



PharmaBio Expands Investment in Discovery Labs to Advance Surfaxin LSTM and Aerosurf[®] Programs

Warrington, PA —October 13, 2010 — Discovery Laboratories, Inc. (Nasdaq: DSCO), a biotechnology company developing its novel synthetic surfactant and aerosol technologies for respiratory diseases, today announces that it has entered into an agreement for a new investment of \$0.5 million from PharmaBio Development Inc. (PharmaBio), the former strategic investing subsidiary of Quintiles Transnational Corp. (Quintiles).

PharmaBio has agreed to purchase approximately 2.4 million shares of the Company's common stock and warrants to purchase approximately 1.2 million shares of common stock for gross proceeds of \$0.5 million. Each common share, together with a related warrant to purchase one half of a share of common stock, was sold at a unit price of \$0.21. The warrants have a five year term and are exercisable at an exercise price of \$0.273 per share of common stock. Should the dollar volume-weighted average price of the Company's common stock exceed \$0.45 for any five out of seven consecutive trading days for which stated minimum trading volumes are also met, the Company is entitled to redeem the warrants upon 20 days written notice.

“While our primary focus remains obtaining FDA approval for Surfaxin[®] for Respiratory Distress Syndrome in premature infants, this additional funding is intended to primarily support near-term regulatory and related development activities to progress Surfaxin LSTM and Aerosurf[®],” said John G. Cooper, President and Chief Financial Officer of Discovery Laboratories.

Discovery Labs and PharmaBio have a longstanding relationship and PharmaBio, before giving effect to the offering, owns approximately 5.6 million shares of the Company's common stock. In April 2010, Discovery restructured its \$10.6 million loan with PharmaBio, with the final payment of \$2.0 million occurring on September 30, 2010. Additionally, the two companies have agreed to continue evaluating a potential long-term strategic collaboration focused on the development of Surfaxin LS and/or Aerosurf, however, there can be no assurances that any such arrangements will be entered into.

The offering is being made solely to PharmaBio. The securities will be issued under a previously filed registration statement that was declared effective by the Securities and Exchange Commission on June 18, 2008. The transaction is expected to close on or about October 14, 2010, subject to satisfaction of customary closing conditions. This press release shall not constitute an offer to sell or the solicitation of an offer to buy any securities of Discovery Laboratories, Inc. nor shall there be any sale of the securities in any state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or jurisdiction.

The description of the financing with PharmaBio is subject in its entirety to the definitive terms of the transaction documents, which are attached as exhibits to the Form 8-K to be filed by the Company with the Securities and Exchange Commission (“SEC”).

About Surfaxin, Surfaxin LS and Aerosurf

Discovery Labs lead programs, Surfaxin, Surfaxin LS and Aerosurf are being developed with the potential to greatly improve the management of RDS in premature infants, and collectively represent the opportunity, over time, to significantly expand the current RDS worldwide annual market.

The safety and efficacy of Surfaxin for neonatal RDS has been previously demonstrated in a large, multinational Phase 3 clinical program. Discovery Labs believes that to potentially gain FDA marketing approval for Surfaxin for the prevention of RDS it must satisfy the FDA as to the final validation of an important quality control release and stability test for Surfaxin, the fetal rabbit biological activity test (BAT). Discovery Labs is currently conducting a comprehensive preclinical program that is intended to satisfy the FDA in this respect. If approved, Surfaxin would be the first synthetic, peptide-containing surfactant for commercial use in neonatal medicine.

Discovery Labs' development strategy for Surfaxin LS™ (next-generation, lyophilized formulation of Surfaxin) is to build upon the Surfaxin clinical experience to create a best-in-class surfactant therapy with improved preparation and administration flexibility and the potential to further improve clinical performance. Aerosurf® (drug/device combination for noninvasive administration of aerosolized KL₄ surfactant to address neonatal RDS) holds the promise to significantly expand the use of surfactant therapy by providing neonatologists with a less-invasive means of delivering KL₄ surfactant without the current requirement of invasive endotracheal intubation and mechanical ventilation.

Surfaxin, Surfaxin LS and Aerosurf are investigational drug or drug-device combination products that have not been approved by the U.S. Food and Drug Administration or any other world health regulatory authority.

About Discovery Labs

Discovery Laboratories, Inc. is a biotechnology company developing KL₄ surfactant therapies for respiratory diseases. Surfactants are produced naturally in the lungs and are essential for breathing. 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, aerosol or lyophilized formulations. In addition, Discovery Labs' proprietary capillary aerosolization technology produces a dense aerosol, with a defined particle size that is capable of potentially delivering aerosolized KL₄ surfactant to the deep lung without the complications currently associated with liquid surfactant administration. Discovery Labs believes that its proprietary technology platform 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 are: risks relating to the rigorous regulatory requirements required for approval of any drug or drug-device combination products that Discovery Labs may develop, including that: (a) Discovery Labs and the U.S. Food and Drug Administration (FDA) or other regulatory authorities will not be able to agree on the matters raised during regulatory reviews, or Discovery Labs may be required to conduct significant additional activities to potentially gain approval of its product candidates, if ever, (b) the FDA or other regulatory authorities may not accept or may withhold or delay consideration of any of Discovery Labs' applications, or may not approve or

may limit approval of Discovery Labs' products to particular indications or impose unanticipated label limitations, and (c) changes in the national or international political and regulatory environment may make it more difficult to gain FDA or other regulatory approval; risks relating to Discovery Labs' research and development activities, including (i) time-consuming and expensive pre-clinical studies, clinical trials and other efforts, which may be subject to potentially significant delays or regulatory holds, or fail, and (ii) the need for sophisticated and extensive analytical methodologies, including an acceptable biological activity test, if required, as well as other quality control release and stability tests to satisfy the requirements of the regulatory authorities; risks relating to Discovery Labs' ability to develop and manufacture drug products and capillary aerosolization systems for clinical studies, and, if approved, for commercialization of drug and combination drug-device products, including risks of technology transfers to contract manufacturers and problems or delays encountered by Discovery Labs, its contract manufacturers or suppliers in manufacturing drug products, drug substances and capillary aerosolization systems on a timely basis or in an amount sufficient to support Discovery Labs' development efforts and, if approved, commercialization; the risk that Discovery Labs may be unable to identify potential strategic partners or collaborators to develop and commercialize its products, if approved, in a timely manner, if at all; the risk that Discovery Labs will not be able in a changing financial market to raise additional capital or enter into strategic alliances or collaboration agreements, or that the ongoing credit crisis will adversely affect the ability of Discovery Labs to fund its activities, or that additional financings could result in substantial equity dilution; the risk that Discovery Labs will not be able to access credit from its committed equity financing facilities (CEFFs), or that the minimum share price at which Discovery Labs may access the CEFFs from time to time will prevent Discovery Labs from accessing the full dollar amount potentially available under the CEFFs; the risk that Discovery Labs or its strategic partners or collaborators will not be able to retain, or attract, qualified personnel; the risk that Discovery Labs will be unable to regain compliance with The Nasdaq Capital Market listing requirements prior to the expiration of the additional grace period currently in effect, which could cause the price of Discovery Labs' common stock to decline; the risk that recurring losses, negative cash flows and the inability to raise additional capital could threaten Discovery Labs' ability to continue as a going concern; the risks that Discovery Labs may be unable to maintain and protect the patents and licenses related to its products, or other companies may develop competing therapies and/or technologies, or health care reform may adversely affect Discovery Labs; risks of legal proceedings, including securities actions and product liability claims; risks relating to health care reform; and other risks and uncertainties 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.

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