Bod Science announces significant updates regarding Aqua Phase Delivery Technology

- **Ethics approval received from Bellberry for Pharmacokinetic (PK) Study to compare the bioavailability of Aqua Phase Cannabidiol (CBD) and CBD in Medium Chain Triglycerides (MCT) oil**
- **Significant solubility enhancement demonstrated with Aqua Phase Technology through ultraviolet analysis**
- **A second Pharmacokinetic (PK) Study also underway using micro sampling technology**
- **Advanced collaboration discussions underway for use of the Aqua Phase Technology in multiple treatment areas including those outside of Cannabis.**

Sydney, Australia – 23 March 2023: Cannabis focused drug development and product innovation company Bod Science Limited ("Bod" or "the Company") (ASX: BOD) is pleased to provide this update on the development of the Aqua Phase delivery technology[1]

Bod is undertaking two PK studies to demonstrate the enhanced bioavailability of CBD using Aqua Phase technology compared with CBD in MCT oil. The first PK study is looking at bioavailability in capillary blood, using microsampling technology, demonstrating the amount of the drug that can penetrate organs and the extremities, which is critical for managing diseases in the body. This study has commenced and currently has 10 volunteers involved. The results of this PK study are anticipated by the end of June 2023.

The second PK study is looking at bioavailability in venous blood. Ethics approval for this Phase I PK Study has been granted by Bellbery, with recruitment commencing immediately for the 12 study participants to be selected. Recruitment activities will include an initial advertising period, followed by screening and selection; all of which is anticipated to take 2-3 weeks. Results from the Phase I PK study via venous blood are anticipated to be completed by end July 2023.

Bod's two PK studies will assess and compare the absorption of Aqua Phase CBD against CBD in MCT oil. The study participants will, after fasting, each receive a single dose of one product, followed by a 2-week washout period to ensure the first dose has been completely eliminated from the body prior to dosing with the second product. The study participants will then receive a single dose of the other product.

Ultraviolet (UV) analysis of the solubility of Aqua Phase CBD using UV-Vis Spectrophotometry[2] compared with standard CBD preparations have been undertaken at a UK University. This analysis has shown that Aqua Phase CBD solubility ranges from 1.6 millimolar (mM) to 2.7mM under various conditions, whereas standard CBD solubility is 0.2 micromolar(µM). This body of work was undertaken to support the final patent application of Aqua Phase, and demonstrates a significant solubility enhancement. Aqueous solubility is a key rate-limiting parameter influencing biological activity and gastrointestinal absorption of a drug from solid dosage forms. As such, solubility is one of the important and main considerations studied during the pre-formulation of any drugs' dosage form. Water soluble drugs are easy for formulation development, but drugs which show poor water solubility will impose a variety of problems for formulation and development.

Cannabinoids like CBD naturally have poor solubility and hence, biological absorption – estimated bioavailability in humans of oral CBD compounds in oil is only 6 to 8%. Bod foresees Aqua Phase providing a solution to overcome these solubility barriers in many different medications and thereby reduce the side effect profiles of medications and lower the cost of medications through reduced dosage of the active ingredient.

Bod is in advanced discussions with collaborators who will further study Aqua Phase technology, utilise it in their

[1] ASX Announcement – 30 August 2022: Bod to acquire Aqua Phase

[2] UV-Vis Spectrophotometry is a quantitative technique used to measure how much a chemical substance absorbs light. Solubility of that compound can then be calculated using an equation where y= mx+b where y is absorbance, x is concentration, m the slope and b the intercept

products and / or distribute Bod products. Bod looks forward to updating the market on these partnerships in the near term.

Success in Bod's PK studies will satisfy the milestone obligations under the Aqua Phase Asset Purchase Deed for Bod's acquisition of Aqua Phase. Achieving these milestones is a definitive and critical test for pharmaceutical applications, and to provide the baseline data to support commercialisation discussions, expand Bod's value proposition and lead to new and innovative delivery formats across numerous markets for cannabis including food and beverage. Aqua Phase promises to enable CBD, other cannabinoids and other lipophilic or poorly soluble compounds to realise their full potential as first line and safe treatments in global pharmaceutical markets.

Management commentary:

CEO Ms Jo Patterson said: *"The acquisition of Aqua Phase has been a strategic and methodological process, with a number of key milestones along the way. We are increasingly confident in the commercial potential of this unique delivery format in numerous global markets.*

"Aqua Phase promises to enable poor solubility medications to become cheaper and safer as a result of lower side effects and less use of the active ingredient required due to the medications increased solubility. The solubility data we have already demonstrated from the UV analysis enables us to move a number of commercial opportunities in cannabis and non-cannabis medications forward with increasing confidence."

This announcement has been approved by the Board of Bod Science Limited.

-ENDS-

About Bod Science:

Bod Science (ASX:BOD) is a cannabis focused drug development and product innovation company.

Bod is focused on progressing research and development with a defined clinical trial pathway to commercialise and deliver premium, scientifically proven and trusted products for patients and consumers.

The company has a number of existing partnerships with large corporate companies and collaborations with leading research organisations to advance the use of Cannabis related medicines with therapeutic indications.

For more information please contact:

Jo Patterson	Amalie Schreurs
Chief Executive Officer	White Noise Communications
Info@bodaustralia.com	amalie@whitenoisecomms.com
+61 2 9199 5018	+61 431 636 033