L-DOPA Amide Derivatives for Treating Parkinson's Disease (Yissum)

code: 7-2006-138

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Novel treatment for Parkinson’s disease overcomes “on-off” phenomenon

Categories	Parkinson’s disease, L-dopa, L-dopa amide
Development Stage	Concept proven, in vivo human models
Patent Status	Pending patent application in, Europe, US and Israel (PCT publication № WO2004/069146)

Highlights

- Increases the endogenous level of dopamine to alleviate the motor complications of Parkinson’s disease and to delay the onset of the symptoms from the dramatic decrease in dopamine
- Formulated for buccal, oral, sub-lingual, parenteral, intranasal, intramuscular, intravenous, subcutaneous, intraduodenal or rectal administration
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Our Innovation

- Provides a pharmaceutical preparation for the treatment of patients suffering from PD comprising a composition of L-Dopamide
- A water-soluble compound could be applied f for rescue therapy. An advantage over the insoluble L-DOPA
- Involves an essential structural change to make L-DOPA more soluble and resistant to DOPA Decarboxylase
- Administrable without Carbidopa due to resistance to DOPA-decarboxylase
- L-Dopamide is slowly hydrolyzed to L-DOPA because it is resistance to DOPA decarboxylase
- Slow release addresses the on/off phenomenon of Parkinson’s
- Degrades to natural products

The Opportunity

Addresses the need for more effective therapy for Parkinson’s disease using a more sustained level of dopamine

Oral results

Oral application in animal model showed longer duration > 40% over L- DOPA.

- Higher efficiency as a proof of concept in experiments made side by side with L-DOPA
- PK studies available

Development Milestones

Ready for toxicology studies.

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