



Discovery Labs AFECTAIR™ Technology to Be Presented at the American Association for Respiratory Care Annual Meeting

Company to Release Results From First Series of Studies Supporting New Product Candidate

WARRINGTON, PA – November 2, 2011 — **Discovery Laboratories, Inc. (Nasdaq: DSCO)** will be presenting, for the first time, new data supporting AFECTAIR™ at the *American Association for Respiratory Care* (AARC) Congress 2011. The Company introduced AFECTAIR as a new product candidate earlier this year. The AARC Congress 2011, being held November 5-8 in Tampa, FL, is the world's largest and most comprehensive respiratory care meeting.

AFECTAIR has been developed by Discovery Labs to simplify the delivery of any inhaled medication for critical care patients requiring ventilatory support. Discovery Labs is advancing a series of studies that assess the use of AFECTAIR in the delivery of several inhaled therapies. The results from the first set of AFECTAIR studies will be released at the AARC meeting on November 7th, 2011. The presentations are as follows:

- Delivery of Aerosolized Albuterol Using A Novel Aerosol Delivery Adapter In An *In-Vitro* Neonatal Ventilation Model; *Mazela, et al.*
- Aerosolized Albuterol Particle Size Distribution In Two Aerosol Delivery System Configurations Under Neonatal Ventilation Conditions; *Mazela, et al.*
- Resistance Determinations of a Novel Aerosol Delivery Adapter in a Neonatal Model; *Henderson, et al.*

About The American Association for Respiratory Care

The American Association for Respiratory Care, headquartered in Dallas, is a professional association of respiratory therapists that focuses primarily on respiratory therapy education and research. The organization's goals are to ensure that respiratory patients receive safe and effective care from qualified professionals as well as supporting respiratory health care providers. The association continues to advocate on behalf of pulmonary patients for appropriate access to respiratory services provided by qualified professionals. Further information about the AARC and how to become a respiratory therapist are available at www.AARC.org.

About AFECTAIR™

AFECTAIR is a series of novel patient interface adapters and related componentry based on proprietary patient interface technology developed by Discovery Labs. AFECTAIR has been developed to simplify the delivery of any inhaled therapy for critical care patients requiring ventilatory support. According to national health statistics and market assessment data, it is estimated that more than 1.3 million patients annually in the United States and European Union receive aerosolized medications while requiring ventilator support. Discovery Labs is implementing a regulatory plan that

potentially will allow for the commercial introduction of AFECTAIR in the United States and the European Union in 2012.

About Discovery Labs

Discovery Laboratories, Inc. is a specialty biotechnology company with one focus – to create life-saving products for critical care patients with respiratory disease and improve the standard of care for pulmonary medicine. Discovery Labs' novel proprietary KL₄ surfactant technology produces a synthetic, peptide-containing surfactant that is structurally similar to pulmonary surfactant and is being developed in liquid, lyophilized and aerosolized formulations. Discovery Labs is also developing its proprietary drug delivery technologies – capillary aerosol generator and novel patient interface adapters – to enable efficient, targeted upper respiratory or alveolar delivery of aerosolized KL₄ surfactant. Discovery Labs believes that its proprietary technology makes it possible, for the first time, to develop a significant pipeline of surfactant products to address a variety of respiratory diseases for which there frequently are few or no approved therapies. For more information, please visit our website at www.discoverylabs.com.

Forward Looking Statements

To the extent that statements in this press release are not strictly historical, all such statements are forward-looking, and are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from the statements made. Examples of such risks and uncertainties, including those related to Discovery Labs' development activities, are described in Discovery Labs' filings with the Securities and Exchange Commission, including the most recent reports on Forms 10-K, 10-Q and 8-K, and any amendments thereto. Except as otherwise required by law, Discovery Labs undertakes no obligation to update or revise any forward-looking statements.

Contact Information:

Investor Relations:

John G. Cooper, President and Chief Financial Officer
215-488-9300

Media Relations:

Michael Parks, President – Pitch360 Inc.
484-356-7105