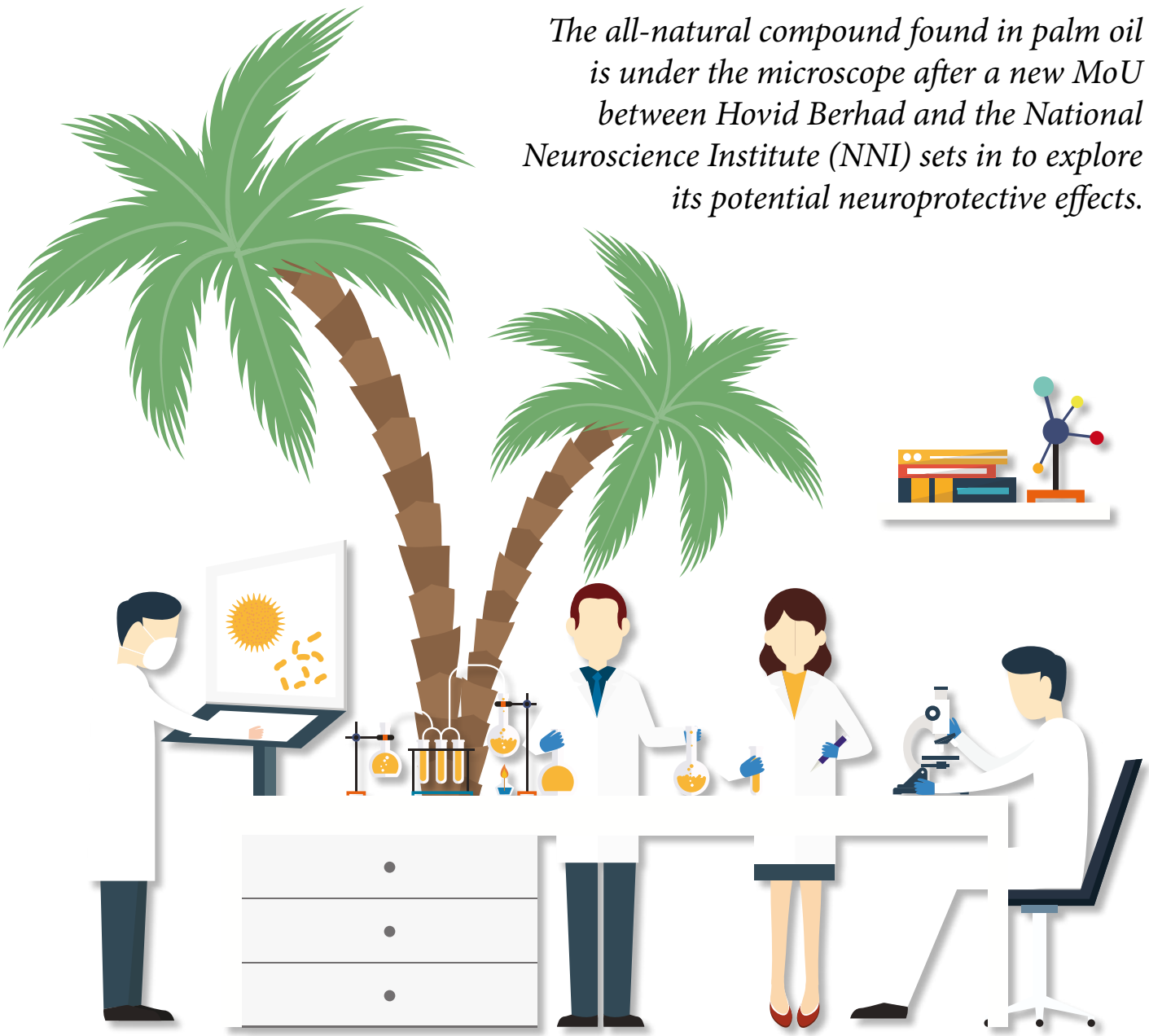
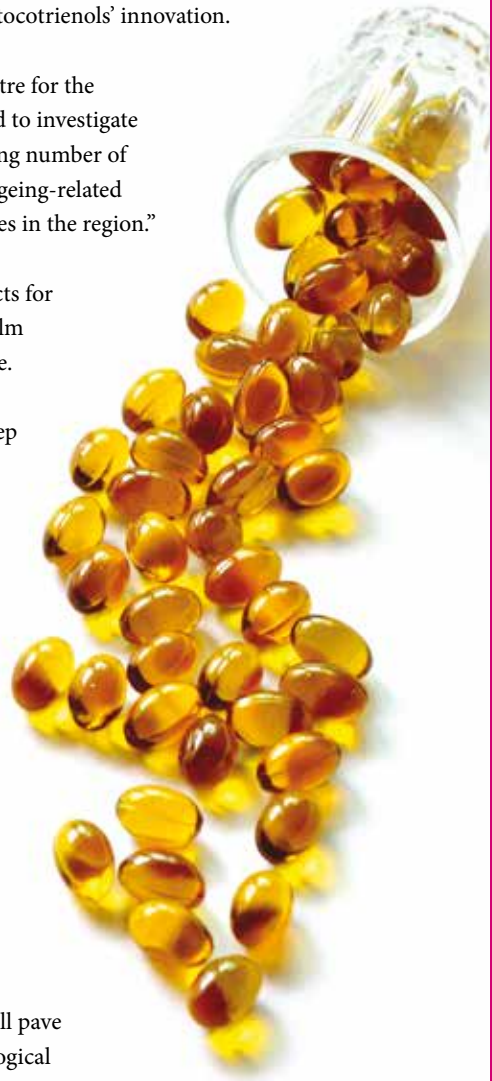
In the Lab: Palm Tocotrienols for Parkinson's Disease

The all-natural compound found in palm oil is under the microscope after a new MoU between Hovid Berhad and the National Neuroscience Institute (NNI) sets in to explore its potential neuroprotective effects.



Hovid Berhad and NNI signed a Memorandum of Understanding (MoU) on 8 May 2015 to embark on research to study the neuroprotective effects of palm tocotrienols in Parkinson Disease (PD). Hovid Berhad is an established pharmaceutical manufacturer and also the leading pioneer in palm tocotrienols' innovation.

Professor Tan Eng King, Director of Research, NNI, said, "As Singapore's national specialty centre for the management and treatment of neurological diseases, we are keen to partner with Hovid Berhad to investigate the potential of palm tocotrienol as a preventative therapy for these diseases that affect a growing number of patients. We hope that embarking on this translational clinical research programme to tackle ageing-related brain disorders will help facilitate greater cooperation among medical researchers and industries in the region."



Clinical investigations have shown that palm tocotrienols have therapeutic and preventive effects for neurological diseases in the areas of stroke and dementia. These studies show that 200mg of palm tocotrienols, when taken twice daily, is able to protect human nerves from neurological damage.

Currently, there are limited treatment options for PD patients, such as oral medication and Deep Brain Stimulation (DBS) surgery. However, many treatments mainly improve the symptoms of the disease. Furthermore, medications have side effects and the challenge for PD research is to develop a drug that can prevent PD from developing or delay the onset of the disease.

Looking Deeper into Tocotrienols

The research collaboration hopes to demonstrate that tocotrienols can reverse or reduce damage in neuronal cells derived from PD patients and also in animal models. The research aims to investigate the role of tocotrienols in PD using various in vitro and in vivo models.

Utilising human neuronal cells lines and animal models of PD, the research team will determine the optimal safety range of tocotrienols, and conduct therapeutic tests in wild-type and mutant models.

The number of age-related neurological diseases is expected to rise with Singapore's ageing population. This partnership between NNI and Hovid Berhad is a major stepping stone that will pave the way for further collaborations on the treatment and prevention of other age-related neurological diseases such as dementia and stroke.

(Left) From NNI: Assoc Prof Ng Wai Hoe, Medical Director, and Prof Tan Eng King, Director, Research, with Mr David Ho, Managing Director, Hovid, and Professor Yuen Kah Hay, University Sains Malaysia.

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- Professor Tan Eng King
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