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

SCHEDULE 13G

Under the Securities Exchange Act of 1934*

(Amendment No. 4)

GTx, Inc.

(Name of Issuer)

Common Stock, \$0.001 par value

(Title of Class of Securities)

40052B108

(CUSIP Number)

December 31, 2009

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

o Rule 13d-1(b)

X Rule 13d-1(c)

o Rule 13d-1(d)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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CUSIP No. 40052B108

Page <u>2</u> of <u>6</u> Pages

1	NAME OF REPORTING PERSON S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON						
2	Larry N. Feinberg CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*						
	CHECK THE ATTROTRIME BOX II A WEMBER OF A GROOT						
				(a)	0		
				(b)	X		
3	SEC USE ONLY						
4	CITIZENSHIP OR PLACE OF ORGANIZATION						
	United States						
	Office 5	5	SOLE VOTING POWER				
NUMB	BER OF						
_	RES	6	SHARED VOTING POWER				
BENEFICIALLY OWNED BY			2,631,479				
EACH 7 SOLE DISPOSITIVE POWER		SOLE DISPOSITIVE POWER					
REPORTING '							
WITH -		8	0 SHARED DISPOSITIVE POWER				
		0					
9	AGGRE	GATE AN	2,631,479 MOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
9	AGGREGATE AMOUNT DENEFICIALLY OWNED BY EACH REPORTING PERSON						
10	2,631,479 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*						
10	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*						
44	N/A						
11	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9						
	7.2%						
12	TYPE OF REPORTING PERSON*						
	IN						

Page <u>3</u> of <u>6</u> Pages

1	NAME OF REPORTING PERSON							
	S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON							
	Oracle Investment Management, Inc.							
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*							
_								
				(a)	0			
				(b)	X			
3	SEC USE ONLY							
4	CITIZENSHIP OR PLACE OF ORGANIZATION							
•	Gridding Grid Erick of Greenwald Interv							
	Delawar		SOLE VOTING POWER					
		5	SOLE VOTING POWER					
_	BER OF		0					
_	ARES ICIALLY	6	SHARED VOTING POWER					
OWNED BY			1,539,235					
EACH		7	SOLE DISPOSITIVE POWER					
DEDSON								
W	WITH		0 SHARED DISPOSITIVE POWER					
		8	JIMAES SIGNATURE TO WELL					
	ACCRE	CATEA	1,539,235					
9	AGGRE	GAIE A	MOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON					
	1,539,23							
10	CHECK	BOX IF	THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES*					
	N/A							
11	PERCEN	NT OF C	LASS REPRESENTED BY AMOUNT IN ROW 9					
	4.2%							
12		F REPO	RTING PERSON*					
	СО							
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This Amendment No. 4 to Schedule 13G (this "Amendment No. 3") is being filed with respect to the Common Stock, par value \$0.001 ("Common Stock") of GTx, Inc., a Delaware corporation (the "Company"), to amend the Schedule 13G filed on February 9, 2005, as previously amended by Amendment No. 1, filed on February 7, 2006, by Amendment No. 2, filed on February 15, 2008 and by Amendment No. 3, filed on May 20, 2009 (as so amended, the "Schedule 13G"), in accordance with the annual amendment requirements and to report that Oracle Investment Management, Inc. ("Oracle Investment Management") no longer holds in excess of 5% of the total outstanding Common Stock. Capitalized terms used but not defined herein have the meaning ascribed thereto in the Schedule 13G.

<u>Item 4</u>: <u>Ownership</u>:

Item 4 of the Schedule 13G is hereby amended and restated as follows:

I. Current Ownership.

The beneficial ownership of Common Stock by the Reporting Persons, as of the date of this Amendment No. 4, is as follows:

A. <u>Larry N. Feinberg</u>

- (a) Amount beneficially owned: 2,631,479
- (b) Percent of class: 7.2%. The percentages used herein and in the rest of this Amendment No. 4, are calculated based upon a total of 36,420,901 shares of Common Stock issued and outstanding as of November 4, 2009, as reported in the Company's Quarterly Report on Form 10-Q for the period ended September 30, 2009.
 - (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: 0
 - (ii) Shared power to vote or direct the vote: 2,631,479
 - (iii) Sole power to dispose or direct the disposition:0
 - (iv) Shared power to dispose or direct the disposition: 2,631,479

B. Oracle Investment Management, Inc.

- (a) Amount beneficially owned: 1,539,235
- (b) Percent of class: 4.2%
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 1,539,235
 - (iii) Sole power to dispose or direct the disposition:-0-
 - (iv) Shared power to dispose or direct the disposition: 1,539,235

II. December 31, 2009 Ownership.

The beneficial ownership of Common Stock by the Reporting Persons, as of December 31, 2009, is as follows:

A. Larry N. Feinberg

- (a) Amount beneficially owned: 2,932,201
- (b) Percent of class: 8.1%.
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: 10,000
 - (ii) Shared power to vote or direct the vote: 2,922,201
 - (iii) Sole power to dispose or direct the disposition:10,000
 - (iv) Shared power to dispose or direct the disposition: 2,922,201

B. Oracle Investment Management, Inc.

- (a) Amount beneficially owned: 1,829,957
- (b) Percent of class: 5.0%
- (c) Number of shares as to which such person has:
 - (i) Sole power to vote or direct the vote: -0-
 - (ii) Shared power to vote or direct the vote: 1,829,957
 - (iii) Sole power to dispose or direct the disposition:-0-
 - (iv) Shared power to dispose or direct the disposition: 1,829,957

<u>Item 5</u>: <u>Ownership of Five Percent or Less of a Class</u>:

Item 5 of the Schedule 13G is hereby amended and restated as follows:

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following: [X]. Oracle Investment Management no longer holds in excess of 5% of the total outstanding Common Stock, however Larry N. Feinberg continues to hold in excess of 5%.

Item 10: Certification:

Each of the Reporting Persons hereby makes the following certification:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

[THE REMAINDER OF THIS PAGE LEFT INTENTIONALLY BLANK]

SIGNATURE

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

DATED: February 1, 2010

<u>/s/ Larry N. Feinberg</u>
Larry N. Feinberg

ORACLE INVESTMENT MANAGEMENT, INC.

By: <u>/s/ Larry N. Feinberg</u>

Name: Larry N. Feinberg

Title: President

[SIGNATURE PAGE TO AMENDMENT NO. 4 TO SCHEDULE 13G WITH RESPECT TO GTX, INC.]