Armata Pharmaceuticals Announces Publication of Successful Adjunctive Phage Treatment in Cystic Fibrosis Patient

Armata's bacteriophage, AP-PA01, used to treat multidrug-resistant Pseudomonas aeruginosa infection Paper appears in the peer-reviewed journal Infection

Company to host bacteriophage Key Opinion Leader meeting and live webcast on Wednesday, June 26

MARINA DEL REY, Calif, May 28, 2019 / PRNewswire/ -- Armata Pharmaceuticals, Inc. (NYSE American: ARMP), a clinical-stage biotechnology company focused on precisely targeted bacteriophage therapeutics for antibiotic-resistant infections, today announced the publication of a case study involving a cystic fibrosis patient who was successfully treated for a multidrug-resistant *Pseudomonas aeruginosa* infection with the Company's natural phage product, AP-PA01. The paper, entitled "Successful adjunctive use of bacteriophage therapy for treatment of multidrug-resistant *Pseudomonas aeruginosa* infection in a cystic fibrosis patient," appears in the peer-reviewed journal *Infection.* In addition to its work with AP-PA01, Armata is engineering its *Pseudomonas aeruginosa* phage to create a new, synthetic phage product, AP-PA02.

"The publication of this successful treatment case study, with an Armata phage administered through our single-patient expanded access program, adds to the impressive and growing body of evidence demonstrating the effectiveness of our phage product candidates, and bacteriophage in general," said Todd R. Patrick, Chief Executive Officer of Armata. "To solidify our position as a leader in the development of phage-based therapeutics, we are currently working with key opinion leaders to map out an efficient clinical strategy for both our *Pseudomonas* and *Staphylococcus* phage product candidates, and plan to file an IND later this year for our *Staphylococcus* phage candidate. Treatment of single patients through the expanded access program has been very helpful in demonstrating the promise of phage therapy. However, the reality is that supporting compassionate use cases limits our ability to focus our resources on formal clinical trials required for FDA approval to bring a potential solution to all patients suffering from drug-resistant bacterial infections. With the growing threat of antimicrobial resistance, it is extremely important that we take the necessary steps to perform rigorous clinical trials so we can move toward commercialization of alternatives to traditional antibiotics."

Mr. Patrick added, "As such, we plan to end our single-patient expanded access program and instead focus on demonstrating phage efficacy through well-powered clinical trials. The work in these two lead programs will pave the way for development of new phage product candidates, natural or synthetic, that address additional unmet medical need and create new opportunities for corporate or government partnerships."

"Patients suffering from cystic fibrosis are particularly vulnerable to *Pseudomonas aeruginosa* infections, and repeated exposure to antibiotics puts them at high risk for developing multidrug resistant strains," said Saima Aslam, MD, MS, Associate Professor, Medical Director, Solid Organ Transplant Infectious Diseases, Division of Infectious Diseases and Global Public Health at the University of California, San Diego, principal investigator and co-author of the paper. "This particular cystic fibrosis patient who was awaiting a lung transplant developed multidrug resistant *Pseudomonas aeruginosa* pneumonia and worsening respiratory failure that persisted despite treatment with multiple antibiotics. She also developed renal failure as an adverse event from one of her antibiotics. Only after phage therapy was introduced as an adjunct to antibiotic treatment did the infection resolve, and the patient went on to receive a bilateral lung transplant. Additionally, her renal failure resolved as we were able to stop the nephrotoxic antibiotic once the phage was added to her treatment regimen. This successful outcome speaks to the great potential of phage-based therapeutics to address the growing threat of antibiotic resistance and provides very strong rationale for continued development."

Management to Host Key Opinion Leader (KOL) Meeting

The management team of Armata will be hosting a bacteriophage KOL meeting and webcast on Wednesday, June 26 at 12:00pm EDT.

The event will feature a presentation by Robert Schooley, MD (University of California, San Diego), who will discuss the rapidly growing antibiotic resistance crisis, and the urgent need for the development of new antibiotic alternatives. Dr. Schooley will be available to answer questions following the lunch.

Armata management will also provide an overview of the company's phage-based product candidates aimed to address areas of significant unmet clinical need by targeting key antibiotic-resistant bacteria. Armata's lead product candidate, AP-SA01, is a Phase 1/2-ready asset that targets *Staphylococcus aureus*, including multidrug-resistant strains. In addition, Armata is also developing and advancing a broad pipeline of proprietary synthetic phage candidates, including a synthetic phage for *Pseudomonas aeruginosa*. Armata has also

partnered with Merck to develop proprietary synthetic phage candidates designed to target an undisclosed infectious disease agent.

The live webcast of the event can be found at: http://lifesci.rampard.com/20190626/reg.jsp

Phage Therapeutics

Phage therapeutics are uniquely positioned to address the threat of antibiotic-resistance as they can be precisely targeted to kill select bacteria, have a differentiated mechanism of action, can penetrate and disrupt biofilms (a common bacterial defense mechanism against antibiotics), are potentially synergistic with antibiotics and have been shown to restore antibiotic sensitivity to drug-resistant bacteria.

About Armata Pharmaceuticals, Inc.

Armata is a clinical-stage biotechnology company focused on the development of precisely targeted bacteriophage therapeutics for the treatment of antibiotic-resistant infections using its proprietary bacteriophage-based technology. Armata's lead product candidate, AP-SA01, targets *Staphylococcus aureus* including multidrug-resistant strains. The Company is also developing and advancing a broad pipeline of synthetic phage candidates, including a synthetic phage for *Pseudomonas aeruginosa*, leveraging its proprietary phage-specific GMP manufacturing capabilities. In collaboration with Merck, known as MSD outside of the United States and Canada, Armata is developing proprietary synthetic phage candidates to target an undisclosed infectious disease agent.

Forward Looking Statements - This communication contains "forward-looking" statements, including, without limitation, statements related to the anticipated benefits of the transactions contemplated by the merger agreement and related transactions, the anticipated benefits of the sale of \$10 million of Armata's common stock to certain shareholders of Armata immediately following the closing of the merger, and statements related to the anticipated initiation of a clinical trial of AB-SA01 for the treatment of S. aureus bacteremia later in 2019. Any statements contained in this communication that are not statements of historical fact may be deemed to be forward-looking statements. These forward-looking statements are based upon Armata's current expectations. Forward-looking statements involve risks and uncertainties. Armata's actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, without limitation, related to Armata's ability to successfully integrate the operations of AmpliPhi Biosciences Corporation and C3J Therapeutics, Inc. and achieve the potential benefits of the merger; the company's ability to advance its preclinical and clinical programs and the uncertain and time-consuming regulatory approval process. Additional risks and uncertainties relating to Armata and its business can be found under the caption "Risk Factors" and elsewhere in Armata's filings and reports with the SEC, including in Armata's Annual Report on Form 10-K, filed with the SEC on March 25, 2019, and Armata's subsequent filings with the SEC. Armata expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in Armata's expectations with regard thereto or any change in events, conditions or circumstances on which any such statements are based.

Media Contacts:

At the Company:

Steve Martin Armata Pharmaceuticals, Inc. <u>ir@armatapharma.com</u> (858) 800-2492

Investor Relations:

Joyce Allaire LifeSci Advisors, LLC <u>jallaire@lifesciadvisors.com</u> 212-915-2569

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