

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

FORM S-1
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Lantern Pharma Inc.

(Exact name of registrant as specified in its charter)

Delaware	2834	46-3973463
(State or jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

Lantern Pharma Inc.
1920 McKinney Avenue, 7th Floor
Dallas, Texas 75201
(972) 277-1136

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

Panna Sharma
President and Chief Executive Officer
1920 McKinney Avenue, 7th Floor
Dallas, Texas 75201
(628) 777-3339

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

Copies to:

Daniel K. Donahue, Esq.
Greenberg Traurig, LLP
18565 Jamboree Road, Suite 500
Irvine, California 92612
Telephone: (949) 732-6557

Brad L. Shiffman, Esq.
Blank Rome LLP
1271 Avenue of the Americas
New York, New York 10020
Telephone: (212) 885-5442

Approximate date of commencement of proposed sale to the public: As soon as practicable after the effective date of this Registration Statement.

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, 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. File No. 333-251992

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 post-effective amendment filed pursuant to Rule 462(d) 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.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 to Section 7(a)(2)(B) of the Securities Act

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price ⁽¹⁾⁽²⁾	Amount of Registration Fee
Common Stock, par value \$0.0001 per share ⁽³⁾	\$ 11,499,994	\$ 1,254.65

(1) Represents only the additional number of shares of common stock being registered, and includes shares of common stock that the underwriters have the option to purchase. Does not include the securities that the registrant previously registered on the Registration Statement on Form S-1 (File No. 333-251992).

(2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457(o) of the Securities Act of 1933.

This Registration Statement shall become effective upon filing with the Securities and Exchange Commission in accordance with Rule 462(b) of the Securities Act.

EXPLANATORY NOTE

This Registration Statement is being filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended (the "Securities Act") and General Instruction V of Form S-1. The contents of the Registration Statement on Form S-1 (File No. 333-251992), including the exhibits thereto, filed by Lantern Pharma Inc. with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act, which was declared effective by the Commission on January 14, 2021, are incorporated by reference into this Registration Statement.

PART II - INFORMATION NOT REQUIRED IN PROSPECTUS

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits

The following exhibits are filed herewith or incorporated by reference in this prospectus:

<u>Exhibit No.</u>	<u>Description</u>
5.1	Opinion of Greenberg Traurig, LLP
23.1	Consent of EisnerAmper LLP, independent registered public accounting firm
23.2	Consent of Greenberg Traurig, LLP (included in Exhibit 5.1)
24.1*	Power of Attorney

* Previously filed with the Registrant's Registration Statement on Form S-1 (File No. 333-251992), initially filed with the Securities and Exchange Commission January 8, 2021 and incorporated by reference herein

II-1

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 Dallas, State of Texas, on January 15, 2021.

Lantern Pharma Inc.

By: /s/ Panna Sharma
Panna Sharma
Chief Executive Officer
(Principal Executive Officer)

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>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Panna Sharma</u> Panna Sharma	President, Chief Executive Officer and Director (Principal Executive Officer)	January 15, 2021
<u>/s/ David R. Margrave</u> David R. Margrave	Chief Financial Officer (Principal Financial and Principal Accounting Officer)	January 15, 2021
*		
<u>Donald J. Keyser</u>	Chairman of the Board	January 15, 2021
*		
<u>Leslie W. Kreis, Jr.</u>	Director	January 15, 2021
*		
<u>David S. Silberstein</u>	Director	January 15, 2021
*		
<u>Vijay Chandru</u>	Director	January 15, 2021
*		

By: /s/ Panna Sharma
Panna Sharma
Attorney-in-Fact

GREENBERG TRAURIG, LLP
18565 Jamboree Road, Suite 500
Irvine, California 92612

January 15, 2021

Lantern Pharma Inc.
1920 McKinney Avenue, 7th Floor
Dallas, Texas 75201

Re: Registration Statement on Form S-1

Ladies and Gentlemen:

We have acted as counsel to Lantern Pharma, Inc., a Delaware corporation (the “**Company**”), in connection with the Registration Statement on Form S-1 (File No. 333-251992) filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (“**Securities Act**”), on January 8, 2021 (the “**Initial Registration Statement**”) and a registration statement relating to the Initial Registration Statement filed pursuant to Rule 462(b) promulgated under the Securities Act (the “**Additional Registration Statement**”) and, together with the Initial Registration Statement, the “**Registration Statement**”), for the registration of up to \$68,999,994 worth of shares (the “**Common Shares**”) of the Company’s \$0.0001 par value common stock.

You have requested our opinion as to the matters set forth below in connection with the Registration Statement. For purposes of rendering this opinion, we have examined the Registration Statement, forms of the Amended and Restated Certificate of Incorporation and By-laws of the Company currently in effect, and the corporate action of the Company that provides for the issuance of the Common Shares, and we have made such other investigations as we have deemed appropriate. We have examined and relied upon certificates of public officials and, as to certain matters of fact that are material to our opinion, we have also relied on a certificate of an officer of the Company. We have not independently verified the matters set forth in such certificates.

We express no opinion herein as to the laws of any state or jurisdiction other than the General Corporation Law of the State of Delaware and the federal laws of the United States of America.

Based upon and subject to the foregoing, it is our opinion that the Common Shares are duly authorized for issuance by the Company and, when issued and paid for as described in the Registration Statement, will be validly issued, fully paid and non-assessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to our name under the caption “Legal Matters” in the prospectus made part of the Registration Statement.

Very truly yours,

/s/ GREENBERG TRAURIG, LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement of Lantern Pharma Inc. on Form S-1 to be filed on or about January 14, 2021 of our report dated April 16, 2020, except for Note 11, which is May 11, 2020, and except for the effects of the Company's reincorporation and completion of its' IPO discussed in Note 12, as to which the date is December 14, 2020, on our audits of the consolidated financial statements as of December 31, 2019 and 2018 and for each of the years then ended. Our report includes an explanatory paragraph about the existence of substantial doubt concerning the Company's ability to continue as a going concern. We also consent to the reference to our firm under the caption "Experts" in this Registration Statement.

/s/ EisnerAmper LLP

EISNERAMPER LLP
Iselin, New Jersey
January 14, 2021