IJARSCT



International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Impact Factor: 7.67

Volume 5, Issue 11, May 2025

Study and Evaluation of Ophthalmic Drug Delivery System

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Abstract: Ophthalmic drug delivery is a highly challenging field due to the unique anatomy and physiology of the eye, which presents multiple barriers to effective therapeutic concentrations. Traditional systems like eye drops suffer from poor bioavailability and rapid pre-corneal elimination. This review explores current advancements in ophthalmic drug delivery systems, including conventional, novel, and nanotechnology-based approaches, evaluating their efficacy, limitations, and future prospects.

Keywords: Ophthalmic drug delivery, Eye drops, Nanotechnology, In-situ gel, Ocular inserts, Dendrimers, Microneedles





