



Prana selects lead PD drug candidate for development

Data presented at the World Parkinson's Congress in Glasgow, Scotland

Melbourne – September 29, 2010: Prana today announced that it has selected a novel lead drug candidate to be developed as a disease modifying treatment for Parkinson's Disease, PBT434.

Parkinson's Disease primarily is associated with a loss of motor function (tremors, loss of coordination and control) and is the second most prevalent neurodegenerative disease after Alzheimer's Disease.

The loss of motor function in Parkinson's Disease results from loss of the dopamine producing cells in the part of the brain called the *substantia nigra*. Dopamine is the critical chemical messenger between neurons that enables muscle coordination and function. Parkinson's Disease is also associated with abnormally high levels of iron and with the accumulation of the protein alpha synuclein. The most effective current treatments aim to replace this lost source of dopamine – however these therapies do not slow the course of the disease and they do not protect the *substantia nigra*.

Explaining the mechanism of the disease, our scientists hypothesise that elevated iron and alpha synuclein in the presence of dopamine, can lead to cell death in the *substantia nigra*, leading to the loss of motor function. Accordingly, because PBT434 can:

- (i) prevent the ongoing loss of *substantia nigra* cells,
- (ii) prevent the elevation of iron, and
- (iii) prevent the accumulation of alpha synuclein, the drug has potential as a true disease modifying treatment for the sufferers of Parkinson's Disease.

Impressively, PBT434 has demonstrated strong efficacy in 3 different Parkinson's Disease mouse models

- a. a transgenic mouse model, designed to produce a form of alpha synuclein (A53T) which causes inherited Parkinson's Disease.
- b. the 6-hydroxy dopamine model (6-OHDA) – a toxin injected directly into the *substantia nigra*.
- c. the MPTP model, a toxin injected into the body that enters the brain and selectively kills *substantia nigra* cells.

Combined, these complementary models show the overall robust benefits of PBT434. "These are great results being reported today. PBT434 is saving the cells that produce the chemicals needed to have normal motor function. Not

many drugs have the evidence to claim that. If the drug performs well in development, it could have a dramatic effect on the lives of Parkinson's Disease sufferers" commented Geoffrey Kempler, Prana's Executive Chairman. "It is very pleasing to see another drug candidate emerge from our extensive library of over 600 MPACs, that we have developed to bring disease modifying benefits to neurological disorders" Mr Kempler concluded.

The data will be presented by Associate Professor Robert Cherny, Prana's Head of Research, at the World Parkinson's Congress in Glasgow, Scotland - 28 September to 1 October 2010. Details of the experimental results will be available on our website www.pranabio.com.

About Prana Biotechnology Limited

Prana Biotechnology was established to commercialise research into Alzheimer's Disease, Huntington's Disease and other major age-related neurodegenerative disorders. 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.

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.

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