

LICENSING OPPORTUNITY:

## **Boosting second messengers**

# a novel approach to stimulate repair in progressive multiple sclerosis

#### **BACKGROUND INFORMATION**

Current therapeutics in multiple sclerosis (MS) have limited efficacy in preventing the transition towards the progressive phase and are no longer effective in the progressive stage of the disease.

In *progressive MS*, the central nervous system (CNS) fails to repair MS lesions. There is *no cure* for the over 1 million progressive MS patients worldwide.

Hasselt University and Maastricht University have found a new target to boost endogenous repair processes in an animal model for MS



**KNOWLEDGE IN ACTION** 



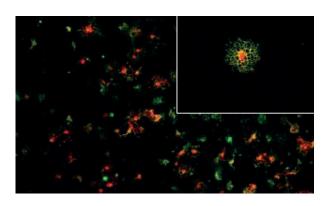


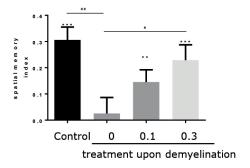
#### **COMPELLING RESULTS**

Research showed that selective boosting of second messengers improves remyelination in vitro and in vivo.

We showed a dose dependent increase in oligodendrocyte differentiation in vitro into mature myelinating oligodendrocytes. Moreover, in vivo remyelination was supported by an improvement in cognitive performance upon increasing cellular second messengers.

The target specificity is selected to avoid potential emetic side effects.





#### **KEY FEATURES AND ADVANTAGES**

- Induction of CNS repair (remyelination) in animal model for MS.
- Effective target specificity circumventing expected side-effects
- Applications include demyelinating diseases in general (e.g. progressive MS, X-ALD, PML, spinal cord injury).
- Hasselt University and Maastricht University have IPR for boosting remyelination in progressive MS.

#### MARKET POTENTIAL

The yearly average cost for a progressive MS patient is calculated on \$40k; with more than 1 million patients this renders the global annual costs on >\$40b.

No cure or treatment is available for secondary progressive MS patients.

For the alternative disease indications, there is a prevalence of at least 0.5 million patients worldwide.

In 2015, the progressive MS alliance determined the expected yearly revenue for a treatment for progressive MS on \$3b.

### **OUTSTANDING OPPORTUNITY**

Patent application is available for licensing.

Both universities are searching interested parties to complete development and commercialization.

#### **BUSINESS DEVELOPER**

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