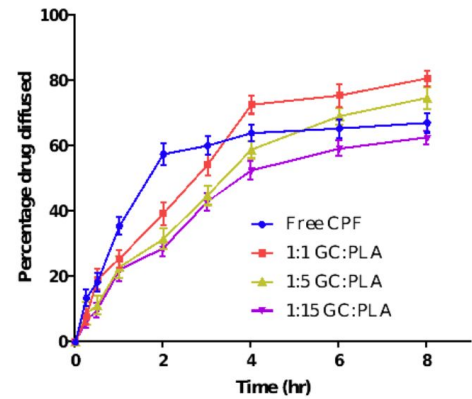




GRANTED

(IN398719)

A muco-adhesive polymeric micellar structure and process for preparing the same



NEED

Ocular drug delivery systems face challenges like low bioavailability and short residence time. Muco-adhesive polymeric micellar structures offer a potential solution to enhance drug retention and efficacy in eye treatments.

TECHNOLOGY OVERVIEW

This invention presents a muco-adhesive polymeric micellar structure that encapsulates a quinolone drug like ciprofloxacin, improving its ocular delivery. The micelles, sized between 50-250 nm, are formed using glycol chitosan and poly(lactic acid).

TECHNOLOGY KEY FEATURES

1) Muco-adhesive polymeric micelles for enhanced ocular drug delivery. 2) Nanometer-sized micelles (50-250 nm) for optimized absorption. 3) Utilizes glycol chitosan and poly(lactic acid) for stability and biocompatibility.

[Read more here](#)

MARKET ANALYSIS

The global ophthalmic drug delivery market is expected to grow at a CAGR of 6.9% from 2023 to 2033, driven by increasing demand for advanced drug delivery systems and rising eye disease prevalence. (Source: Market Research Future, 2023)

Target Industries

1) Pharmaceutical companies focusing on ophthalmic drugs and drug delivery technologies. 2) Biotech firms developing novel delivery systems for enhanced drug targeting. 3) Healthcare providers seeking effective treatments for eye conditions like glaucoma and infections.

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.

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