

IOVANCE BIOTHERAPEUTICS, INC.

Common Stock

This Prospectus Supplement supplements, and should be read in conjunction with, our Prospectus included in Post-Effective Amendment No. 1 to Registration Statement on Form S-3 (Registration No. 333-214073) dated July 31, 2017 (the “**Prospectus**”). This Prospectus Supplement must be delivered with the Prospectus.

The information in the Prospectus in the section titled “Selling Stockholders” is amended by this Prospectus Supplement to reflect the sale by Acuta Capital Fund, LP and Acuta Opportunity Fund, LP of all their warrants to purchase shares of our common stock to OTA LLC.

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 Supplement. Any representation to the contrary is a criminal offense.

The date of this Prospectus Supplement is February 12, 2018.

SELLING STOCKHOLDERS

SUPPLEMENTAL INFORMATION

The table beginning on page 7 of the Prospectus in the section titled “Selling Stockholders” is hereby revised to reflect the following transfers by Acuta Capital Fund, LP (“Acuta Capital”) and Acuta Opportunity Fund, LP (“Acuta Opportunity”) of warrants to purchase an aggregate total of 1,432,797 shares of our common stock to OTA LLC. Acuta Capital and Acuta Opportunity have entered into an agreement with OTA LLC pursuant to which Acuta Capital and Acuta Opportunity have (i) sold to OTA LLC warrants to purchase 191,400 shares, and (ii) agreed to sell to OTA LLC all of the remaining warrants to purchase 1,241,397 shares. Following the foregoing sales, Acuta Capital and Acuta Opportunity will no longer own any securities covered by the Prospectus.

Selling Stockholder	Beneficial Ownership Before the Offering		Number of Shares Being Offered	Beneficial Ownership After the Offering	
	Number of Shares	Percent		Number of Shares(1)	Percent
OTA LLC	1,432,797(2)	1.6%	1,432,797	0	-

- (1) Assumes the selling stockholder sells all of the shares of common stock included in this prospectus.
- (2) Represents warrants to purchase 191,400 shares owned by OTA LLC as of February 9, 2018, and warrants to purchase 1,241,397 shares that OTA LLC has agreed to purchase from Acuta Capital and Acuta Opportunity.