

### New target and treatment for Parkinson (Yissum)

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# New pathway to reduce toxicity of $\alpha$ -Synuclein

Categories	Parkinson's disease, $\alpha$ -Synuclein, Brain lipids
Development Stage	Proof of concept demonstrated
Patent Status	Provisional patent application filed
Market	Parkinson's Disease is a neurodegenerative disorder affecting over four million people worldwide. The market for Parkinson's disease drugs predicted to reach \$3.7 billion in 2015.

# **Highlights**

- The protein  $\alpha$ -Synuclein ( $\alpha$ -Syn ) is a neuronal protein that is critically implicated in the pathogenesis of Parkinson's and other neurodegenerative diseases, including Alzheimer's disease.
- α-Syn interacts with brain lipids.
- New pathways involved in the pathogenicity of  $\alpha$ -Syn have been discovered.
- There is a pressing need for treatments that will both manage the symptoms of the disease and also slow its progression, while reducing incapacitating side effects.
- These will lead to more focused and effective treatments for Parkinson's.

# **Our Innovation**

New approach to treating Parkinson's disease uses agonists/antagonists of specific nuclear receptors to inhibit  $\alpha$ -Syn cytotoxicity and pathogenicity. In addition, specific compounds that interfere with the metabolism of phospholipids are employed to inhibit  $\alpha$ -Syn cytotoxicity and pathogenicity

# **Key Features**

- More closely focused on causes of Parkinson's disease
- Treats the disease rather than the symptoms

# **Development Milestones**

Seeking industrial cooperation for further development

### The Opportunity

Parkinson's disease and the related synucleinopathies, including familial and sporadic forms of the disease, involving  $\alpha$ -Syn-related toxicity.

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