lipid nanoparticles

	NCT Number	Title	Authors	Description	Identifier	Dates
1	pubmed:35916335	Antitumour effects of a solid lipid nanoparticle loaded with gemcitabine and oxaliplatin on the viability, apoptosis, autophagy, and Hsp90 of ovarian cancer cells	Ashwaq A Al-Mutairi Mayson H Alkhatib	The present study aimed to explore the sensitising capability of the anticancer agents, gemcitabine (GEM) and oxaliplatin (OXA), encapsulated in a novel SLN (GEM:OXA-SLN) against the ovarian cancer cell lines. A novel SLN, prepared using hot homogenisation by mixing phosphatidylcholine, cholesterol, tween 80, and oleic acid, was characterised using Transmission Electron Microscope and zetasizer. The anticancer activities and the underlying molecular mechanisms of GEM:OXA-SLN were investigated	pmid:35916335 doi:10.1080/02652048.2022.2109218	Tue, 02 Aug 2022 06:00:00 -0400
2	pubmed:36064266	Advances in mRNA vaccines	Mengyun Li Zining Wang Chunyuan Xie Xiaojun Xia	mRNA vaccines have been increasingly recognized as a powerful vaccine platform since the FDA approval of two COVID-19 mRNA vaccines, which demonstrated outstanding prevention efficacy as well as great safety profile. Notably, nucleoside modification and lipid nanoparticle-facilitated delivery has greatly improved the immunogenicity, stability, and translation efficiency of mRNA molecule. Here we review the recent progress in mRNA vaccine development, including nucleoside modification, in vitro	pmid:36064266 pme:PMC9214710 doi:10.1016/bs.ircmb.2022.04.011	Mon, 05 Sep 2022 06:00:00 -0400
3	pubmed:36070841	Simultaneous quantification of multiple RNA cargoes co-loaded into nanoparticle-based delivery systems	Abhijeet Lokras Akash Chakravarty Thomas Rades Dennis Christensen Henrik Franzyk Aneesh Thakur Camilla Foged	Robust, sensitive, and versatile analytical methods are essential for quantification of RNA drug cargoes loaded into nanoparticle-based delivery systems. However, simultaneous quantification of multiple RNA cargoes co-loaded into nanoparticles remains a challenge. Here, we developed and validated the use of ion-pair reversed-phase high-performance liquid chromatography combined with UV detection (IP-RP-HPLC-UV) for simultaneous quantification of single- and double-stranded RNA cargoes. Complete	pmid:36070841 doi:10.1016/j.ijpharm.2022.122171	Wed, 07 Sep 2022 06:00:00 -0400