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Emerald Bioscience Announces Notice of Allowance from United States Patent Office for Proprietary Analog of Cannabidiol

Emerald's CBD-valine-hemisuccinate, a CBD analog with superior absorption, bioavailability, and pharmacokinetics compared to the natural cannabinoid, has important therapeutic potential for ocular diseases and as a potent analgesic

Long Beach, California, March 09, 2020 (GLOBE NEWSWIRE) -- Emerald Bioscience, Inc. (OTCQB: EMBI) ("EMBI"), focused on the development of cannabinoid-based therapeutics to address global medical indications, especially those of unmet medical need, today announced that its proprietary analog of cannabidiol, CBD-valine-hemisuccinate (CBDVHS) has been issued a notice of allowance by the United States Patent and Trademark Office. EMBI licensed CBDVHS from its discovery and research partner, the University of Mississippi. Included in the notification are claims related to composition of matter and methods of use, as well as other molecular configurations of this CBD derivative.

This molecule has been issued patents from South Africa, Australia, and New Zealand and the company is awaiting patent decisions from other major pharmaceutical markets such as the European Union and Japan. Emerald's goal is to achieve a global patent footprint for this drug, as was achieved for its prodrug of THC, THC-valine-hemisuccinate.

CBDVHS is a molecule in-licensed by EMBI from the University as part of an "all-fields" licensing agreement executed in 2019, permitting the development of the drug for any indication, using any formulation or route of administration, for both human and veterinary uses. Additionally, the molecule has been determined by the Drug Enforcement Agency (DEA) not to be a controlled substance, which the company anticipates will allow it to eventually conduct clinical studies in more diverse populations, and perhaps expand potential uses through cosmetic preparations or as a beverage additive.

This news is the culmination of years of development work to design cannabinoid derivatives at the University and Eli Labs. The overall development goal has been to design molecules with three main characteristics: enhanced absorption, optimized bioavailability, and more predictive pharmacokinetics.

"Studies conducted under the auspices of the University observed superior permeation of CBDVHS into both anterior and posterior compartments of the eye when formulated as an ocular nanoemulsion versus CBD. They also identified a potent analgesic effect, rivaling that of morphine, in a murine model of chemotherapy-related neuropathy, a painful condition associated with certain types of cancer therapy," commented Brian Murphy, MD, CEO of EMBI. "In addition, ocular experiments performed in an *ex vivo* human tissue model by

Glauconix revealed CBDVHS displayed one-hundred-times the potency of CBD in lowering biomarkers associated with inflammation and fibrosis. Our data portfolio provides the validation and springboard to further explore the drug's utility, both in and outside the eye."

About the University of Mississippi

The University of Mississippi, the state's flagship institution, is among the elite group of R-1: Doctoral Universities - Highest Research Activity in the Carnegie Classification. The university has a long history of producing leaders in public service, academics, research and business. Its 15 academic divisions include a major medical school, nationally recognized schools of accountancy, law and pharmacy, and an Honors College acclaimed for a blend of academic rigor, experiential learning and opportunities for community action.

About Eli Labs

Eli Labs is a privately held corporation located in Oxford, MS that performs analytical validation testing as well as research involving drug discovery. The company President is Mahmoud Elsohly, PhD, who is Research Professor in the National Center for Natural Products Research at the University of Mississippi.

About Emerald Bioscience, Inc.

Emerald Bioscience is a biopharmaceutical company headquartered in Long Beach, California, focused on the discovery, development, and commercialization of bioengineered cannabinoid-based therapeutics for significant unmet medical needs in global markets. With proprietary technology licensed from the University of Mississippi, Emerald is developing novel ways to deliver cannabinoid-based drugs for specific indications with the aim of optimizing the clinical effects of such drugs while limiting potential adverse events. Emerald's strategy is to clinically develop a number of proprietary biosynthetic compounds, alone or in combination with corporate partners.

For more information, visit www.emeraldbio.life

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FORWARD LOOKING STATEMENTS

This press release contains forward-looking statements, including statements regarding our product development, business strategy, product branding, timing of clinical trials and commercialization of cannabinoid-based therapeutics. Such statements and other 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. 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 "anticipated," "contemplates," "goal," "focus," "aims,"

“intends,” “believes,” “can,” “could,” “challenge,” “predictable,” “will,” “would,” “may” 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 Emerald may make. Risks and uncertainties that may cause actual results to differ materially include, among others, our capital resources, uncertainty regarding the results of future testing and development efforts and other risks that are described in the Risk Factors section of Emerald’ most recent annual or quarterly report filed with the Securities and Exchange Commission. Except as expressly required by law, Emerald disclaims any intent or obligation to update these forward-looking statements.

Source: Emerald Bioscience, Inc.