PRESS RELEASE

Abeona Therapeutics and Brammer Bio Announce Collaboration for Commercial Translation of ABO-102

--Strategic alignment with Brammer Bio for commercial AAV process development, scale up and assay validation

--Phillip B. Maples, Ph.D., to lead Abeona manufacturing, as VP of Therapeutics Development and Quality Management

CLEVELAND, Sept. 28, 2017 (GLOBE NEWSWIRE) -- Abeona Therapeutics Inc. (Nasdaq:ABEO), a leading clinical-stage biopharmaceutical company focused on developing novel gene and cell therapies for life-threatening rare diseases, announced today an update on the Company's manufacturing strategy and plans for ABO-102, including strategic manufacturing commitments with Brammer Bio for commercial translation. Abeona also announced the recent appointment of Phillip B. Maples, Ph.D., as Vice President of Therapeutic Development and Quality Management to oversee all cell-therapy manufacturing and Adam Davis, Ph.D., as Director to oversee AAV manufacturing.

"Our autologous cell and gene therapy programs continue to demonstrate remarkable effects in clinical trials of patients with life-threatening diseases with no treatment options, and we are pleased to collaborate with Brammer Bio for commercial AAV process development, scale up and assay validation for clinical programs and internal capabilities," stated Timothy J. Miller, Ph.D., Abeona's President and CEO. "Dr. Maples' technical, manufacturing, regulatory and quality management expertise makes him a natural fit to supervise our manufacturing efforts. We are pleased with the progress so far and look forward to providing a more fulsome update at our inaugural Research and Development day, October 11th in New York City."

"Brammer Bio is delighted to be able to support Abeona with process development and clinical vector supply based on over a decade of experience in cGMP manufacturing using AAV gene transfer vectors on a variety of platforms," said Dr. Richard Snyder, Chief Scientific Officer, Brammer Bio.

Dr. Maples is responsible for leading the design and execution of the AAV and cell therapy facility in Cleveland, OH. He joins Abeona with over 30 years experience in the biotechnology industry, primarily developing cell and gene therapies, having designed and constructed over ten cGMP cell and gene therapy manufacturing facilities around the globe. While at Baxter Healthcare, Dr. Maples worked with the NIH team on the development of Chronic Granulomatous Disease gene therapy and co-created an ISO 9000 compliant quality system in order to certify a worldwide business division at Baxter Healthcare. At US Oncology, he developed and operated a Stem Cell Transplant Processing Network and a Phase I/II Cell and Gene Therapy Manufacturing Facility. At CellExsys, he established the clinical and regulatory frameworks, and manufacturing for Antigen-specific T Cell clinical studies in various countries. At Gradalis, Dr. Maples developed gene-modified autologous cancer vaccines for various cancers. He has authored 47 publications and 12 issued US patents. He holds a Ph.D. and M.S. in Biochemistry and Molecular Biology from the University of Oklahoma's Health Sciences Center and completed his post-doctoral fellowship at the University of Chicago.

Dr. Davis is responsible for leading AAV manufacturing, scale-up and product development at Abeona's Cleveland gene therapy center. He brings over 12 years experience in both academic and industry AAV gene therapy manufacturing, having previously developed AAV gene therapy products at Nationwide Children's Hospital and BioMarin Pharmaceuticals. His extensive AAV experience incudes translating both mammalian and baculovirus AAV systems into clinical trials. Dr. Davis holds a Ph.D in Biophysics from The Ohio State University.

About Brammer Bio: Brammer Bio is a leading CDMO providing clinical and commercial supply of vectors for *in vivo* gene therapy and *ex vivo* modified-cell based therapy, process and analytical development, and regulatory support, enabling large pharma and biotech clients to accelerate the delivery of novel medicines to improve patient health. Brammer is owned by Ampersand Capital Partners, the only institutional investor in the company, and its founders. For more information, please visit www.brammerbio.com. For inquiries or more information on working with Brammer Bio, please contact info@brammerbio.com or 1.866.GENECMO (436.3266), or visit www.brammerbio.com.

About Abeona: Abeona Therapeutics Inc. is a clinical-stage biopharmaceutical company developing gene therapies for life-threatening rare genetic diseases. Abeona's lead programs include ABO-102 (AAV-SGSH), an adeno-associated virus (AAV) based gene therapy for Sanfilippo syndrome type A (MPS IIIA) and EB-101 (gene-corrected skin grafts) for recessive dystrophic epidermolysis bullosa (RDEB). Abeona is also developing ABO-101 (AAV-NAGLU) for Sanfilippo syndrome type B (MPS IIIB), ABO-201 (AAV-CLN3) gene therapy for juvenile Batten disease (JNCL), ABO-202 (AAV-CLN1) for treatment of infantile Batten disease (INCL), EB-201 for epidermolysis bullosa (EB), ABO-301 (AAV-FANCC) for Fanconi anemia (FA) disorder and ABO-302 using a novel CRISPR/Cas9-based gene editing approach to gene therapy for rare blood diseases. In addition, Abeona has a proprietary vector

platform, AIM™, for next generation product candidates. For more information, visit www.abeonatherapeutics.com.

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This press release contains certain statements that are forward-looking within the meaning of Section 27a of the Securities Act of 1933, as amended, and that involve risks and uncertainties. These statements are subject to numerous risks and uncertainties, including but not limited to continued interest in our rare disease portfolio, our ability to enroll patients in clinical trials, the impact of competition; the ability to develop our products and technologies; the ability to secure licenses for any technology that may be necessary to commercialize our products; the ability to achieve or obtain necessary regulatory approvals; the impact of changes in the financial markets and global economic conditions; and other risks as may be detailed from time to time in the Company's Annual Reports on Form 10-K and other reports filed by the Company with the Securities and Exchange Commission. The Company undertakes no obligations to make any revisions to the forward-looking statements contained in this release or to update them to reflect events or circumstances occurring after the date of this release, whether as a result of new information, future developments or otherwise.

Abeona Therapeutics Inc