

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

SCHEDULE 13G/A

Under the Securities Exchange Act of 1934
(Amendment No. 1)*

LANTHEUS HOLDINGS, INC.

(Name of Issuer)

COMMON STOCK, PAR VALUE \$0.01 PER SHARE

(Title of Class of Securities)

516544103

(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 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 AVISTA CAPITAL PARTNERS GP, LLC I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) 20-4773707	
(2)	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(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 0
	(6)	SHARED VOTING POWER 15,293,599*
	(7)	SOLE DISPOSITIVE POWER 0
	(8)	SHARED DISPOSITIVE POWER 15,293,599*
(9)	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 15,293,599*	
(10)	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
(11)	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 41.6%	
(12)	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO	

* See Item 4.

(1)	NAMES OF REPORTING PERSONS AVISTA CAPITAL PARTNERS, L.P I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) 20-4464005	
(2)	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(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 0
	(6)	SHARED VOTING POWER 8,713,673*
	(7)	SOLE DISPOSITIVE POWER 0
	(8)	SHARED DISPOSITIVE POWER 8,713,673*
(9)	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 8,713,673*	
(10)	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
(11)	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 23.7%	
(12)	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN	

* See Item 4

(1)	NAMES OF REPORTING PERSONS AVISTA CAPITAL PARTNERS (OFFSHORE), L.P. I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) 22-3934137	
(2)	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(3)	SEC USE ONLY	
(4)	CITIZENSHIP OR PLACE OF ORGANIZATION Bermuda	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH:	(5)	SOLE VOTING POWER 0
	(6)	SHARED VOTING POWER 2,297,718*
	(7)	SOLE DISPOSITIVE POWER 0
	(8)	SHARED DISPOSITIVE POWER 2,297,718*
(9)	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 2,297,718*	
(10)	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
(11)	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 6.3%	
(12)	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) PN	

* See Item 4.

(1)	NAMES OF REPORTING PERSONS ACP-LANTERN CO-INVEST, LLC I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (ENTITIES ONLY) 61-1549172	
(2)	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (SEE INSTRUCTIONS) (a) <input type="checkbox"/> (b) <input checked="" type="checkbox"/>	
(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 0
	(6)	SHARED VOTING POWER 4,282,208*
	(7)	SOLE DISPOSITIVE POWER 0
	(8)	SHARED DISPOSITIVE POWER 0
(9)	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 4,282,208*	
(10)	CHECK IF THE AGGREGATE AMOUNT IN ROW (9) EXCLUDES CERTAIN SHARES (SEE INSTRUCTIONS) <input type="checkbox"/>	
(11)	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW 9 11.7%	
(12)	TYPE OF REPORTING PERSON (SEE INSTRUCTIONS) OO	

* See Item 4.

Item 1(a). Name of Issuer

Lantheus Holdings, Inc.

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

331 Treble Cove Road
North Billerica, MA 01862

Item 2.(a) Name of Person

This statement is filed by the entities and persons listed below, all of whom together are referred to herein as the "Reporting Persons":

- (i) AVISTA CAPITAL PARTNERS GP, LLC
- (ii) AVISTA CAPITAL PARTNERS, L.P.
- (iii) AVISTA CAPITAL PARTNERS (OFFSHORE), L.P.
- (iv) ACP-LANTERN CO-INVEST, LLC

(b) Address of Principal Business Office or, if none, Residence

All Reporting Persons:

65 East 55th Street, 18th Floor
New York, NY 10022.

(c) Citizenship

AVISTA CAPITAL PARTNERS GP, LLC, AVISTA CAPITAL PARTNERS, L.P. and ACP-LANTERN CO-INVEST, LLC: Delaware
AVISTA CAPITAL PARTNERS (OFFSHORE), L.P.: Bermuda

(d) Title of Class of Securities

Common Stock, par value \$0.01 per share

(e) CUSIP Number

516544103

Item 3. If this statement is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o);
- Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c);
- Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c);
- Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8);
- An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- A parent holding company or control person in accordance with §240.13d-1(b)(1)(ii)(G);
- A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- 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);
- A non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J);
- A group, in accordance with §240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with §240.13d-1(b)(1)(ii)(J), please specify the type of institution:

Item 4. Ownership

(a)-(c)

Reporting Person	Amount Beneficially Owned(a)	Percent of Class(b)	Number of shares as to which the person has: Sole power to vote or to direct the vote	Number of shares as to which the person has: Shared power to vote or to direct the vote	Number of shares as to which the person has: Sole power to dispose or to direct the disposition of:	Number of shares as to which the person has: Shared power to dispose or to direct the disposition of:
Avista Capital Partners GP, LLC	15,293,599	41.6%	0	15,293,599	0	15,293,599
Avista Capital Partners, L.P.	8,713,673	23.7%	0	8,713,673	0	8,713,673
Avista Capital Partners (Offshore), L.P.	2,297,718	6.3%	0	2,297,718	0	2,297,718
ACP-Lantern Co-Invest, LLC	4,282,208	11.7%	0	4,282,208	0	4,282,208

(a) Avista Capital Partners GP, LLC serves as the general partner of Avista Capital Partners, L.P. and Avista Capital Partners (Offshore), L.P. and as the managing member of ACP-Lantern Co-Invest, LLC. By virtue of these relationships, Avista Capital Partners GP, LLC may be deemed to share beneficial ownership of the 8,713,673 shares of Common Stock held by Avista Capital Partners, L.P., the 2,297,718 shares of Common Stock held by Avista

Capital Partners (Offshore), L.P., and the 4,282,208 shares of Common Stock held by ACP-Lantern Co-Invest, LLC. Voting and disposition decisions at Avista Capital Partners GP, LLC with respect to those shares are made by an investment committee, the members of which include David Burgstahler and Sriram Venkataraman, each of whom serves as a director of Lantheus Holdings, Inc. Each of the members of the investment committee disclaims beneficial ownership of these securities except to the extent of any pecuniary interest therein.

(b) Ownership percentages are based upon the 36,756,106 shares of Common Stock outstanding as of December 31, 2016 as provided by the Issuer's transfer agent.

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 5 percent of the class of securities, check the following [].

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

Not Applicable

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. Certifications

Not Applicable

SIGNATURE

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

Date: February 3, 2017

AVISTA CAPITAL PARTNERS GP, LLC

By: /s/ Ben Silbert

Name: Ben Silbert

Title: Authorized Representative

AVISTA CAPITAL PARTNERS, L.P.

By: Avista Capital Partners GP, LLC
its General Partner

By: /s/ Ben Silbert

Name: Ben Silbert

Title: Authorized Representative

AVISTA CAPITAL PARTNERS (OFFSHORE), L.P.

By: Avista Capital Partners GP, LLC
its General Partner

By: /s/ Ben Silbert

Name: Ben Silbert

Title: Authorized Representative

ACP-LANTERN CO-INVEST, LLC.

By: Avista Capital Partners GP, LLC
its General Partner

By: /s/ Ben Silbert

Name: Ben Silbert

Title: Authorized Representative

EXHIBIT INDEX

Exhibit No.

A Joint Filing Agreement (Incorporated by reference from Exhibit A to Schedule 13G filed on February 8, 2016).