

A review on lipid-polymer hybrid nanoparticles and preparation with recent update

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Abstract:

Ongoing progression in nanotechnology has demonstrated that nanoparticles have indicated promising potential as in delivering the drug. The acceptance of nanoparticles and their applications also reported in clinical advancement to upgrade and improve the pharmacokinetic and pharmacodynamics properties of therapeutic compounds. In this review, we talk about the next-generation core-shell nanostructures like lipid-polymer hybrid nanoparticles (LHNPs) and their application and formulation aspects. Conceptually, derived from both polymeric nanoparticles and liposome, which gave them a name of hybrid nanoparticles. It is basically polymer core enveloped by a lipid layer. The major issue arises with nanoparticles with polymer is related to entrapment efficiency and LHNPs have proved to solve this issue to a vast extent, due to their hybrid components.

Keywords: Emulsion Method; Lipid-Polymer Hybrid Nanoparticles (LPHNs); Nanoparticles

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