



Recent advances in nanocarrier-loaded gels: Which drug delivery technologies against which diseases?

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Mots-clés	Fullerene [11], Gel Liposome Micelle Dendrimer [12], Health application [13], In vivo [14], Lipid nanocapsules [15], Polymeric nanocapsules [16], Solid nanocapsules [17] The combination of pharmaceutical technologies can be a wise choice for developing innovative therapeutic strategies. The association of nanocarriers and gels provides new therapeutic possibilities due to the combined properties of the two technologies. Gels support the nanocarriers, localize their administration to the target tissue, and sustain their release. In addition to the properties afforded by the gel, nanocarriers can provide additional drug sustained release or different pharmacokinetic and biodistribution profiles than those from nanocarriers administered by the conventional route to improve the drug therapeutic index. This review focuses on recent (over the last ten years) in vivo data showing the advances and advantages of using nanocarrier-loaded gels. Liposomes, micelles, liquid and solid lipid nanocapsules, polymeric nanoparticles, dendrimers, and fullerenes are all nanotechnologies which have been recently assessed for medical applications, such as cancer therapy, the treatment of cutaneous and infectious diseases, anesthesia, the administration of antidepressants, and the treatment of unexpected diseases, such as alopecia.
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