

Aus researchers identify key Alzheimer's risk factors

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Singapore: Australian scientists are helping to unravel the links between a person's brain chemistry, genes and their risk of developing Alzheimer's disease (AD) by revealing interplay between two known AD risk factors of amyloid plaques in the brain and a common gene variation (BDNF Val66Met).

Professor Paul Maruff, chief science officer at Melbourne-based cognition testing company Cogstate, said that the research has been able to determine who is most at risk for AD.

"Our studies conducted in the Australian Imaging Biomarkers and Lifestyle (AIBL) cohort have confirmed both elevated brain amyloid and this common gene variation are risk factors for Alzheimer's disease, with the presence of both signaling those at highest risk and patients in whom cognitive deterioration was more rapid," said co-author of the research, Professor Maruff.

"This is important because it can help to identify those with the most to gain from early drug and perhaps even behavioral intervention designed to prevent AD. Both approaches to prevention are currently a major international focus of companies and research groups. This research will also help to identify those older people who have mild cognitive impairment (MCI) but who have a low risk of AD, meaning their impairment may have other causes such as depression or stress which are more readily treatable," he added.

The research, which comprised of four studies in total, used data collected for the major AIBL study that uses Cogstate's cognition testing as a highly-sensitive measure of cognitive health. The AIBL study, which started in 2006 and involves more than 1000 people aged over 60 years, is looking for biomarkers, cognitive characteristics, and other factors contributing to AD.