

Nemus Bioscience Announces Enhanced Ocular Tissue Concentration by the Proprietary Prodrug of Tetrahydrocannabinol (NB1111) - Associated With a Superior Decline in Intra-Ocular Pressure (IOP) in an Animal Model

COSTA MESA, CA -- (Marketwired) -- 06/16/16 -- [NEMUS Bioscience, Inc.](#) (OTCQB: NMUS) announced that data recently obtained from the company's research and commercialization partner, the University of Mississippi (UM), showed that in a rabbit normal ocular pressure model that examined the effects of NB1111, the proprietary NEMUS prodrug of tetrahydrocannabinol (THC), NB1111 provided superior tissue penetration and concentration, whether administered in a solid lipid nanoparticle (SLN) or in an eyedrop emulsion, when compared to standard THC in the same eyedrop vehicles.

NB1111 was observed to enhance ocular penetration in most tissues of the eye, up to 30x better depending on the tissue assayed. Additionally, the heightened ocular tissue penetration was associated with a decline in IOP statistically greater than that seen with comparator treatments of pilocarpine, a beta-blocker, or THC alone, administered as a single-dose and multiple daily doses over five days. Furthermore, when examining tissue samples, investigators also assessed the presence of THC in the plasma of the animals, using an assay capable of detecting nanogram quantities of the drug. No THC was detected in the plasma of the treated animals, whether they received THC or NB1111, even after five days of dosing. This would indicate that the THC generated from NB1111 and its activity are predominantly restricted to the eye.

"The investigators, led by Dr. Soumyajit Majumdar, examined the utility of NB1111 in one eye while the contralateral eye was used as a control," observed Brian Murphy, MD, MBA, the NEMUS CEO and CMO. "The placebo formulation did not have any effect on the IOP. This allowed the researchers to demonstrate that the IOP lowering effect of NB1111 was a direct effect of the drug. It should also be noted that the non-prodrug version THC, administered in an SLN or emulsion, exerted no significant effect on IOP, and was consistent with that seen with a placebo. A key finding in these experiments was no THC was detected in the peripheral circulation and this has important implications for future human testing in restricting the activity of THC to the eye thus balancing safety and efficacy of NB1111 as a therapeutic."

"These findings reinforce earlier IOP-lowering outcomes we observed in rabbit glaucoma models using NB1111. We now have important data that shows superior penetration of

ocular organs known to regulate IOP by NB1111 as well as the retina located in the posterior chamber of the eye. This finding can help explain the substantial decline in IOP in both normal and glaucomatous eyes when exposed to this cannabinoid prodrug," reported Soumyajit Majumdar, PhD, Associate Professor of Pharmaceutics and Drug Delivery and Associate Dean for Research in the School of Pharmacy at the university and lead scientist of the ophthalmic studies of NB1111. "This superior penetration of multiple ocular compartments which is not seen with THC alone, will be important in the next set of experiments examining the potential neuroprotective qualities of NB1111."

Dr. Murphy noted, "The UM research group plans to submit the data to a major peer-reviewed research meeting with full presentation of the data at that symposium. NEMUS is encouraged by this data and plans to continue to advance the development of NB1111 using an implantable ocular device to provide a constant effective dose of drug."

FORWARD LOOKING STATEMENTS

Statements in this press release that are not descriptions of historical facts are forward-looking statements that are based on management's current expectations and assumptions and are subject to risks and uncertainties, including statements about the potential benefits of NB1111 and the timing of our near term, intermediate term and long term goals. If such risks or uncertainties materialize or such assumptions prove incorrect, our business, operating results, financial condition and stock price could be materially negatively affected. In some cases, forward-looking statements can be identified by terminology including "goal," "focus," "aims," "believes," "can," "challenge," "predictable" "will," or the negative of these terms or other comparable terminology. We operate in a rapidly changing environment and new risks emerge from time to time. As a result, it is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements the Company may make. Risks and uncertainties that may cause actual results to differ materially include, among others, uncertainty regarding the results of future testing and development efforts and other risks that are described in the Risk Factors section of NEMUS' most recent annual or quarterly report filed with the Securities and Exchange Commission. Except as expressly required by law, NEMUS disclaims any intent or obligation to update these forward-looking statements.

ABOUT NEMUS BIOSCIENCE, INC.

The Company is a biopharmaceutical company, headquartered in Costa Mesa, California, focused on the discovery, development, and commercialization of cannabinoid-based therapeutics for significant unmet medical needs in global markets. Utilizing certain proprietary technology licensed from the University of Mississippi, NEMUS is working to develop novel ways to deliver cannabinoid-based drugs for specific indications, with the aim of optimizing the clinical effects of such drugs, while limiting the potential adverse events. NEMUS' strategy will explore the use of natural and synthetic compounds, alone or in combination. The Company is led by a highly qualified team of executives with decades of biopharmaceutical experience and significant background in early-stage drug development.

For more information, visit <http://www.nemusbioscience.com>.

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