

RESEARCH DIRECTIONS

Chinese herbal medicine development

Associate Professor Dennis Chang, Professor Kelvin Chan and Professor Alan Bensoussan from Centre for Complementary Medicine Research (CompleMED) are collaborating to further develop a standardised herbal product for the treatment of stroke. This research is funded through the Hutchison Whampoa Guangzhou Baiyunshan Chinese Medicine Co., Ltd.

'Stroke affects more than 53,000 Australians every year and is Australia's second single greatest killer after heart disease', says Associate Professor Chang. 'Naoxinqing, a standardised herbal extract of the leave of *Diospyros kaki*, has been used for years for the treatment of stroke and other cardiovascular diseases but the underlying mechanism is not clear. This project will investigate the chemical definition of Naoxinqing for the purpose of quality assurance and establishing the pharmacokinetic profiles of the selective bioactive components of the extract. A clinical trial protocol will also be developed.'

The researchers will develop and validate high-performance thin layer chromatography and high performance liquid chromatography tandem mass spectrometry to be used to identify and quantitate the selected biomarker components of Naoxinqing extract. They will develop a model to study the pharmacokinetics of the identified bioactive markers and its metabolites. A pilot clinical trial protocol will be developed to evaluate clinical effectiveness of Naoxinqing in patients with subacute phase of ischemic stroke.



There is the potential for a significant impact in reducing the effects of stroke. The data generated from this research will form the basis for the further development of Naoxinqing and subsequent scientific studies.

Project Title: Chemical characterisation and pharmacokinetic study of Naoxinqing, a standardised herbal extract

Funding has been set at: \$60,000

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