lipid nanoparticles

	NCT Number	Title	Authors	Description	Identifier	Dates
1	pubmed:36126785	Spray drying siRNA-lipid nanoparticles for dry powder pulmonary delivery	Christoph M Zimmermann Domizia Baldassi Karen Chan Nathan B P Adams Alina Neumann Diana Leidy Porras-Gonzalez Xin Wei Nikolaus Kneidinger Mircea Gabriel Stoleriu Gerald Burgstaller Dominik Witzigmann Paola Luciani Olivia M Merkel	While all the siRNA drugs on the market target the liver, the lungs offer a variety of currently undruggable targets which could potentially be treated with RNA therapeutics. Hence, local, pulmonary delivery of RNA nanoparticles could finally enable delivery beyond the liver. The administration of RNA drugs via dry powder inhalers offers many advantages related to physical, chemical and microbial stability of RNA and nanosuspensions. The present study was therefore designed to test the...	pmid:36126785 doi:10.1016/j.jconrel.2022.09.021	Tue, 20 Sep 2022 06:00:00 -0400
2	pubmed:36129161	Neuroprotective effect of naringenin-loaded solid lipid nanoparticles against streptozocin-induced neurotoxicity through autophagy blockage	Zeinab Nouri Soraya Sajadimajd Leila Hoseinzadeh Gholamreza Bahrami Elham Arkan Sajad Moradi Fereshteh Abdi Mohammad Hosein Farzaei	Autophagy is a pivotal contributing factor to modulate the progression of neurodegenerative diseases. Although naringenin (Nar) has shown beneficial effects against neurodegenerative diseases, its poor solubility and bioavailability have limited its application. The present research aimed to design a nanostructured formulation of Nar to achieve an enhanced therapeutic effect. Herein, Nar-loaded solid lipid nanoparticles (Nar-SLNs) were prepared and characterized. Then, PC12 cells were exposed to...	pmid:36129161 doi:10.1111/jfbc.14408	Wed, 21 Sep 2022 06:00:00 -0400
3	pubmed:36129254	Leveraging Biological Buffers for Efficient Messenger RNA Delivery via Lipid Nanoparticles	Michael I Henderson Yulia Eygeris Antony Jozic Marco Herrera Gaurav Sahay	Lipid nanoparticles containing messenger RNA (mRNA-LNPs) have launched to the forefront of nonviral delivery systems with their realized potential during the COVID-19 pandemic. Here, we investigate the impact of commonly used biological buffers on the performance and durability of mRNA-LNPs. We tested the compatibility of three common buffersHEPES, Tris, and phosphate-buffered salinewith a DLin-MC3-DMA mRNA-LNP formulation before and after a single controlled freeze-thaw cycle. We hypothesized...	pmid:36129254 doi:10.1021/acs.molpharmaceut.2c00587	Wed, 21 Sep 2022 06:00:00 -0400