BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

Bionomics reveals data on Alzheimer's drug candidate

04 February 2013 | News | By BioSpectrum Bureau

Bionomics reveals positive data on Alzheimer's drug candidate

Singapore: Australian company Bionomics has made public new data on BNC375, its drug candidate with potential for the treatment of memory loss in Alzheimer's disease. The company presented the data at the 33rd Annual Meeting of the Australian Neuroscience Society taking place in Melbourne, Australia.

BNC375 is a positive allosteric modulator of the a7 nicotinic acetylcholine receptor (a7 nAChR). Data demonstrates the in vivo memory enhancing properties of this drug candidate in two animal models of cognitive impairment as well as data on the action of BNC375 on the receptor. The animal model data indicates that BNC375 enhances both episodic memory and working memory and that it has equivalent performance compared to Donepezil, a Pfizer product marketed as Aricept with reported $2.5 billion sales in 2011. BNC375 has a 100-fold therapeutic dose range, from 0.1 to 10 mg per kg and has demonstrated a wide therapeutic window in the preclinical studies conducted to date.

"BNC375 targets Alzheimer's disease and other conditions which are associated with significant memory loss," said Dr Deborah Rathjen, CEO and managing director, Bionomics. "This latest drug candidate to come from our technology platform conforms to Bionomics' focus on developing well differentiated drug candidates to treat serious conditions such as Alzheimer's disease, Schizophrenia and Parkinson's disease amongst others."

There is a large body of evidence implicating the Î±7 nAChR in the pathophysiology of several neurodegenerative and neuropsychiatric diseases. Modulation of this receptor enhances cognitive processes, for example working memory and attention, which are compromised in these disorders.

In 2010 the estimated worldwide costs of dementia, including direct and indirect costs of care, was $604 billion with an estimated 35.6 million people worldwide affected by dementia. This is expected to double every 20 years reaching 65.7 million in 2030 and 115.4 million in 2050. In the US alone, an estimated 5.3 million people have Alzheimer's disease including 14% of people over 71 years of age, according to Business Insights (May 2011) data.