New Study Shows Neonatologists and Parents of NICU Infants Share Concern Regarding Newborn Exposure to Animal-Derived Medications

Study Illustrates that Parents Desire to be Informed of Use of Animal-Derived Medications and Potential Treatment Alternatives for Their Children

WARRINGTON, PA — October 18, 2011 — Discovery Laboratories, Inc. (Nasdaq: DSCO) today reported that, in a recently published study in the Journal of Neonatal-Perinatal Medicine, nearly all neonatologists (92 percent) interviewed stated they were concerned about the exposure of newborn children to animal-derived medications. Additionally, two-thirds of parents with children in the neonatal intensive care unit (NICU) who were interviewed in the same study wanted to be informed if an animal-derived medication were administered to their newborn child. More than half of parents expressed a preference for humanized or synthetic products of comparable efficacy over an animal-derived medication. In addition, 58 percent of parents stated their primary objection to use of animal-derived medications was based on potential safety concerns, while 27 percent stated their objection was based on social and religious considerations. The study highlights the growing need for synthetic medication options that can address persisting concerns around the use of animal-derived medications in newborn children.

“The concerns shared by neonatologists and parents of children in the NICU are not unfounded and underscore the need for the pharmaceutical industry to pursue safe and effective alternatives to animal-derived drugs,” said Dr. Steven Donn, study co-author and Professor of Pediatrics, University of Michigan Health System. “Concerns about use of animal-derived medications exist and there is a need for further education for neonatal healthcare practitioners regarding the origin and choice of available medications.”

The study also revealed that, today, 97 percent of neonatologists seldom, if ever, discuss the source of medications or their concerns about administering animal-derived medications. However, if an alternative synthetic agent is considered to have comparable safety and efficacy, 78 percent of neonatologists believe parents should be informed of the treatment alternative for their newborn.

Animal-derived medications are routinely used in the NICU today. Respiratory Distress Syndrome (RDS) is a prevalent problem among premature infants for which animal-derived surfactants are frequently administered. Currently, there is no comparable synthetic agent available to address RDS. SURFAXIN®, Discovery Labs’ lead product candidate, is a synthetic therapeutic surfactant. SURFAXIN is currently under review for potential marketing approval by the U.S. Food and Drug Administration (FDA) for the prevention of RDS in premature infants with a target action date of March 6, 2012 under the Prescription Drug User Fee Act (PDUFA).

About the Study
The study was conducted by two leading academic physicians at the University of Michigan. The purpose of the study was to explore and compare parents’ and neonatologists’ views regarding animal-derived versus synthetic medications. Questionnaires were distributed to the Directors of US Neonatology Divisions and to parents of the newborns admitted to a tertiary level neonatal intensive care unit (NICU). Of the 98 neonatologists and 150 parents contacted, 66 (67 percent) neonatologists and all parents responded. (Study Reference: Do neonatologists and parents share the same concerns
About animal-derived pharmaceutical agents? Sarkar and Donn, *Journal of Neonatal-Perinatal Medicine, 2011*)

**About Discovery Labs**

Discovery Laboratories, Inc. is a specialty biotechnology company with one focus – to create life-saving products for 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 aerosol 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](http://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 the Company’s comprehensive preclinical program, development and manufacturing activities and related regulatory efforts, 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.

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