

lipid nanoparticles

NCT Number		Title	Authors	Description	Identifier	Dates
1	pubmed:36108749	Lipid nanoparticle-encapsulated VEGFa siRNA facilitates cartilage formation by suppressing angiogenesis	Yi Chen Wei Chen Yiming Ren Shuling Li Miao Liu Jiahua Xing Yudi Han Youbai Chen Ran Tao Lingli Guo Xiang Sui Quanyi Guo Shuyun Liu Yan Han	Cartilage is an important tissue that is widely found in joints, ears, nose and other organs. The limited capacity to regenerate makes cartilage reconstruction an urgent clinical demand. Due to the avascular nature of cartilage, we hypothesized that inhibition of vascularization contributes to cartilage formation. Here, we used VEGFa siRNA to inhibit the infiltration of the local vascular system. Optimized lipid nanoparticles were prepared by microfluidics for the delivery of siRNA. Then, we...	pmid:36108749 doi:10.1016/j.ijbiomac.2022.09.065	Thu, 15 Sep 2022 06:00:00 -0400
2	pubmed:36108993	Levofloxacin in nanostructured lipid carriers: preformulation and critical process parameters for a highly incorporated formulation	Viviane Lucia Beraldo de Araújo Ana Flávia Siqueira Vicente Marcelo van Vliet Lima Anita Umerska Eliana Barbosa Souto Lidia Tajber Laura de Oliveira Nascimento	The first step of a successful nanoformulation development is preformulation studies, in which the best excipients, drug-excipient compatibility and interactions can be identified. During the formulation, the critical process parameters and their impact must be studied to establish the stable system with a high drug entrapment efficiency (EE). This work followed these steps to develop nanostructured lipid carriers (NLCs) to deliver the antibiotic levofloxacin (LV). The preformulation studies...	pmid:36108993 doi:10.1016/j.ijpharm.2022.122193	Thu, 15 Sep 2022 06:00:00 -0400
3	pubmed:36109461	Directing the Way-Receptor and Chemical Targeting Strategies for Nucleic Acid Delivery	Ricarda Carolin Steffens Ernst Wagner	Nucleic acid therapeutics have shown great potential for the treatment of numerous diseases, such as genetic disorders, cancer and infections. Moreover, they have been successfully used as vaccines during the COVID-19 pandemic. In order to unfold full therapeutical potential, these nano agents have to overcome several barriers. Therefore, directed transport to specific tissues and cell types remains a central challenge to receive carrier systems with enhanced efficiency and desired...	pmid:36109461 doi:10.1007/s11095-022-03385-w	Thu, 15 Sep 2022 06:00:00 -0400
4	pubmed:36110028	Microneedle mediated transdermal delivery of -sitosterol loaded nanostructured lipid nanoparticles for androgenic alopecia	Kousalya Prabahar Ubaidulla Udhumansha Nehal Elsherbiny Mona Qushawy	Plant-derived 5 -reductase inhibitors, such as -sitosterol and phytosterol glycosides, have been used to treat androgenic alopecia, but their oral absolute bioavailability is poor. This study aimed to develop a transdermal drug delivery system of -sitosterol (BS) using a nanostructured lipid carrier (NLC) incorporated into polymeric microneedles (MN). Using a high-speed homogenization method, NLC was formulated variables were optimized by Box-Behnken statistical design. The optimized...	pmid:36110028 doi:10.1080/10717544.2022.2120927	Fri, 16 Sep 2022 06:00:00 -0400
5	pubmed:36111480	Experimental study of resveratrol-solid lipid nanoparticles in promotion of osteogenic differentiation of bone marrow mesenchymal stem cells	Feng Xiong Cheng Yao Liangshuang Zhou Weifeng Li Bangguo Wei Jianzhong Guan Yingji Mao	CONCLUSION: Encapsulation of SLNs can improve the effect of Res on promoting osteogenesis, and achieve the best effect of osteogenic differentiation of BMSCs at a lower concentration, which is expected to be used in the treatment of bone homeostasis imbalance diseases.	pmid:36111480 doi:10.7507/1002-1892.202205009	Fri, 16 Sep 2022 06:00:00 -0400