



## Adverum Biotechnologies Provides Update on Alpha-1 Antitrypsin Deficiency Program

October 14, 2016

MENLO PARK, Calif., Oct. 14, 2016 (GLOBE NEWSWIRE) -- Adverum Biotechnologies, Inc. (Nasdaq:ADVM) today provided an update on its development program for ADVM-043 (formerly "ANN-001"), a novel gene therapy for Alpha-1 Antitrypsin (A1AT) Deficiency, a rare genetic disorder that may result in serious respiratory and liver disease. Adverum has decided to upgrade the ADVM-043 manufacturing process by implementing its proprietary baculovirus-based production system and plans to transfer the third-party contract manufacturing for ADVM-043 to a large-scale contract manufacturer. This upgrade is designed to increase the production scale, and comply with industry standards so that the same production process is used from clinical trials through commercial stage. The company now expects to begin enrolment of patients in the Phase 1/2 clinical trial for ADVM-043 in the fourth quarter of 2017.

"Adverum has industry-leading capabilities in process development and manufacturing, consisting of a baculovirus-based AAV production system and state-of-the-art purification technology to manufacture AAV vectors of various serotypes. This allows us to deliver a turn-key large scale process to third-party cGMP manufacturers. We plan to leverage our leading manufacturing capabilities and upgrade our ADVM-043 manufacturing process now, to prepare for both our anticipated clinical and commercial product needs," said Amber Salzman, Ph.D., Chief Executive Officer of Adverum Biotechnologies. "Our goal is to meet with the FDA to review our modified plans in the first quarter of 2017, to allow us to move ahead with patient enrolment in our planned Phase 1/2 clinical trial for ADVM-043 in the fourth quarter of 2017. We are committed to advancing this novel gene therapy for patients with A1AT deficiency, and are planning to be ready to deliver this potential product through a robust commercial-ready manufacturing process."

The company's other lead programs for wet age-related macular degeneration (wAMD) and hereditary angioedema (HAE) remain on target to initiate toxicology studies in the first half of 2017.

### About Adverum's Manufacturing Capabilities

Adverum's industrialized manufacturing process is based on a proprietary baculovirus expression system and state-of-the-art purification technology. This process is highly efficient and scalable, applicable to various serotypes, with current production yields per run up to one hundred times greater than those obtained using conventional AAV production systems. The company has the capability to develop manufacturing processes up to 200L and transfer them turn-key to third party cGMP manufacturers. Further scale up is expected to allow commercial-grade material for diseases with large patient populations. In addition, Adverum has also developed formulations that allow for the production of highly concentrated purified vectors.

### About Adverum Biotechnologies, Inc.

Adverum is a gene therapy company committed to discovering and developing novel medicines that can offer life-changing benefits to patients living with rare diseases or diseases of the eye who currently have limited or burdensome treatment options. Adverum has a robust pipeline that includes product candidates to treat wet AMD, A1AT deficiency, and hereditary angioedema, among other diseases. We are leveraging our next-generation adeno-associated virus (AAV)-based directed evolution platform to generate product candidates designed to provide durable efficacy by inducing sustained expression of a therapeutic protein. Our focus on the patient is supported by clinical development expertise and core capabilities in vector optimization, process development, manufacturing, and assay development. For more information please visit [www.adverumbio.com](http://www.adverumbio.com).

### Forward-Looking Statements for Adverum Biotechnologies

Statements contained in this press release regarding matters that are not historical facts are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements include, but are not limited to, statements regarding Adverum's plans, potential opportunities, expectations, projections, goals, objectives, milestones, strategies, product pipeline, the sufficiency of its resources to fund the advancement of any development program or the completion of any clinical trials, and the safety, efficacy, and projected development timeline and commercial potential of products under development, all of which are based on certain assumptions made by us on current conditions, expected future developments and other factors we believe are appropriate in the circumstances. Adverum may not consummate any plans or product development goals in a timely manner, or at all, or otherwise carry out the intentions or meet the expectations or projections disclosed in our forward-looking statements, and you should not place undue reliance on these forward-looking statements. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of various risks and uncertainties, which include, without limitation, the risk that Adverum's resources will not be sufficient for Adverum to conduct or continue planned development programs and planned clinical trials, the risk of a delay in the enrollment of patients in Adverum's clinical studies or in the manufacturing of products to be used in such clinical studies, risks related to regulatory review of Adverum's development plans and planned clinical trials and the risk that Adverum will not be able to successfully develop or commercialize any of its product candidates. Risks and uncertainties facing Adverum are described more fully in Adverum's periodic reports filed with the SEC. All forward-looking statements contained in this press release speak only as of the date on which they were made. Adverum undertakes no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they were made.

Contact for Adverum:

Tricia Truehart

Vice President

The Trout Group LLC

646-378-2953

[ttruehart@troutgroup.com](mailto:ttruehart@troutgroup.com)

 Primary Logo

Adverum Biotechnologies, Inc.