

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

FORM 8-K  
Current Report

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (date of earliest event reported): February 24, 2022

**IOVANCE BIOTHERAPEUTICS, INC.**  
(Exact Name of Registrant as Specified in Charter)

**Delaware**  
(State of Incorporation)

**001-36860**

Commission File Number

**75-3254381**

(I.R.S. Employer Identification No.)

**825 Industrial Road, 4<sup>th</sup> Floor**  
**San Carlos, California**

(Address of Principal Executive Offices)

**94070**

(Zip Code)

**(650) 260-7120**

(Registrant's Telephone Number, Including Area Code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425).
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12).
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b)).
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c)).

Indicate by check mark whether the registrant is an emerging growth company as defined in as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter). 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 13(a) of the Exchange Act.

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value \$0.000041666 per share	IOVA	The Nasdaq Stock Market, LLC

**Item 2.02. Results of Operations and Financial Condition.**

On February 24, 2022, Iovance Biotherapeutics, Inc. (the “Company”) issued a press release announcing its financial results for the fourth quarter and fiscal year ended December 31, 2021 and an update on recent developments. A copy of that press release is furnished as Exhibit 99.1.

The information furnished under this Item 2.02, including the accompanying Exhibit 99.1, shall not be deemed to be “filed” for the purposes of Section 18 of the Securities Exchange Act of 1934 (the “Exchange Act”), or otherwise subject to the liability of such section, nor shall such information be deemed to be incorporated by reference in any subsequent filing by the Company under the Securities Act of 1933, as amended, or the Exchange Act, regardless of the general incorporation language of such filing, except as specifically stated in such filing.

**Item 9.01. Financial Statements and Exhibits.**

(d) Exhibits.

**Exhibit**

**No.**

**Description**

[99.1](#)

[Press Release of Iovance Biotherapeutics, Inc., dated February 24, 2022.](#)

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Cover Page Interactive Data File (embedded as Inline XBRL document)

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this Report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: February 24, 2022

**IOVANCE BIOTHERAPEUTICS, INC.**

By: /s/ Frederick G. Vogt

Frederick G. Vogt, Interim CEO & General Counsel

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**Iovance Biotherapeutics Reports Fourth Quarter and Full Year 2021  
Financial Results and Corporate Updates**

*Expanding TIL Platform in Multiple Solid Tumors and Treatment Settings*

**SAN CARLOS, Calif., February 24, 2022** -- Iovance Biotherapeutics, Inc. (NASDAQ: IOVA), a late-stage biotechnology company developing novel T cell-based cancer immunotherapies (tumor infiltrating lymphocyte, TIL, and peripheral-blood lymphocyte, PBL), today reported fourth quarter and full year 2021 financial results and corporate updates.

Frederick Vogt, Ph.D., J.D., Interim President and Chief Executive Officer of Iovance, stated, “Throughout 2021, we continued to build upon the strength of clinical data for Iovance TIL therapy in multiple solid tumor types and treatment settings. Highlights included long-term clinical data for one-time treatment with lifileucel in metastatic melanoma, the potential to increase response rates for TIL therapy in combination with pembrolizumab as an earlier treatment for melanoma, cervical and head and neck cancers, as well as an important proof-of-concept for Iovance TIL therapy in non-small cell lung cancer. We also advanced our genetically modified TIL pipeline and expect to initiate our first clinical study of a gene-edited TIL product candidate later this year. Our top priority remains our ongoing work to address feedback from the U.S. Food and Drug Administration (FDA) regarding the potency assays for lifileucel to support our planned biologics license application (BLA) submission in the first half of this year. We remain increasingly confident in the broad potential for TIL as the next class of paradigm-shifting therapy for cancer patients with significant unmet need.”

**Full Year 2021 Highlights and Recent Corporate Updates**

**Regulatory**

- **Potency assays for lifileucel:** Following FDA feedback regarding the potency assays for lifileucel, Iovance has continued ongoing work developing and validating its potency assays and has engaged in discussions with the FDA during the second half of 2021. The anticipated BLA submission for lifileucel continues to be planned for the first half of 2022. Resolution of the potency assay for lifileucel in melanoma is also a key step towards regulatory plans in other indications.
- **U.S. FDA Fast Track Designation for lifileucel in combination with pembrolizumab in metastatic melanoma:** The FDA granted fast track designation for lifileucel in combination with pembrolizumab for the treatment of immune checkpoint inhibitor (ICI) naïve (frontline) metastatic melanoma based on the unmet medical need and potential advantages for this combination over available care.

**Clinical**

- **Iovance TIL therapy (lifileucel) in metastatic melanoma:**
  - o **Lifileucel in late line (post-anti-PD-1) melanoma:** Follow up data as assessed by investigators from Cohort 2 (n=66) in the C-144-01 study of lifileucel in advanced melanoma were presented at the American Society for Clinical Oncology (ASCO) 2021 Annual Meeting. The overall response rate (ORR) was 36.4% (4.5% complete response rate and 31.8% partial response rate) and median duration of response (DOR) was not reached at 33.1 months of median study follow up. Iovance expects to report clinical data from the pivotal melanoma cohort 4 as assessed by an independent review committee (IRC) in 2022 in connection with its BLA submission.

- **Lifileucel in combination with pembrolizumab in early line (anti-PD-1 naïve) melanoma (Cohort 1A in the IOV-COM-202 study):** Initial clinical data were presented at ASCO 2021 and updated results were presented at Society for Immunotherapy of Cancer (SITC) 2021. The updated ORR was 60% and the complete response rate was 30% at a median follow up of 11.5 months in Cohort 1A (n=10). Based on these results, Iovance intends to expand Cohort 1A and define a development strategy in early line melanoma in 2022.
  - **Iovance TIL therapy (LN-145) in non-small cell lung cancer (NSCLC):**
    - **LN-145 monotherapy in metastatic NSCLC (mNSCLC):** Results from Cohort 3B in the IOV-COM-202 study were highlighted at SITC 2021. LN-145 showed a 21.4% ORR in the full analysis set (n=28) and 25% in the efficacy-evaluable set (n=24). One complete response and one partial response were ongoing at 20.7 months and 3.0 months, respectively, at a median study follow up of 9.8 months. These results demonstrated activity for TIL therapy in heavily pretreated mNSCLC patients who received one or more prior systemic therapies, including anti-PD-1 therapy, and support the ongoing development strategy for LN-145 in second line mNSCLC patients in the IOV-LUN-202 study.
    - **LN-145 in second-line mNSCLC:** Enrollment is ongoing at more than 30 active clinical sites in the U.S., Canada and Europe for the IOV-LUN-202 study of LN-145 in patients with mNSCLC following a single line of approved systemic therapy. Iovance is engaged in discussions with the FDA about IOV-LUN-202 and intends to incorporate FDA feedback into the study design to support registration.
  - **Lifileucel in cervical cancer:** The C-145-04 study is investigating lifileucel for the treatment of metastatic cervical cancer patients following chemotherapy (Cohort 1), after chemotherapy and anti-PD-1/PD-L1 therapy (Cohort 2), and in combination with pembrolizumab in patients who have not had therapy for advanced disease (Cohort 3).
    - **Lifileucel monotherapy in advanced cervical cancer:** Iovance is engaged in regulatory discussions about a potential BLA for lifileucel in cervical cancer and intends to execute an updated registrational strategy based on FDA dialogue and feedback.
    - **Lifileucel in combination with pembrolizumab in early line cervical cancer:** Initial results from Cohort 3 (n=14) in the C-145-04 study were presented at SITC 2021 and demonstrated an ORR of 57.1% at a median follow up of 7.6 months.
  - **Iovance TIL therapy combinations in additional solid tumor cancers:** In Cohort 2A of the IOV-COM-202 study, Iovance is also investigating TIL therapy in combination with pembrolizumab in patients with head and neck squamous cell carcinoma (HNSCC) who are naïve to therapy with ICIs. Updated Cohort 2A data were presented at SITC 2021 and demonstrated a 38.9% ORR (n=18) at a median study follow up of 7.8 months. The IOV-COM-202 study is also investigating TIL combinations in patients with NSCLC including TIL therapy plus pembrolizumab (Cohort 3A) and TIL plus ipilimumab/nivolumab (Cohort 3C).
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### Next-Generation Genetically Modified TIL Products and Research Programs

- Iovance expects to initiate its first clinical study of a genetically modified TIL product candidate in 2022. The lead program, designated IOV-4001, leverages the TALEN® technology licensed from Collectis S.A. to inactivate PD-1 expression in the TIL product.
- Additional targets for genetic modification using the TALEN technology, including double knock-out programs, are in preclinical development.
- Approaches to increase TIL potency using CD39/69 double negative TILs and gene knock-in targets are also in preclinical development.
- Accepted abstracts at the upcoming Transplantation & Cellular Therapy Meetings of ASTCT™ and CIBMTR® Tandem Meetings, April 23-26, 2022, describe TIL products manufactured from cryopreserved tumor samples shipped from Australia and a potential approach to optimize TIL memory-like phenotype and increase functionality during the manufacturing process.
- Iovance continues to advance additional research and preclinical studies of next generation TIL therapies and related technologies, including a novel IL-2 analog (IOV-3001).

### Manufacturing

- **Iovance Cell Therapy Center (iCTC):** commissioning activities were completed and clinical manufacturing of TIL product commenced at the iCTC, Iovance's 136,000 square foot cell therapy manufacturing facility, in the third quarter of 2021. Commercial manufacturing remains on track to commence with a potential BLA approval.
- **Generation 3 (Gen 3) manufacturing:** TIL product manufactured using a shorter 16-day third generation process (Gen 3) is being investigated in cohorts of metastatic melanoma patients in the IOV-COM-202 study as well as NSCLC patients in the IOV-LUN-202 study.

### Corporate

- Cash position of \$602.1 million at December 31, 2021 is expected to be sufficient into 2024.
- A strong organization of approximately 350 employees with an average of more than four years of cell therapy experience is in place to advance research, development, manufacturing, and commercial launch preparations.
- Iovance continues to expand its intellectual property portfolio and currently owns more than 35 granted or allowed U.S. and international patents for TIL compositions and methods of treatment and manufacturing in a broad range of cancers. Iovance's Gen 2 patent rights are expected to provide exclusivity into 2038. Iovance's portfolio also includes patent applications and granted patents directed towards Gen 3 manufacturing, selected TIL products, stable and transient genetic TIL modifications, tumor digest and fragment compositions and methods (including cryopreservation), and combinations of checkpoint inhibitors and TIL products.

### Fourth Quarter and Full Year 2021 Financial Results

Iovance had \$602.1 million in cash, cash equivalents, investments and restricted cash at December 31, 2021 compared to \$635.0 million at December 31, 2020. The cash position is expected to be sufficient to fund current and planned operations into 2024.

Jean-Marc Bellemin, Chief Financial Officer, stated, "With late-stage clinical assets in our pipeline, as well as a strong balance sheet and investments focused on launch preparations, we are well positioned to execute our operating plan. We are confident in our prospects to deliver new treatment options to patients with great unmet need while enhancing shareholder value."

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Net loss for the fourth quarter ended December 31, 2021, was \$99.3 million, or \$0.63 per share, compared to a net loss of \$68.4 million, or \$0.47 per share, for the fourth quarter ended December 31, 2020. Net loss for the full year period ended December 31, 2021, was \$342.3 million, or \$2.23 per share, compared to a net loss of \$259.6 million, or \$1.88 per share, for the full year period ended December 31, 2020.

Research and development expenses were \$75.6 million for the fourth quarter ended December 31, 2021, an increase of \$23.1 million compared to \$52.5 million for the fourth quarter ended December 31, 2020. Research and development expenses were \$259.0 million for the full year period ended December 31, 2021, an increase of \$57.3 million compared to \$201.7 million for the full year ended December 31, 2020.

The increase in research and development expenses in the fourth quarter 2021 over the prior year period was primarily attributable to an increase in costs associated with growth of the internal research and development team, including stock-based compensation expense, and increases in clinical trial costs and facility related costs associated with the *iCTC*. The increase in research and development expenses in the full year 2021 over the prior full year period was primarily attributable to growth of the internal research and development team and an increase in clinical trial costs and facility related costs associated with the *iCTC*.

General and administrative expenses were \$23.8 million for the fourth quarter ended December 31, 2021, an increase of \$7.7 million compared to \$16.1 million for the fourth quarter ended December 31, 2020. General and administrative expenses were \$83.7 million for the full year period ended December 31, 2021, an increase of \$23.5 million compared to \$60.2 million for the full year ended December 31, 2020.

The increases in general and administrative expenses in the fourth quarter and full year 2021 compared to the prior year periods were primarily attributable to an increase in costs associated with growth of the internal general and administrative team, including stock-based compensation expense, and an increase in intellectual property filing related costs.

### **Webcast and Conference Call**

Iovance will host a conference call today at 4:30 p.m. ET to discuss the fourth quarter and full year 2021 financial results and corporate updates. The conference call dial-in numbers are 1-(844) 646-4465 (domestic) or 1-(615) 247-0257 (international) and the access code is 2877242. The live webcast can be accessed in the Investors section of the company's website at <http://www.iovance.com>. The archived webcast will be available for a year in the Investors section at [www.iovance.com](http://www.iovance.com).

### **About Iovance Biotherapeutics, Inc.**

[Iovance Biotherapeutics](#) aims to be the global leader in innovating, developing and delivering tumor infiltrating lymphocyte (TIL) therapies for patients with cancer. We are pioneering a transformational approach to cure cancer by harnessing the human immune system's ability to recognize and destroy diverse cancer cells in each patient. Our lead late-stage TIL product candidate, lifileucel for metastatic melanoma, has the potential to become the first approved one-time cell therapy for a solid tumor cancer. The [Iovance TIL platform](#) has demonstrated promising clinical data across multiple solid tumors.

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We are committed to continuous innovation in cell therapy, including gene-edited cell therapy, that may extend and improve life for patients with cancer. For more information, please visit [www.iovance.com](http://www.iovance.com).

### **Forward-Looking Statements**

Certain matters discussed in this press release are “forward-looking statements” of Iovance Biotherapeutics, Inc. (hereinafter referred to as the “Company,” “we,” “us,” or “our”) within the meaning of the Private Securities Litigation Reform Act of 1995 (the “PSLRA”). All such written or oral statements made in this press release, other than statements of historical fact, are forward-looking statements and are intended to be covered by the safe harbor for forward-looking statements provided by the PSLRA. Without limiting the foregoing, we may, in some cases, use terms such as “predicts,” “believes,” “potential,” “continue,” “estimates,” “anticipates,” “expects,” “plans,” “intends,” “forecast,” “guidance,” “outlook,” “may,” “could,” “might,” “will,” “should” or other words that convey uncertainty of future events or outcomes and are intended to identify forward-looking statements. Forward-looking statements are based on assumptions and assessments made in light of management’s experience and perception of historical trends, current conditions, expected future developments and other factors believed to be appropriate. Forward-looking statements in this press release are made as of the date of this press release, and we undertake no duty to update or revise any such statements, whether as a result of new information, future events or otherwise. Forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties and other factors, many of which are outside of our control, that may cause actual results, levels of activity, performance, achievements and developments to be materially different from those expressed in or implied by these forward-looking statements. Important factors that could cause actual results, developments and business decisions to differ materially from forward-looking statements are described in the sections titled “Risk Factors” in our filings with the Securities and Exchange Commission, including our most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q, and include, but are not limited to, the following substantial known and unknown risks and uncertainties inherent in our business: the effects of the COVID-19 pandemic; risks related to the timing of and our ability to successfully develop, submit, obtain and maintain U.S. Food and Drug Administration (“FDA”) or other regulatory authority approval of, or other action with respect to, our product candidates, and our ability to successfully commercialize any product candidates for which we obtain FDA approval; preliminary and interim clinical results, which may include efficacy and safety results, from ongoing clinical trials or cohorts may not be reflected in the final analyses of our ongoing clinical trials or subgroups within these trials or in other prior trials or cohorts; the risk that enrollment may need to be adjusted for our trials and cohorts within those trials based on FDA and other regulatory agency input; the changing landscape of care for cervical cancer patients may impact our clinical trials in this indication; the risk that we may be required to conduct additional clinical trials or modify ongoing or future clinical trials based on feedback from the FDA or other regulatory authorities; the risk that our interpretation of the results of our clinical trials or communications with the FDA may differ from the interpretation of such results or communications by the FDA; the acceptance by the market of our product candidates and their potential reimbursement by payors, if approved; our ability or inability to manufacture our therapies using third party manufacturers or our own facility may adversely affect our potential commercial launch; the results of clinical trials with collaborators using different manufacturing processes may not be reflected in our sponsored trials; the risk that unanticipated expenses may decrease our estimated cash balances and forecasts and increase our estimated capital requirements; and other factors, including general economic conditions and regulatory developments, not within our control.

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**IOVANCE BIOTHERAPEUTICS, INC.**  
**Selected Consolidated Balance Sheet Information**  
(In thousands)

	December 31, 2021	December 31, 2020
Cash, cash equivalents, and investments	\$ 595,998	\$ 629,437
Restricted cash	\$ 6,084	\$ 5,525
Total assets	\$ 777,333	\$ 768,458
Stockholders' equity	\$ 621,659	\$ 656,498

**IOVANCE BIOTHERAPEUTICS, INC.**  
**Consolidated Statements of Operations**  
(In thousands, except per share information)

	For the Three Months Ended December 31,		For the Years Ended December 31,	
	2021 (Unaudited)	2020 (Unaudited)	2021	2020
<b>Costs and expenses*</b>				
Research and development	\$ 75,616	\$ 52,451	\$ 259,039	\$ 201,727
General and administrative	23,849	16,083	83,664	60,210
Total costs and expenses	99,465	68,534	342,703	261,937
<b>Loss from operations</b>	(99,465)	(68,534)	(342,703)	(261,937)
<b>Other income</b>				
Interest income, net	135	137	451	2,356
<b>Net Loss</b>	\$ (99,330)	\$ (68,397)	\$ (342,252)	\$ (259,581)
<b>Net Loss Per Share of Common Stock, Basic and Diluted</b>	\$ (0.63)	\$ (0.47)	\$ (2.23)	\$ (1.88)
<b>Weighted Average Shares of Common Stock Outstanding, Basic and Diluted</b>	156,923	146,738	153,406	138,301
<b>* Includes stock-based compensation as follows:</b>				
Research and development	\$ 11,542	\$ 4,662	\$ 40,833	\$ 19,727
General and administrative	7,562	5,570	28,932	21,160
	\$ 19,104	\$ 10,232	\$ 69,765	\$ 40,887

## CONTACTS

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