



# Technology Transfer Opportunity

## Repositioned Therapeutic for Treatment of Multiple Sclerosis

### OPPORTUNITY:

Repositioned therapeutic for diseases associated with the demyelination of the central or peripheral nervous system such as Multiple Sclerosis (MS).

### Value Proposition:

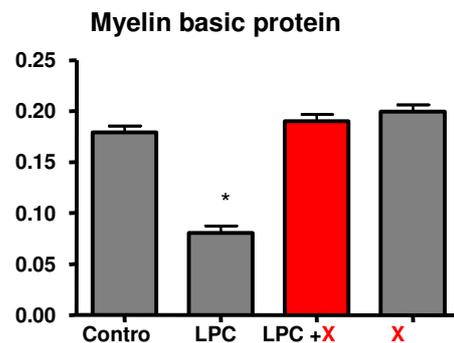
The prevalence rate of MS has been estimated at approximately 1 in 700, affecting females at approximately twice the rate of males although prevalence estimates vary greatly depending on region. As a progressive disease with considerable resultant disability, the condition is associated with a high cost of illness, a significant proportion of which relates to drug costs. Current treatments for MS rely on immunosuppressants aimed to reduce the length and degree of inflammation-mediated damage to insulating cells around nerve fibres. These therapies have several significant limitations including side-effects associated with immunosuppression, lack of effect on progressive forms of the disease and suboptimal route of administration.

The present therapeutic (Compound X) may present a first in class novel MS therapeutic which functions to protect and/or repair neuronal insulation. Compound X is a nootropic drug which is primarily known for its ability to enhance cognitive function. It is well tolerated, readily orally administered and safe in human.

Key advantages of Compound X over existing MS therapies:

- It directly prevents/reverses demyelination of neuronal cells.
- It shows no immunosuppression-related side effects.
- It can be orally administered and has a good safety record.

- It has the potential to be effective against progressive forms of MS and other diseases associated with demyelination such as transverse myelitis, Guillain-Barré syndrome, and others.



Application of this Compound X ("X") reverses/prevents demyelination injury in a well-established *in vitro* model for the study of MS-type demyelination insult.

### Market:

Pharmaceutical and biotechnology industry with an interest in neurotherapeutics and CNS diseases.

### Inventors:

Dr Keith Murphy and Dr Mark Pickering of UCD School of Biomolecular and Biomedical Sciences.

### Status:

*In vitro* data available, *in vivo* experiments planned for 2010. A US provisional patent application was filed in October 2009.

### Opportunity Sought:

Available for licensing

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