

Optimising mRNA-LNP Manufacturing for Clinical Success

THE CHALLENGE

RNA-based therapies are progressing rapidly and offer transformative potential. AI is increasingly used to optimise mRNA design, improving stability and translation efficiency. But **coordinating multiple partners across IVT, purification, and drug product manufacture** can complicate supply chains and delay timelines. Additional hurdles include **cold chain storage for LNPs** and **navigating licensing requirements**. With technology evolving so quickly and the expertise required spanning diverse disciplines, **identifying a clear manufacturing path** can be difficult.

OUR APPROACH

Rapid, small-scale, GMP-ready mRNA manufacturing is at the core of our offer, optimised for speed, efficiency, and quality. Our team specialises in enhancing IVT (in vitro transcription) reactions and purification strategies to **maximise mRNA yield and purity**. By leveraging established chromatography and tangential flow filtration (TFF) technologies, we deliver robust, scalable processes. As a **single-point solution provider**, we support the full journey **from IVT through to LNP formulation and final drug product**, with integrated fill finish capabilities and GMP-compliant production for clinical delivery.

DELIVERABLES

- **End-to-end mRNA-LNP Process Development:** Includes tailored IVT optimisation, scalable purification strategies, and LNP formulation using proven encapsulation platforms.
- **Fill Finish within our GMP-Ready Manufacturing Facility:** Clinical-ready drug product manufacturing with integrated fill finish and cold chain considerations.
- **Comprehensive Analytical Support:** Robust assays to ensure mRNA integrity, potency, and encapsulation efficiency aligned with GMP standards.

VALUE

Our streamlined mRNA-LNP manufacturing platform accelerates development timelines, reduces costs, and mitigates risks, enabling rapid, cost-effective transition from process development through clinical manufacturing and beyond.

EXMOOR PHARMA AT A GLANCE



Philosophy: With a focus on the entire journey from bench to market, we streamline and de-risk projects to maximise product success.



Capability: A full-service partner delivering high-value solutions for better, faster, and cost-effective outcomes.



Trust: Building lasting relationships through trust, transparency, and respect.



Collaboration: An open partnership that complements and enhances your capabilities.



Experience: Over 20 years of expertise, supporting 170+ clients from discovery to patient delivery across diverse programs.

