## FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

| <b>STATEMENT</b> | <b>OF CHANGES</b> | IN BENEFICIAL | <b>OWNERSHIP</b> |
|------------------|-------------------|---------------|------------------|

| 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).

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*  HYDE JOSEPH R III                                     |            |                                    |                                       | 2. Issuer Name and Ticker or Trading Symbol GTX INC /DE/ [ GTXI ] |   |           |                |                                       |   |               |  | Relationship of Reporting Person(s) to Issuer (Check all applicable)     X Director X 10% Owner                            |   |   |   |           |   |  |
|---|------------|------------------------------------|---------------------------------------|---|---|-----------|----------------|---------------------------------------|---|---------------|--|--|---|---|---|-----------|---|--|
|   | (Fii       | · ·                                | Middle)                               |   | 3. Date of Earliest Transaction (Month/Day/Year) 01/29/2009 |           |                |                                       |   |               |  |  | Officer (give title Other (specify below) below)                                  |   |   |           |   |  |
| 3RD FLC   | OOR<br>    |                                    |                                       | _ [   | 4. If Amen  | dment, Da | ate of C       | Original                              | Filed (Month  | /Day/Ye       | ear)   |  | Individual o  | r Joint/G   | roup Fili   | ng (Check | Applicable                                    |  |
| (Street) MEMPH  | IS TN      | N 3                                | 88163                                 |   |   |           |                |                                       |   |               |  |  | X Form filed by One Reporting Person Form filed by More than One Reporting Person |   |   |           |   |  |
| (City)  | (St        | ate) (                             | Zip)                                  |   |   |           |                |                                       |   |               |  |  |   |   |   |           |   |  |
|   |            | Tabl                               | e I - Non-Dei                         | rivat   | ive Sec   | urities   | Acqu           | ired,                                 | Disposed  | l of, o       | r Bene   | eficia   | lly Owne  | ed  |   |           |   |  |
| 1. Title of Security (Instr. 3)   |            | 2. Transacti<br>Date<br>(Month/Day |                                       | 2A. Deemed<br>Execution Date,<br>if any<br>(Month/Day/Year)       | <u> </u>  |           |                |                                       | ) (Instr. 3, 4 and 5)   |               | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) |  | 6. Ownership<br>Form: Direct<br>(D) or Indirect<br>(I) (Instr. 4)                 | Direct Ir<br>ndirect B<br>tr. 4) C                                      | 7. Nature of<br>Indirect<br>Beneficial<br>Ownership<br>(Instr. 4) |           |   |  |
| Common  | Charle     |                                    | 01/20/2                               | 000   | -   |           | Code           | V                                     | Amount  | (A) oi<br>(D) | _  | 742(1)   | (Instr. 3 a   | nd 4)   |   | _         |   |  |
| Common Common   |            |                                    | 01/29/2                               |   | -   |           | P<br>P         | +                                     | 25,600<br>38,570  | A             | \$10.5   |  | 7,591,<br>7,630,  |   |   | )         |   |  |
| Common  |            |                                    | 01/30/2                               | 009   | $\vdash$  |           | r              | ╫                                     | 30,370  | A             | Φ10.:  | 944(-)   | 216,  |   |   |           | By Spouse                                     |  |
| Common  |            |                                    |                                       |   |   |           |                |                                       |   |               |  |  | 300,  |   |   | , E       | By 2009-1<br>GRAT                             |  |
| Comon St  | ock        |                                    |                                       |   |   |           |                |                                       |   |               |  |  | 309,  | 927   |   |           | By 2006-1<br>GRAT                             |  |
| Common  | Stock      |                                    |                                       |   |   |           |                |                                       |   |               |  |  | 463,  | 482   |   |           | Sy 2006-2<br>GRAT                             |  |
| Common  | Stock      |                                    |                                       |   |   |           |                |                                       |   |               |  |  | 410,  | 325   |   | I E       | y Trust                                       |  |
| Common  | Stock      |                                    |                                       |   |   |           |                |                                       |   |               |  |  | 410,  | 325   |   | I F       | By Trust                                      |  |
| Common  | Stock      |                                    |                                       |   |   |           |                |                                       |   |               |  |  | 410,  | 323   |   | I E       | By Trust                                      |  |
| Common  | Stock      |                                    |                                       |   |   |           |                |                                       |   |               |  |  | 114,  | 350   |   | I E       | y Trust                                       |  |
| Common  | Stock      |                                    |                                       |   |   |           |                | $oxed{igspace}$                       |   | lacksquare    | _  |  | 114,  | 350   |   | I F       | y Trust                                       |  |
| Common  | Stock      |                                    |                                       |   |   |           |                |                                       |   |               |  |  | 91,6  | 528   |   | I A       | sy Pittco<br>associates,<br>P. <sup>(3)</sup> |  |
| Common Stock  |            |                                    |                                       |   |   |           |                |                                       |   |               | 715,716  |  |   | I I   | by Pittco<br>nvestments,<br>P. <sup>(3)</sup>                     |           |   |  |
|   |            | Та                                 | ble II - Deriv<br>(e.g.,              |   |   |           |                |                                       | isposed o<br>s, convert   |               |  |  | Owned   |   |   |           |   |  |
| 1. Title of 2. 3. Transaction Date Execution Date, Security or Exercise (Month/Day/Year) if any |            | 4.<br>Tra                          | I. 5. Number of Derivative Decivative |   | er 6. Date E<br>Expiratio<br>(Month/D                       |           | xercisable and | d 7.1<br>Am<br>Sec<br>Un<br>De<br>Sec | 7. Title and<br>Amount of<br>Securities<br>Underlying<br>Derivative<br>Security (Instr.<br>and 4) |               | 8. Price of<br>Derivative<br>Security<br>(Instr. 5)                          | 9. Number of<br>derivative<br>Securities<br>Beneficially<br>Owned<br>Following<br>Reported<br>Transaction(s)<br>(Instr. 4) | ve<br>es<br>ially<br>ng<br>ed<br>etion(s)   | 10.<br>Ownership<br>Form:<br>Direct (D)<br>or Indirect<br>(I) (Instr. 4 | Beneficial<br>Ownership<br>(Instr. 4)                             |           |   |  |
|   | of Pesnons |                                    |                                       | Co  | de V  | (A) (E    |                | ate<br>kercisa                        | Expiration Date   | on Titl       | Amo<br>or<br>Num<br>of<br>e Sha  | nber   |   |   |   |           |   |  |

<sup>1.</sup> An aggregate of 25,600 shares of common stock were purchased in multiple trades on January 29, 2009 at prices ranging from \$10.60 to \$10.86. The price reported above reflects the weighted average sale price. The reporting person hereby undertakes to provide upon request to the SEC staff, GTx, Inc. or a shareholder of GTx, Inc. full information regarding the number of shares and prices at which the transaction was effected.

<sup>2.</sup> An aggregate of 38,570 shares of common stock were purchased in multiple trades on January 30, 2009 at prices ranging from \$10.72 to \$11.00. The price reported above reflects the weighted average sale price. The reporting person hereby undertakes to provide upon request to the SEC staff, GTx, Inc. or a shareholder of GTx, Inc. full information regarding the number of shares and prices at which the transaction was effected.

<sup>3.</sup> The reporting person disclaims beneficial ownership of these securities except to the extent of his pecuniary interest therein, and the inclusion of these shares in his report shall not be deemed an admission of

beneficial ownership of the reported shares for the purpose of Section 16 or any other purpose.

Remarks:

/s/ Mark E. Mosteller, by Power of Attorney

02/02/2009

\*\* Signature of Reporting Person Da

Data

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

- $^{\star}$  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.

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