

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 transfer by Manish Singh of a warrant to purchase 125,000 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 December 1, 2017.

SELLING STOCKHOLDERS

SUPPLEMENTAL INFORMATION

The table beginning on page 7 of the Prospectus in the section titled “Selling Stockholders” is amended as follows.

The table is hereby revised to reflect the following transfer: (i) Manish Singh transferred warrants to purchase 125,000 shares of our common stock to OTA LLC. The beneficial ownership information for the selling stockholder listed below is as of December 1, 2017.

| Selling Stockholder | Beneficial Ownership Before Offering | | Number of Shares Being Offered | Beneficial Ownership After Offering | |
|---------------------|---|---------|--------------------------------------|--|---------|
| | Number of Shares | Percent | | Number of Shares | Percent |
| OTA LLC | 162,500(4) | * | 162,500 | 0 | - |

* Less than 1%

(4) Consists solely of shares of common stock issuable upon exercise of a November 2013 Warrant.