New Nasal Delivery Technology for Disease Treatments (Yissum)

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CNS (MS, Insomnia, Sleepiness, Emesis, Parkinson), Hyperglycemias, Hot Flushes, Obesity

Categories	Drug delivery, Novel Carrier
Development Stage	Concept has been proved in animal models (including sheep) for many diseases and various drugs including large molecules and peptides. Industrial upscale results.
Patent Status	Patents filed in United States, Europe, Japan, Israel, India and China; published in the United States, Europe and Japan
Market	With advances in biotechnology, nasal drug delivery is increasingly becoming a more viable alternative to oral and injectable routes of administration for an increasing number of drugs including peptides..

Highlights

- Technology for efficient drug therapy by nasal delivery
- Wide number of experiments in animal models
- Examples: very efficient treatment and disease prevention in EAE mice (drugs: steroids, glatiramer acetate, new drug combinations), antiemetic in rat model (drug: granisetron), antiwrithing effect (drug: diazepam), malaria prevention and treatment (drug: DHA), insomnia (drugs: benzodiazepine, melatonin, antihistamines), obesity (drug: insulin, others) Parkinson rotational model (drug: apomorphine),

Our Innovation

- Platform drug delivery carrier technology for approved or new drugs, single drugs or combination of drugs (also including new drug combinations).

Key Features

- Improved delivery into the brain
- Better bioavailability by nasal route than by oral or subcutaneous routes
- Particularly important in crisis management such as for multiple sclerosis, Alzheimer, insomnia, glioma, sleepiness (EDS), epileptic seizures, hyperglycemia, hypoglycaemia, hot flushes, emesis, Parkinson rigidity
- Carrier ingredients already have FDA approval for nasal delivery
- Increase patient compliance - needle-free alternative for delivering drugs for acute and chronic conditions, allowing self-medication

Development Milestones

- Proof of concept achieved in animal models
- Planned Phase I and Phase II trials

The Opportunity

- Seeking investment and cooperation for ongoing development of a number of drugs
- Prior FDA ingredient approvals will lead to faster product approval process

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