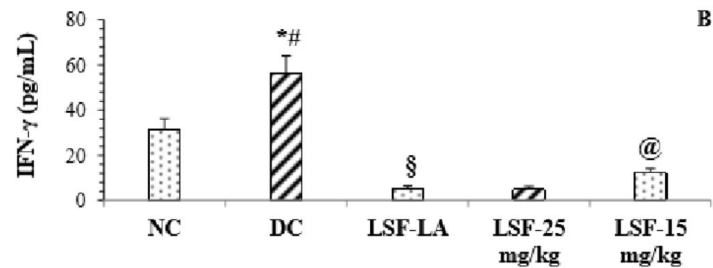




GRANTED

(IN389948)

Surfactant-free, self-assembling micelles of fatty acid conjugated to hydrophilic drug and method for preparing the same



NEED

Type 1 Diabetes treatments often face challenges such as poor drug stability and reduced bioavailability. This surfactant-free micelle system promises enhanced delivery of lisofylline with improved stability, addressing these issues effectively.

TECHNOLOGY OVERVIEW

This surfactant-free, self-assembling micelle system conjugates linoleic acid to lisofylline, a hydrophilic drug. It provides higher stability, improved bioavailability, and controlled release for Type 1 Diabetes treatment, offering a potential breakthrough in drug delivery.

TECHNOLOGY KEY FEATURES

Surfactant-free micelles; self-assembling system; linoleic acid conjugated to lisofylline; improved stability; enhanced bioavailability; reduced inactive metabolite formation.

[Read more here](#)

MARKET ANALYSIS

The global diabetes drug market is projected to grow at a CAGR of 6.3% from 2023 to 2033. Key drivers include rising diabetes incidence and demand for advanced drug delivery solutions. (Source: MarketsandMarkets, 2023)

Target Industries

1) Pharmaceutical companies focusing on drug delivery systems; 2) Research institutions developing nanoformulations; 3) Diabetes treatment specialists.

AT A GLANCE

- SDG 3 (Good Health and Well-being), SDG 9 (Industry, Innovation, and Infrastructure), SDG 12 (Responsible Consumption and Production)

Technology is available for licensing/ co-development.

Reach out to Prof. Deepak Chitkara, Coordinator, BITS Technology Enabling Centre,
BITS Pilani Contact Details: tec.bits@pilani.bits-pilani.ac.in, 91 1596-255913

