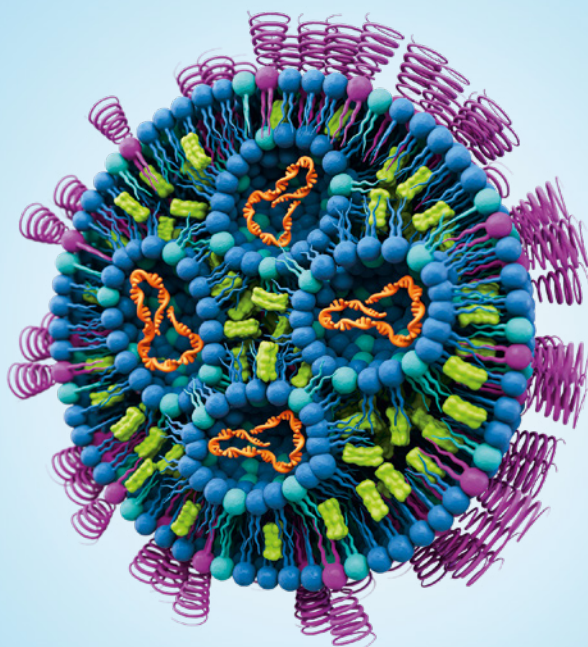


Lipid Nanoparticles for Gene Delivery

Bringing you advanced drug delivery technologies from Vancouver



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Lipid nanoparticles (LNPs) enable the delivery of a variety of molecules, including nucleic acids such as mRNA, to cells and are therefore an essential tool in gene therapy. To unleash the potential of vaccines, protein and gene therapies, drug developers need the support of a trusted and experienced provider of novel functional excipients who understands how to overcome biological barriers and optimize new and emerging drugs.

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Evonik Health Care has decades of experience working with all types of drug delivery technologies including lipids, lipid formulations and lipid production methods. With its laboratories near Vancouver, British Columbia, formerly known as Transferra Nanosciences Inc. or Northern Lipids, Evonik Health Care is a leading CDMO for lipid nanoparticles and liposome-based formulations.

We have an unparalleled track record in early stage development, scale-up and production of lipid-based formulations for nucleic acid therapeutics and other advanced nanomedicines. Our unique analytical capabilities and the ability to support clients from concept to commercialization help you develop manufacturing processes that can be scaled up for success.

Forward-looking solutions for lipid-based nanoparticle drug formulations

Evonik's Vancouver laboratories are a leading technology, product, and service provider of advanced lipid-based nanoparticle drug formulations. The Evonik Vancouver site near Burnaby, British Columbia, offers Chemistry, Manufacturing and Control (CMC) services to customers conducting pharmaceutical research and development. With proven success in moving drug candidates from the bench into clinical trials, Evonik's Vancouver site focuses on LNP drug delivery systems from pre-formulation R&D services through GMP clinical trial manufacturing and commercial process development.

Evonik Health Care excels in the provision of products, technologies, and services for drug delivery in both parenteral and oral formulation applications. The addition of the lipid nanoparticle formulation services and LIPEX® extruder equipment of the Vancouver site continues to broaden and strengthen the array of services and products we offer globally.



INTEGRATED FORMULATION SERVICES

- Significant experience with formulating oligonucleotide drugs
- Enhancement of solubility and bioavailability of high potency APIs
- Development expertise through 100+ unique formulations with our lipid nanoparticle technology
- Seamless transition from scale up through clinical manufacturing
- Comprehensive analytical services to accompany R&D, toxicology, clinical and commercial manufacturing
- LIPEX® extruders ranging from benchtop to commercial production scale

TECHNICAL EXCELLENCE WITH PHASE-APPROPRIATE QUALITY ASSURANCE

- Quality systems around manufacturing processes subject to 25+ audits in the last 5 years
- About 50% of the audits were conducted by European Qualified Persons (QP)
- No quality system deficiencies noted by Health Canada

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