

# **New blood test can diagnose and monitor treatment of Parkinson's disease**

April 26 2007

---

While Florey researchers have also created a genetic test for PD (10% of PD cases are caused by genetic factors), this new test has a broader application by screening for many different types of PD and monitoring treatment, as well as measuring the effectiveness of drugs being developed to treat the disease.

Dr Qiao-Xin Li and colleagues from The University of Melbourne and The Mental Health Research Institute of Victoria, along with Prof Malcolm Horne from the Howard Florey Institute, found people with PD had low levels of the brain-secreted protein 'alpha-synuclein' in their blood, while people without PD had high levels of the protein.

Prof Horne said the test they developed measured alpha-synuclein levels in blood.

"Currently there is no specific PD diagnostic test so doctors rely on their observations to make a diagnosis, which means some patients may not be prescribed the most suitable medication and around 15% of those diagnosed may actually be suffering from something else," Prof Horne said.

"Further studies are required to establish whether this test can distinguish between people who are responsive to treatment and those who are not," he said.

The researchers are now conducting a large-scale study to determine the

effectiveness of the test, to discover whether it is applicable for all types of PD, and to find out if it can measure the rate of progression and severity of the disease.

"If the results of our large-scale study are encouraging, this test could be available for clinical use within the next two years," Prof Horne said.

"We are now refining the test to make it quicker and cheaper so it can be offered to all those who have or are at risk of developing PD.

"While the clinical outcomes for this test will be significant, it also opens up new avenues of PD research and drug development.

"Further research using this test will also help us better understand the many different forms of PD and work towards ways to prevent or delay the disease.

"The test will also ensure drug trial participants actually have PD so research outcomes will be statistically more valid, which paves the way for faster and more effective drug development.

"When drugs that modify disease progression are available, this test may also help in showing whether candidate drugs are having an effect on the disease by keeping alpha-synuclein levels close to normal," Prof Horne said.

Source: Research Australia

Citation: New blood test can diagnose and monitor treatment of Parkinson's disease (2007, April 26) retrieved 10 April 2024 from <https://medicalxpress.com/news/2007-04-blood-treatment-parkinson-disease.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.