

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

SCHEDULE 13G

**Under the Securities Exchange Act of 1934
(Amendment No.)***

T2 BIOSYSTEMS, INC.

(Name of Issuer)

COMMON STOCK, \$0.001 PAR VALUE PER SHARE

(Title of Class of Securities)

89853L104

(CUSIP Number)

December 31, 2016

(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule 13G is filed:

Rule 13d-1(b)

Rule 13d-1(c)

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 in 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).

(1) Names of Reporting Persons. I.R.S. Identification Nos. of Above Persons (entities only):

Lagoda Investment Management, L.P. 46-4740139

(2) Check the Appropriate Box if a Member of a Group

(a)

(b)

(3) SEC Use Only

(4) Citizenship or Place of Organization: Delaware

Number of Shares Beneficially Owned By Each Reporting Person With

(5) Sole Voting Power:	1,733,083*
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(6) Shared Voting Power:	0*
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(7) Sole Dispositive Power:	1,733,083*
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(8) Shared Dispositive Power:	0*
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(9) Aggregate Amount Beneficially Owned by Each Reporting Person:

1,733,083*

(10) Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions):

(11) Percent of Class Represented by Amount in Row (9):

5.7%*

(12) Type of Reporting Person (See Instructions): IA

*Lagoda Investment Management, L.P. (the "Reporting Person") serves as the investment manager to certain managed accounts (the "Accounts") and possesses the sole power to vote and the sole power to direct the disposition of all securities of T2 Biosystems, Inc. (the "Issuer") held by the Accounts. The general partner of the Reporting Person is Lagoda Investment Management, LLC, a Delaware limited liability company (the "General Partner"). Richard Bayles, Fatima Dickey and Youngdawn Daniel Ha, as the managing principals of the General Partner, possess the voting and dispositive power with respect to all securities beneficially owned by the Reporting Person.

As of December 31, 2016, the Accounts held 1,733,083 shares of common stock of the Issuer, par value \$0.001 per share (the "Shares").

Based on information disclosed in the Issuer's Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2016, filed with the Securities and Exchange Commission on November 8, 2016, there were 30,431,301 Shares outstanding as of November 7, 2016. As a result of the foregoing, for purposes of Reg. Section 240.13d-3, the Reporting Person beneficially owns 1,733,083 Shares, or 5.7% of the Shares deemed issued and outstanding as of December 31, 2016.

Item 1(a). Name Of Issuer:

T2 Biosystems, Inc. (the “Issuer”)

Item 1(b). Address of Issuer’s Principal Executive Offices:

101 Hartwell Avenue
Lexington, Massachusetts 02421

Item 2(a). Name of Person Filing:

This report on Schedule 13G (this “Schedule 13G”) is being filed by Lagoda Investment Management, L.P. (the “Reporting Person”). The Reporting Person serves as the investment manager to certain managed accounts (the “Accounts”), and possesses the sole power to vote and the sole power to direct the disposition of all securities of T2 Biosystems, Inc. (the “Issuer”) held by the Accounts. The general partner of the Reporting Person is Lagoda Investment Management, LLC, a Delaware limited liability company (the “General Partner”). Richard Bayles, Fatima Dickey and Youngdawn Daniel Ha, as the managing principals of the General Partner, possess the voting and dispositive power with respect to all securities beneficially owned by the Reporting Person.

As of December 31, 2016, the Accounts held 1,733,083 shares of common stock of the Issuer, par value \$0.001 per share (the “Shares”).

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Item 2(b). Address of Principal Business Office or, if None, Residence:

The address for the Reporting Person is:
3 Columbus Circle, New York, NY 10019

Item 2(c). Citizenship:

Lagoda Investment Management, L.P. is organized under the laws of the State of Delaware.

Item 2(d). Title of Class of Securities:

Common Stock, \$0.001 par value per share.

Item 2(e). CUSIP No.:

89853L104

Item 3. If This Statement Is Filed Pursuant to §§240.13d-1(b) or 13d-2(b) or (c), check whether the Person Filing is a:

- (a) Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);
- (b) Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
- (c) Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);
- (d) Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);
- (e) An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
- (h) A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) Group, in accordance with §240.13d-1(b)(1)(ii)(J).

Item 4. Ownership:

As reported in the cover pages to this report, the ownership information with respect to the Reporting Person is as follows:

(a) Amount Beneficially Owned:	1,733,083*
(b) Percent of Class:	5.7%*

(c) Number of Shares as to which such person has:

(i) Sole power to vote or to direct the vote:	1,733,083*
(ii) Shared power to vote or to direct the vote:	0*
(iii) Sole power to dispose or to direct the disposition of:	1,733,083*
(iv) Shared power to dispose or to direct the disposition of:	0*

*The Reporting Person, as the investment manager to the Accounts, possesses the sole power to vote and the sole power to direct the disposition of all securities of the Issuer held by the Accounts. Richard Bayles, Fatima Dickey and Youngdawn Daniel Ha, as the managing principals of the General Partner, possess the voting and dispositive power with respect to all securities beneficially owned by the Reporting Person.

As of December 31, 2016, the Accounts held 1,733,083 Shares.

Based on information disclosed in the Issuer's Quarterly Report on Form 10-Q for the fiscal quarter ended September 30, 2016, filed with the Securities and Exchange Commission on November 8, 2016, there were 30,431,301 Shares outstanding as of November 8, 2016. As a result of the foregoing, for purposes of Reg. Section 240.13d-3, the Reporting Person owns 1,733,083 Shares, or 5.7% of the Shares deemed issued and outstanding as of December 31, 2016.

Item 5. Ownership of Five Percent or Less of a Class:

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: []

Item 6. Ownership of More Than Five Percent on Behalf of Another Person:

The 1,733,083 Shares reported herein are held by the Accounts.

Item 7. Identification and Classification of the Subsidiary Which 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:

Not Applicable.

Item 9. Notice of Dissolution of Group:

Not Applicable.

Item 10. Certification:

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and 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 my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

J

January 24, 2017

LAGODA INVESTMENT MANAGEMENT, L.P.

By: /s/ Patrick A. Keenan
Name: Patrick A. Keenan
Title: Chief Financial Officer

**Attention: Intentional misstatements or omissions of fact constitute
Federal criminal violations (See 18 U.S.C. 1001).**