Landmark Publication Endorses Prana's Drug Pipeline Strategy for Treating Neurodegenerative Diseases

Distinguished independent research team led by Susan Lindquist, National Medal of Science winner 2010, publishes findings in Journal of Biological Chemistry

Melbourne – 16 December, 2011: Prana Biotechnology (NASDAQ:PRAN; ASX:PBT) today announced that the Journal of Biological Chemistry* has published research that provides strong validation of Prana's strategy to treat neurodegenerative diseases.

The authors, led by Professor Susan Lindquist, Professor of Biology at Massachusetts Institute of Technology, discussed the broad therapeutic potential of 8-hydroxyquinolines (8-OHQ), which were identified as being protective against the neurotoxic proteins that cause disease in disorders such as Alzheimer's, Huntington's, Parkinson's and other neurodegenerative disorders. PBT2, Prana's lead Phase II drug is a specific type of 8-OHQ designed and selected for enhanced efficacy and tolerability as a therapeutic intervention. The authors cite the positive therapeutic results of PBT2.

The paper, entitled *"Different 8-OHQ's Protect Models of TDP-43, α–synuclein, and Polyglutamine Proteotoxicity through Distinct Mechanisms"* describes the identification of selected 8-OHQ compounds, from 200,000 compounds tested, as protective against neurodegeneration due to their influence on metal homeostasis in the brain. The authors noted that the "ability of different 8-OHQ's to impinge on diverse proteotoxicities (neurotoxicity caused by overabundant mutant or misfolded proteins) further links metal homeostasis to neurodegenerative diseases including Alzheimer's, Parkinson's and Huntington's diseases".

Importantly, the authors make the point that subtle changes to the chemical backbone of this class of drug can permit rational drug design for different disease indications. PBT2 was selected on the basis of unique chemical modifications designed to confer subtle but effective redistribution of metals in the brain, ability to prevent amyloid induced neurotoxicity and neuro-regenerative effects. To date, Prana's 800 strong novel compound library has yielded a Phase II candidate for Alzheimer's and Huntington's with PBT2, Parkinson's' with PBT434 and brain cancer with PBT519.

"This is a landmark paper supporting Prana's therapeutic strategy", commented Prana's Head of Research, Assoc. Professor Robert Cherny. "The findings by the authors that precise chemical modifications to the 8-OHQ compounds altered metal binding and metal transport properties resulting in various mechanisms of action supports findings by Prana scientists that the therapeutic benefits of selected members of this class of compound arise from a unique combination of metal recovery and redistribution", concluded Dr Cherny.

The paper can be accessed online here

Prana has commenced a 12 month clinical trial of PBT2 Alzheimer's Disease (see company announcements dated 22 November 2011 and 15 December 2011). Mr Geoffrey Kempler, Prana's Executive Chairman, commented that "the findings in this

publication further fuel the momentum building toward the acceptance and success of our strategy for treating neurodegenerative diseases".

*Daniel F. Tardiff, Michelle L. Tucci, Kim A. Caldwell, Guy A. Caldwell and Susan Lindquist, December 6, 2011, doi:10.1074/jbc.M111.308668

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About Prana Biotechnology Limited
Prana Biotechnology was established to commercialize research into age-related neurodegenerative disorders. The Company was incorporated in 1997 and listed on the Australian Securities 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.

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 factions 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.

Contacts:

Australia
Prana Biotechnology Ltd
T: +61 3 93494906
E: info@pranabio.com

US – Investor Relations
Leslie Wolf-Creutzfeldt
T: 646-284-9472
E: leslie.wolf-creutzfeldt@grayling.com

US - Media
Ivette Almeida

T: 646-284-9455
E: ivette.almeida@grayling.com