Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

Under

The Securities Act of 1933

IOVANCE BIOTHERAPEUTICS, INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

75-3254381 (IRS Employer Identification No.)

825 Industrial Road, Suite 400 San Carlos, California 94070 (Address of registrant's principal executive offices, including zip code)

Iovance Biotherapeutics, Inc. 2018 Equity Incentive Plan (Full title of the Plan)

Frederick G. Vogt, Ph.D., J.D. Interim Chief Executive Officer and General Counsel Iovance Biotherapeutics, Inc. 825 Industrial Road, Suite 400 San Carlos, California 94070 (Name and address of agent for service)

(650) 260-7120 (Telephone number, including area code, of agent for service)

Copies to:

Emilio Ragosa DLA Piper LLP (US) 51 John F. Kennedy Parkway, Suite 120 Short Hills, New Jersey 07078 Telephone: (973) 520-2550

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. (Check one):

Large accelerated filer \boxtimes Non-accelerated filer \square

Accelerated filer \Box
Smaller reporting company \Box
Emerging growth company \Box

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. \Box

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

This Registration Statement relates to the registration of an additional 6,700,000 shares (the "Shares") of Iovance Biotherapeutics, Inc.'s (the "Registrant") common stock, \$0.000041666 par value per share. The Shares are of the same class and relate to the same employee benefit plan, the 2018 Equity Incentive Plan, which was amended on June 10, 2022 (in the form attached hereto as Exhibit 99.1) (the "Incentive Plan"), as those registered pursuant to the Registrant's registration statements on Form S-8, previously filed with the Securities and Exchange Commission on <u>September 7, 2018</u> (Registration No. 333-227242) and June 19, 2020 (Registration No. 333-239316). In accordance with General Instruction E of Form S-8, the contents of the Registrant's registration statements on Form S-8 filed with the Securities and Exchange Commission on <u>September 7, 2018 (Registration No. 333-229316)</u> are incorporated herein by reference (solely to the extent the contents of such registration statement relate to the Incentive Plan) and the information required by Part II is omitted, except as supplemented by the information set forth below.

Item 8. Exhibits.

Exhibit								
No.	Description							
<u>4.1</u>	Certificate of Incorporation of Registrant (incorporated herein by reference to Exhibit 3.3 to Registrant's Current Report on Form 8-K							
	filed with the Commission on June 2, 2017.)							
<u>4.2</u>	Certificate of Amendment of Certificate of Incorporation of Registrant (incorporated herein by reference to Exhibit 3.1 to Registrant's							
	Current Report on Form 8-K filed with the Commission on June 27, 2017.)							
<u>4.3</u>	Certificate of Amendment of Certificate of Incorporation of Registrant (incorporated herein by reference to Exhibit 3.1 to Re							
	Current Report on Form 8-K filed with the Commission on June 11, 2019.)							
<u>4.4</u>	Third Amended and Restated Bylaws of the Registrant (incorporated herein by reference to Exhibit 3.1 to Registrant's Current Report on							
	Form 8-K filed with the Commission on April 29, 2022).							
<u>4.5</u>	Specimen of Stock Certificate (incorporated herein by reference to Exhibit 4.2 to the Registrant's Annual Report on Form 10-K filed with							
	the Commission on March 12, 2018).							
<u>5.1</u>	<u>Opinion of DLA Piper LLP (US) (filed herewith).</u>							
<u>23.1</u>	Consent of Ernst & Young LLP, Independent Registered Accounting Firm (filed herewith).							
<u>23.2</u>	Consent of Marcum LLP, Independent Registered Accounting Firm (filed herewith).							
<u>23.3</u>	Consent of DLA Piper LLP (US) (included in Exhibit 5.1).							
<u>24</u>	Power of Attorney (contained on the signature page hereto).							
<u>99.1</u>	Iovance Biotherapeutics, Inc. 2018 Equity Incentive Plan, as amended (incorporated herein by reference to Exhibit 10.1 to the Registrant's							
	Quarterly Report on Form 10-Q filed with the Commission on August 4, 2022).							
<u>99.2</u>	Form of Incentive Stock Option Agreement under the Iovance Biotherapeutics, Inc. 2018 Equity Incentive Plan (incorporated herein by							
00.0	reference to Exhibit 10.10 of Registrant's Annual Report on Form 10-K filed with the Commission on February 25, 2020).							
<u>99.3</u>	Form of Non-Qualified Stock Option Agreement under the 2018 Equity Incentive Plan (incorporated herein by reference to Exhibit 10.11							
00.4	of Registrant's Annual Report on Form 10-K filed with the Commission on February 25, 2020).							
<u>99.4</u>	Form of Stock Unit Notice and Stock Unit Agreement under the Iovance Biotherapeutics, Inc. 2018 Equity Incentive Plan, as amended							
	(June 2021 Retention Equity Awards) (incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q							
00 5	<u>filed with the Commission on August 5, 2021).</u> Form of Nongualified Stock Option Award Agreement under the Iovance Biotherapeutics, Inc. 2018 Equity Incentive Plan, as amended							
<u>99.5</u>								
	(June 2021 Retention Equity Awards) (incorporated herein by reference to Exhibit 10.3 to the Registrant's Current Report on Form 10-Q filed with the Commission on August 5, 2021).							
<u>99.6</u>	Form of Deferred Stock Unit Notice and Deferred Stock Unit Agreement under the Iovance Biotherapeutics, Inc. 2018 Equity Incentive							
<u>33.0</u>	Plan (incorporated herein by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed with the Commission on							
	<u>August 4, 2022).</u>							
107	Filing Fee Table (filed herewith).							
107								

SIGNATURE

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement with respect to the Iovance Biotherapeutics, Inc. 2018 Equity Incentive Plan, to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Carlos, State of California, on August 4, 2022.

Iovance Biotherapeutics, Inc.

By: /s/ Frederick G. Vogt Name: Frederick G. Vogt, Ph.D., J.D. Title: Interim CEO & General Counsel

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each individual whose signature appears below constitutes and appoints Frederick G. Vogt and Jean-Marc Bellemin, and each of them, his or her true and lawful attorneys-in-fact and agents with full power of substitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by this registration statement that is to be effective on filing pursuant to Rule 462(b) promulgated under the Securities Act of 1933 and all post-effective amendments thereto, and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, 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 or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or her or their 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 on August 4, 2022.

Signature	Title Interim Chief Executive Officer and General Counsel (Principal Executive Officer)				
/s/ Frederick G. Vogt, Ph.D., J.D. Frederick G. Vogt, Ph.D., J.D.					
/s/ Jean-Marc Bellemin Jean-Marc Bellemin	Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)				
/s/ Athena Countouriotis, M.D. Athena Countouriotis, M.D.	Director				
/s/ Iain Dukes, D. Phil. Iain Dukes, D. Phil.	Director				
/s/ Ryan Maynard Ryan Maynard	Director				
/s/ Merrill A. McPeak	Director				
Merrill A. McPeak /s/ Wayne Rothbaum	Director				
Wayne Rothbaum					
/s/ Michael Weiser, M.D., Ph.D. Michael Weiser, M.D., Ph.D.	Director				
/s/ Wendy Dixon, Ph.D. Wendy Dixon, Ph.D.	Director				

DLA Piper LLP (US) 51 John F. Kennedy Parkway, Suite 120 Short Hills, New Jersey 07078 www.dlapiper.com T: 973-520-2550 F: 973-520-2551 Attorneys Responsible for Short Hills Office: Emilio Ragosa

August 4, 2022

Iovance Biotherapeutics, Inc. 825 Industrial Road, Suite 400 San Carlos, California 94070

Re: Securities Being Registered under Registration Statement on Form S-8

Ladies and Gentlemen:

We have acted as counsel to Iovance Biotherapeutics, Inc., a Delaware corporation (the "*Company*"), in connection with the preparation of a Registration Statement on Form S-8 (the "*Registration Statement*") under the Securities Act of 1933, as amended (the "*Act*"). The Registration Statement relates to the registration of 6,700,000 shares (the "*Plan Shares*") of the Company's common stock, par value \$0.000041666 per share, issuable under the Iovance Biotherapeutics, Inc. 2018 Equity Incentive Plan, as amended (the "*2018 Plan*"), as referenced in the Registration Statement.

In connection with this opinion letter, we have examined the Registration Statement and originals, or copies certified or otherwise identified to our satisfaction, of the Certificate of Incorporation, as amended and the Amended and Restated Bylaws of the Company and such other documents, records and other instruments as we have deemed appropriate for purposes of the opinion set forth herein.

We have assumed the genuineness of all signatures, the legal capacity of all natural persons, the authenticity of the documents submitted to us as originals, the conformity with the originals of all documents submitted to us as certified, facsimile or photostatic copies and the authenticity of the originals of all documents submitted to us as certified.

Based upon the foregoing, we are of the opinion that the Plan Shares have been duly authorized and, when and to the extent issued in accordance with the terms of the 2018 Plan and any award agreement entered into under the 2018 Plan, the Plan Shares will be validly issued, fully paid and nonassessable.

The opinion expressed herein is limited to the Delaware General Corporation Law.

We hereby consent to the use of this opinion as Exhibit 5.1 to the Registration Statement. In giving such consent, we do not hereby admit that we are acting within the category of persons whose consent is required under Section 7 of the Act or the rules or regulations of the U.S. Securities and Exchange Commission thereunder.

Very truly yours,

/s/ DLA Piper LLP (US)

CONSENT OF ERNST & YOUNG LLP, INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (Form S-8) pertaining to the 2018 Equity Incentive Plan of Iovance Biotherapeutics, Inc. of our reports dated February 24, 2022, with respect to the consolidated financial statements of Iovance Biotherapeutics, Inc. and the effectiveness of internal control over financial reporting of Iovance Biotherapeutics, Inc. included in its Annual Report (Form 10-K) for the year ended December 31, 2021, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

San Mateo, California August 4, 2022

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S CONSENT

We consent to the incorporation by reference in this Registration Statement of Iovance Biotherapeutics, Inc. on Form S-8 of our report dated February 25, 2021, with respect to our audits of the consolidated financial statements of Iovance Biotherapeutics, Inc. as of December 31, 2020 and for each of the two years in the period ended December 31, 2020 appearing in the Annual Report on Form 10-K of Iovance Biotherapeutics, Inc. for the year ended December 31, 2021.

/s/ Marcum ${\scriptstyle LLP}$

Marcum LLP New York, NY August 4, 2022

Calculation Of Filing Fee Tables

Form S-8 (Form Type)

Iovance Biotherapeutics, 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 Unit	Maximum Aggregate Offering Price	Fee Rate		mount of gistration Fee
Equity	Common stock, par value \$0.000041666 per share	Rule 457(c) and Rule 457(h)	6,700,000(2)	\$ 11.30(3)	\$75,710,000.00	\$ 0.0000927	\$	7,018.32
Total Offering Amounts							\$	-
Total Fee Offsets								-
	Net Fee Due						\$	7,018.32

 Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement shall also cover any additional shares of the Registrant's common stock that becomes issuable in respect of the securities identified in the above table 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) Represents 6,700,000 additional shares of common stock reserved for issuance under the Registrant's 2018 Equity Incentive Plan, as amended.

(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 \$11.30, the average of the high and low prices of the Registrant's common stock as reported on The Nasdaq Global Market on August 2, 2022.