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

## **SCHEDULE 13G**

(Rule 13d-102)

#### INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULES 13d-1(b), (c), AND (d) AND AMENDMENTS THERETO FILED PURSUANT TO RULE 13d-2(b)

(Amendment No. 4)<sup>1</sup>

GTx, Inc. (Name of Issuer)

Common Stock, \$0.001 par value per share (Title of Class of Securities)

40052B 20 7

(CUSIP Number)

December 31, 2018

(Date of Event Which Requires Filing of this Statement)

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

□ Rule 13d-1(b)

⊠ Rule 13d-1(c)

□ Rule 13d-1(d)

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*).

<sup>&</sup>lt;sup>1</sup> 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 disclosures provided in a prior cover page.

·			
1	NAME OF REPO	RTING PERSON	
		gy Value Fund, L.P.	
2	CHECK THE APP	PROPRIATE BOX IF A MEMBER OF A GROUP	(a) ⊠
			(b) 🗆
3	SEC USE ONLY		
5	SEC USE ONEI		
4	CITIZENSHIP OF	R PLACE OF ORGANIZATION	
	Delaware		
NUMBER OF	5	SOLE VOTING POWER	
SHARES BENEFICIALLY		0 shares	
OWNED BY	6	SHARED VOTING POWER	
EACH	Ŭ		
REPORTING		0 shares	
PERSON WITH	7	SOLE DISPOSITIVE POWER	
	0	0 shares	
	8	SHARED DISPOSITIVE POWER	
		0 shares	
9	AGGREGATE AN	IOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	0 Shares		
10	CHECK BOX IF 1	THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
11	PERCENT OF CL	ASS REPRESENTED BY AMOUNT IN ROW (9)	
	0%		
12	TYPE OF REPOR	TING PERSON	
	DN		
	PN		

	NAME OF DEDC		
1	NAME OF REPC	DRTING PERSON	
	Biotechnol	ogy Value Fund II, L.P.	
2		PROPRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
-			(b) 🗆
3	SEC USE ONLY		
4	CITIZENCUIDO	R PLACE OF ORGANIZATION	
4	CITIZENSHIPU	R PLACE OF ORGANIZATION	
	Delaware		
NUMBER OF	5	SOLE VOTING POWER	
SHARES			
BENEFICIALLY		0 shares	
OWNED BY	6	SHARED VOTING POWER	
EACH REPORTING		0 shares	
PERSON WITH	7	SOLE DISPOSITIVE POWER	
		0 shares	
	8	SHARED DISPOSITIVE POWER	
9		0 shares MOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
9	AGGREGALE A	MOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	0 shares		
10	CHECK BOX IF	THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
11	PERCENT OF C	LASS REPRESENTED BY AMOUNT IN ROW (9)	
	0%		
12	TYPE OF REPOI	RTING PERSON	
	PN		

1	NAME OF REPORT	TING PERSON	
		v Value Trading Fund OS LP	
2	CHECK THE APPR	OPRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
			(b) 🗆
3	SEC USE ONLY		
4	CITIZENSUID OD I	PLACE OF ORGANIZATION	
4	CITIZENSIIIF OK I	LACE OF ORGANIZATION	
	Cayman Island	ls	
NUMBER OF	5	SOLE VOTING POWER	
SHARES			
BENEFICIALLY		0 shares	
OWNED BY	6	SHARED VOTING POWER	
EACH			
REPORTING		0 shares	
PERSON WITH	7	SOLE DISPOSITIVE POWER	
		0 shares	
	8	SHARED DISPOSITIVE POWER	
	0	SHARED DIST OSTITVE FOWER	
		0 shares	
9	AGGREGATE AMO	DUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	0 shares		
10	CHECK BOX IF TH	IE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
- 11			
11	PERCENT OF CLA	SS REPRESENTED BY AMOUNT IN ROW (9)	
	0%		
12	TYPE OF REPORT	NG PERSON	
12			
	PN		
	ļ		

NAME OF REPO	RTING PERSON	
CHECK THE API	PROPRIATE BOX IF A MEMBER OF A GROUP	(a) ⊠
		(b) 🗆
SEC USE ONLY		
SEC USE ONLY		
CITIZENSHIP OF	R PLACE OF ORGANIZATION	
Cayman Isla	unds	
5	SOLE VOTING POWER	
6	SHARED VOTING POWER	
7		
/	SOLE DISPOSITIVE POWER	
	() shares	
8		
_		
	0 shares	
AGGREGATE AN	NOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
CHECK BOX IF	THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
DERCENT OF CI	$\Delta$ SS REDRESENTED RV $\Delta$ MOUNT IN ROW (0)	
	$\frac{1}{100} \operatorname{Ker} \operatorname{Ker} \operatorname{Ker} (J)$	
0%		
TYPE OF REPOR	TING PERSON	
CO		
_	BVF Partner   CHECK THE APP   SEC USE ONLY   CITIZENSHIP OF   Cayman Isla   Cayman Isla   6   7   8   AGGREGATE AN   0 shares   CHECK BOX IF TO   PERCENT OF CL   0%   TYPE OF REPOR	CITIZENSHIP OR PLACE OF ORGANIZATION   Cayman Islands   5 SOLE VOTING POWER   0 shares   6 SHARED VOTING POWER   0 shares   7 SOLE DISPOSITIVE POWER   0 shares   8 SHARED DISPOSITIVE POWER   0 shares   8 SHARED DISPOSITIVE POWER   0 shares   CAGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON   0 shares   CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES   PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9)   0%   TYPE OF REPORTING PERSON

	¥		
1	NAME OF REPORT	TING PERSON	
	BVF Partners		
2	CHECK THE APPR	OPRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
			(b) 🗆
3	SEC USE ONLY		
4		PLACE OF ORGANIZATION	
7	CITIZENSIIII OKI	LACE OF ORGANIZATION	
	Delaware		
NUMBER OF	5	SOLE VOTING POWER	
SHARES			
BENEFICIALLY		0 shares	
OWNED BY	6	SHARED VOTING POWER	
EACH			
REPORTING		0 shares	
PERSON WITH	7	SOLE DISPOSITIVE POWER	
		0 shares	
	8	SHARED DISPOSITIVE POWER	
	0	SHIRLD DISTOSTITVE FOWER	
		0 shares	
9	AGGREGATE AMO	DUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	0 shares		
10	CHECK BOX IF TH	IE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
11			
11	PERCENT OF CLA	SS REPRESENTED BY AMOUNT IN ROW (9)	
	0%		
12	TYPE OF REPORT	ING PERSON	
12			
	PN, IA		
<u> </u>	<u>}</u>		

NAME OF REPO	RTING PERSON	
CHECK THE AP	PROPRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
		(b) 🗆
SEC USE ONLY		
SEC USE ONLY		
CITIZENSHIP O	R PLACE OF ORGANIZATION	
Delaware		
5	SOLE VOTING POWER	
6	SHARED VOTING POWER	
	0 shares	
7		
/	SOLE DISPOSITIVE POWER	
	0 shares	
8	SHARED DISPOSITIVE POWER	
	0 shares	
AGGREGATE AN	MOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
CHECK BOX IF	THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
PERCENT OF CI	ASS REPRESENTED BY AMOUNT IN ROW (9)	
0%		
TYPE OF REPOR	RTING PERSON	
СО		
	BVF Inc.   CHECK THE APP   SEC USE ONLY   CITIZENSHIP OF   Delaware   5   6   7   8   AGGREGATE AN   0 shares   CHECK BOX IF 7   9   PERCENT OF CI   0%   TYPE OF REPOF	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP SEC USE ONLY CITIZENSHIP OR PLACE OF ORGANIZATION Delaware 5 SOLE VOTING POWER 0 shares 6 SHARED VOTING POWER 0 shares 7 SOLE DISPOSITIVE POWER 0 shares 8 SHARED DISPOSITIVE POWER 0 shares 8 SHARED DISPOSITIVE POWER 0 shares CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (9) 0% TYPE OF REPORTING PERSON

1	NAME OF REPOR	PTING PERSON	
1	NAME OF REFOR		
	Mark N. Lan	npert	
2	CHECK THE APP	ROPRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
			(b) 🗆
3	SEC USE ONLY		
3	SEC USE ONLY		
4	CITIZENSHIP OR	PLACE OF ORGANIZATION	
NUMBER OF	United States	SOLE VOTING POWER	
SHARES	5	SOLE VOTING POWER	
BENEFICIALLY		0 shares	
OWNED BY	6	SHARED VOTING POWER	
EACH			
REPORTING PERSON WITH	7	0 shares SOLE DISPOSITIVE POWER	
PERSON WITH	/	SOLE DISPOSITIVE POWER	
		0 shares	
	8	SHARED DISPOSITIVE POWER	
9		0 shares OUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
9	AGGREGALE AM	IOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	0 shares		
10	CHECK BOX IF T	HE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES	
11	PERCENT OF CU	ASS REPRESENTED BY AMOUNT IN ROW (9)	
11			
	0%		
12	TYPE OF REPORT	TING PERSON	
	IN		
	11N		

## CUSIP NO. 40052B 20 7

CUSIP NO. 4	0052B 20 /
Item 1(a).	Name of Issuer:
	GTx, Inc., a Delaware corporation (the "Issuer").
Item 1(b).	Address of Issuer's Principal Executive Offices:
	175 Toyota Plaza, 7th Floor Memphis, Tennessee 38103
Item 2(a). Item 2(b). Item 2(c).	Name of Person Filing Address of Principal Business Office or, if None, Residence Citizenship
	Biotechnology Value Fund, L.P. ("BVF") 44 Montgomery St., 40th Floor San Francisco, California 94104 Citizenship: Delaware
	Biotechnology Value Fund II, L.P. ("BVF2") 44 Montgomery St., 40th Floor San Francisco, California 94104 Citizenship: Delaware
	Biotechnology Value Trading Fund OS LP ("Trading Fund OS") PO Box 309 Ugland House Grand Cayman, KY1-1104 Cayman Islands Citizenship: Cayman Islands
	BVF Partners OS Ltd. ("Partners OS") PO Box 309 Ugland House Grand Cayman, KY1-1104 Cayman Islands Citizenship: Cayman Islands
	BVF Partners L.P. ("Partners") 44 Montgomery St., 40th Floor San Francisco, California 94104 Citizenship: Delaware
	BVF Inc. 44 Montgomery St., 40th Floor San Francisco, California 94104 Citizenship: Delaware
	Mark N. Lampert ("Mr. Lampert") 44 Montgomery St., 40th Floor San Francisco, California 94104 Citizenship: United States

Each of the foregoing is referred to as a "Reporting Person" and collectively as the "Reporting Persons."

## CUSIP NO. 40052B 20 7

Item 2(d).	Title	Title of Class of Securities:				
	Common Stock, par value \$0.001 per share (the "Common Stock")					
Item 2(e).	CUSI	CUSIP Number:				
	40052	40052B 20 7				
Item 3.	If This Statement is Filed Pursuant to Rule 13d-1(b), or 13d-2(b) or (c), Check Whether the Person Filing is a:					
	/x/ Not applicable.					
	(a)	//	Broker or dealer registered under Section 15 of the Exchange Act.			
	(b)	//	Bank as defined in Section 3(a)(6) of the Exchange Act.			
	(c)	//	Insurance company as defined in Section 3(a)(19) of the Exchange Act.			
	(d)	//	Investment company registered under Section 8 of the Investment Company Act.			
	(e)	//	An investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E).			
	(f)	//	An employee benefit plan or endowment fund in accordance with Rule 13d-1(b)(1)(ii)(F).			
	(g)	//	A parent holding company or control person in accordance with Rule 13d-1(b)(1)(ii)(G).			
	(h)	//	A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act.			
	(i)	//	A church plan that is excluded from the definition of an investment company under Section 3(c)(14) of the Investment Company Act.			
	(j)	//	Group, in accordance with Rule 13d-1(b)(1)(ii)(J).			
	(k)	//	Group, in accordance with Rule 240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with Rule 240.13d-1(b)(1)(ii)(J), please specify the type of institution:			
Item 4.	Ownership					
	As of	Decem	per 31, 2018, the Reporting Persons no longer beneficially owned any shares of Common Stock of the Issuer.			
Item 5.	Owne	ership of	Five Percent or Less of a Class.			
			ent 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 ent of the class of securities, check the following [X].			
			10			

### CUSIP NO. 40052B 20 7

Item 6.	Ownership of More than Five Percent on Behalf of Another Person.
	Not Applicable.
Item 7.	Identification and Classification of the Subsidiary That Acquired the Security Being Reported on by the Parent Holding Company or Control Person.
	Not Applicable.
Item 8.	Identification and Classification of Members of the Group.
	See Exhibit 99.1 to Amendment No. 1 to the Schedule 13G filed with the Securities and Exchange Commission on February 16, 2016.
Item 9.	Notice of Dissolution of Group.
	Not Applicable.
Item 10.	Certifications.
	Designing below and of the undersigned antifies that to the best of its large deduce and belief the exercities asford to show a set

By signing below each of the undersigned certifies that, to the best of its 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.

#### **SIGNATURE**

After reasonable inquiry and to the best of his knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true, complete and correct.

Dated: February 14, 2019

BIOTECHNOLOGY VALUE FUND, L.P.

- By: BVF Partners L.P., its general partner By: BVF Inc., its general partner
- By: /s/ Mark N. Lampert Mark N. Lampert President

BVF INC.

By: /s/ Mark N. Lampert

Mark N. Lampert President

/s/ Mark N. Lampert MARK N. LAMPERT

#### BIOTECHNOLOGY VALUE FUND II, L.P.

- By: BVF Partners L.P., its general partner
- By: BVF Inc., its general partner
- By: /s/ Mark N. Lampert Mark N. Lampert President

#### BVF PARTNERS L.P.

- By: BVF Inc., its general partner
- By: /s/ Mark N. Lampert Mark N. Lampert President

#### BVF PARTNERS OS LTD.

- By: BVF Partners L.P., its sole member
- By: BVF Inc., its general partner
- By: /s/ Mark N. Lampert Mark N. Lampert President

#### BIOTECHNOLOGY VALUE TRADING FUND OS LP

- By: BVF Partners L.P., its investment manager
- By: BVF Inc., its general partner

# By: /s/ Mark N. Lampert

Mark N. Lampert President

