

June 2, 2016



Moleculin Biotech, Inc. Completes NASDAQ Initial Public Offering

NEW YORK, NY and HOUSTON, TX -- (Marketwired) -- 06/02/16 -- Moleculin Biotech, Inc., (NASDAQ: MBRX) today announced the closing of an initial public offering ("IPO" and or the "Offering") of 1,540,026 common stock at a public offering price of \$6.00 per share for gross proceeds of \$9,240,156. Moleculin's common stock began trading on June 2, 2016 on the NASDAQ Capital Market under the symbol "MBRX." After pricing at the high end of its range, the stock closed on its first day of trading at \$8.00.

Net proceeds of this offering will help finance a Phase II clinical trial for Annamycin, an anthracycline for the treatment of relapsed or refractory acute myeloid leukemia, more commonly referred to as AML. Other uses of the IPO funding include, license maintenance and IP prosecution costs, research, and general working capital purposes.

Walter Klemp, Chairman of Moleculin Biotech stated, "The entire team at Moleculin Biotech is more than pleased with the results of our IPO. The team worked hand in hand with our underwriters to bring the IPO to a successful conclusion, notably by providing information on the offering to our more than 77,000+ Facebook fans. This innovative process allowed us to create a strong foundation of shareholders as we begin life as a public company and progress toward our stated milestones."

Bonwick Capital Partners LLC acted as Lead Bookrunner and Lead Underwriter, and Network 1 Financial Securities, Inc. acted as Co-Underwriter for the Offering.

About Moleculin Biotech, Inc.

Moleculin Biotech, Inc. is a preclinical and clinical-stage pharmaceutical company focused on the development of anti-cancer drug candidates, many of which are based on discoveries made at M.D. Anderson Cancer Center.

Our lead product candidate is Annamycin, a Phase II clinical stage anthracycline for the treatment of relapsed or refractory acute myeloid leukemia, more commonly referred to as AML.

We also have two active pre-clinical small molecule portfolios, one of which is focused on the modulation of hard-to-target tumor cell signaling mechanisms and the recruitment of the patient's own immune system. The other portfolio targets the metabolism of tumors.

For more information about the offering, please visit <http://www.moleculin.com>.

Forward-Looking Statements

Some of the statements in this release are forward-looking statements within the meaning of

Section 27A of the Securities Act of 1933, Section 21E of the Securities Exchange Act of 1934 and the Private Securities Litigation Reform Act of 1995, which involve risks and uncertainties. These statements relate to future events, future expectations, plans and prospects. Although Moleculin Biotech believes that the expectations reflected in such forward-looking statements are reasonable as of the date made, expectations may prove to have been materially different from the results expressed or implied by such forward-looking statements. Moleculin Biotech has attempted to identify forward-looking statements by terminology including "believes," "estimates," "anticipates," "expects," "plans," "projects," "intends," "potential," "may," "could," "might," "will," "should," "approximately" or other words that convey uncertainty of future events or outcomes to identify these forward-looking statements. These statements are only predictions and involve known and unknown risks, uncertainties, and other factors, including those discussed under the heading "Risk Factors" in our Registration Statement on Form S-1 originally filed with the Securities and Exchange Commission on February 1, 2016, as amended (Registration No. 333-209323). Any forward-looking statements contained in this release speak only as of its date. We undertake no obligation to update any forward-looking statements contained in this release to reflect events or circumstances occurring after its date or to reflect the occurrence of unanticipated events.

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