

A Treatment for Acute Brain Injury

Never Stand Still

NewSouth Innovations

Genistein - a neuroprotective treatment for brain injury arising from excessive glutamate release such as occurs with stroke and epilepsy.

Background

Traumatic brain injury is a major medical and socio-economic problem globally and is one of the leading causes of death and disability.

A stroke is a medical emergency and can cause permanent neurological damage and death. Risk factors for stroke include old age, high blood pressure, previous stroke or transient ischemic attack (TIA), diabetes, high cholesterol, tobacco smoking and atrial fibrillation. Stroke is the second leading cause of death worldwide.

The Technology

This invention has arisen from our discovery of a novel isoform of the TRPC3 ion channel subunit (TRPC3c) which has notably stronger activation and associated Ca^{2+} entry than previously identified isoforms. We have shown that expression of this TRPC3c isoform is regulated in the brain, and that the channel activity of TRPC3c channels is potentially blocked by genistein and PyR3, another TRPC channel blocker.

Key Benefits

- Currently no known treatments for stroke
- TRPC3(c) drug target for ischaemic/excitotoxic brain injury
- Treatment of epileptic seizures
- Traumatic brain injury neuroprotection



The Opportunity

UNSW is seeking a commercial partner to licence and/or to work collaboratively with the inventor Professor Gary Housley in the development of this potentially disruptive therapeutic agent.

<https://research.unsw.edu.au/people/professor-gary-david-housley>

For more information contact:

Dr Joe Brennan

Business Development Manager
NewSouth Innovations

Ref 12_2686

T: +61 2 9385 7729 | M: +61 450 469 492

E: j.brennan@nsinnovations.com.au