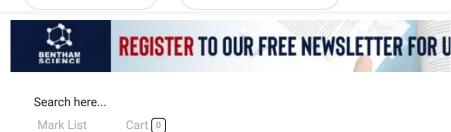
My Subscriptions ▼

Welcome IFTM University









Review Article

A Review on Polymeric Nanostructured Micelles for the Ocular Inflammation-Main Emphasis on Uveitis

Author(s): Nikita Kaushal, Manish Kumar*, Amanjot Singh, Abhishek Tiwari, Varsha

Tiwari and Rakesh Pahwa Volume 11, Issue 1, 2023

Published on: 23 November, 2022

Page: [34 - 43] Pages: 10

DOI: <u>10.2174/2211738511666221019160908</u>

Price: \$65











Abstract

Background: Various types of nano-formulations are being developed and tested for the delivery of the ocular drug. They also have anatomical and physiological limitations, such as tear turnover, nasal lachrymal waste, reflex squinting, and visual static and dynamic hindrances, which pose challenges and delay ocular drug permeation. As a result of these limitations, less than 5% of the dose can reach the ocular tissues.

Objective: The basic purpose of designing these formulations is that they provide prolonged retention for a longer period and can also increase the course time.

Methods: To address the aforementioned issues, many forms of polymeric micelles were developed. Direct dissolving, dialysis, oil-in-water emulsion, solvent evaporation, co-solvent evaporation, and freeze-drying are some of the methods used to make polymeric nano micelles.

Results: Their stability is also very good and also possesses reversible drug loading capacity. When the drug is given through the topical route, then it has very low ocular bioavailability.

Conclusion: The definition and preparation process of polymeric micelles and antiinflammatory drugs used in uveitis and the relation between uveitis and micelles are illustrated in detail.

Keywords: Polymeric micelles, visual static, prolonged retention, reflex squinting, ocular drug permeation, course time.



Total citation Recent citation

Field Citation Ratio Relative Citation Ratio

FIND YOUR **INSTITUTION**

Journal Information > About Journal > Editorial Board > Current Issue > Volumes/Issues

For Authors & Reviewers

Explore Articles

Next »

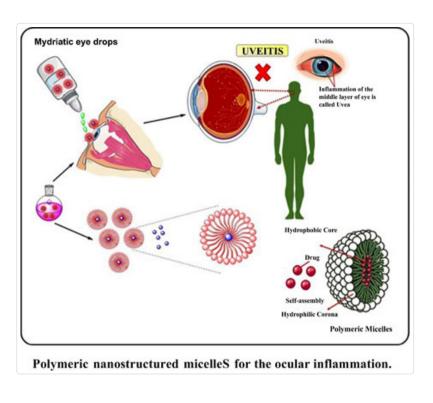
Open Access

For Visitors

« Previous

Graphical Abstract

https://www.eurekaselect.com/article/127100



Rights & Permissions | Print | Export Mark Item Purchase PDF Cite as

We recommend

A Review on Polymeric Nano Micelles Based Delivery to the Posterior Segment of the Eye Sheetal Devi et al., Nanoscience & Nanotechnology-Asia, 2019

Polymeric Micelles for Ocular Delivery: Progress and Issues

Nida Akhtar et al., Pharmaceutical Nanotechnology, 2015

Defining the Properties of pH -sensitive Polymeric Micellar Ocular Delivery System of Miconazole Nitrate for the Management of Fungal Endophthalmitis

Vaishali Agrawal et al., Pharmaceutical Nanotechnology, 2014

A Novel Approach of Drug Localization through Development of Polymeric Micellar System Containing Azelastine HCl for Ocular Delivery

Sheetal Devi et al., Pharmaceutical Nanotechnology, 2019

Qualitative Estimation of Drug Entrapment Efficiency in Polymeric Nano - Micelles Using Dissipative Particle Dynamics (DPD)

Farzin Hadizadeh et al., Pharmaceutical Nanotechnology, 2017

Design and Synthesis of Sillenite-Based Micro/Nanomaterials and Their Applications in Photocatalysis

Xiujun Cao et al., Progress in Chemistry, 2020

Regulation of Condensed States of Biological Macromolecules by Rationally Designed Nanomaterials

Qiao Jiang et al., Progress in Chemistry, 2020

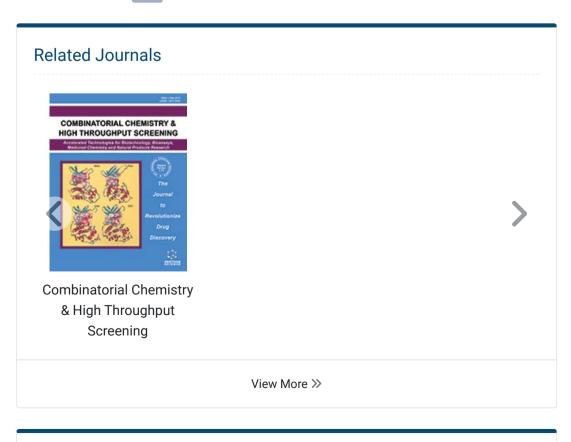
Self-Assembly of Small Molecule Modified DNA and Their Application in Biomedicine * Jiahui Ma et al., Progress in Chemistry, 2021

Carbon dots in lubrication applications HE Chuang et al., Progress in Chemistry, 2021

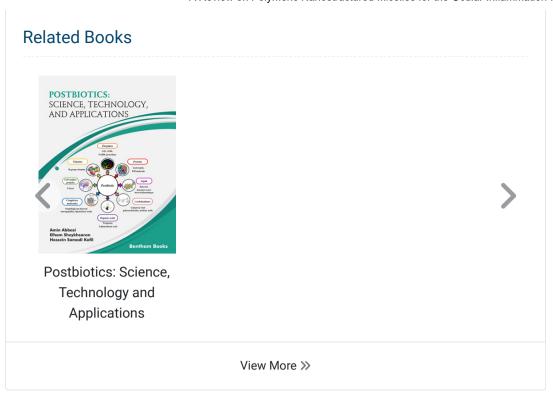
Machine learning-based approach: global trends, research directions, and regulatory standpoints

Raffaele Pugliese et al., Data Science and Management, 2021

Powered by TREND MD



https://www.eurekaselect.com/article/127100 2/3





© 2023 Bentham Science Publishers | Privacy Policy