

---

---

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

---

**FORM S-8  
REGISTRATION STATEMENT  
UNDER  
THE SECURITIES ACT OF 1933**

---

**Lantheus Holdings, Inc.**

(Exact name of registrant as specified in its charter)

---

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)

**35-2318913**  
(I.R.S. Employer  
Identification No.)

**201 Burlington Road, South Building  
Bedford, Massachusetts 01730**  
(Address of Principal Executive Offices)

**01862**  
(Zip Code)

**Lantheus Holdings, Inc. 2015 Equity Incentive Plan**  
(Full Title of Plan)

**Daniel Niedzwiecki  
Chief Administrative Officer and  
General Counsel  
201 Burlington Road, South Building  
Bedford, Massachusetts 01730**  
(Name and address of agent for service)

**(978) 671-8648**  
(Telephone number, including area code, of agent for service)

---

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large Accelerated filer   
Non-accelerated filer

Accelerated filer   
Smaller reporting company   
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

---

---

## EXPLANATORY NOTE

Lantheus Holdings, Inc. (the “Registrant”) is filing this Registration Statement on Form S-8 (this “Registration Statement”) to register an additional 4,000,000 shares of its common stock, par value \$0.01 per share, that may be issued and sold under the Lantheus Holdings, Inc. 2015 Equity Incentive Plan, as amended (the “Plan”), following the amendment to the Plan that was approved by the Registrant’s stockholders at its annual meeting on April 25, 2024. This Registration Statement is submitted in accordance with General Instruction E to the Registration Statement on Form S-8 regarding registration of additional securities, and pursuant to that instruction, the contents of the Registration Statements on Form S-8 (File No. [333-205211](#), File No. [333-214343](#), File No. [333-220049](#), File No. [333-232919](#), File No. [333-258454](#) and File No. [333-264890](#)) filed with the Securities and Exchange Commission on June 25, 2015, October 31, 2016, August 18, 2017, July 31, 2019, August 4, 2021 and May 12, 2022, respectively, are incorporated herein by reference.

## PART II

### INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

**Item 8. Exhibits.**

See Exhibit Index below.

**EXHIBIT INDEX**

EXHIBIT NUMBER	DESCRIPTION OF EXHIBITS	INCORPORATED BY REFERENCE			
		FORM	FILE NUMBER	EXHIBIT	FILING DATE
4.1	<a href="#">Amended and Restated Certificate of Incorporation of Lantheus Holdings, Inc.</a>	8-K	001-36569	3.1	April 27, 2018
4.2	<a href="#">Amended and Restated Bylaws of Lantheus Holdings, Inc.</a>	8-K	001-36569	3.2	December 27, 2021
4.3	<a href="#">Common Stock Certificate.</a>	8-K	001-36569	4.1	June 30, 2015
4.4	<a href="#">Lantheus Holdings, Inc. 2015 Equity Incentive Plan.</a>	S-1/A	333-196998	10.37	June 16, 2015
4.5	<a href="#">Form of 2015 Restricted Stock Agreement.</a>	S-1/A	333-196998	10.38	June 16, 2015
4.6	<a href="#">Form of 2015 Option Award Agreement.</a>	S-1/A	333-196998	10.39	June 16, 2015
4.7	<a href="#">Form of Restricted Stock Unit Award Agreement (Employee Time-Based Vesting).</a>	10-Q	001-36569	10.2	April 29, 2022
4.8	<a href="#">Form of Restricted Stock Unit Award Agreement (Relative Total Shareholder Return Performance-Based Vesting).</a>	10-Q	001-36569	10.3	April 29, 2022
4.9	<a href="#">Form of Stock Option Award Agreement (Time Vesting).</a>	10-Q	001-36569	10.4	April 29, 2022
4.10	<a href="#">Amendment to Lantheus Holdings, Inc. 2015 Equity Incentive Plan.</a>	8-K	001-36569	10.1	April 28, 2016
4.11	<a href="#">Second Amendment to Lantheus Holdings, Inc. 2015 Equity Incentive Plan.</a>	8-K	001-36569	10.1	April 28, 2017
4.12	<a href="#">Third Amendment to Lantheus Holdings, Inc. 2015 Equity Incentive Plan.</a>	10-Q	001-36569	10.1	April 30, 2019
4.13	<a href="#">Fourth Amendment to Lantheus Holdings, Inc. 2015 Equity Incentive Plan.</a>	8-K	001-36569	10.1	April 26, 2019
4.14	<a href="#">Fifth Amendment to Lantheus Holdings, Inc. 2015 Equity Incentive Plan.</a>	8-K	001-36569	10.1	April 29, 2021
4.15	<a href="#">Sixth Amendment to Lantheus Holdings, Inc. 2015 Equity Incentive Plan.</a>	8-K	001-36569	10.1	May 2, 2022
4.16	<a href="#">Seventh Amendment to Lantheus Holdings, Inc. 2015 Equity Incentive Plan</a>	8-K	001-36569	10.1	April 29, 2024
5.1*	<a href="#">Legal Opinion of Foley Hoag LLP.</a>				
23.1*	<a href="#">Consent of Independent Registered Public Accounting Firm, Deloitte &amp; Touche LLP.</a>				
23.2*	<a href="#">Consent of Foley Hoag LLP (included as part of Exhibit 5.1).</a>				
24.1*	<a href="#">Power of Attorney (included as part of the signature page hereto).</a>				
107*	<a href="#">Filing Fee Table</a>				

\* Filed herewith

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933 the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Bedford, Commonwealth of Massachusetts, on August 21, 2024.

### Lantheus Holdings, Inc.

By: /s/ Brian Markison

Name: Brian Markison

Title: Chief Executive Officer

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each of the undersigned constitutes and appoints each of Brian Markison, Robert J. Marshall, Jr. and Daniel Niedzwiecki, each acting alone, her or his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for such person and in her or his name, place and stead, in any and all capacities, to sign this Registration Statement on Form S-8 (including all pre-effective and post-effective amendments and registration statements filed pursuant to Rule 462(b) under the Securities Act of 1933), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, each acting alone, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming that any such attorney-in-fact and agent, or her or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Brian Markison</u> Brian Markison	Chief Executive Officer and Director (Principal Executive Officer)	August 21, 2024
<u>/s/ Robert J. Marshall, Jr.</u> Robert J. Marshall, Jr.	Chief Financial Officer (Principal Financial Officer)	August 21, 2024
<u>/s/ Kimberly Brown</u> Kimberly Brown	Chief Accounting Officer (Principal Accounting Officer)	August 21, 2024
<u>/s/ Mary Anne Heino</u> Mary Anne Heino	Chair of the Board of Directors	August 21, 2024
<u>/s/ Minnie Baylor-Henry</u> Minnie Baylor-Henry	Director	August 21, 2024
<u>/s/ Dr. Gérard Ber</u> Dr. Gérard Ber	Director	August 21, 2024
<u>/s/ Samuel Leno</u> Samuel Leno	Director	August 21, 2024
<u>/s/ Heinz Mäusli</u> Heinz Mäusli	Director	August 21, 2024

---

*/s/ Julie McHugh*

---

Julie McHugh

Director

August 21, 2024

---

*/s/ Gary Pruden*

---

Gary Pruden

Director

August 21, 2024

---

*/s/ Dr. James Thrall*

---

Dr. James Thrall

Director

August 21, 2024



Seaport West  
155 Seaport Boulevard  
Boston, MA 02210-2600

617 832 1000 *main*  
617 832 7000 *fax*

August 21, 2024

Lantheus Holdings, Inc.  
201 Burlington Road, South Building  
Bedford, Massachusetts 01730

Re: Registration Statement on Form S-8

Ladies and Gentlemen:

We are familiar with the Registration Statement on Form S-8 (the “**Registration Statement**”) being filed by Lantheus Holdings, Inc., a Delaware corporation (the “**Company**”), with the Securities and Exchange Commission (the “**Commission**”) under the Securities Act of 1933, as amended (the “**Securities Act**”), on the date hereof. The Registration Statement relates to the offer and sale by the Company of up to 4,000,000 shares (the “**Shares**”) of its common stock, par value \$0.01 per share (“**Common Stock**”), issuable under the Lantheus Holdings, Inc. 2015 Equity Incentive Plan (as amended through the date hereof, the “**2015 Plan**”).

In arriving at the opinions expressed below, we have examined the Certificate of Incorporation and Bylaws of the Company, each as amended and restated to date, the records of meetings and consents of the Company’s Board of Directors, or committees thereof, records of the proceedings of its stockholders deemed to be relevant to this opinion letter, and the 2015 Plan, each as provided to us by the Company, and the Registration Statement.

In addition, we have relied upon certificates and other assurances of officers of the Company and others as to factual matters without having independently verified such factual matters. In our examination, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, the conformity to authentic original documents of all documents submitted to us as copies and the due authorization, execution and delivery of all documents by all persons other than the Company, where authorization, execution and delivery are prerequisites to the effectiveness of such documents. We have also made such investigations of law, as we have deemed appropriate as a basis for the opinions expressed below.

We have assumed that the purchase price or other consideration to be received by the Company for the Shares will be valid consideration equal to or in excess of the par value thereof.

In rendering the opinion expressed below, we express no opinion other than as to the Delaware General Corporation Law.

On the basis of the foregoing, it is our opinion that the Shares, when issued and delivered in accordance with the terms of the 2015 Plan and the awards thereunder against the Company’s receipt of the purchase price or other consideration therefor, will be validly issued, fully paid and non-assessable.

This opinion is to be used only in connection with the offer and sale of the Shares while the Registration Statement is in effect.

This opinion is being delivered solely for the benefit of the Company and such other persons as are entitled to rely upon it pursuant to the applicable provisions of the Securities Act. This opinion may not be used, quoted, relied upon or referred to for any other purpose, nor may it be used, quoted, relied upon or referred to by any other person, for any purpose, without our prior written consent.

This opinion is based upon currently existing statutes, rules and regulations and judicial decisions and is rendered as of the date hereof, and we disclaim any obligation to advise you of any change in any of the foregoing sources of law or subsequent developments in law or changes in facts or circumstances which might affect any matters or opinions set forth herein.

We consent to the filing of this opinion as an exhibit to the Registration Statement. In giving such consent, we do not admit that we are within the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

This opinion letter shall be interpreted in accordance with the Core Opinion Principles jointly issued by the Committee on Legal Opinions of the American Bar Association's Business Law Section and the Working Group on Legal Opinions Foundation as published in 74 Business Lawyer 815 (2019).

Very truly yours,

FOLEY HOAG LLP

By: /s/ Stacie S. Aarestad

a Partner

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in this Registration Statement on Form S-8 of our reports dated February 22, 2024, relating to the financial statements of Lantheus Holdings, Inc. and the effectiveness of Lantheus Holdings, Inc.'s internal control over financial reporting, appearing in the Annual Report on Form 10-K of Lantheus Holdings, Inc. for the year ended December 31, 2023.

/s/ Deloitte & Touche LLP

Boston, Massachusetts  
August 21, 2024



## Calculation Of Filing Fee Tables

Form S-8  
(Form Type)

Lantheus Holdings, Inc.  
(Exact Name of Registrant as Specified in its Charter)

Table 1: Newly Registered Securities

Security Type	Security Class Title	Fee Calculation Rule	Amount Registered(1)	Proposed Maximum Offering Price Per Share	Maximum Aggregate Offering Price	Fee Rate	Amount of Registration Fee
Equity	Common stock, \$0.01 par value per share	Rule 457(c) and Rule 457(h)	4,000,000(2)	\$95.03(3)	\$380,120,000	\$0.00014760	\$56,105.71
Total Offering Amounts					\$380,120,000		\$56,105.71
Total Fee Offsets							—
Net Fee Due							\$56,105.71

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the “Securities Act”), this registration statement on Form S-8 (the “Registration Statement”) shall also cover any additional shares of the Registrant’s common stock, \$0.01 par value per share (the “Common Stock”) that becomes issuable under the Lantheus Holdings, Inc. 2015 Equity Incentive Plan (as amended, the “Plan”) by reason of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration that increases the number of the Registrant’s outstanding shares of Common Stock.
- (2) This Registration Statement covers 4,000,000 shares of the Registrant’s Common Stock, which are issuable pursuant to the Plan.
- (3) Estimated in accordance with Rule 457(c) and (h) under the Securities Act solely for the purpose of calculating the registration fee on the basis of \$95.03, the average of the high and low prices of the Registrant’s common stock as reported on The Nasdaq Global Market on August 16, 2024, which date is within five business days prior to the filing of this registration statement.