Intraoral sustained-release device for treatment of Parkinson's and other neurological disorders

A novel intraoral device for sustained and controlled medication delivery for the treatment of neurological disorders.

IP Status: US Patent Issued; Issued Patent No. 12,161,755

Applications

- Sustained dosing of medications
- Treatment of Parkinson's and other neurological disorders

Technology Overview

Patients who suffer from chronic neurological disorders such as Parkinson's disease depend on medications to control their symptoms. Standard oral dosing regimes can result in variable levels of drugs in the bloodstream and are dependent on rigid patient compliance, both of which serve to lower the overall quality of care. Researchers at the University of Minnesota have developed a novel intraoral sustained-release device that delivers medication continuously through both buccal mucosal and gastrointestinal absorption. This device consists of nested sachets made from porous, non-toxic materials, allowing for controlled, on-demand drug release. This novel system has the potential to improve symptom management for Parkinson's disease and offers broad potential for other drug delivery applications.

Phase of Development

TRL: 3-4

Prototype developed. Optimization of formulations and pharmacokinetic studies are ongoing.

Desired Partnerships

This technology is now available for:

- License
- Sponsored research
- Co-development

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Category

Life Sciences/Human Health Life Sciences/Medical Devices

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