146   | D  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 8,484   | A          | \$0.93 | 366,630   | D  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 2,650   | A          | \$0.94 | 369,280   | D  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 1,866   | A          | \$0.95 | 371,146   | D  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 1,000   | A          | \$0.96 | 372,146   | D  |   |
| Common Stock                    | 04/11/2008                           |  | P                              |   | 3,100   | A          | \$0.98 | 375,246   | D  |   |
| Common Stock                    | 10/31/2006                           |  | P                              |   | 7,086,380   | A          | (1)    | 7,086,380   | I  | Accredited Venture Capital, LLC                       |

**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 Securities Underlying Derivative Security (Instr. 3 and 4) |                            | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|--|--|--------------------------------------|--|--------------------------------|---|--|-----|--|-----------------|---|----------------------------|--|--|---|--|
|  |  |                                      |  | Code                           | V | (A)  | (D) | Date Exercisable   | Expiration Date | Title   | Amount or Number of Shares |  |  |   |  |

Explanation of Responses:

1. Received in exchange for shares of Pipex Therapeutics, Inc. common stock upon the October 31, 2006 merger of Pipex Therapeutics, Inc. and a wholly owned subsidiary of the Registrant. Mr. Kanzer is the managing member of Pharmainvestors, LLC, the managing member of Accredited Venture Capital, LLC.

/s/ Steve H. Kanzer

04/14/2008

\*\* 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).

\*\* 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.