

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

**FORM S-3**  
POST EFFECTIVE AMENDMENT NO. 1 TO  
FORM S-3 REGISTRATION STATEMENT NO. 333-258371  
FORM S-3 REGISTRATION STATEMENT NO. 333-249315  
FORM S-3 REGISTRATION STATEMENT NO. 333-241683  
FORM S-3 REGISTRATION STATEMENT NO. 333-234041

UNDER  
THE SECURITIES ACT OF 1933

**ENTASIS THERAPEUTICS HOLDINGS INC.**

(Innoviva Merger Sub, Inc. as successor by merger to Entasis Therapeutics Holdings Inc.)

(Exact name of registrant as specified in charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)

82-4592913  
(I.R.S. Employer  
Identification No.)

35 Gatehouse Drive  
Waltham, Massachusetts 02451  
(781) 810-0120

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Manoussos Perros, Ph.D.  
Chief Executive Officer  
Entasis Therapeutics Holdings Inc.  
35 Gatehouse Drive  
Waltham, Massachusetts 02451  
(781) 810-0120

(Name, address, including zip code, and telephone number, including area code, of agent for service)

*With copies to:*

Jack S. Bodner  
Allison B. Schiffman  
Matthew C. Franker  
Covington & Burling LLP  
The New York Times Building  
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(212) 841-1000

Elizabeth M. Keiley  
Entasis Therapeutics Holdings Inc.  
35 Gatehouse Drive  
Waltham, Massachusetts 02451  
(781) 810-0120

Approximate date of commencement of proposed sale to the public: Not Applicable. Removal from registration of securities that were not sold pursuant to the above referenced registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input checked="" type="checkbox"/>

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.

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## EXPLANATORY NOTE

### DEREGISTRATION OF SECURITIES

This Post-Effective Amendment No. 1 (this “Post-Effective Amendment”) relates to the following Registration Statements on Form S-3, originally filed with the Securities and Exchange Commission (the “SEC”) by Entasis Therapeutics Holdings Inc., a Delaware corporation (“Entasis” or the “Registrant”):

- Registration Statement on Form S-3, File No. 333-258371, filed on August 2, 2021;
- Registration Statement on Form S-3, File No. 333-249315, filed on October 5, 2020;
- Registration Statement on Form S-3, File No. 333-241683, filed on August 6, 2020; and
- Registration Statement on Form S-3, File No. 333-234041, filed on October 2, 2019.

On July 11, 2022, Innoviva, Inc., a Delaware corporation (“Innoviva”), completed its acquisition of Entasis (the “Merger”) pursuant to the Agreement and Plan of Merger, dated as of May 23, 2022, by and among Innoviva, Innoviva Merger Sub, Inc., a Delaware corporation (“Merger Sub”) and a wholly owned subsidiary of Innoviva, and Entasis (the “Merger Agreement”). Upon consummation of the Merger, Merger Sub merged with and into Entasis, with Entasis continuing as the surviving corporation and a wholly owned subsidiary of Innoviva.

In connection with the Merger, Entasis is terminating all offerings of its securities registered pursuant to its existing registration statements under the Securities Act of 1933, as amended, including the Registration Statements. Entasis hereby terminates the effectiveness of the Registration Statements and removes from registration, by means of this Post-Effective Amendment, any and all securities of Entasis registered for sale under the Registration Statements that remain unsold as of the date hereof. Each Registration Statement is hereby amended, as appropriate, to reflect the termination of such offerings in accordance with the undertakings made by the Registrant in each Registration Statement.

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## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, Entasis Therapeutics Holdings Inc. certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Post-Effective Amendment No. 1 to each of the Registration Statements to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Waltham, Massachusetts, on this 11th day of July, 2022.

### ENTASIS THERAPEUTICS HOLDINGS INC.

By: /s/ Manoussos Perros, Ph.D.  
Manoussos Perros, Ph.D.  
Chief Executive Officer

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