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FOR IMMEDIATE RELEASE

INDIGO ANNOUNCES UPCYTE® PRODUCT AGREEMENT

Agreement meets increasing demand for predictive liver toxicity models.

State College, PA (July 19, 2016) INDIGO Biosciences, the recognized industry-leader in Nuclear Receptor research, and upcyte® technologies GmbH announced completion of a distribution Partnership. upcyte® technologies GmbH, based in Hamburg-Eppendorf, Germany, is a life science company specializing in controlled, scalable propagation and standardization of human primary cell products. The upcyte® Hepatocytes will be used as a part of INDIGO's *in vitro* toxicology platform. This agreement meets the demand for predictive liver toxicity models, necessary due to the high attrition rate of drugs found to cause liver damage following entry into the market.

upcyte® technology allows controlled proliferation beyond the typical life span of primary cells without either immortalization or loss of differentiation properties. Utilizing upcyte® human liver cells, INDIGO has completed break-through developments in optimization, decreasing donor-to-donor variability while maintaining many Phase I and Phase II enzyme activities, making these cells more comparable to primary hepatocytes. The virtually unlimited availability of differentiated cells and their long viability period gives upcyte® hepatocytes an advantage over other commonly used cells.

Utilizing this unique platform, INDIGO's services lab can examine your compound's potential to cause liver toxicity through metabolic activation or by induction of drug metabolism enzymes. upcyte® hepatocytes contain equivalent activity of several cytochrome P450s when compared to human hepatocytes, making the examination of metabolism-dependent toxicity biologically relevant. As with primary human hepatocytes, the induction response is donor-dependent; therefore, upcyte® hepatocytes offer a panel of different donors with a range of induction responses, allowing for greater end-stage predictability. In addition, INDIGO is able to strengthen

and quantify changes in the expression of target genes regulated by PXR, CAR, AhR, LXRs, LRH-1, PPARs, and Nrf2.

“There is an increasing demand to develop more predictive models for liver toxicity,” says Dr. Jack Vanden Heuvel, INDIGO’s Chief Scientific Officer. “Hepatotoxicity remains a major reason for drug withdrawal from pharmaceutical development and clinical use. These cells offer a very attractive model to predict hepatotoxicity caused by drugs and chemicals of environmental concern.”

About INDIGO Biosciences, Inc.

INDIGO Biosciences was founded in 2005 in State College, Pennsylvania, and has established itself as an industry-leading provider of both products and services focused on nuclear receptors. INDIGO offers both screening services and assay kits for the pharmaceutical, biotechnology, agri-business, and nutraceutical industries, as well as government research agencies and academic researchers.

For more information on INDIGO’s products or services, please visit indigobiosciences.com