

## Prana commences research collaboration with Takeda for the treatment of Parkinson's disease gastrointestinal neuropathology

*PBT434, Prana's lead drug in preclinical development for movement disorders, to be profiled in collaborative venture*

**MELBOURNE, Australia, and SAN FRANCISCO USA. 18th July 2017:** Prana Biotechnology Ltd (ASX PBT: NASDAQ PRAN) today announced a research collaboration with Takeda Pharmaceuticals International, Inc. to study the ability of Prana's investigational movement disorders compound, PBT434, to slow or prevent neurodegeneration of the gastrointestinal system.

One of the important non-motor features of Parkinson's disease is often the early presentation of severe and disabling impairment of gastrointestinal function. Parkinson's disease is characterised by the loss of neurons and their networks in the brain and in the gut. The cause of neurodegeneration and gastrointestinal dysfunction in Parkinson's disease is not known, but the protein alpha-synuclein has been hypothesized to be implicated in this process.

Prana recently announced the publication of results with PBT434 demonstrating significant reduction of alpha-synuclein in various pre-clinical models of Parkinson's disease in the paper entitled, "**The novel compound PBT434 prevents iron-mediated neurodegeneration and alpha-synuclein toxicity in multiple models of Parkinson's disease**" in the peer reviewed journal Acta Neuropathologica Communications \*. This paper suggested that PBT434 may reduce the formation of toxic alpha-synuclein fibrils and aggregates, rescue neurons burdened by such toxic forms of alpha-synuclein and restore motor function in animal models.

The research collaboration will investigate the ability of investigational compound PBT434 to mitigate gastrointestinal dysfunction; constipation, lowered colon motility and inflammation in mouse models, including an alpha-synuclein transgenic mouse.

Associate Professor David Finkelstein, Prana's Senior Scientific Consultant and Head of the Parkinson's Disease Laboratory at the Florey Institute of Neuroscience and Mental Health (Melbourne), said: "This early research is important because our major therapeutic objective is to treat these disabling symptoms and provide an early therapeutic intervention for both motor and non-motor Parkinsonian symptoms in patients which may significantly impact on the quality of life."

PBT434 is the first of a new generation of small molecules from the quinazolinone class of drugs that was specifically designed to block the accumulation and aggregation of alpha-synuclein and is expected to begin human testing in a Phase 1 trial later this year.

\*The peer reviewed article can be accessed from:

<https://actaneurocomms.biomedcentral.com/articles/10.1186/s40478-017-0456-2>

### Contacts:

#### Investor Relations

Rebecca Wilson

E: [rwilson@buchanwe.com.au](mailto:rwilson@buchanwe.com.au)

Tp: +61 3 9866 4722

#### Media

Scott Newstead

E: [snewstead@buchanwe.com.au](mailto:snewstead@buchanwe.com.au)

Tp: +61 3 9866 4722

## **About Prana Biotechnology Limited**

Prana Biotechnology was established to commercialise research into neurodegenerative diseases such as Alzheimer's disease, Huntington disease, and Parkinsonian disease. The Company was incorporated in 1997 and listed on the Australian Stock Exchange in March 2000 and listed on NASDAQ in September 2002. Researchers at prominent international institutions including The University of Melbourne, The Mental Health Research Institute (Melbourne) and Massachusetts General Hospital, a teaching hospital of Harvard Medical School, contributed to the discovery of Prana's technology.

For further information please visit the Company's web site at [www.pranabio.com](http://www.pranabio.com).

### Forward Looking Statements

*This press release contains "forward-looking statements" within the meaning of section 27A of the Securities Act of 1933 and section 21E of the Securities Exchange Act of 1934. The Company has tried to identify such forward-looking statements by use of such words as "expects," "intends," "hopes," "anticipates," "believes," "could," "may," "evidences" and "estimates," and other similar expressions, but these words are not the exclusive means of identifying such statements. Such statements include, but are not limited to any statements relating to the Company's drug development program, including, but not limited to the initiation, progress and outcomes of clinical trials of the Company's drug development program, including, but not limited to, PBT2, and any other statements that are not historical facts. Such statements involve risks and uncertainties, including, but not limited to, those risks and uncertainties relating to the difficulties or delays in financing, development, testing, regulatory approval, production and marketing of the Company's drug components, including, but not limited to, PBT2, the ability of the Company to procure additional future sources of financing, unexpected adverse side effects or inadequate therapeutic efficacy of the Company's drug compounds, including, but not limited to, PBT2, that could slow or prevent products coming to market, the uncertainty of patent protection for the Company's intellectual property or trade secrets, including, but not limited to, the intellectual property relating to PBT2, and other risks detailed from time to time in the filings the Company makes with Securities and Exchange Commission including its annual reports on Form 20-F and its reports on Form 6-K. Such statements are based on management's current expectations, but actual results may differ materially due to various factors including those risks and uncertainties mentioned or referred to in this press release. Accordingly, you should not rely on those forward-looking statements as a prediction of actual future results.*