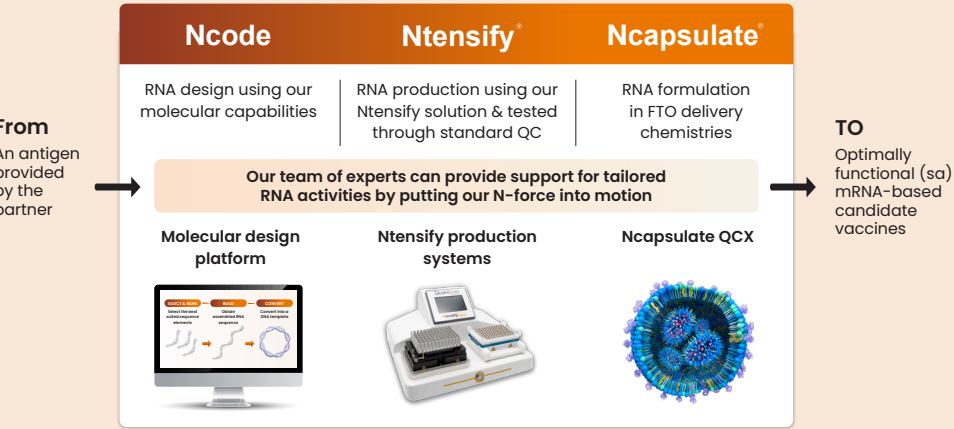


Quantoom as your trusted RNA partner

We put our N-force into motion with our partners, allowing them to accelerate the translation of their science and research into life-changing RNA-LNP drugs.



In vivo validation of our Nforce toolbox

	RNA	LNP	Sequence design & optimization	RNA/formulation preparation	In vitro testing	POC in target species	Early-phase development	Partners
Animal health	saRNA	REF LNP	Ncode V2.0	PPRV				 BIOTECHNOLOGY
	sa/mRNA	QCX-002	Ncode V2.0	PPRV				
	saRNA	QCX-002	Ncode V2.0	Avian Influenza, H5N1				
	mRNA	QCX-002	Ncode V2.0	Feline cancer		Feline cancer		
	RNA	LNP	Sequence design & optimization	RNA/formulation preparation	In vitro testing	Preclinical	Clinical	Partners
Cancer vaccines	mRNA	QCX-002	Ncode V2.0	Melanoma (shared antigen)				 Cancer Research Group Arizona State University
	mRNA	QCX-002	Ncode V2.0	Melanoma (neoantigen)				
	mRNA	QCX-002	Ncode V2.0	Melanoma (neoantigen)				
	mRNA	QCX-002	Ncode V2.0	Colorectal (neoantigen)				
Prophylactic vaccines	mRNA	REF LNP	Ncode V1.0	Rabies				 Cancer Research Group
	mRNA	REF LNP	Ncode V1.0	COVID-19 & Influenza				
	saRNA	QCX-002	Ncode V1.0	Influenza H5N1				
	mRNA	REF LNP	Ncode V1.0	Malaria				

Pre-clinical programs

+10 pre-clinical development programs have demonstrated the power of N-Force for infectious diseases and oncology applications

Commercial track record

+20 countries are actively using our Ntensify technologies, already 3 under GMPs

Our company

Quantoom Biosciences is a full-stack RNA partner for mRNA- and saRNA-based vaccines and therapeutics. Its **N-force** toolbox relies on 3 core elements to turn any antigen into a (sa)mRNA-LNP drug product: **Ncode** for sequence design and optimization, **Ntensify®** for RNA production and **Ncapsulate®** for RNA-LNP formulation. Launched in 2023, the **Ntensify** solution enables fully integrated, scalable RNA production by combining processes, equipment, reagent mixes, and disposables and has gained global adoption, being recognized for performance and ease-of-use. Beyond technology, Quantoom Biosciences assists its partners by providing extensive enabling solutions, ranging from strategic R&D partnerships to sequence design & optimization.

BELGIUM
Quantoom Biosciences Headquarters.
Showroom for Ntensify® technologies.

Visit our website

www.quantoom.com

Rue de la Maîtrise 11
1400 Nivelles
BELGIUM

Get in touch!

✉ bd@quantoom.com

🌐 www.quantoom.com

Trusted by

Supported by

Member of



N-Force toolbox

End-to-end RNA LNP technologies.
Turn any antigen into a drug product.

Ncode

Turn any antigen into an optimized sa/mRNA construct

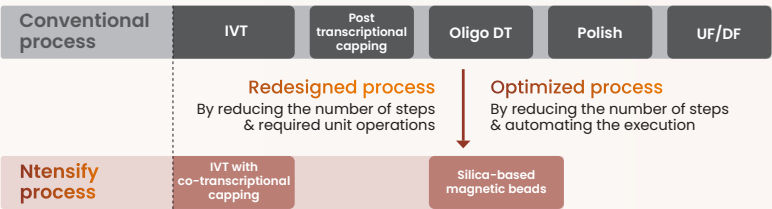
We offer a set of tools and expertise to help you optimally design your sequence for downstream RNA applications.



Ntensify®

RNA manufacturing technologies

STARTING WITH
PROCESS REDESIGN
AND OPTIMIZATION



Demonstrated
by robust DoE

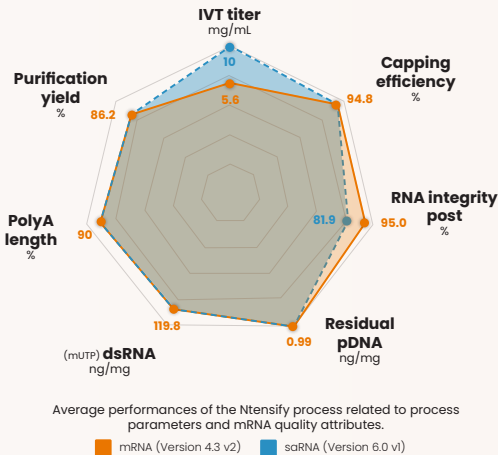
- > 2000 individual reactions
- 100+ different constructs tested
- Different mRNA Sizes (1 to 4kb)
- Different saRNA sizes (8 to 12Kb)



POSITIVE REPORT BY
REGULATORY AGENCIES



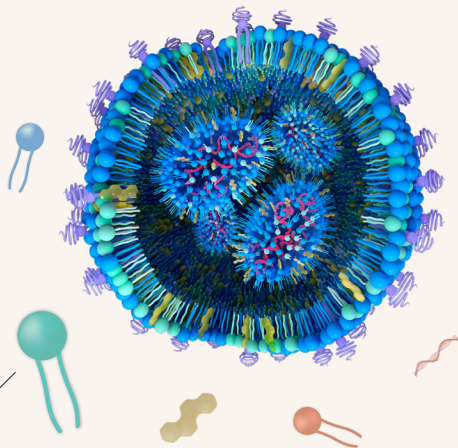
DRUG MASTERFILE IN
REGISTRATION AT FDA



Ncapsulate® QCX

Proprietary delivery chemistries

We offer a library of delivery chemistries with demonstrated performances in in-vivo and target species. Compared to gold-standard solution, our chemistries increase total protein expression. They are available as various offering depending on your specific needs; from raw material to custom services.



Ncapsulate QCX

Ntensify product line

mano



Entry point for RNA
construct assessment
In vitro & in vivo studies

mRNA capacity per batch (purified naked mRNA)

125 µg – 3 mg

micro



Drug discovery
& pre-clinical phase
Up to 96 constructs

saRNA capacity per batch (purified naked saRNA)

320 µg – 2.5 mg

mini



Drug discovery
& pre-clinical phase
Up to 48 constructs

Level of automation & run duration

Manual in 4 hours

From 4 to 6 hours

Automated in under 1 day

midi flex



Clinical trials &
commercial production

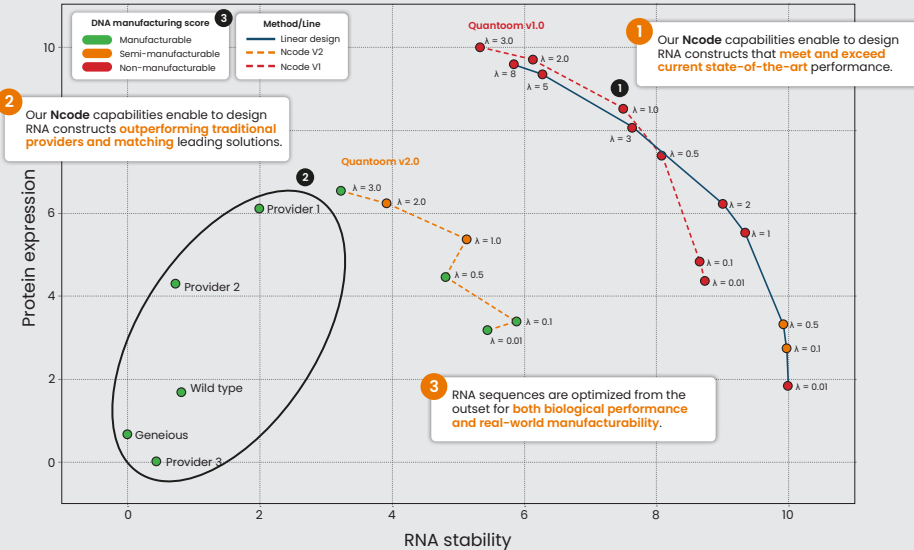
8 mg – 92 mg

10 mg – 123 mg

0.1 g – 4 g

0.128 g – 5 g

Comparative performance analysis of our Ncode capabilities



Representation of the sequence optimization process using either Quantoom's Ncode sequence optimization process or other providers. Starting from a wild type sequence («wild type»), the sequence is fed in either existing sequence optimizers («provider») or Ncode.

BENEFITS

- De-risked:** With our **construct-agnostic process**, there is no more need to re-develop, nor tune the process, for each new RNA construct. Our process has been used for +10 (pre-)clinical programs.
- Fast & Scalable:** The combination of our agnostic process with our redesigned scale-out based process enables to save up +15 months of development time. **No scale-up needed beyond 20mL.**
- Cost-effective:** Our re-designed agnostic process, implemented in an **automated and intensified equipment**, dramatically cuts costs: less CAPEX (low footprint facilities), less OPEX and less development cost.
- Freedom-to-Operate mindset:** our patented lipid-like Calixarene opens new sustainable possibilities for RNA delivery