

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

Amendment No. 1
to
FORM S-3
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
(I.R.S. Employer
Identification Number)

999 Skyway Road, Suite 150
San Carlos, California 94070
(Address of registrant's principal executive offices, including zip code)

Maria Fardis, Ph.D., M.B.A.
President and Chief Executive Officer
Iovance Biotherapeutics, Inc.
999 Skyway Road, Suite 150
San Carlos, California 94070
(650) 260-7120
(Name, address, including zip code, and telephone number, including area code, of agent for service)

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

Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this registration statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, 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, 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 type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input 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.

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered (1)	Proposed maximum offering price per unit (1)(2)	Proposed maximum aggregate offering price (1)(3)	Amount of registration fee(1)
Common Stock, \$0.000041666 par value (4)(10)	—	—	—	—
Preferred Stock, \$0.001 par value (5)(10)	—	—	—	—
Debt Securities (6)(10)	—	—	—	—
Warrants (7)(10)	—	—	—	—
Rights to purchase common stock, preferred stock, debt securities or units (8)(10)	—	—	—	—
Units(9)(10)	—	—	—	—
Total	\$ 400,000,000	100%	\$ 400,000,000(11)	\$ 48,480.00

- (1) Not specified as to each class of securities to be registered pursuant to General Instruction II.D. to Form S-3.
- (2) The proposed maximum offering price per unit will be determined from time to time by the registrant in connection with the issuance by the registrant of the securities registered hereunder.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o).
- (4) Subject to note (11) below, there is being registered an indeterminate number of shares of common stock.
- (5) Subject to note (11) below, there is being registered an indeterminate number of shares of preferred stock.
- (6) Subject to note (11) below, there is being registered an indeterminate principal amount of debt securities, excluding accrued interest and accrued amortization of discount, if any, to the date of delivery.
- (7) Subject to note (11) below, there is being registered hereunder an indeterminate amount and number of warrants. The warrants may represent the right to purchase shares of common stock, shares of preferred stock or debt securities.
- (8) Subject to note (11) below, there is being registered an indeterminate number of rights that may represent a right to purchase common shares, preferred shares, debt securities or units.
- (9) Subject to note (11) below, there is being registered an indeterminate number of units. Each unit will be issued under a unit agreement and will represent an interest in a combination of one or more of the securities registered hereunder.
- (10) Subject to note (11) below, this registration statement also covers an indeterminate amount of securities as may be issued in exchange for, or upon conversion or exercise of, as the case may be, the shares of preferred stock or warrants registered hereunder. Any securities registered hereunder may be sold separately or as units with other securities registered hereunder. No separate consideration will be received for any securities registered hereunder that are issued in exchange for, or upon conversion of, as the case may be, the shares of preferred stock or warrants.
- (11) In no event will the aggregate initial offering price of all securities issued from time to time pursuant to the prospectus contained in this registration statement exceed \$400,000,000 or the equivalent thereof in one or more foreign currencies or foreign currency units. Such amount represents the offering price of any shares of common stock or shares of preferred stock, the principal amount of any debt securities issued at their stated principal amount, the issue price rather than the principal amount of any debt securities issued at an original issue discount, the issue price of any warrants, the exercise price of any securities issuable upon the exercise of warrants, and the issue price of any securities issuable upon the exercise of rights. If any debt securities are issued at an original issue discount, then the offering price of such debt securities shall be equal to any such greater principal amount due at maturity, such aggregate principal amount not to exceed \$400,000,000 less the value of securities previously issued hereunder. Any offering of securities denominated other than in United States dollars will be treated as the equivalent of United States dollars based on the exchange rate applicable to the purchase of such securities at the time of initial offering. The securities registered hereunder may be sold separately or as units with other securities registered hereunder.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities, and it is not soliciting an offer to buy these securities, in any state where the offer or sale is not permitted.

Subject to Completion, Dated September 17, 2019

PROSPECTUS

\$400,000,000

IOVANCE BIOTHERAPEUTICS, INC.

Common Stock

Preferred Stock

Debt Securities

Warrants

Units

**Rights to Purchase Common Stock, Preferred Stock,
Debt Securities or Units**

We may offer and sell from time to time, in one or more offerings and on terms that we will determine at the time of each offering, shares of common stock, shares of preferred stock, debt securities, warrants or units that include any of these securities, or rights to purchase shares of common stock, shares of preferred stock, debt securities or units. We may sell any combination of these securities in one or more offerings with an aggregate initial offering price of up to \$400,000,000.

We will provide the specific terms of each offering of securities, including the price and the type and amount of securities to be offered and sold, in a supplement to this prospectus. You should read this prospectus and the prospectus supplement carefully before you invest.

We may offer and sell these securities directly to purchasers or to or through one or more underwriters, dealers and agents, and on a continuous or delayed basis. If we sell securities to or through underwriters, dealers or agents, we will include their names and the fees, commissions and discounts that they will receive, as well as the net proceeds to us, in the prospectus supplement. This prospectus may not be used to sell our securities unless it is accompanied by the prospectus supplement. The delivery of this prospectus together with a prospectus supplement relating to the offered securities shall not constitute an offer of any other securities covered by this prospectus.

Investing in our securities involves a high degree of risk. See "Risk Factors" on page 4 of this prospectus and in the applicable prospectus supplement for a discussion of risks that you should consider before you invest in our securities.

Our common stock is traded on The Nasdaq Global Market under the symbol "IOVA." On September 16, 2019, the last reported sale price of our common stock on The Nasdaq Global Market was \$21.15 per share.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is .

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ABOUT THIS PROSPECTUS

This prospectus is a part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission (the “SEC”) utilizing a “shelf” registration process. Under the shelf registration process, we may sell any combination of the securities described in this prospectus in one or more transactions up to a total dollar amount of \$400,000,000.

The rules and regulations of the SEC allow us to omit from this prospectus certain information that is included in the registration statement. For further information about us and our securities, you should review the registration statement and the exhibits filed with the registration statement. In addition, the SEC allows us to incorporate by reference into this prospectus information in the reports and other documents that we file with the SEC, which means that we can disclose important information to you by referring you to those reports and other documents. The information incorporated by reference is considered to be part of this prospectus, and information that we later file with the SEC will automatically update and, where applicable, modify or supersede that information. You may read the registration statement (including its exhibits) and the reports and other documents that we file with the SEC at the SEC’s website, www.sec.gov.

This prospectus provides you with a general description of the securities we may offer. Each time we offer securities under this shelf registration, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with the additional information described under the heading “Incorporation of Certain Information by Reference.” To the extent that any information in the prospectus supplement is inconsistent with the information in this prospectus, the information in the prospectus supplement will modify or supersede this prospectus.

This prospectus and the applicable prospectus supplement do not constitute an offer to sell or the solicitation of an offer to buy any securities other than the registered securities to which they relate, nor do this prospectus and the applicable prospectus supplement constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

You should not assume that the information contained in this prospectus and the applicable prospectus supplement is accurate as of any date subsequent to the date set forth on the front of the document or that any information we have incorporated by reference is correct as of any date subsequent to the date of the document incorporated by reference, even though this prospectus and any applicable prospectus supplement is delivered or securities are sold on a later date. Our business, financial condition, results of operations and prospects may have changed since those dates.

You should rely only on the information contained in this prospectus, in the applicable prospectus supplement and in any documents incorporated by reference into this prospectus and the applicable prospectus supplement. We have not authorized any salesperson, dealer or other person to provide you with information different from that contained in this prospectus, in the applicable prospectus supplement or in any documents incorporated by reference into this prospectus or the applicable prospectus supplement, and you are not entitled to rely upon any such different information.

Throughout this prospectus, the terms “Iovance,” “we,” “us,” “our,” and “our company” refer to Iovance Biotherapeutics, Inc., a Delaware corporation.

Overview

We are a clinical-stage biopharmaceutical company focused on the development and commercialization of cell therapies as novel cancer immunotherapy products designed to harness the power of a patient's own immune system to eradicate cancer cells. Tumor infiltrating lymphocyte, or TIL, therapy is a platform technology that has been licensed from National Cancer Institute (NCI) primarily based on data in metastatic melanoma, metastatic and advanced cervical cancer. We have optimized the manufacturing process for TIL to a shorter process known as Gen 2, which yields a cryopreserved TIL product. This proprietary and scalable manufacturing method is being further investigated in multiple indications. Our lead product candidates include lifileucel for metastatic melanoma and LN-145 for advanced cervical cancer. Both product candidates are autologous adoptive cell therapies utilizing TIL. In addition to metastatic melanoma and advanced cervical cancer, we are investigating the effectiveness and safety of TIL therapy for the treatment of squamous cell carcinoma of the head and neck and metastatic non-small cell lung cancer through our sponsored trials, as well as other oncology indications through collaborations.

We are conducting an on-going Phase 2 clinical trial, C-144-01, of our lead product candidate, lifileucel, for the treatment of metastatic melanoma. This multicenter pivotal trial is enrolling patients with melanoma whose disease has progressed following treatment with at least one systemic therapy, including a PD-1 inhibitor and if BRAF mutated, a BRAF inhibitor, or a combination of BRAF and MEK inhibitors (National Clinical Trial identification number NCT02360579). Cohort 4 of the C-144-01 clinical trial is a single-arm cohort intended to be used for the registration of lifileucel. The C-144-01 trial uses our proprietary Generation 2, or Gen 2, manufacturing process. We completed and closed enrollment of patients into Cohort 2 of the C-144-01 trial in 2018. We announced that the first patient was dosed in Cohort 4 of this trial in March 2019. Cohort 4 is being enrolled with a prospective definition of objective response rate, or ORR, read out by a Blinded Independent Review Committee, or BIRC, as the primary endpoint based on our interpretation of discussions with the U.S. Food and Drug Administration, or FDA. FDA also acknowledged the potential acceptability of single-arm data from Cohort 4 for registration. In October 2018, we announced that lifileucel had received a Regenerative Medicine Advanced Therapy, or RMAT, designation from the FDA. Updated results from Cohort 2 of the C-144-01 clinical trial were reported at the American Society of Clinical Oncology, or ASCO, annual meeting on June 1, 2019. In 66 patients with metastatic melanoma, treatment with lifileucel resulted in an ORR of 38%, with 2 complete responses and 23 partial responses. The disease control rate, or DCR, was 80%. Patients were heavily pretreated and had a mean of 3.3 prior therapies. The median duration of response, or DOR, had not been reached. The median follow-up was 8.8 months. The adverse event profile was generally consistent with the underlying advanced disease and the profile of the lymphodepletion and IL-2 regimens.

In addition to our ongoing trial in metastatic melanoma, we are conducting clinical trials of LN-145, TIL therapy in cervical, head and neck cancers, and other cancers. C-145-04 is an ongoing Phase 2, multicenter trial that will assess the safety and efficacy of LN-145 for the treatment of patients with recurrent, metastatic or persistent cervical cancer (NCT03108495). In February 2019, LN-145 received Fast Track designation from the FDA for development in the treatment of cervical cancer with disease progression on or after chemotherapy. In March 2019, the protocol for this trial was amended to increase the sample size to 59 and to modify the primary endpoint of ORR to be determined by BIRC. In May 2019, LN-145 received Breakthrough Therapy designation, or BTD, from the FDA for the development in the treatment of cervical cancer. Updated results from the C-145-04 clinical trial were reported at the ASCO annual meeting on June 1, 2019. In 27 patients with advanced cervical cancer, treatment with LN-145 resulted in an ORR of 44%. In the study there were 3 complete responses and 9 partial responses. The DCR was 85%. Patients were heavily pretreated and had a mean of 2.4 prior therapies. The DOR had not been reached. The median follow-up was 7.4 months. The adverse event profile was generally consistent with the underlying advanced disease and the profile of the lymphodepletion and IL-2 regimens. Based on an End of Phase 2 meeting held with the FDA in June 2019, the FDA has acknowledged that results from the C-145-04 clinical trial may be sufficient to support registration in the treatment of patients with advanced cervical cancer. In accordance with the FDA's recommendations, a new version of the protocol, which further defines the patient population, was provided to the FDA. We plan to include in the biologics license application, or BLA, patients who have progressed following initial systemic therapy for recurrent or metastatic disease, which constitutes almost all of the more advanced patients enrolled to date. We have also expanded the sample size of the C-145-04 clinical trial to include approximately 75 patients from the appropriate patient population.






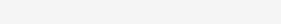

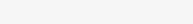
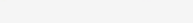

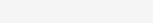

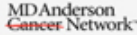



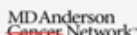







C-145-03 is an ongoing Phase 2, multicenter trial that we are conducting to assess the safety and efficacy of LN-145 for the treatment of patients with recurrent metastatic squamous cell carcinoma of the head and neck (NCT03083873). In October 2018, we reported that, to date, preliminary data for 13 patients in the C-145-03 clinical trial yielded an ORR of 31% with a DOR ranging from 2.8 to 7.6 months. The adverse event profile remained consistent with previous reports. We continue to enroll patients in this study.

We are also investigating the potential of our TIL therapies in earlier lines of treatment and in combination with pembrolizumab. IOV-COM-202 is a Phase 2, multicenter trial that is composed of four cohorts to enroll up to a total of 48 patients (NCT03645928). In Cohort 1A, we are enrolling advanced unresectable or metastatic melanoma patients who have not received prior immunotherapy, including checkpoint inhibitors such as anti-PD-1/anti-PD-L1 therapy. The patients receive lifileucel in combination with pembrolizumab. In Cohort 2A, we are enrolling advanced head and neck squamous cell carcinoma patients who are also naïve to prior immunotherapy including anti-PD-1/anti-PD-L1 therapy. The patients will receive LN-145 in combination with pembrolizumab. We recently opened Cohort 3A to enroll non-small cell lung cancer patients who are also naïve to prior immunotherapy including anti-PD-1/anti-PD-L1 therapy. The patients in Cohort 3A will receive LN-145 in combination with pembrolizumab. In Cohort 3B, we are enrolling non-small cell lung cancer patients who have previously received systemic therapy which could include checkpoint inhibitors. The patients are receiving LN-145. In May 2019, we reported that the first patient was dosed in Cohort 1A, which represents the first instance of a patient naïve to checkpoint inhibitor treatment receiving our TIL therapy in combination with pembrolizumab. In addition to the U.S., the IOV-COM-202 trial has also received regulatory approval in Canada and in certain European countries.

We closed the IOV-LUN-201 clinical trial, investigating TIL therapy in non-small cell lung cancer, or NSCLC, in combination with anti-PD-L1 therapy, in April 2019, and instead opened Cohorts 3A and 3B of the IOV-COM-202 trial as described above, to adapt our clinical development plans to reflect advances in the treatment landscape for non-small cell lung cancer.

As part of our collaboration program with the MD Anderson Cancer Center, or MDACC, two Phase 2 trials were initiated in 2018. Both trials are sponsored by MDACC. The first trial, 2017-0672 (NCT03449108), is intended to allow for investigation of LN-145 manufactured by us using our manufacturing process to treat patients with soft tissue sarcoma, osteosarcoma and platinum resistant ovarian cancer. A second trial under the collaboration with MDACC is active as well (NCT03610490). This trial uses TIL manufactured by MDACC using urelumab, a 4-1BB agonistic antibody, as part of the manufacturing process. The data obtained using this manufacturing process may not be representative of our data using our Gen 2 manufacturing process. We are also collaborating with Roswell Park Cancer Institute on a clinical trial using our LN-145 product for the treatment of patients with bladder cancer in combination with the anti-PD1 antibody pembrolizumab. This trial is now open for enrollment.

Our current product candidate pipeline and selected investigator-sponsored proof-of-concept studies are summarized in the graph below:

	Regimen	Trial	Indication	N	Partner	Phase 1	Phase 2	Pivotal
Company sponsored studies	Lifileucel	C-144-01	Melanoma	164	—			
	LN-145	C-145-04	Cervical cancer	75	—			
	LN-145	C-145-03	Head & neck cancer	47	—			
	Lifileucel + pembrolizumab LN-145 + pembrolizumab LN-145 + pembrolizumab LN-145	IOV-COM-202	Melanoma Head & neck Non-small cell lung Non-small cell lung	48	—			
Select investigator sponsored proof-of-concept studies	MDA TIL	NCT03610490	Ovarian, sarcomas, pancreatic	~54				
	LN-145	NCT03449108	Ovarian, sarcomas	~54				
	LN-145 + pembrolizumab	NCT03935347	Bladder cancer	12				

We intend to begin a clinical trial of our peripheral blood lymphocyte therapy, IOV-2001, for the treatment of patients with chronic lymphocytic leukemia after all necessary approvals are obtained. IOV-2001 is a non-genetically modified, polyclonal T cell product that is manufactured using a nine-day process from 50 mL of patient's blood.

We have also entered into a collaboration with a Canadian institution, Centre hospitalier de l'Université de Montreal, or CHUM, under which CHUM agreed to conduct a clinical study using a PD-1 positive selected TIL product manufactured by a CHUM collaborator using a process developed by CHUM. We are also developing our own TIL selection processes for future clinical testing.

We currently own seven recently granted or allowed U.S. patents for compositions and methods of treatment in a broad range of cancers relating to our Gen 2 manufacturing process, including U.S. Patent Nos. 10,166,257, 10,130,659, 10,272,113, and 10,363,273. Our owned and licensed intellectual property portfolio also includes patent applications relating to TIL, marrow infiltrating, and peripheral blood lymphocyte therapies, methods of manufacturing, the use of costimulatory molecules in TIL therapy and manufacturing, stable and transient genetically-modified TIL therapies, and methods of treating patient subpopulations.

Corporate Information

Information concerning our company is contained in the documents that we file with the SEC as a reporting company under the Securities Exchange Act of 1934, as amended, which are accessible at www.sec.gov, and on our website at www.iovance.com. The information contained on, or that can be accessed through, our website is not a part of this prospectus. Investors should not rely on any such information in deciding whether to purchase our common stock. We have included our website address in this prospectus solely as an inactive textual reference. Information on our website is not, and should not be considered, part of this prospectus.

Our principal executive offices are located at 999 Skyway Road, Suite 150, San Carlos, California 94070, and our telephone number is (650) 260-7120.

RISK FACTORS

Investment in any securities offered pursuant to this prospectus and the applicable prospectus supplement involves a high degree of risk. Prior to making a decision about investing in our securities, you should carefully consider the risk factors described in our most recent Annual Report on Form 10-K and Quarterly Report on Form 10-Q and in any subsequent Quarterly Reports on Form 10-Q or Current Reports on Form 8-K that we file with the SEC after the date of this prospectus, all of which are incorporated by reference into this prospectus, in addition to the risk factor described below. You should also carefully review all other information contained in or incorporated by reference into this prospectus and the applicable prospectus supplement, including the information contained below under the heading “Cautionary Note Regarding Forward-Looking Statements,” as updated by our subsequent filings under the Securities Exchange Act of 1934, as amended. The occurrence of any of these risks might cause you to lose all or part of your investment in the offered securities.

Risks Related to our Securities

Our certificate of incorporation, as amended, designates the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our certificate of incorporation, as amended, provides that, subject to limited exceptions, the Court of Chancery of the State of Delaware shall, to the fullest extent permitted by law, be the sole and exclusive forum for (1) any derivative action or proceeding brought on our behalf, (2) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, employees or agents to us or our stockholders, creditors or other constituents, (3) any action asserting a claim against us arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation, as amended, or our amended bylaws, or (4) any other action asserting a claim against us that is governed by the internal affairs doctrine.

Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our certificate of incorporation described above. This choice of forum provision may limit a stockholder’s ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or other employees, which may discourage such lawsuits against us and our directors, officers, and employees. Further, this choice of forum provision does not preclude or contract the scope of exclusive federal or concurrent jurisdiction for any actions brought under the Securities Act or the Exchange Act. Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. As a result, the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. In addition, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. As a result, the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Securities Act or any other claim for which the federal and state courts have concurrent jurisdiction. Accordingly, our exclusive forum provision will not relieve us of our duties to comply with the federal securities laws and the rules and regulations thereunder, and our stockholders will not be deemed to have waived our compliance with these laws, rules and regulations.

If a court were to find these provisions of our certificate of incorporation, as amended, inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions, which could adversely affect our business, results of operations, and financial condition. Even if we are successful in defending against these claims, litigation could result in substantial costs and be a distraction to management and other employees.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated herein by reference contain forward-looking statements, and we anticipate that the applicable prospectus supplement will contain forward-looking statements. These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results to be materially different from any future results expressed or implied by the forward-looking statements. In some cases, you can identify forward-looking statements by the use of words such as “believe,” “anticipate,” “intend,” “plan,” “estimate,” “may,” “could,” “anticipate,” “predict,” or “expect” and similar expressions. You should not place undue reliance on forward-looking statements since they involve known and unknown risks, uncertainties and other factors that are, in many cases, beyond our control. Forward-looking statements are not guarantees of future performance. Actual events or results may differ materially from those discussed in the forward-looking statements as a result of various factors. Except as required by applicable law, we do not undertake any obligation to publicly update any forward-looking statements, whether as a result of new information, future developments or otherwise.

Important factors that could cause actual results to differ materially from those reflected in our forward-looking statements include, among others:

- our inability to obtain regulatory approval for, or successfully commercialize, our leading product candidate, lifileucel, or our other product candidates;
- difficulty in enrolling patients in our clinical trials and uncertainty of clinical trial results;
- our inability to control the timing and some of the research and development activities of our third-party research institution collaborators relating to our product candidates;
- our history of operating losses and inability to become profitable;
- uncertainty and volatility in the price of our common stock;
- the costs and effects of existing and potential governmental investigations and litigation;
- our inability to meet the continued listing requirements of The Nasdaq Global Market;
- our inability to implement and maintain appropriate internal controls;
- uncertainty as to our employees' and independent contractors' compliance with regulatory standards and requirements and securities insider trading rules;
- dependence on the efforts of third parties to conduct and oversee our clinical trials for our product candidates, to manufacture clinical supplies of our product candidates and to commercialize our product candidates;
- the effect of government regulations on our business;
- a loss of any of our key management personnel;
- our inability to secure and maintain relationships with collaborators and contract manufacturers;
- our inability to develop or commercialize our product candidates due to intellectual property rights held by third parties;
- our inability to protect the confidentiality, privacy, or security of our data or our trade secrets; and
- our potential inability to access capital required to fund proposed operations.

All written and verbal forward-looking statements attributable to us or any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section. We caution investors not to rely too heavily on the forward-looking statements we make or that are made on our behalf.

In addition, you should refer to the documents we have incorporated by reference for a discussion of other important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame, or at all.

We may discuss certain of these risks and uncertainties in greater detail in any prospectus supplement under the heading "Risk Factors." Additional cautionary statements or discussions of risks and uncertainties that could affect our results or the achievement of the expectations described in forward-looking statements may also be contained in the documents we incorporate by reference into this prospectus, including our most recent Annual Report on Form 10-K and our Quarterly Report on Form 10-Q filed with the SEC.

USE OF PROCEEDS

Unless we state otherwise in the applicable prospectus supplement, we intend to use the net proceeds from the sale of securities described in this prospectus for the further development and commercialization of our product candidates and for general corporate purposes, which may include, among other things, reducing indebtedness, acquiring other companies (although we currently have no agreement to acquire any other company), purchasing or licensing other assets or lines of business, repurchasing our common stock and making capital expenditures, including the construction of our manufacturing facility, as well as for working capital. Until we use the net proceeds for these purposes, we intend to invest the net proceeds in investment-grade, interest-bearing securities. We have not determined the amounts we plan to spend on any of these areas or the timing of these expenditures. As a result, our management will have broad discretion regarding the application of the net proceeds from the sale of securities described in this prospectus.

THE SECURITIES THAT WE MAY OFFER

We, directly or through underwriters, dealers or agents designated by us from time to time, may offer, issue and sell, together or separately, up to \$400,000,000 in the aggregate of:

- shares of our common stock, par value \$0.000041666 per share;
- shares of our preferred stock, par value \$0.001 per share;
- debt securities;

- warrants to purchase shares of our common stock, shares of our preferred stock and/or our debt securities;
- units consisting of two or more of the securities described above; or
- rights to purchase shares of our common stock, shares of our preferred stock, warrants, units or our debt securities.

The common stock, the preferred stock, the debt securities, the warrants, the units, and the rights to purchase shares of our common stock, shares of our preferred stock, warrants, debt securities or units collectively are referred to in this prospectus as the “securities.”

We have summarized below the material terms of the various types of securities that we may offer. We will describe in the applicable prospectus supplement the detailed terms of the securities offered by that supplement. If indicated in the prospectus supplement, the terms of the offered securities may differ from the terms summarized below.

This prospectus may not be used to sell our securities unless it is accompanied by the applicable prospectus supplement.

DESCRIPTION OF SECURITIES

The following is a summary of all material characteristics of our capital stock as set forth in our certificate of incorporation and bylaws, as amended. Copies of these documents are filed or incorporated by reference as exhibits to the registration statement, of which this prospectus forms a part.

DESCRIPTION OF COMMON STOCK

We are presently authorized to issue 300,000,000 shares of \$0.000041666 par value common stock. As of June 30, 2019, we had issued and outstanding 123,820,508 shares of common stock.

We have one class of common stock. Holders of our common stock are entitled to one vote per share on all matters to be voted upon by stockholders and do not have cumulative voting rights in the election of directors. Holders of shares of common stock are entitled to receive on a pro rata basis such dividends, if any, as may be declared from time to time by our board of directors in its discretion from funds legally available for that use, subject to any preferential dividend rights of outstanding preferred stock. They are also entitled to share on a pro rata basis in any distribution to our common stockholders upon our liquidation, dissolution or winding up, subject to the prior rights of any outstanding preferred stock. Common stockholders do not have preemptive rights to subscribe to any additional stock issuances by us, and they do not have the right to require the redemption of their shares or the conversion of their shares into any other class of our stock. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of any series of preferred stock that we may designate and issue in the future.

The following provisions of our certificate of incorporation and bylaws could have the effect of delaying or discouraging another party from acquiring control of us and could encourage persons seeking to acquire control of us to first negotiate with our board of directors:

- our certificate of incorporation and bylaws prohibit our stockholders from filling board vacancies, calling special stockholder meetings or taking action by written consent;
- our certificate of incorporation and bylaws require advance written notice of stockholder proposals and director nominations;
- our certificate of incorporation requires any action instituted against our officers or directors in connection with their service to us to be brought in the state of Delaware.

- our bylaws provide that our board of directors will establish the authorized number of directors from time to time;
- our bylaws provide for the removal of a director only with cause and by the affirmative vote of the holders of at least two-thirds of the shares then entitled to vote at an election of our directors;
- our certificate of incorporation does not permit cumulative voting in the election of directors; and
- our certificate of incorporation permits our board of directors to determine the rights, privileges and preferences of any new series of preferred stock, some of which could impede the ability of a person to acquire control of our company.

In addition, we are subject to the provisions of Section 203 of the General Corporation Law of Delaware. Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner. A "business combination" includes mergers, asset sales and other transactions resulting in a financial benefit to the interested stockholder. Subject to specified exceptions, an "interested stockholder" is a person who, together with affiliates and associates, owns, or within three years did own, 15% or more of the corporation's voting stock.

The transfer agent and registrar of our common stock is Continental Stock Transfer and Trust Company. The address of our transfer agent and registrar is 1 State Street, 30th Floor, New York, New York 10004, and its telephone number is (212) 509-4000.

Our common stock is traded on The Nasdaq Global Market under the symbol "IOVA."

DESCRIPTION OF PREFERRED STOCK

We have authority to issue 50,000,000 shares of preferred stock, par value \$0.001 per share. As of June 30, 2019, we had issued and outstanding 194 shares designated as Series A Convertible Preferred Stock (the "Series A Convertible Preferred Stock") that are convertible into 97,000 shares of common stock, and 5,854,845 shares designated as Series B Preferred (the "Series B Convertible Preferred Stock") that are convertible into 5,854,845 shares of common stock. There are no other series of shares of our preferred stock currently issued or outstanding. The rights and restrictions granted or imposed on the shares of the Series A Convertible Preferred Stock and Series B Convertible Preferred Stock are described below.

Under our certificate of incorporation, our board of directors has the authority, without further action by stockholders, to designate one or more series of preferred stock and to fix the voting powers, designations, preferences, limitations, restrictions and relative rights granted to or imposed upon the preferred stock, including dividend rights, conversion rights, voting rights, rights and terms of redemption, liquidation preference and sinking fund terms, any or all of which may be preferential to or greater than the rights of the common stock.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of the common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in our control and may adversely affect the market price of the common stock and the voting and other rights of the holders of common stock.

We will describe in a prospectus supplement relating to any series of preferred stock being offered the following terms:

- the distinguishing designation of the series of preferred stock;
- the number of shares of the series of preferred stock offered, the liquidation preference per share and the offering price of the series;
- the dividend rate(s), period(s) or payment date(s) or method(s) of calculation applicable to the series of preferred stock;

- whether dividends are cumulative or non-cumulative and, if cumulative, the date from which dividends on the series of preferred stock will accumulate;
- the procedures for any auction and remarketing, if any, for the series of preferred stock;
- the provisions for a sinking fund, if any, for the series of preferred stock;
- the provision for redemption, if applicable, of the series of preferred stock;
- any listing of the series of preferred stock on any securities exchange;
- the terms and conditions, if applicable, upon which the series of preferred stock will be convertible into common stock, including the conversion price or manner of calculation and conversion period;
- voting rights, if any, of the series of preferred stock;
- a discussion of any material or special U.S. federal income tax considerations applicable to the series of preferred stock;
- the relative ranking and preferences of the series of preferred stock as to dividend rights and rights upon the liquidation, dissolution or winding up of our affairs;
- any limitations on issuance of any series of preferred stock ranking senior to or on a parity with the series of preferred stock being offered as to dividend rights and rights upon liquidation, dissolution or winding up of our affairs; and
- any other specific terms, preferences, rights, limitations or restrictions of the series of preferred stock.

Unless we specify otherwise in the applicable prospectus supplement, the preferred stock will rank, relating to dividends and upon our liquidation, dissolution or winding up:

- senior to all classes or series of our common stock and to all of our equity securities ranking junior to the preferred stock;
- on a parity with all of our equity securities the terms of which specifically provide that the equity securities rank on a parity with the preferred stock; and
- junior to all of our equity securities the terms of which specifically provide that the equity securities rank senior to the preferred stock.

Series A Convertible Preferred Stock

In October 2013, we created a new class of preferred stock, the Series A Convertible Preferred Stock, designated as “Series A Convertible Preferred Stock.” The shares of Series A Convertible Preferred Stock have a stated value of \$1,000 per share and are initially convertible into shares of common stock at a price of \$2.00 per share (subject to adjustment as described below). The rights of the Series A Convertible Preferred Stock are set forth in the Certificate of Designation of Preferences and Rights of Series A Convertible Preferred Stock (the “Series A Certificate of Designation”), which gives the holders of the Series A Convertible Preferred Stock the rights, preferences and privileges described in the following paragraphs.

The Series A Convertible Preferred Stock may, at the option of the holder, be converted at any time or from time to time into fully paid and non-assessable shares of common stock at the conversion price in effect at the time of conversion; provided, that a holder of Series A Convertible Preferred Stock may at any given time convert only up to that number of shares of Series A Convertible Preferred Stock so that, upon conversion, the aggregate beneficial ownership of the common stock (calculated pursuant to Rule 13d-3 of the Exchange Act) of such holder and all persons affiliated with such holder, is not more than 4.99% of the common stock then outstanding (subject to adjustment up to 9.99% solely at the holder's discretion upon 60 days' prior notice). The number of shares into which one share of Series A Convertible Preferred Stock shall be convertible is determined by dividing the stated value of \$1,000 per share by the initial Conversion Price. The "Conversion Price" per share for the Series A Convertible Preferred Stock is initially equal to \$2.00 (subject to appropriate adjustment for certain events, including stock splits, stock dividends, combinations, recapitalizations or other recapitalizations affecting the Series A Convertible Preferred Stock).

The Series A Convertible Preferred Stock will automatically be converted into common stock at the then-applicable Conversion Price (1) upon the written consent of the holders holding at least a majority of the outstanding shares of Series A Convertible Preferred Stock or (2) if required by us to be able to list our common stock on a national securities exchange; provided, any such conversions will continue to be limited by, and subject to the beneficial ownership conversion limitations set forth above.

Except as otherwise required by law, the holders of shares of Series A Convertible Preferred Stock do not have the right to vote on matters that come before the stockholders; provided, that we may not, without the prior written consent of a majority of the outstanding Series A Convertible Preferred Stock: (1) amend, alter, or repeal any provision of our certificate of incorporation (including the Series A Certificate of Designation) or Bylaws in a manner adverse to the Series A Convertible Preferred Stock; (2) create or authorize the creation of or issue any other security convertible into or exercisable for any equity security, having rights, preferences or privileges senior to or on parity with the Series A Convertible Preferred Stock, or increase the authorized number of shares of Series A Convertible Preferred Stock; or (3) enter into any agreement with respect to any of the foregoing.

In the event of any dissolution or winding up of our company, whether voluntary or involuntary, the proceeds would be paid *pari passu* among the holders of shares of our common stock, Series A Convertible Preferred Stock and Series B Convertible Preferred Stock, pro rata based on the number of shares held by each such holder, treating for this purpose all such securities as if they had been converted to common stock.

We may not declare, pay or set aside any dividends on shares of any class or series of our capital stock (other than dividends on shares of common stock payable in shares of common stock) unless the holders of the Series A Convertible Preferred Stock shall first receive, or simultaneously receive, an equal dividend on each outstanding share of Series A Convertible Preferred Stock.

Series B Convertible Preferred Stock

In June 2016, we created a new class of Preferred Stock designated as "Series B Preferred Stock," which are now convertible into common stock. The rights of the Series B Convertible Preferred Stock are set forth in the Certificate of Designation of Preferences and Rights of Series B Convertible Preferred Stock (the "Series B Certificate of Designation"). A total of 11,500,000 shares of Series B Convertible Preferred Stock are authorized for issuance under the Series B Certificate of Designation. The shares of Series B Convertible Preferred Stock have a stated value of \$4.75 per share and are convertible into shares of our common stock at a conversion price of \$4.75 per share, subject to certain adjustments.

Holders of Series B Convertible Preferred Stock are entitled to dividends on an as-if-converted basis in the same form as any dividends actually paid on shares of our Series A Convertible Preferred Stock or other securities. So long as any Series B Convertible Preferred Stock remains outstanding, we may not redeem, purchase or otherwise acquire any material amount of our Series A Convertible Preferred Stock or other securities.

The shares of Series B Convertible Preferred Stock are convertible, at the option of each holder, at any time or from time to time into shares of our common stock at the conversion price in effect at the time of conversion, except that, subject to certain limited exceptions, no holder of Series B Convertible Preferred Stock may convert the Series B Convertible Preferred Stock if, after giving effect to the conversion, the holder and all affiliated persons would own beneficially more than 4.99% of our common stock (subject to adjustment to up to 9.99% solely at the holder's discretion upon 61 days' prior notice to us). The conversion price of \$4.75 is subject to appropriate adjustment in the event of a stock split, stock dividend, combination or other recapitalization affecting our common stock.

Holders of a majority of the outstanding shares of Series B Convertible Preferred Stock are entitled to elect to convert all of the outstanding shares of the Series B Convertible Preferred Stock into shares of common stock, subject to the beneficial ownership limitations of each holder set forth above.

Except as otherwise required by law, the holders of Series B Convertible Preferred Stock have no right to vote on matters submitted to a vote of our stockholders. Without the prior written consent of a majority of the outstanding shares of Series B Convertible Preferred Stock, however, we may not: (i) amend our certificate of incorporation (including the Series B Certificate of Designation) in a manner adverse to the Series B Convertible Preferred Stock; (ii) create or authorize the creation of any other security convertible into or exercisable for any equity security ranking as to dividends, redemption or distribution of assets upon a liquidation senior to, the Series B Convertible Preferred Stock, or increase the authorized number of shares of Series B Convertible Preferred Stock; or (iii) enter into any agreement with respect to any of the foregoing.

In the event of the dissolution and winding up of our company, the proceeds available for distribution to our stockholders would be paid *pari passu* among the holders of shares of our common stock, Series A Convertible Preferred Stock and Series B Convertible Preferred Stock, pro rata based upon the number of shares held by each such holder, treating for this purpose all such securities as if they had been converted into our common stock.

DESCRIPTION OF DEBT SECURITIES

The following is a general description of the terms of debt securities we may issue from time to time unless we provide otherwise in the applicable prospectus supplement. Particular terms of any debt securities we offer will be described in the prospectus supplement relating to such debt securities.

As required by Federal law for all bonds and notes of companies that are publicly offered, any debt securities we issue will be governed by a document called an “indenture,” the form of which is filed as an exhibit to the registration statement of which this prospectus forms a part. We have summarized the general features of the debt securities to be governed by the indenture. The summary is not complete. An indenture is a contract between us and a financial institution acting as trustee on behalf of the holders of the debt securities, and is subject to and governed by the Trust Indenture Act of 1939, as amended. The trustee has two main roles. First, the trustee can enforce holders’ rights against us if we default. There are some limitations on the extent to which the trustee acts on holders’ behalf, described in the second paragraph under “Description of Debt Securities—Events of Default.” Second, the trustee performs certain administrative duties, such as sending interest and principal payments to holders.

Because this section is a summary, it does not describe every aspect of any debt securities we may issue or the indenture governing any such debt securities. Particular terms of any debt securities we offer will be described in the prospectus supplement relating to such debt securities, and we urge you to read the applicable executed indenture, which will be filed with the SEC at the time of any offering of debt securities, because it, and not this description, will define the rights of holders of such debt securities.

A prospectus supplement will describe the particular terms of any series of debt securities we may issue, including some or all of the following:

- the designation or title of the series of debt securities;
- the total principal amount of the series of debt securities, the denominations in which the offered debt securities will be issued and whether the offering may be reopened for additional securities of that series and on what terms;
- the percentage of the principal amount at which the series of debt securities will be offered;

- the date or dates on which principal will be payable;
- the rate or rates (which may be either fixed or variable) and/or the method of determining such rate or rates of interest, if any;
- the date or dates from which any interest will accrue, or the method of determining such date or dates, and the date or dates on which any interest will be payable;
- the terms for redemption, extension or early repayment, if any;
- the currencies in which the series of debt securities are issued and payable;
- whether the amount of payments of principal, interest or premium, if any, on a series of debt securities will be determined with reference to an index, formula or other method and how these amounts will be determined;
- the place or places of payment, transfer, conversion and/or exchange of the debt securities;
- the provision for any sinking fund;
- any restrictive covenants;
- events of default;
- whether the series of debt securities are issuable in certificated form;
- any provisions for legal defeasance or covenant defeasance;
- whether and under what circumstances we will pay additional amounts in respect of any tax, assessment or governmental charge and, if so, whether we will have the option to redeem the debt securities rather than pay the additional amounts (and the terms of this option);
- any provisions for convertibility or exchangeability of the debt securities into or for any other securities;
- whether the debt securities are subject to subordination and the terms of such subordination;
- any listing of the debt securities on any securities exchange;
- if applicable, a discussion of certain U.S. Federal income tax considerations, including those related to original issue discount, if applicable; and
- any other material terms.

The debt securities may be secured or unsecured obligations. Unless the prospectus supplement states otherwise, principal, interest and premium, if any, will be paid by us in immediately available funds.

General

The indenture may provide that any debt securities proposed to be sold under this prospectus and the applicable prospectus supplement relating to such debt securities (“offered debt securities”) and any debt securities issuable upon conversion or exchange of other offered securities (“underlying debt securities”) may be issued under the indenture in one or more series.

For purposes of this prospectus, any reference to the payment of principal of, or interest or premium, if any, on, debt securities will include additional amounts if required by the terms of the debt securities.

Debt securities issued under an indenture, when a single trustee is acting for all debt securities issued under the indenture, are called the “indenture securities.” The indenture may also provide that there may be more than one trustee thereunder, each with respect to one or more different series of securities issued thereunder. See “Description of Debt Securities—Resignation of Trustee” below. At a time when two or more trustees are acting under an indenture, each with respect to only certain series, the term “indenture securities” means the one or more series of debt securities with respect to which each respective trustee is acting. In the event that there is more than one trustee under an indenture, the powers and trust obligations of each trustee described in this prospectus will extend only to the one or more series of indenture securities for which it is trustee. If two or more trustees are acting under an indenture, then the indenture securities for which each trustee is acting would be treated as if issued under separate indentures.

We refer you to the applicable prospectus supplement relating to any debt securities we may issue from time to time for information with respect to any deletions from, modifications of or additions to the Events of Default or covenants that are described below, including any addition of a covenant or other provision providing event risk or similar protection, that will be applicable with respect to such debt securities.

We have the ability to issue indenture securities with terms different from those of indenture securities previously issued and, without the consent of the holders thereof, to reopen a previous issue of a series of indenture securities and issue additional indenture securities of that series unless the reopening was restricted when that series was created.

Conversion and Exchange

If any debt securities are convertible into or exchangeable for other securities, the related prospectus supplement will explain the terms and conditions of the conversion or exchange, including the conversion price or exchange ratio (or the calculation method), the conversion or exchange period (or how the period will be determined), if conversion or exchange will be mandatory or at the option of the holder or us, provisions for adjusting the conversion price or the exchange ratio and provisions affecting conversion or exchange in the event of the redemption of the underlying debt securities. These terms may also include provisions under which the number or amount of other securities to be received by the holders of the debt securities upon conversion or exchange would be calculated according to the market price of the other securities as of a time stated in the prospectus supplement.

Payment and Paying Agents

We will pay interest to the person listed in the applicable trustee’s records as the owner of the debt security at the close of business on a particular day in advance of each due date for interest, even if that person no longer owns the debt security on the interest due date. That day, often approximately two weeks in advance of the interest due date, is called the “record date.” Because we will pay all the interest for an interest period to the holders on the record date, holders buying and selling debt securities must work out between themselves the appropriate purchase price. The most common manner is to adjust the sales price of the debt securities to prorate interest fairly between buyer and seller based on their respective ownership periods within the particular interest period. This prorated interest amount is called “accrued interest.”

Events of Default

Holders of debt securities of any series will have rights if an Event of Default occurs in respect of the debt securities of such series and is not cured, as described later in this subsection. The term “Event of Default” in respect of the debt securities of any series means any of the following:

- we do not pay the principal of, or any premium on, a debt security of the series on its due date;
- we do not pay interest on a debt security of the series within 30 days of its due date;
- we do not deposit any sinking fund payment in respect of debt securities of the series on its due date and we do not cure this default within five days;
- we remain in breach of a covenant in respect of debt securities of the series for 90 days after we receive a written notice of default stating we are in breach. The notice must be sent by either the trustee or holders of at least 25% of the principal amount of debt securities of the series;
- we file for bankruptcy or certain other events of bankruptcy, insolvency or reorganization occur; and

- any other Event of Default occurs in respect of debt securities of the series described in the prospectus supplement.

An Event of Default for a particular series of debt securities does not necessarily constitute an Event of Default for any other series of debt securities issued under the same or any other indenture. The trustee may withhold notice to the holders of debt securities of any default, except in the payment of principal, premium or interest, if it considers the withholding of notice to be in the best interests of the holders.

Remedies if an Event of Default Occurs

If an Event of Default has occurred and has not been cured or waived, the trustee or the holders of not less than 25% in principal amount of the debt securities of the affected series may declare the entire principal amount of all the debt securities of that series to be due and immediately payable. This is called a declaration of acceleration of maturity. A declaration of acceleration of maturity may be canceled by the holders of a majority in principal amount of the debt securities of the affected series if the default is cured or waived and certain other conditions are satisfied.

Except in cases of default, where the trustee has some special duties, the trustee typically is not required to take any action under an indenture at the request of any holders unless the holders offer the trustee reasonable protection from expenses and liability (called an “indemnity”). If reasonable indemnity is provided, the holders of a majority in principal amount of the outstanding debt securities of the relevant series may direct the time, method and place of conducting any lawsuit or other formal legal action seeking any remedy available to the trustee. The trustee may refuse to follow those directions in certain circumstances.

Before a holder is allowed to bypass the trustee and bring its own lawsuit or other formal legal action or take other steps to enforce its rights or protect its interests relating to any debt securities, the following must occur:

- the holder must give the trustee written notice that an Event of Default has occurred and remains uncured;
- the holders of at least 25% in principal amount of all outstanding debt securities of the relevant series must make a written request that the trustee take action because of the default and must offer reasonable indemnity to the trustee against the cost and other liabilities of taking that action;
- the trustee must not have taken action for 60 days after receipt of the above notice and offer of indemnity; and
- the holders of a majority in principal amount of the debt securities must not have given the trustee a direction inconsistent with the above notice during that 60-day period.

However, a holder is entitled at any time to bring a lawsuit for the payment of money due on its debt securities on or after the due date. Each year, we will furnish to each trustee a written statement of certain of our officers certifying that to their knowledge we are in compliance with the indenture and the debt securities, or else specifying any default.

Waiver of Default

The holders of a majority in principal amount of the relevant series of debt securities may waive a default for all such series of debt securities. If this happens, the default will be treated as if it had not occurred. No one can waive a payment default on a holder’s debt security, however, without the holder’s approval.

Merger or Consolidation

Under the terms of an indenture, we may be permitted to consolidate or merge with another entity. We may also be permitted to sell all or substantially all of our assets to another entity. However, typically we may not take any of these actions unless all the following conditions are met:

- if we do not survive such transaction or we convey, transfer or lease our properties and assets substantially as an entirety, the acquiring company must be a corporation, limited liability company, partnership or trust, or other corporate form, organized under the laws of any state of the United States or the District of Columbia, and such company must agree to be legally responsible for our debt securities, and, if not already subject to the jurisdiction of any state of the United States or the District of Columbia, the new company must submit to such jurisdiction for all purposes with respect to the debt securities and appoint an agent for service of process;
- alternatively, we must be the surviving company;
- immediately after the transaction no Event of Default will exist;
- we must deliver certain certificates and documents to the trustee; and
- we must satisfy any other requirements specified in the prospectus supplement relating to a particular series of debt securities.

Modification or Waiver

There are three types of changes we may make to an indenture and the debt securities issued thereunder.

Changes Requiring Approval

First, there are changes that we cannot make to debt securities without specific approval of all of the holders. The following is a list of the types of changes that may require specific approval:

- change the stated maturity of the principal or rate of interest on a debt security;
- reduce any amounts due on a debt security;
- reduce the amount of principal payable upon acceleration of the maturity of a security following a default;
- at any time after a change of control has occurred, reduce any premium payable upon a change of control;
- change the place or currency of payment on a debt security (except as otherwise described in the prospectus or prospectus supplement);
- impair the right of holders to sue for payment;
- adversely affect any right to convert or exchange a debt security in accordance with its terms;
- reduce the percentage of holders of debt securities whose consent is needed to modify or amend the indenture;
- reduce the percentage of holders of debt securities whose consent is needed to waive compliance with certain provisions of the indenture or to waive certain defaults;
- modify any other aspect of the provisions of the indenture dealing with supplemental indentures, modification and waiver of past defaults, changes to the quorum or voting requirements or the waiver of certain covenants; and
- change any obligation we have to pay additional amounts.

Changes Not Requiring Approval

The second type of change does not require any vote by the holders of the debt securities. This type is limited to clarifications and certain other changes that would not adversely affect holders of the outstanding debt securities in any material respect, including the addition of covenants and guarantees. We also do not need any approval to make any change that affects only debt securities to be issued under the indenture after the change takes effect.

Changes Requiring Majority Approval

Any other change to the indenture and the debt securities may require the following approval:

- if the change affects only one series of debt securities, it must be approved by the holders of a majority in principal amount of that series; and
- if the change affects more than one series of debt securities issued under the same indenture, it must be approved by the holders of a majority in principal amount of all of the series affected by the change, with all affected series voting together as one class for this purpose.

The holders of a majority in principal amount of all of the series of debt securities issued under an indenture, voting together as one class for this purpose, may waive our compliance obligations with respect to some of our covenants in that indenture. However, we cannot obtain a waiver of a payment default or of any of the matters covered by the bullet points included above under “Description of Debt Securities—Modification or Waiver—Changes Requiring Approval.”

Further Details Concerning Voting

When taking a vote on proposed changes to the indenture and the debt securities, we expect to use the following rules to decide how much principal to attribute to a debt security:

- for original issue discount securities, we will use the principal amount that would be due and payable on the voting date if the maturity of these debt securities were accelerated to that date because of a default;
- for debt securities whose principal amount is not known (for example, because it is based on an index), we will use a special rule for that debt security described in the related prospectus supplement; and
- for debt securities denominated in one or more foreign currencies, we will use the U.S. dollar equivalent.

Debt securities will not be considered outstanding, and therefore not eligible to vote, if we have deposited or set aside in trust money for their payment or redemption. Debt securities will also not be eligible to vote if they have been fully defeased as described later under “Description of Debt Securities—Defeasance—Legal Defeasance.”

We generally will be entitled to set any day as a record date for the purpose of determining the holders of outstanding indenture securities that are entitled to vote or take other action under the indenture. If we set a record date for a vote or other action to be taken by holders of one or more series, that vote or action may be taken only by persons who are holders of outstanding indenture securities of those series on the record date and must be taken within 11 months following the record date.

Book-entry and other indirect holders will need to consult their banks or brokers for information on how approval may be granted or denied if we seek to change the indenture or the debt securities or request a waiver.

Defeasance

The following provisions will be applicable to each series of debt securities unless we state in the applicable prospectus supplement that the provisions of covenant defeasance and legal defeasance will not be applicable to that series.

Covenant Defeasance

We can make the deposit described below and be released from some of the restrictive covenants in the indenture under which the particular series was issued. This is called “covenant defeasance.” In that event, the holders would lose the protection of those restrictive covenants but would gain the protection of having money and government securities set aside in trust to repay holders’ debt securities. If applicable, a holder also would be released from the subordination provisions described under “Description of Debt Securities—Indenture Provisions—Subordination” below. In order to achieve covenant defeasance, we must do the following:

- If the debt securities of the particular series are denominated in U.S. dollars, we must deposit in trust for the benefit of all holders of such debt securities a combination of money and U.S. government or U.S. government agency notes or bonds that will generate enough cash to make interest, principal and any other payments on the debt securities on their various due dates;
- We may be required to deliver to the trustee a legal opinion of our counsel confirming that, under current U.S. Federal income tax law, we may make the above deposit without causing the holders to be taxed on the debt securities any differently than if we did not make the deposit and just repaid the debt securities ourselves at maturity; and
- We must deliver to the trustee certain documentation stating that all conditions precedent to covenant defeasance have been complied with.

If we accomplish covenant defeasance, holders can still look to us for repayment of the debt securities if there were a shortfall in the trust deposit or the trustee is prevented from making payment. In fact, if one of the remaining Events of Default occurred (such as our bankruptcy) and the debt securities became immediately due and payable, there might be a shortfall. Depending on the event causing the default, holders may not be able to obtain payment of the shortfall.

Legal Defeasance

As described below, we can legally release ourselves from all payment and other obligations on the debt securities of a particular series (called “legal defeasance”), (1) if there is a change in U.S. Federal tax law that allows us to effect the release without causing the holders to be taxed any differently than if the release had not occurred, and (2) if we put in place the following other arrangements for holders to be repaid:

- If the debt securities of the particular series are denominated in U.S. dollars, we must deposit in trust for the benefit of all holders of such debt securities a combination of money and U.S. government or U.S. government agency notes or bonds that will generate enough cash to make interest, principal and any other payments on the debt securities on their various due dates;
- We may be required to deliver to the trustee a legal opinion confirming that there has been a change in current U.S. Federal tax law or an Internal Revenue Service ruling that allows us to make the above deposit without causing the holders to be taxed on the debt securities any differently than if we did not make the deposit and just repaid the debt securities ourselves at maturity. Under current U.S. Federal tax law, the deposit and our legal release from the debt securities would be treated as though we paid each holder its share of the cash and notes or bonds at the time the cash and notes or bonds were deposited in trust in exchange for its debt securities and holders would recognize gain or loss on the debt securities at the time of the deposit; and
- We must deliver to the trustee a legal opinion and officers’ certificate stating that all conditions precedent to legal defeasance have been complied with.

If we ever did accomplish legal defeasance, as described above, holders would have to rely solely on the trust deposit for repayment of the debt securities. Holders could not look to us for repayment in the unlikely event of any shortfall. Conversely, the trust deposit would most likely be protected from claims of our lenders and other creditors if we ever became bankrupt or insolvent. If applicable, holders would also be released from the subordination provisions described later under “Description of Debt Securities—Indenture Provisions—Subordination.”

Resignation of Trustee

Each trustee may resign or be removed with respect to one or more series of indenture securities provided that a successor trustee is appointed to act with respect to such series. In the event that two or more persons are acting as trustee with respect to different series of indenture securities under the indenture, each of the trustees will be a trustee of a trust separate and apart from the trust administered by any other trustee.

Indenture Provisions—Subordination

Upon any distribution of our assets upon our dissolution, winding up, liquidation or reorganization, the payment of the principal of (and premium, if any) and interest on any indenture securities denominated as subordinated debt securities is to be subordinated to the extent provided in the indenture in right of payment to the prior payment in full of all Senior Indebtedness (defined below), but our obligation to holders to make payment of the principal of (and premium, if any) and interest on such subordinated debt securities will not otherwise be affected. In addition, no payment on account of principal (or premium, if any), interest or sinking fund, if any, may be made on such subordinated debt securities at any time unless full payment of all amounts due in respect of the principal (and premium, if any), interest and sinking fund, if any, on Senior Indebtedness has been made or duly provided for in money or money's worth.

In the event that, notwithstanding the foregoing, any payment from us is received by the trustee in respect of subordinated debt securities or by the holders of any of such subordinated debt securities before all Senior Indebtedness is paid in full, the payment or distribution must be paid over to the holders of the Senior Indebtedness or on their behalf for application to the payment of all the Senior Indebtedness remaining unpaid until all the Senior Indebtedness has been paid in full, after giving effect to any concurrent payment or distribution to the holders of the Senior Indebtedness. Subject to the payment in full of all Senior Indebtedness, the holders of such subordinated debt securities will be subrogated to the rights of the holders of the Senior Indebtedness to the extent of payments made to the holders of the Senior Indebtedness out of the distributive share of such subordinated debt securities.

By reason of this subordination, in the event of a distribution of our assets upon our insolvency, certain of our senior creditors may recover more, ratably, than holders of any subordinated debt securities. The related indenture will provide that these subordination provisions will not apply to money and securities held in trust under the defeasance provisions of the indenture.

“Senior Indebtedness” will be defined in an applicable indenture as the principal of (and premium, if any) and unpaid interest on:

- our indebtedness (including indebtedness of others guaranteed by us), whenever created, incurred, assumed or guaranteed, for money borrowed (other than indenture securities issued under the indenture and denominated as subordinated debt securities), unless in the instrument creating or evidencing the same or under which the same is outstanding it is provided that this indebtedness is not senior or prior in right of payment to the subordinated debt securities; and
- renewals, extensions, modifications and refinancings of any of such indebtedness.

The prospectus supplement accompanying any series of indenture securities denominated as subordinated debt securities will set forth the approximate amount of our Senior Indebtedness outstanding as of a recent date.

Trustee

We intend to name the indenture trustee for each series of indenture securities in the related prospectus supplement.

Certain Considerations Relating to Foreign Currencies

Debt securities denominated or payable in foreign currencies may entail significant risks. These risks include the possibility of significant fluctuations in the foreign currency markets, the imposition or modification of foreign exchange controls and potential illiquidity in the secondary market. These risks will vary depending upon the currency or currencies involved and will be more fully described in the applicable prospectus supplement.

DESCRIPTION OF WARRANTS

We may issue warrants for the purchase of shares of our common stock, preferred stock or debt securities. We may issue warrants independently or together with other securities, and the warrants may be attached to or separate from any offered securities. If a series of warrants will be issued under a separate warrant agreement to be entered into between us and the investors or a warrant agent, we will so specify in the applicable prospectus supplement. The following summary of the material provisions of the warrants and warrant agreements is subject to, and qualified in its entirety by reference to, all the provisions of the warrants and any warrant agreement applicable to a particular series of warrants. The terms of any warrants offered under a prospectus supplement may differ from the terms described below. We urge you to read the applicable prospectus supplement, as well as the complete warrants and warrant agreements that contain the terms of the warrants.

The material terms of any issue of warrants will be described in the prospectus supplement relating to the issue. Those terms may include:

- the number of shares of common stock or preferred stock purchasable upon the exercise of warrants to purchase such shares and the price at which such number of shares may be purchased upon such exercise;
- a summary of the designation and terms (including, without limitation, liquidation, dividend, conversion and voting rights) of the series of preferred stock purchasable upon exercise of warrants to purchase preferred stock as set forth in the certificate of designation for such series of preferred stock;
- the principal amount of debt securities that may be purchased upon exercise of a debt warrant and the exercise price for the warrants, which may be payable in cash, securities or other property;
- the date, if any, on and after which the warrants and the related debt securities, preferred stock or common stock will be separately transferable;
- the terms of any rights to redeem or call the warrants;
- the date on which the right to exercise the warrants will commence and the date on which the right will expire;
- U.S. federal income tax consequences applicable to the warrants; and
- any additional terms of the warrants, including terms, procedures, and limitations relating to the exchange, exercise and settlement of the warrants.

Each warrant will entitle its holder to purchase the principal amount of debt securities or the number of shares of preferred stock or common stock at the exercise price set forth in, or calculable as set forth in, the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to the specified time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

A holder of warrant certificates may exchange them for new warrant certificates of different denominations, present them for registration of transfer and exercise them at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement. Until any warrants to purchase debt securities are exercised, the holder of the warrants will not have any rights of holders of the debt securities that can be purchased upon exercise, including any rights to receive payments of principal, premium or interest on the underlying debt securities or to enforce covenants in the applicable indenture. Until any warrants to purchase common stock or preferred stock are exercised, the holders of the warrants will not have any rights of holders of the underlying common stock or preferred stock, including any rights to receive dividends or payments upon any liquidation, dissolution or winding up on the common stock or preferred stock, if any.

DESCRIPTION OF UNITS

We may issue units consisting of any combination of common stock, preferred stock, debt securities or warrants to purchase shares of our common stock, shares of our preferred stock or debt securities offered under this prospectus in one or more series. We may elect to evidence each series of units by unit certificates that we will issue under a separate unit agreement. We may enter into unit agreements with a unit agent. Each unit agent will be a bank or trust company that we select. We will indicate the name and address of the unit agent in the applicable prospectus supplement relating to a particular series of units.

The following description, together with the additional information included in any applicable prospectus supplement, summarizes the general features of the units that we may offer under this prospectus. You should read any prospectus supplement related to the series of units being offered, as well as the complete unit agreements that contain the terms of the units. Specific unit agreements will contain additional important terms, and we will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from another report that we file with the SEC, the form of each unit agreement relating to units offered under this prospectus.

If we offer any units, certain terms of that series of units will be described in the applicable prospectus supplement, including, without limitation, the following, as applicable:

- the title of the series of units;
- identification and description of the separate constituent securities comprising the units;
- the price or prices at which the units will be issued;
- the date, if any, on and after which the constituent securities comprising the units will be separately transferable;
- a discussion of certain U.S. federal income tax considerations applicable to the units; and
- any other material terms of the units and their constituent securities.

DESCRIPTION OF RIGHTS

The following is a general description of the terms of the rights we may issue from time to time unless we provide otherwise in the applicable prospectus supplement. Particular terms of any rights we offer will be described in the prospectus supplement relating to such rights.

General

We may issue rights to purchase common stock, preferred stock, debt securities or units. Rights may be issued independently or together with other securities and may or may not be transferable by the person purchasing or receiving the rights. In connection with any rights offering to our stockholders, we may enter into a standby underwriting, backstop or other arrangement with one or more underwriters or other persons pursuant to which such underwriters or other persons would purchase any offered securities remaining unsubscribed for after such rights offering. In connection with a rights offering to our stockholders, we would distribute certificates evidencing the rights and a prospectus supplement to our stockholders on or about the record date that we set for receiving rights in such rights offering.

The applicable prospectus supplement will describe the following terms of any rights we may issue, including some or all of the following:

- the title and aggregate number of the rights;

- the subscription price or a formula for the determination of the subscription price for the rights and the currency or currencies in which the subscription price may be payable;
- if applicable, the designation and terms of the securities with which the rights are issued and the number of rights issued with each such security or each principal amount of such security;
- the number or a formula for the determination of the number of the rights issued to each stockholder;
- the extent to which the rights are transferable;
- in the case of rights to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one right;
- in the case of rights to purchase common stock or preferred stock, the type of stock and number of shares of stock purchasable upon exercise of one right;
- the date on which the right to exercise the rights will commence, and the date on which the rights will expire (subject to any extension);
- if applicable, the minimum or maximum amount of the rights that may be exercised at any one time;
- the extent to which such rights include an over-subscription privilege with respect to unsubscribed securities;
- if applicable, the procedures for adjusting the subscription price and number of shares of common stock or preferred stock purchasable upon the exercise of each right upon the occurrence of certain events, including stock splits, reverse stock splits, combinations, subdivisions or reclassifications of common stock or preferred stock;
- the effect on the rights of any merger, consolidation, sale or other disposition of our business;
- the terms of any rights to redeem or call the rights;
- information with respect to book-entry procedures, if any;
- the terms of the securities issuable upon exercise of the rights;
- if applicable, the material terms of any standby underwriting, backstop or other purchase arrangement that we may enter into in connection with the rights offering;
- if applicable, a discussion of certain U.S. Federal income tax considerations; and
- any other terms of the rights, including terms, procedures and limitations relating to the exchange and exercise of the rights.

Exercise of Rights

Each right will entitle the holder to purchase for cash or other consideration such shares of stock or principal amount of securities at the subscription price as shall in each case be set forth in, or be determinable as set forth in, the prospectus supplement relating to the rights offered thereby. Rights may be exercised as set forth in the applicable prospectus supplement beginning on the date specified therein and continuing until the close of business on the expiration date set forth in the prospectus supplement relating to the rights offered thereby. After the close of business on the expiration date, unexercised rights will become void.

Upon receipt of payment and a subscription certificate properly completed and duly executed at the corporate trust office of the subscription agent or any other office indicated in the prospectus supplement, we will, as soon as practicable, forward the securities purchasable upon such exercise. If less than all of the rights represented by such subscription certificate are exercised, a new subscription certificate will be issued for the remaining rights. If we so indicate in the applicable prospectus supplement, holders of the rights may surrender securities as all or part of the exercise price for rights.

We may determine to offer any unsubscribed offered securities directly to stockholders, persons other than stockholders, to or through agents, underwriters or dealers or through a combination of such methods, including pursuant to standby underwriting, backstop or other arrangements, as set forth in the applicable prospectus supplement.

Prior to exercising their rights, holders of rights will not have any of the rights of holders of the securities purchasable upon subscription, including, in the case of rights to purchase common stock or preferred stock, the right to receive dividends, if any, or payments upon our liquidation, dissolution or winding up or to exercise any voting rights or, in the case of rights to purchase debt securities, the right to receive principal, premium, if any, or interest payments, on the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture.

PLAN OF DISTRIBUTION

We may sell the securities covered by this prospectus from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods or through underwriters or dealers, through agents and/or directly to one or more purchasers. The securities may be distributed from time to time in one or more transactions:

- at a fixed price or prices, which may be changed;
- at market prices prevailing at the time of sale;
- at prices related to such prevailing market prices; or
- at negotiated prices.

Each time that we sell securities covered by this prospectus, we will provide a prospectus supplement or supplements that will describe the method of distribution and set forth the terms and conditions of the offering of such securities, including the offering price of the securities and the proceeds to us, if applicable.

Offers to purchase the securities being offered by this prospectus may be solicited directly. Agents may also be designated to solicit offers to purchase the securities from time to time. Any agent involved in the offer or sale of our securities will be identified in a prospectus supplement.

If a dealer is utilized in the sale of the securities being offered by this prospectus, the securities will be sold to the dealer, as principal. The dealer may then resell the securities to the public at varying prices to be determined by the dealer at the time of resale.

If an underwriter is utilized in the sale of the securities being offered by this prospectus, an underwriting agreement will be executed with the underwriter at the time of sale and the name of any underwriter will be provided in the prospectus supplement that the underwriter will use to make resales of the securities to the public. In connection with the sale of the securities, we or the purchasers of securities for whom the underwriter may act as agent, may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the securities to or through dealers, and those dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for which they may act as agent. Unless otherwise indicated in a prospectus supplement, an agent will be acting on a best efforts basis and a dealer will purchase securities as a principal, and may then resell the securities at varying prices to be determined by the dealer.

Any compensation paid to underwriters, dealers or agents in connection with the offering of the securities, and any discounts, concessions or commissions allowed by underwriters to participating dealers, will be described in the applicable prospectus supplement. Underwriters, dealers and agents participating in the distribution of the securities may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended (the "Securities Act"), and any discounts and commissions received by them and any profit realized by them on resale of the securities may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof and to reimburse those persons for certain expenses.

Any common stock issued by us will be traded on The Nasdaq Global Market unless we specify otherwise in the prospectus supplement, but any other securities may or may not be publicly traded or listed on a national securities exchange. To facilitate the offering of securities, certain persons participating in the offering may engage in transactions that stabilize, maintain or otherwise affect the price of the securities. This may include over-allotments or short sales of the securities, which involve the sale by persons participating in the offering of more securities than were sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option, if any. In addition, these persons may stabilize or maintain the price of the securities by bidding for or purchasing securities in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if securities sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of the securities at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

If indicated in the applicable prospectus supplement, underwriters or other persons acting as agents may be authorized to solicit offers by institutions or other suitable purchasers to purchase the securities at the public offering price set forth in the prospectus supplement, pursuant to delayed delivery contracts providing for payment and delivery on the date or dates stated in the prospectus supplement. These purchasers may include, among others, commercial and savings banks, insurance companies, pension funds, investment companies and educational and charitable institutions. Delayed delivery contracts will be subject to the condition that the purchase of the securities covered by the delayed delivery contracts will not at the time of delivery be prohibited under the laws of any jurisdiction in the United States to which the purchaser is subject. The underwriters and agents will not have any responsibility with respect to the validity or performance of these contracts.

We may engage in at-the-market offerings into an existing trading market in accordance with Rule 415(a)(4) under the Securities Act. In addition, we may enter into derivative transactions with third parties, or sell securities not covered by this prospectus to third parties in privately negotiated transactions. If the applicable prospectus supplement so indicates, in connection with those derivatives, the third parties may sell securities covered by this prospectus and the applicable prospectus supplement, including in short sale transactions. If so, the third party may use securities pledged by us or borrowed from us or others to settle those sales or to close out any related open borrowings of stock, and may use securities received from us in settlement of those derivatives to close out any related open borrowings of stock. The third party in such sale transactions will be an underwriter and, if not identified in this prospectus, will be named in the applicable prospectus supplement. In addition, we may otherwise loan or pledge securities to a financial institution or other third party that in turn may sell the securities short using this prospectus and an applicable prospectus supplement. Such financial institution or other third party may transfer its economic short position to investors in our securities or in connection with a concurrent offering of other securities.

The specific terms of any lock-up provisions in respect of any given offering will be described in the applicable prospectus supplement.

The underwriters, dealers and agents may engage in transactions with us, or perform services for us, in the ordinary course of business for which they receive compensation.

LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon for us by DLA Piper LLP (US), Short Hills, New Jersey. Additional legal matters may be passed upon for us or any underwriters, dealers or agents by counsel that we will name in the applicable prospectus supplement.

EXPERTS

Our financial statements as of December 31, 2018 and 2017 and for the three years in the period ended December 31, 2018, and management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2018 incorporated by reference into this prospectus have been so incorporated in reliance on the reports of Marcum LLP, independent registered public accounting firm, upon the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information and periodic reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and, in accordance with that act, file periodic reports and other information with the SEC. The SEC maintains an Internet site that contains all reports and other information that we file electronically with the SEC. The address of that website is www.sec.gov.

This prospectus is part of a registration statement on Form S-3 that we have filed with the SEC under the Securities Act for the securities offered under this prospectus (the "Form S-3 Registration Statement"). The Form S-3 Registration Statement, including the exhibits to the Form S-3 Registration Statement, contains additional information about us and the securities offered by this prospectus. The rules and regulations of the SEC allow us to omit from this prospectus certain information that is included in the Form S-3 Registration Statement. For further information about us and our securities, you should review the Form S-3 Registration Statement and the exhibits filed with the Form S-3 Registration Statement.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate into this prospectus by reference the information we file with it, which means that we can disclose important information to you by referring you to the documents containing that information. The information incorporated by reference is considered to be part of this prospectus, and information that we later file with the SEC will automatically update and, where applicable, modify or supersede that information.

We incorporate by reference the following documents previously filed with the SEC:

- our Annual Report on Form 10-K for the year ended December 31, 2018 filed with the SEC on [February 28, 2019](#);
- the information included in our definitive proxy statement on Schedule 14A for our 2019 Annual Meeting of Stockholders, filed with the SEC on [April 29, 2019](#), to the extent incorporated by reference in Part III of our Annual Report on Form 10-K for the year ended December 31, 2018;
- our Quarterly Report on Form 10-Q for the quarter ended March 31, 2019 filed with the SEC on [May 7, 2019](#);
- our Quarterly Report on Form 10-Q for the quarter ended June 30, 2019 filed with the SEC on [August 1, 2019](#);
- our Current Reports on Form 8-K filed with the SEC on [January 7, 2019](#); [February 27, 2019](#); [May 16, 2019](#); [May 22, 2019](#); [June 3, 2019](#); [June 11, 2019](#); [June 21, 2019](#); and [July 2, 2019](#); and
- the description of our common stock contained in our registration statement on Form 8-A filed on [February 25, 2015](#) pursuant to Section 12 of the Exchange Act, as amended by a Form 8-A/A filed on [July 27, 2017](#) and including any amendment or report filed for the purpose of updating such description.

All documents filed by us pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act subsequent to the filing of the Form S-3 Registration Statement, including all such documents we may file with the SEC after the date of the Form S-3 Registration Statement and prior to the effectiveness of the registration statement, and prior to the filing of a post-effective amendment to the Form S-3 Registration Statement which indicates that all securities offered hereby have been sold or which deregisters all such securities then remaining unsold shall be deemed to be incorporated by reference herein and to be a part hereof from the date of filing of such documents. Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained herein or in any subsequently filed document that is or is deemed to be incorporated by reference herein modifies or supersedes such statement.

Notwithstanding the foregoing, no portion of any document that is “furnished” but not “filed” in accordance with SEC rules under Exchange Act shall be deemed to be incorporated by reference into this prospectus. Any statement contained in this prospectus or in a document incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or in any other subsequently filed document that is incorporated by reference herein modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request a copy of any of these filings from us at no cost by writing or calling our Chief Financial Officer at the following address or telephone number: Iovance Biotherapeutics, Inc., 999 Skyway Road, Suite 150, San Carlos, California 94070; Telephone: (650) 260-7120.

PROSPECTUS

\$400,000,000

IOVANCE BIOTHERAPEUTICS, INC.

Common Stock

Preferred Stock

Debt Securities

Warrants

Units

**Rights to Purchase Common Stock, Preferred Stock,
Debt Securities or Units**

The date of this prospectus is .

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution.

The following table sets forth the expenses to be paid by us, other than underwriting discounts and commissions, in connection with the offering of the securities described in this registration statement.

Securities and Exchange Commission registration fee	\$	48,480
FINRA filing fee		*
Printing and engraving expenses		*
The Nasdaq Global Market listing fees		*
Legal fees and expenses		*
Accounting fees and expenses		*
Transfer agent and registrar fees		*
Miscellaneous expenses		*
Total	\$	<u> *</u>

* These fees and expenses will be based upon the number of securities offerings and the amount of securities offered and accordingly cannot be estimated at this time.

Item 15. Indemnification of Directors and Officers.

Our certificate of incorporation provides that, to the maximum extent permitted under applicable law, none of our directors will have any personal liability to us or our stockholders for damages for breach of fiduciary duty as a director.

Section 102(b)(7) of the Delaware General Corporation Law allows a corporation to provide in its certificate of incorporation that a director of the corporation will not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except where the director breached the duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. Our certificate of incorporation provides for this limitation of liability.

Section 145 of the Delaware General Corporation Law provides, among other things, that a Delaware corporation may indemnify any person who was, is or is threatened to be made, party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of such corporation), by reason of the fact that such person is or was an officer, director, employee or agent of such corporation or is or was serving at the request of such corporation as a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding, provided such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests and, with respect to any criminal action or proceeding, had no reasonable cause to believe that his or her conduct was unlawful. A Delaware corporation may indemnify any persons who were or are a party to any threatened, pending or completed action or suit by or in the right of the corporation by reason of the fact that such person is or was a director, officer, employee or agent of another corporation or enterprise. The indemnity may include expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit, provided such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the corporation's best interests, provided further that no indemnification is permitted without judicial approval if the officer, director, employee or agent is adjudged to be liable to the corporation. Where an officer or director is successful on the merits or otherwise in the defense of any action referred to above, the corporation must indemnify him or her against the expenses (including attorneys' fees) which such officer or director has actually and reasonably incurred.

Our certificate of incorporation and bylaws provide for indemnification of our officers and directors to the fullest extent permitted by the Delaware General Corporation Law.

We also have entered into indemnification agreements with certain of our directors and certain of our officers, or have relied on similar indemnification provisions contained in our bylaws, in which we agree, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as officers or directors.

We maintain a general liability insurance policy that covers certain liabilities of our officers and directors arising out of claims based on acts or omissions in their capacities as such.

Item 16. Exhibits.

The exhibits listed on the Exhibit Index immediately following the signature page hereto are filed herewith or incorporated by reference herein, and such exhibit list is incorporated in this Item 16 by reference.

Item 17. Undertakings.

(a) The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement; notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in this registration statement;

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Securities and Exchange Commission by the registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in this registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of this registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of this registration statement as of the date the filed prospectus was deemed part of and included in this registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in this registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of this registration statement relating to the securities in this registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; *provided, however*, that no statement made in a registration statement or prospectus that is part of this registration statement or made in a document incorporated or deemed incorporated by reference into this registration statement or prospectus that is a part of this registration statement will, as to a purchaser with a time of contract sale prior to such effective date, supersede or modify any statement that was made in this registration statement or prospectus that was a part of this registration statement or made in any such document immediately prior to such effective date.

(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

(d) The undersigned registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act (the "Act") in accordance with the rules and regulations prescribed by the Securities and Exchange Commission under section 305(b)(2) of the Act.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant 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 Amendment No. 1 to Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Carlos, State of California, on September 17, 2019.

IOVANCE BIOTHERAPEUTICS, INC.

By: /s/ MARIA FARDIS
Maria Fardis, Ph.D., M.B.A.
President and Chief Executive Officer

Pursuant to the requirements of the Securities Act of 1933, this Amendment No. 1 to Registration Statement has been signed by the following persons in the capacities indicated on September 17, 2019.

<u>Signature</u>	<u>Title</u>
<u>/s/ MARIA FARDIS</u> Maria Fardis, Ph.D., M.B.A.	President and Chief Executive Officer and Director (Principal Executive Officer)
<u>/s/ TIMOTHY E. MORRIS</u> Timothy E. Morris	Chief Financial Officer (Principal Financial and Accounting Officer)
* <u>Athena Countouriotis, M.D.</u>	Director
* <u>Iain Dukes, D. Phil.</u>	Director
* <u>Ryan Maynard</u>	Director
* <u>Merrill A. McPeak</u>	Director
* <u>Wayne Rothbaum</u>	Director
* <u>Michael Weiser, M.D., Ph.D.</u>	Director
* By: <u>/s/ Maria Fardis Ph.D., M.B.A.</u> Maria Fardis Ph.D., M.B.A. Attorney-in-Fact	

EXHIBIT INDEX

Exhibit Number	Description of Document
1.1	Form of Underwriting Agreement.*
3.1	Plan of Conversion (incorporated herein by reference to Exhibit 2.1 to Registrant's Current Report on Form 8-K filed with the Commission on June 2, 2017.)
3.3	Articles of Conversion (incorporated herein by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K filed with the Commission on June 2, 2017.)
3.3	Certificate of Conversion (incorporated herein by reference to Exhibit 3.2 of Registrant's Current Report on Form 8-K filed with the Commission on June 2, 2017.)
3.4	Certificate of Incorporation of Registrant (incorporated herein by reference to Exhibit 3.3 of Registrant's Current Report on Form 8-K filed with the Commission on June 2, 2017.)
3.5	Certificate of Amendment of Certificate of Incorporation of Registrant (incorporated herein by reference to Exhibit 3.1 of Registrant's Current Report on Form 8-K filed with the Commission on June 27, 2017.)
3.6	Certificate of Amendment of Certificate of Incorporation of Registrant (incorporated herein by reference to Exhibit 3.1 of Registrant's Current Report on Form 8-K filed with the Commission on June 11, 2019.)
3.7	Bylaws of Registrant (incorporated herein by reference to the Exhibit 3.4 to Registrant's Current Report on Form 8-K filed with the Commission on June 2, 2017.)
3.8	Amendment to the Bylaws of Registrant (incorporated herein by reference to the Exhibit 3.2 to Registrant's Current Report on Form 8-K filed with the Commission on June 27, 2017.)
4.1	Form of Indenture (incorporated herein by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-3 (File No. 333-233578), filed August 30, 2019.)
4.2	Form of Common Stock Certificate.*
4.3	Form of Warrant Certificate.*
4.4	Form of Warrant Agreement.*
4.5	Form of Certificate of Designation with respect to any Preferred Stock issued hereunder and the related form of Preferred Stock Certificate.*
4.6	Form of Debt Security.*
4.7	Form of Unit Agreement.*
4.8	Form of Unit Certificate.*
4.9	Form of Rights Certificate.*
5.1	Opinion of DLA Piper LLP (US) (incorporated herein by reference to Exhibit 5.1 to the Registrant's Registration Statement on Form S-3 (File No. 333-233578), filed August 30, 2019.)
23.1	Consent of Marcum LLP (filed with this registration statement).
23.2	Consent of DLA Piper LLP (US) (included in and incorporated herein by reference to Exhibit 5.1 to the Registrant's Registration Statement on Form S-3 (File No. 333-233578), filed August 30, 2019.)

**Exhibit
Number**

Description of Document

[24.1 Power of Attorney \(included on the signature page to the Registrant's Registration Statement on Form S-3 \(File No. 333-233578\), filed August 30, 2019\).](#)

25.1 Statement of Eligibility of Trustee on Form T-1 under the Trust Indenture Act of 1939, as amended.**

* If applicable, to be filed subsequent to the effectiveness of this registration statement (1) by an amendment to this registration statement or (2) as an exhibit to a Current Report on Form 8-K and incorporated herein by reference.

** If applicable, to be filed subsequent to the effectiveness of this registration statement under the electronic form type 305B2 pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939, as amended.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement of Iovance Biotherapeutics, Inc. on Amendment No. 1 to Form S-3 (File No. 333-233578) of our report dated February 27, 2019, with respect to our audits of the consolidated financial statements of Iovance Biotherapeutics, Inc. as of December 31, 2018 and 2017 and for each of the three years in the period ended December 31, 2018, and our report dated February 27, 2019 with respect to our audit of the effectiveness of internal control over financial reporting of Iovance Biotherapeutics, Inc. as of December 31, 2018 appearing in the Annual Report on Form 10-K of Iovance Biotherapeutics, Inc. for the year ended December 31, 2018. We also consent to the reference to our firm under the heading “Experts” in such Prospectus.

/s/ Marcum LLP

Marcum LLP
New York, NY
September 17, 2019
