

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP**

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

| OMB APPROVAL                                 |           |
|--|-----------|
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|   |   |  |
|---|---|--|
| 1. Name and Address of Reporting Person*<br><u>STEINER MITCHELL SHUSTER</u><br><br>(Last) (First) (Middle)<br>175 TOYOTA PLAZA<br>7TH FLOOR<br><br>(Street)<br>MEMPHIS TN 38103<br><br>(City) (State) (Zip) | 2. Issuer Name and Ticker or Trading Symbol<br><u>GTX INC /DE/ [ GTXI ]</u> | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)<br><br><input checked="" type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner<br><br><input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below)<br>Chief Executive Officer |
|   | 3. Date of Earliest Transaction (Month/Day/Year)<br>07/12/2012              |  |
| 4. If Amendment, Date of Original Filed (Month/Day/Year)  |   |  |

**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                    | 07/12/2012                           |  | S                              |   | 38,563  | D          | \$3.7 <sup>(1)</sup>   | 1,954,423   | I  | By Wife   |
| Common Stock                    | 07/13/2012                           |  | S                              |   | 61,437  | D          | \$3.759 <sup>(2)</sup> | 1,892,986   | I  | By Wife   |
| Common Stock                    | 07/16/2012                           |  | S                              |   | 25,035  | D          | \$3.666 <sup>(3)</sup> | 1,867,951   | I  | By Wife   |
| Common Stock                    |                                      |  |                                |   |   |            |                        | 2,129,922   | D  |   |
| Common Stock                    |                                      |  |                                |   |   |            |                        | 5,100   | I  | By Joint Account                                      |
| Common Stock                    |                                      |  |                                |   |   |            |                        | 134,210   | I  | By 2010 Trust   |
| Common Stock                    |                                      |  |                                |   |   |            |                        | 134,721   | I  | By Trust  |
| Common Stock                    |                                      |  |                                |   |   |            |                        | 133,981   | I  | By Trust  |
| Common Stock                    |                                      |  |                                |   |   |            |                        | 133,741   | I  | By Trust  |
| Common Stock                    |                                      |  |                                |   |   |            |                        | 133,741   | I  | By Trust  |

**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 |   |  |  |   |  |

**Explanation of Responses:**

- An aggregate of 38,563 shares of common stock were sold in multiple trades on July 12, 2012 at prices ranging from \$3.70 to \$3.71. 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.
- An aggregate of 61,437 shares of common stock were sold in multiple trades on July 13, 2012 at prices ranging from \$3.70 to \$3.90. 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.
- An aggregate of 25,035 shares of common stock were sold in multiple trades on July 16, 2012 at prices ranging from \$3.65 to \$3.72. 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.

**Remarks:**

/s/ Mark E. Mosteller, by 07/16/2012  
Power of Attorney

\*\* 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.

