

Item 1.01 Entry Into a Material Definitive Agreement.

On June 15, 2009, ImaRx Therapeutics, Inc., (ImaRx) and Microbix Biosystems Inc. (Microbix) entered into the First Amendment to the Asset Purchase Agreement (the Amendment), which amended the Asset Purchase Agreement (the Original Agreement) dated September 22, 2008 between each of them.

The Amendment confirms that the sum of Monthly Chargebacks will not be less than \$500,000, that Microbix shall continue to be responsible for the payment of Monthly Chargebacks up to a total amount of \$500,000 and that anything in the Original Agreement to the contrary notwithstanding Microbix has no outstanding payment or other obligations to ImaRx pursuant to Section 2.3(b) of the Original Agreement and will not in the future have any such obligations to ImaRx.

The amendment further removed Microbix's obligation to provide a detailed report on a monthly basis containing a description of the payments made by Microbix under Section 2.3(b) of the Original Agreement and that Microbix will now provide such a detailed report when the sum of such payments equals or approaches \$500,000.

Finally, the Amendment provides that Microbix shall not be obligated to pay the \$2.5 million bonus due under the Original Agreement on release by the FDA of certain lots of urokinase to ImaRx. Instead, Microbix shall pay to ImaRx a sum of \$200,000 within 90 calendar days of the date of receipt by Microbix of written authorization from the FDA for the release of the urokinase lots should such authorization be received on or before September 1, 2010. A copy of the Amendment is attached hereto as Exhibit 10.1 and is incorporated herein by reference

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits

Exhibit

No.	Description
10.1	First Amendment to the Asset Purchase Agreement entered into as of June 15, 2009 by and between ImaRx Therapeutics, Inc. and Microbix Biosystems Inc.

SIGNATURES

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

Date: June 19, 2009

IMARX THERAPEUTICS, INC.

By: /s/ Bradford A. Zakes

Bradford A. Zakes,
President and Chief Executive Officer

EXHIBIT INDEX

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