Treatment for Multiple Sclerosis (MS) (RA1) (Yissum)

code: 7-2009-2289

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Immunomodulatory peptides derived from Japanese rice

Categories	**Peptide, Small Molecule, Inflammatory/Autoimmune diseases**
Development Stage	**Proof of concept in MS mouse model**
Patent Status	**Patent filed in the United States**
Market	**Worldwide, the incidence of multiple sclerosis (MS) is approximately 0.1%. The market for MS has total global revenues of over $6 billion.**

Highlights

- **Two peptides, termed IIIM1 and RA1,have found to be active in ameliorating MS symptoms in animals**
- **One of these peptides, RA1, is also found in Japanese rice (Oryza Sativa Japonica group) may be involved in the low prevalence and incidence of MS in Chinese and Japanese populations.**
- **Current MS treatments are of limited efficacy and have severe/unpleasant side effects.**
- **Initial toxicity tests have not revealed any side effects.**

Our Innovation

- **Two synthetic peptides have found to be effective for treating or protecting against inflammatory conditions or diseases, including multiple sclerosis (MS).**

Key Features

- **The two peptides are easily synthesized and can be delivered orally.**
- **RA1 can be delivered both orally and intraperitoneally**
- **RA1 is a naturally-occurring peptide found in Japanese rice and will thus require less stringent toxicology tests for FDA approval**

Development Milestones

- **Toxicity studies, clinical trials**

The Opportunity

- **Applications in the treatment of other inflammatory diseases, autoimmune diseases, and diseases associated with free radicals**
- **The peptides may be used as treatments and also as adjuvants to other treatments.**

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