

## **Leading US Institutions provide Medibio 10,000 new physiological data sets which will significantly advance validation and drive commercial outcomes**

### **Highlights**

- **10,000 new data sets (overnight ECG) of clinical relevance made available to Medibio**
- **Collaborative research and development effort with four leading US universities in participation**
- **All physiological data has corresponding clinical psychiatric diagnoses and/or self-report data**
- **Medibio's Algorithms will now be able to leverage more advanced machine learning techniques expanding the commercial offering and generating higher degrees of research outcomes**
- **Immediate focus on further validation of the Company's Depression Test and sleep staging**
- **Opportunity to explore analytics related to the comorbidity of depression with heart disease**

Medibio Ltd (**MEB** or the **Company**) is pleased to announce four leading US universities have provided the Company with a vast databases of physiological files to undertake joint research and development with Medibio into various mental health conditions. This dramatically increases Medibio's research and development capabilities and will expand potential commercial offerings for its proprietary Digital Mental Health Platform.

Medibio has added in excess of 10,000 overnight physiological (ECG, EEG and other biometrics) data files to be analysed by Medibio's Digital Mental Health Platform (DMHP). This more than trebles the size of Medibio's repository of data files and the Company anticipates the receipt of additional data in the coming months. Essentially this repository of clinical and physiological data means Medibio can generate proxy-clinical trial outcomes and meta-data analyses from more than 15,000 patients retrospectively.

The significant increase in the volume of available data will also allow the Company to refine advanced machine learning techniques to accelerate the optimisation of Medibio's algorithms at the core of its DMHP.

The ability to utilise independently acquired data and corresponding psychiatric diagnoses will also add significantly more weight to the Company's findings and technology with the medical community.

The Universities which supplied the bulk of the new data are Johns Hopkins School of Medicine, Emory University, Washington University, and The Royal's Institute of Mental Health Research affiliated with the University of Ottawa. All physiological data files have either corresponding clinical psychiatric diagnoses undertaken by the partner universities or self-report data covering mental health and/or mental wellness.

The initial focus will be on approximately 900 files received from the University of Ottawa this week. The data will be used as the basis for an independent validation study on the Company's Depression Test using retrospective analysis. The study should be completed relatively quickly. This data also has the potential to be included in the companies FDA submission on its depression diagnostic as an additional source of data.

The second near term project, which has started, involves using the new data to develop a sleep algorithm which can distinguish between the 5 Stages of Sleep. This involves the use of approximately 360,000 data points and advanced machine learning techniques. In addition to improving the existing algorithms for mental health with new analytical metrics the ability to accurately distinguish between sleep stages using only ECG data has significant commercial potential in its own right.

The new the data also includes a set of 800 patients comprising 400 with myocardial infarction and depression and 400 with myocardial infarction and without depression. This data provides Medibio with the opportunity to explore analytics relating to the comorbidity between depression and heart disease.

The balance of the data includes approximately 275 files with corresponding self-report data for stress, PTSD files, and files with various self-reports covering mental wellness and overall wellbeing. The third near term project, also underway, involves utilising the additional data to update Medibio's existing **Stress Algorithm**. This will double the number of stress categories (currently - mild, moderate, and serious) to six, offering a more effective assessment and monitoring of stress levels.

<b>Further Information:</b>	Website: <a href="http://www.medibio.com.au">www.medibio.com.au</a>
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### **About Medibio Limited**

Medibio (ASX: MEB), is a medical technology company that has developed an objective test to assist in the diagnosis of depression, chronic stress, and other mental health disorders. Based on research conducted over 15 years at the University of Western Australia, this test utilizes patented (pending) circadian heart rate variability and cloud based proprietary algorithms to deliver a quantifiable measure to assist in a clinical diagnosis. Johns Hopkins University School of Medicine and Ottawa University, among others, are undertaking validation studies on the clinical utility of the test. This will potentially enable Medibio's technology to be the first FDA approved, objective, evidence based approach to the diagnosis mental health disorders for the medical industry. The technology also provides an objective method for the assessment of stress and mental wellbeing which can be translated to the workplace stress/wellbeing market, wearable technology, and App market. Located in Sydney, NSW, Medibio is listed on the Australian Stock Exchange.