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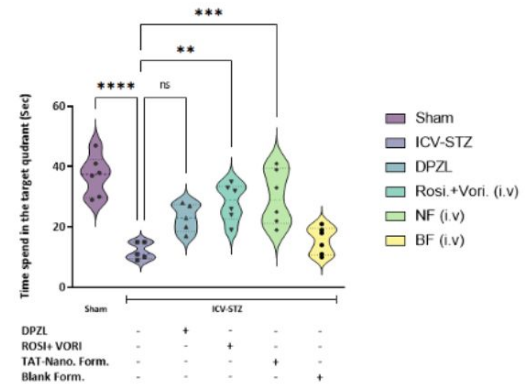
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A therapeutic composition for neurodegenerative diseases and a method of preparing the same

NEED

Neurodegenerative diseases like Alzheimer's and Parkinson's are a growing concern, with limited effective treatments. A new therapeutic composition offers targeted delivery of powerful drugs, improving treatment outcomes by enhancing bioavailability.

TECHNOLOGY OVERVIEW

This therapeutic composition combines rosiglitazone and vorinostat nanoparticles encapsulated in a polymer shell, enabling better drug delivery to treat neurodegenerative diseases. The design uses a hydrophobic core and an amphiphilic shell with a transactivator peptide for targeted action, enhancing drug efficiency.

TECHNOLOGY KEY FEATURES

Nanoparticles for targeted drug delivery, amphiphilic polymer shell, TAT peptide for crossing the blood-brain barrier, dual-drug formulation (rosiglitazone and vorinostat), improved bioavailability, specialized preparation method, aimed at neurodegenerative diseases treatment.

Read more here

MARKET ANALYSIS

The global market for neurodegenerative disease treatments is expected to grow at a CAGR of 5.4% from 2023 to 2033. Increased aging populations, advancements in drug delivery systems, and higher incidences of neurodegenerative conditions will drive growth in the sector.

Target Industries

1) Pharmaceutical companies, 2) Drug delivery system developers, 3) Research institutions focusing on neurodegenerative diseases.

AT A GLANCE

- SDG 3 (Good Health and Well-Being), SDG 9 (Industry, Innovation, and Infrastructure), SDG 10 (Reduced Inequality), SDG 17 (Partnerships for the Goals)

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