



Ascent Therapeutics Achieves Preclinical *in vivo* Proof-of-principle with Novel Pepducin™ GPCR Modulator Platform and Strengthens Senior Management Team

Cambridge, MA - September 10, 2009 - Ascent Therapeutics announced today that the Company has demonstrated efficacy in preclinical models in two Pepducin™ projects. One of the projects targets CXCR4, a key regulator of stem cell and inflammatory cell homeostasis. A second project has yielded the first potent Pepducin agonists for an undisclosed cardiovascular target. The Company also announced that Kenneth Carlson, PhD has joined the senior management team as Senior Director, Head of Biology and that the Company will be presenting at multiple business development events in the coming months.

“These studies demonstrated Pepducin activity in the CXCR4 compounds that is equal or better than the current standard of care,” commented Stephen Hunt, PhD, Sr. Vice President, Discovery Research for Ascent. “Our academic founders had seen signs of Pepducin efficacy in their early studies, and we have now significantly extended that work by demonstrating efficacy levels that meet pharmaceutical industry standards, thus supporting continued development of these agents as therapeutics. We are encouraged by this evidence that the Pepducin platform, which is entirely novel, will stand up well as a solid drug discovery technology. Based on preclinical results, we believe that Pepducins can target G protein-coupled receptors (GPCRs) that are of high importance to the pharmaceutical industry, including many that have been difficult to address with conventional approaches.”

In the CXCR4 project, the *in vivo* results achieved with Ascent’s novel lipopeptide Pepducins were at least as efficacious as those seen with Mozobil®, a small molecule drug marketed by Genzyme which was recently approved for stem cell mobilization prior to bone marrow transplantation. Modulation of CXCR4 activity may also be useful in treating a variety of cancers such as leukemia and multiple myeloma. Potency and specificity criteria were achieved for advancement of the Pepducin leads in both projects. Importantly, details of a structure-activity relationship have begun to emerge. Knowledge gained from preliminary studies of Pepducin half-lives, metabolism, distribution and formulation also supports the continued development of these compounds.

Management Team Addition

The Company also announced that it has augmented its senior management team with the hiring of Kenneth Carlson, PhD as Senior Director, Head of Biology. Dr. Carlson comes to Ascent with over 16 years of drug discovery experience, largely focused on GPCRs. Dr. Carlson was

previously Executive Director of Biological Sciences at Palatin Technologies, where he was a member of the Research Management Committee and was responsible for directing *in vitro* pharmacology and *in vivo* biology. Prior to that, Dr. Carlson held a series of positions of increasing responsibility as a scientist within the Bristol-Myers Squibb Pharmaceutical Research Institute. In addition to chairing drug discovery programs and interfacing with development teams, Dr. Carlson co-chaired a company-wide, multi-disciplinary team focused on GPCR drug discovery. Dr. Carlson received his PhD in Pharmacology from the University of Pennsylvania and was a NIH Postdoctoral Fellow at the National Institutes of Health.

“Ken’s impressive background in GPCR drug discovery and development will complement our team of highly-experienced scientists and biotech executives,” said Frederick Jones, MD, MBA, President and CEO of Ascent. “This level of expertise allows us to leverage our investors’ capital in an extremely efficient way, as evidenced by the success in our earliest projects. We are well-positioned to advance and strengthen the Pepducin platform technology and to drive rapid progress among our projects. This in turn should allow us to move forward quickly in our ongoing discussions with various pharmaceutical and biotechnology companies interested in our current projects, or in applying our Pepducin platform against their more challenging targets of interest.”

Upcoming Events

Drs. Hunt and Jones, along with other members of the Ascent management team, will be presenting updates on the Company’s Pepducin technology at several scientific and investor conferences over the next several months. These include the Sachs Biotechnology in Europe Conference (Zurich, September 14-15), Sofinnova BioPharma Partnering Conference (Tokyo, October 6), Massachusetts Biotechnology Investor Forum (Boston, October 6), Discovery On Target (Boston, November 2-3) and BIO Europe (Vienna, November 2-4).

Mozobil® is a registered trademark of Genzyme.

About Pepducin Technology

Ascent’s proprietary Pepducin® technology platform is being used to develop novel, small lipopeptides to greatly expand the scope of G protein coupled receptor (GPCR) drug development. Pepducin technology comprises a short peptide derived from a GPCR intracellular loop tethered to a hydrophobic moiety. This structure allows Pepducin lipopeptides to anchor in the cell membrane lipid bilayer and target the GPCR/G protein interface via a unique intracellular allosteric mechanism. Ascent’s Pepducin technology platform represents an entirely new paradigm for disrupting GPCR signal transduction from the inside surface of the cell, potentially transforming the scope of GPCR therapeutics to treat a much wider range of serious illnesses.

About Ascent Therapeutics

Ascent Therapeutics is developing first-in-class Pepducin™ lipopeptides, novel molecules that exquisitely target the intracellular domains of G protein coupled receptors (GPCRs) to allosterically modulate GPCR signaling. The Pepducin technology is exclusively licensed from Tufts Medical Center. The Company raised \$19 million in Series A funding in October 2007 from HealthCare Ventures, Novartis Option Fund and TVM Capital. Novartis has also taken an option to license one of a small number of projects, with a potential value to Ascent of \$200 million. www.ascentrx.com

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