January 13, 2020

Emerald Bioscience Provides Update on Recent Progress and Expected 2020 Milestones

- **Company prepares to enter the clinic in 2020 to test NB1111 (THCVHS) in glaucoma**
- **Preclinical formulation testing proprietary analog of CBD examining the utility of CBDVHS in the eye, brain, and liver**
- **First patents have been issued for CBDVHS in pursuit of a global patent footprint to complement the IP estate for THCVHS**

LONG BEACH, CA, Jan. 13, 2020 (GLOBE NEWSWIRE) -- via NEWMEDIAWIRE – Emerald Bioscience, Inc. (OTCQB: EMBI), focused on the development of cannabinoid-based therapeutics to address global medical indications, especially those of unmet medical need, provides an update on progress across its product pipeline, including projected clinical milestones.

NB1111 (THCVHS) Update: Prodrug of THC for the treatment of glaucoma

- In 2019, the Company was able to scale-up production of the prodrug of THC, THCVHS, and demonstrated superiority in intra-ocular pressure (IOP) lowering versus latanoprost and timolol, medications that comprise more than 90% of the current glaucoma market.
- Animal studies showed that NB1111, when compared to latanoprost, could potentially be dosed once-daily, enhancing the competitive profile of the drug in the marketplace using a new nanoemulsion eyedrop formulation, pending human data.
- The active part of the prodrug, THC, was shown to possess significant antifibrotic, anti-inflammatory, and anti-neovascularization effects, attributes that are valuable in safeguarding the optic nerve, further broadening the potential capability of the drug to provide direct neuroprotection to cells of the retina.
- The Company opened an Australian affiliate in advance of conducting a Phase 1 and Phase 2a study in Australia, among healthy volunteers and patients with glaucoma or ocular hypertension; the studies are planned to be initiated in the second half of 2020 with outcomes data expected at the end of 2020 and early 2021.

CBDVHS: Proprietary analog of CBD

- The DEA deemed in 2019 that CBDVHS was not a controlled substance and, therefore, would not be a scheduled pharmaceutical product, if approved by the FDA.
- Preclinical studies conducted throughout 2019 demonstrated that a nanoemulsion formulation of CBDVHS was capable of delivering CBDVHS in significant concentrations, to both the anterior and posterior compartments of the eye.
- Ocular studies of CBDVHS revealed significant anti-inflammatory and anti-fibrotic activity in human eye tissue models when compared to CBD, but without evidence of elevating IOP.

- EMBI has an issued patent for CBDVHS in South Africa and has received additional acceptances for patent issuance in Australia and New Zealand; the Company anticipates feedback from other countries to occur in the 2020 timeframe.
- EMBI plans on conducting further preclinical experiments of CBDVHS throughout 2020, exploring new formulations and routes of administration outside of the eye, as well as assessing the impact of CBDVHS on various organ systems, including the brain and the liver.

Corporate Update:

- The company reported the exercise of 40.8 million warrants by Emerald Health Sciences, which offset $4.08 million owed under the Multi Draw Credit Agreement dated October 5, 2018. Upon exercise of the warrants, the aggregate reduced outstanding principal balance excluding discounts under the Multi Draw Credit Agreement is $2,014,500.

- The Company restructured its board, including:
    - The resignation of Dr. Avtar Dhillon, who offered his resignation as the Chairman of the Board and the position of Chairman of the Finance and Business Development Committee. Dr. Dhillon plans to devote more time to Emerald Health Sciences where he serves as both CEO and Director.
    - The Company entered into a Board Observer Agreement with Emerald Health Sciences to allow Dr. Dhillon to continue as a representative of Emerald Health Sciences as a non-voting observer in future meetings of the Board, and into an Independent Contractor Services Agreement with Dr. Dhillon, pursuant to which Dr. Dhillon will provide ongoing corporate finance and strategic business advisory services to the Company.
    - The Board also appointed Punit Dhillon, an existing member of the Board, as Chairman of the Board and as Chairman of the Finance and Business Development Committee, to fill the vacancies in such offices created by the resignation of Dr. Dhillon.

- The Board approved the company name change to EMBI Pharmaceuticals, subject to regulatory and stockholder approval, in order to further enhance market differentiation as a developer of synthetic cannabinoid derivatives.
- The company signed an “all fields” licensing agreement with the University of Mississippi in 2019, permitting the development of THC and CBD derivatives for all uses, employing any formulation via all routes of administration for both human and veterinary uses.
- Dr. Dennis Kim and Ms. Alice Chen, Chief Medical Officer and Executive Director of Clinical Operations, respectively, joined EMBI in August, 2019, to spearhead the launch of clinical trials in glaucoma.
- The Company remains focused on a target to up-listing to a national stock exchange.

Dr. Brian Murphy, CEO of Emerald Bioscience, commented: “Last year, EMBI demonstrated significant success in its evolution from a biotech discovery company to embarking on a clinical pathway for our compounds. In addition to the positive animal data in glaucoma, which demonstrated superiority in head-to-head studies against the market leaders, we also saw that these cannabinoid derivatives possessed anti-inflammatory and anti-fibrotic activity that could broaden their clinical uses, especially outside of the eye. We look forward to

updating our shareholders as we advance the Company's proprietary synthetic compounds through clinical programs in 2020 to research therapies that combat the leading causes of vision loss throughout the world."

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.

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FORWARD-LOOKING STATEMENTS

This press release contains forward-looking statements, including statements regarding our product development, business strategy, 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.

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Source: Emerald Bioscience, Inc.