

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

**SCHEDULE 14A**

**Proxy Statement Pursuant to Section 14(a) of the  
Securities Exchange Act of 1934  
(Amendment No. )**

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement  
 **Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**  
 Definitive Proxy Statement  
 Definitive Additional Materials  
 Soliciting Material under §240.14a-12

**LANTHEUS HOLDINGS, INC.**

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.  
 Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

(3) Per unit price or other underlying value of transaction computed pursuant to Exchange Act Rule 0-11 (set forth the amount on which the filing fee is calculated and state how it was determined):

(4) Proposed maximum aggregate value of transaction:

(5) Total fee paid:

Fee paid previously with preliminary materials.

Check box if any part of the fee is offset as provided by Exchange Act Rule 0-11(a)(2) and identify the filing for which the offsetting fee was paid previously. Identify the previous filing by registration statement number, or the Form or Schedule and the date of its filing.

(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:



## Important Notice Regarding the Availability of Proxy Materials for the Stockholder Meeting to be held on April 23, 2020, for Lantheus Holdings, Inc.

This communication presents only an overview of the more complete proxy materials that are available to you on the Internet. We encourage you to access and review all of the important information contained in the proxy materials before voting. To view the proxy statement and annual report, go to [www.proxydocs.com/LNTH](http://www.proxydocs.com/LNTH). To submit your proxy while visiting this site, you will need the 12 digit control number in the box below.

Under United States Securities and Exchange Commission rules, proxy materials do not have to be delivered in paper. Proxy materials can be distributed by making them available on the Internet. We have chosen to use these procedures for our Annual Meeting and need YOUR participation.

*If you want to receive a paper or e-mail copy of the proxy materials, you must request one. There is no charge to you for requesting a copy. In order to receive a paper package in time for this year's annual meeting, please make this request on or before April 9, 2020.*

## For a Convenient Way to VIEW Proxy Materials – and – VOTE Online go to: [www.proxydocs.com/LNTH](http://www.proxydocs.com/LNTH)

Proxy Materials Available to View or Receive:

1. Annual Report
2. Proxy Statement

Printed materials may be requested by one of the following methods:



**You must use the 12 digit control number located in the shaded gray box below.**

\* If requesting material by e-mail, please send a blank e-mail with the 12 digit control number (located below) in the subject line. No other requests, instructions or other inquiries should be included with your e-mail requesting material.

### Lantheus Holdings, Inc., Notice of Annual Meeting



**Lantheus Holdings**

Date: Thursday April 23, 2020  
Time: 11:00 A.M. (Eastern Time)  
Place: Boston Marriott, One Burlington Mall Road, Burlington, Massachusetts 01803

**The Board of Directors Recommends a Vote FOR all the nominees listed in proposal 1 and for proposals 2, 3 and 4.**

1. To elect two Class II directors to serve until the 2022 Annual Meeting of Stockholders:

01. Julie McHugh
02. Dr. Frederick Robertson

**The Board of Directors recommends you vote FOR the following proposal:**

2. To approve, on an advisory basis, the compensation paid to our named executive officers.

**The Board of Directors recommends you vote 1 YEAR on the following proposal:**

3. To approve, on an advisory basis, the frequency of future say-on-pay votes.

**The Board of Directors recommends you vote FOR the following proposal:**

4. To ratify the appointment of Deloitte & Touche LLP as the Company's independent registered public accounting firm for the fiscal year ending on December 31, 2020.

**Vote In-Person Instructions:** While we encourage stockholders to vote by the means indicated above, a stockholder is entitled to vote in person at the Annual Meeting. If you wish to vote your shares at the Annual Meeting, please register with the Inspector of Elections at the desk marked "Stockholder Registration" at the entrance to receive a ballot. Proper photo ID is required. Ballots should be returned to the Inspector of Elections in order to be counted. Additionally, a stockholder who has submitted a proxy before the meeting may revoke that proxy in person at the Annual Meeting.