CRS2023 ANNUAL MEETING & EXPOSITION JULY 24-28, 2023

PRECISION NANOSYSTEMS

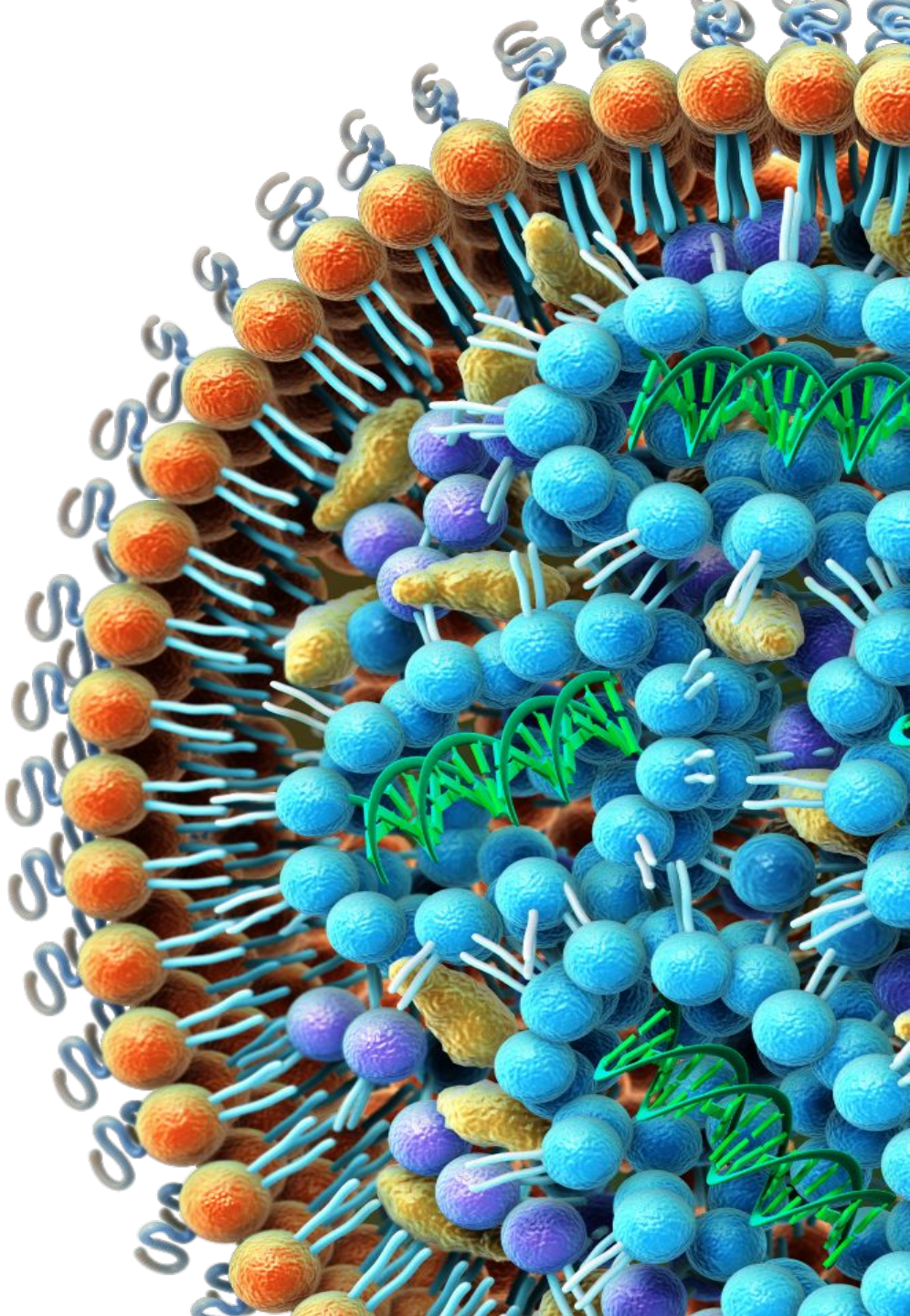
Create Transformative Medicines™

Booth 310

How Ionizable Lipids RNA-LNP Optimize Delivery Strategies

Dr. Ian Villamagna

25 July 2023



cytiva

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Mission

At Precision NanoSystems, our mission is to accelerate the creation of transformative medicine that significantly impacts human well being

At Cytiva, it's our mission to advance and accelerate therapeutics.

Within Genomic Medicine Development Delivery is the Biggest Unknown

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What are the Challenges?

Nucleic Acid Delivery

Nucleic acids are unstable and do not readily enter cells

Drug Product Development, Manufacture & Scale-up

Genomic medicines are complex drug products and are traditionally difficult to develop and challenging to scale-up

Knowledge Gap

Genomic medicines are an emerging technology and few teams have the full compliment of experience in developing this drug product

Different Needs for Different Programs

Genomic medicines are being developed as personalized medicines and for mass administration, and by teams with a wide range of capabilities

Genomic Medicines are Complex and Require Specialized Reagents, Instruments, and Services

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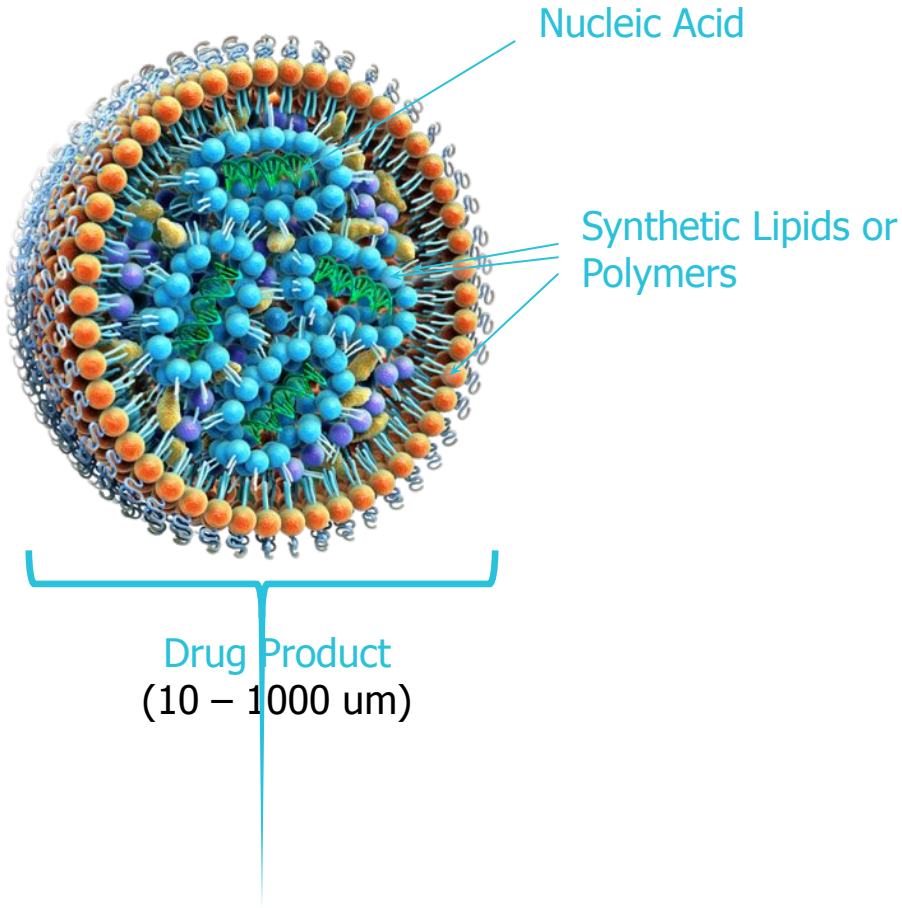

The development of genomic medicines is inherently complex, with multiple different areas that require optimization:

LNP Composition
- Stability
- Lipid composition
- Excipients

RNA Quality
- Quantity
- Integrity
- Structure

Payload Design
- Sequence
- Production
- Biology

Encapsulation
- %EE
- Location of RNA

Scale Up
- Larger batches
- Process Development
- Downstream Process

Biological Testing
- Dosing
- Efficacy
- Safety
- Administration

Meeting our Customers' Needs Earlier to Accelerate Therapeutic Development

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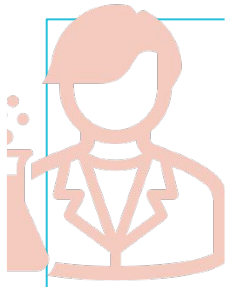
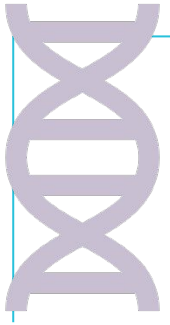


Every Scientist can be a Genomic Medicine Developer

- Lowering the Barrier to Entry
- Genomic Medicines Designed not Discovered
- Niche to Mainstream

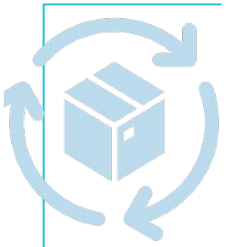
Partner for the Entire Drug Development Journey

- Ideation to Approved Drug
- Continuity through Drug Development
- **Show-Not-Tell** Therapeutically Relevant Proof of Concept Data



Be the Platform for Genomic Medicine

- Optimized Products, Services, Technologies, and Workflows
- Full Stack of Genomic Medicine Development Technologies
- End-to-End Solutions



The Product is the Process

- Therapeutic and Process Development are Linked
- Manufacturing Efficiencies are Critical
- NxGen™ Delivers Precise, Reproducible Nanoparticles across Scales

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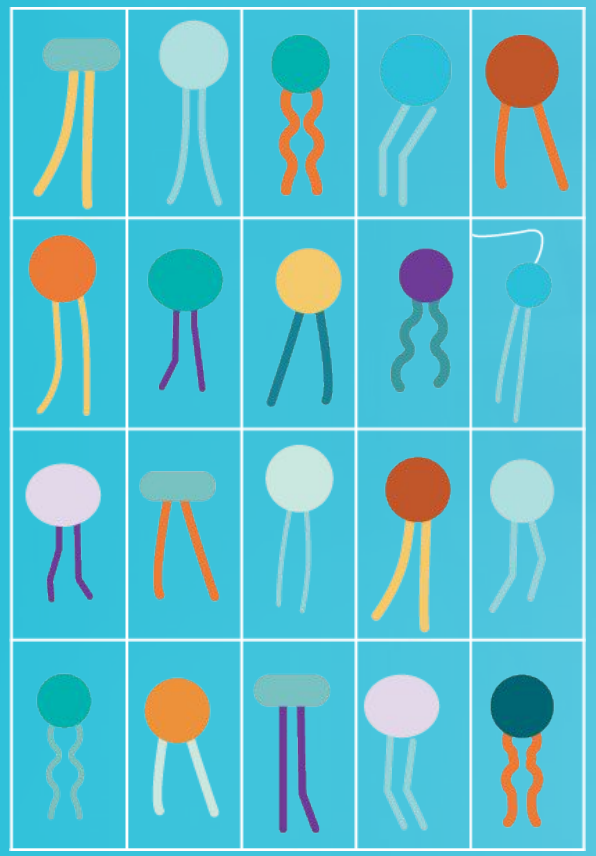
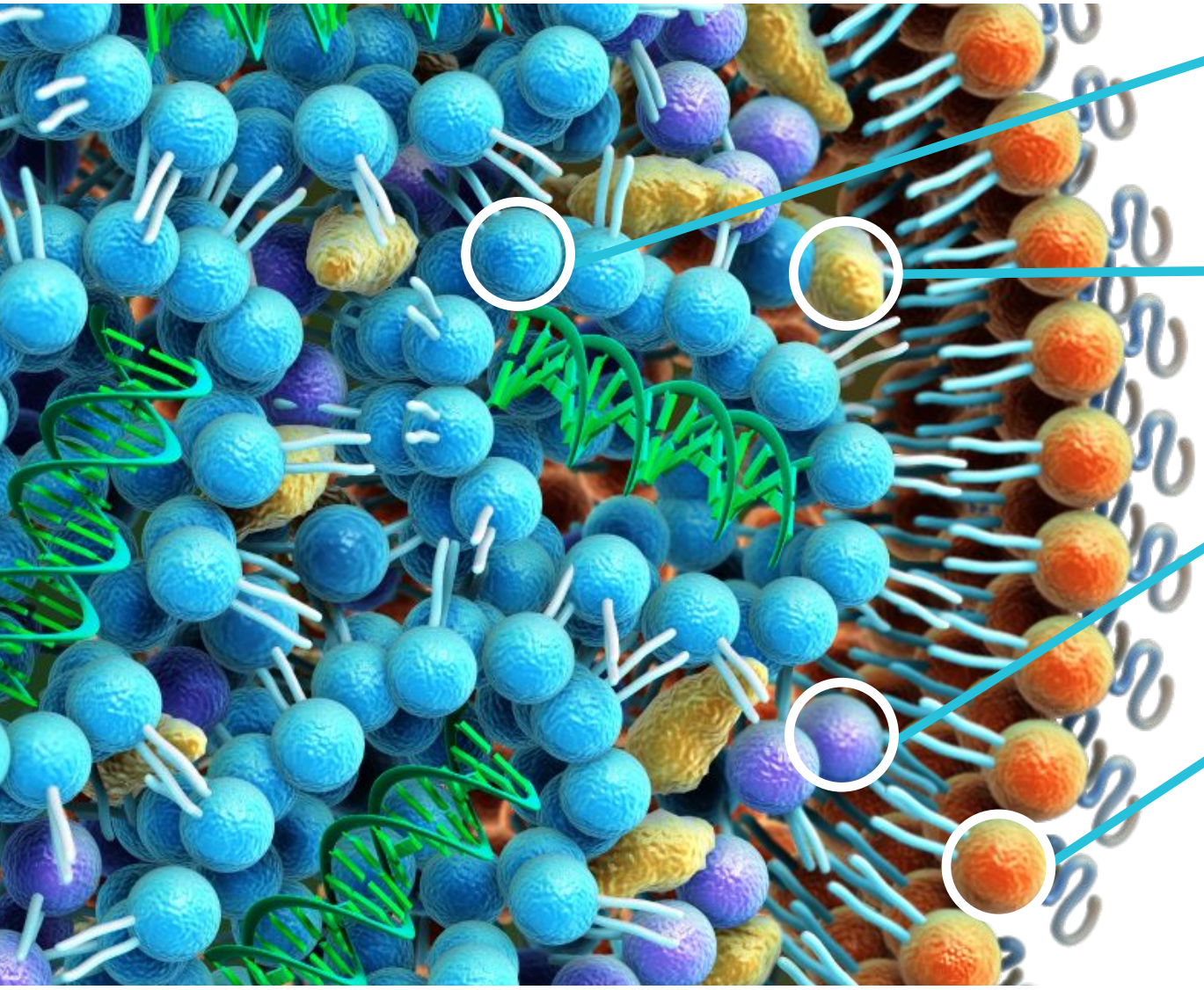
Ionizable Lipid Portfolio



LNP components



Ionizable Cationic Lipid

- Neutral at pH 7, Cationic at pH ~4.5
- Binds & protects RNA
- Facilitates Endosomal Escape

Cholesterol

- Binds ApoE
- Mediates endocytosis via LDL receptor

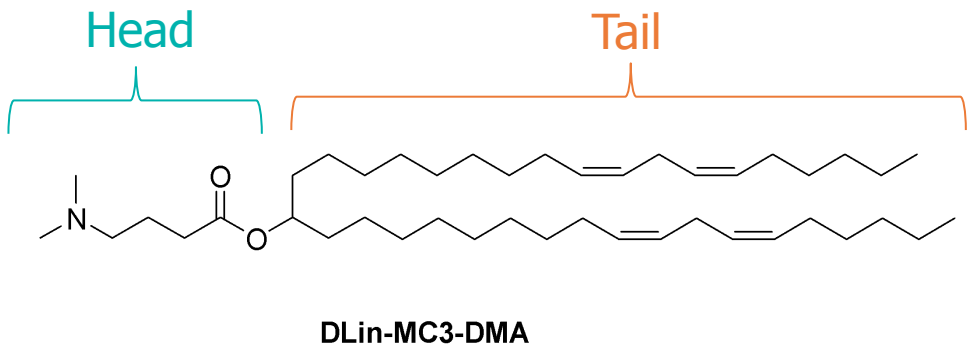
Helper Lipid (e.g. DSPC, DOPC)

- Structural support, fills voids
- Been found to affect release

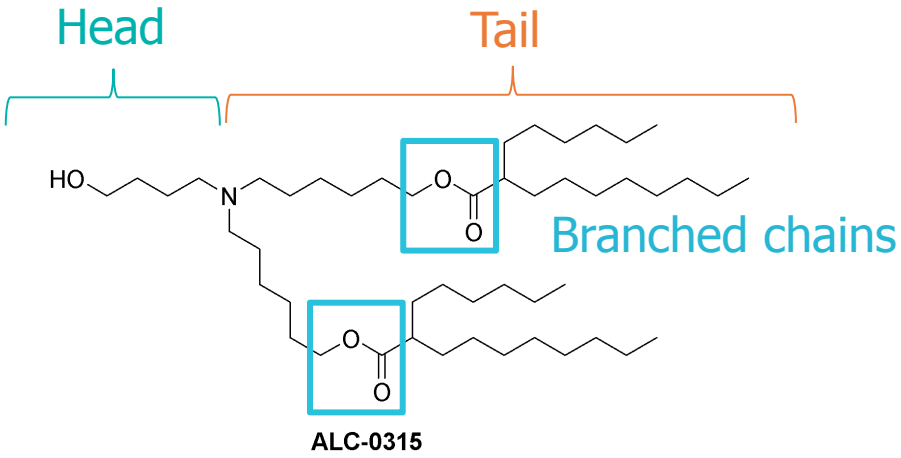
PEG-Lipid

- Stabilizes particle during formation
- Protect from opsonization
- Shed from particle over time following systemic injection

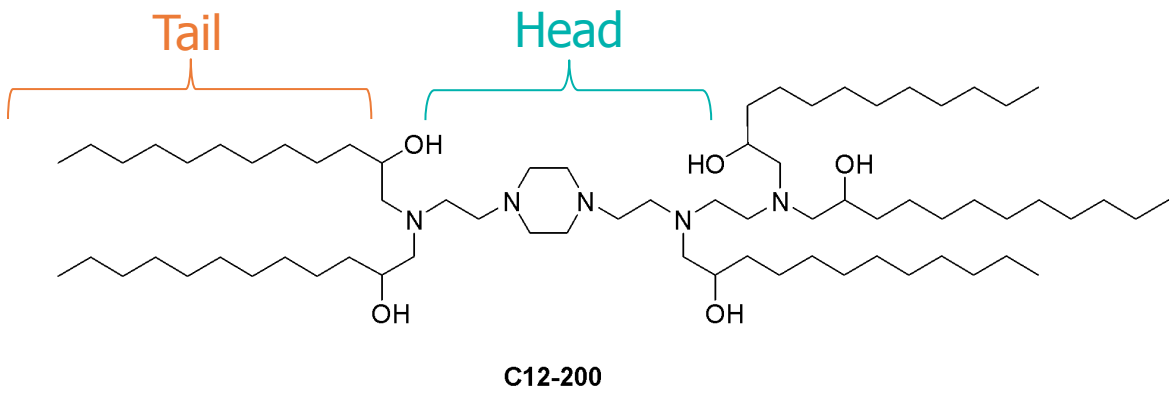
Common Ionizable Lipids



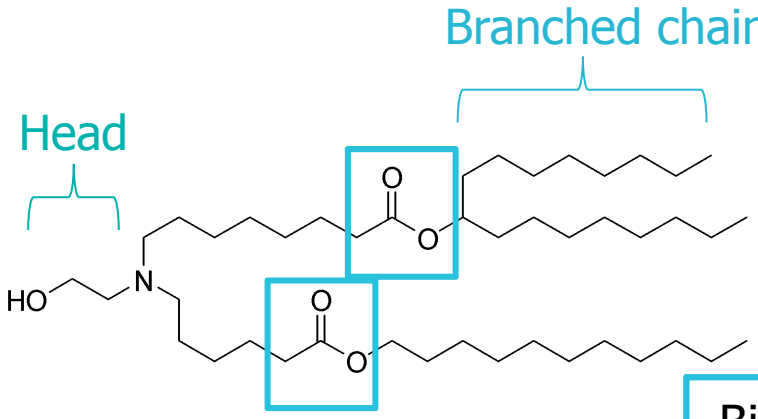
DLin-MC3-DMA



ALC-0315



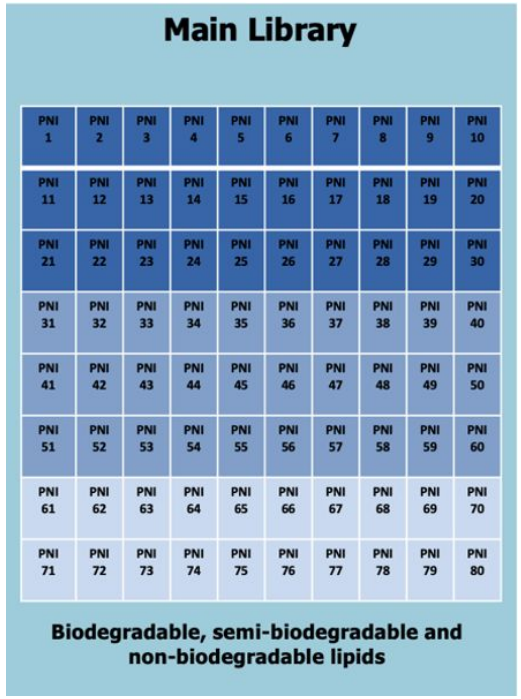
C12-200

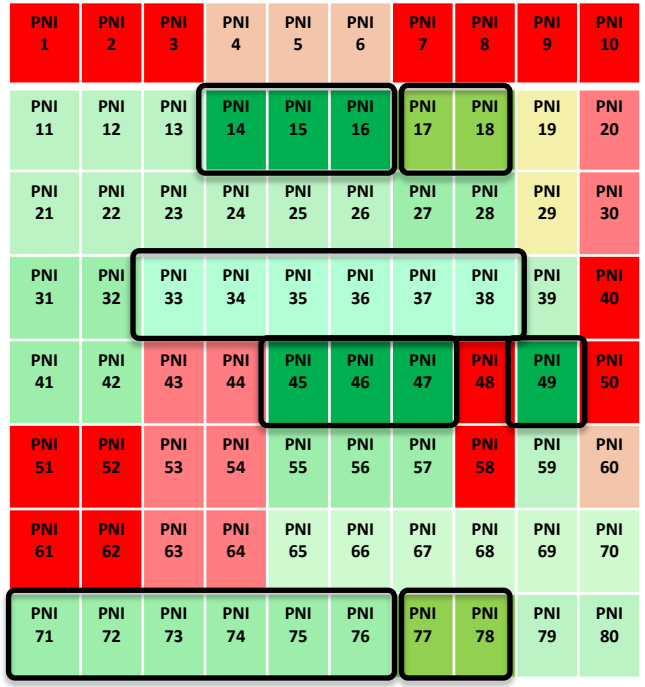


SM-102

Biodegradable ester groups

Strategies to Streamline Ionizable Lipid Selection





- Hits for Cell Therapy
- Hits for Vaccine
- Hits for *In-Vivo* Protein-replacement
- Hits for *In-Vivo* Gene-editing

Diverse Library of Novel Ionizable Lipids → **Lead Candidate Selection** → **Novel Compositions Designed for Specific Applications**

Diverse Portfolio

Well-characterized ionizable lipid portfolio streamlines screening across applications

Lipid Nanoparticle Portfolio Screening

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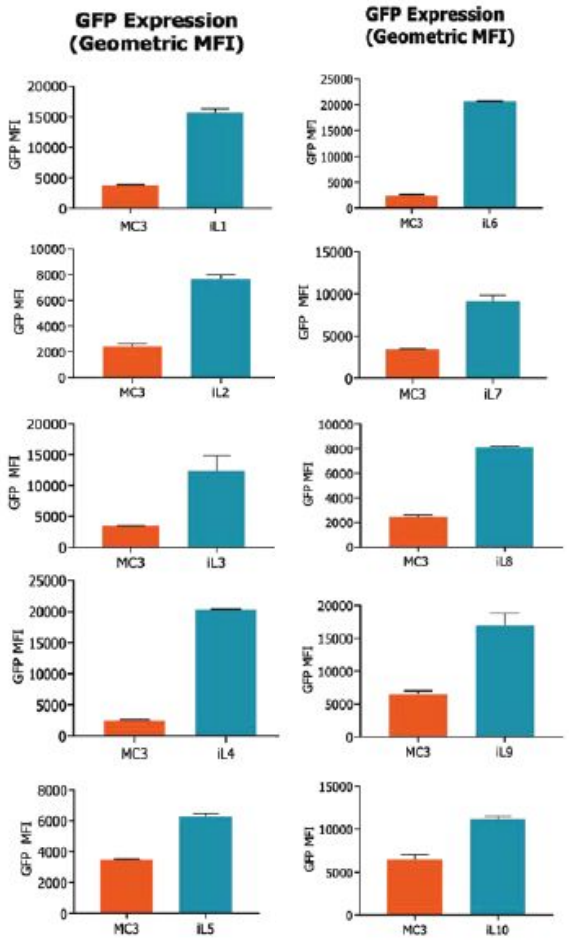
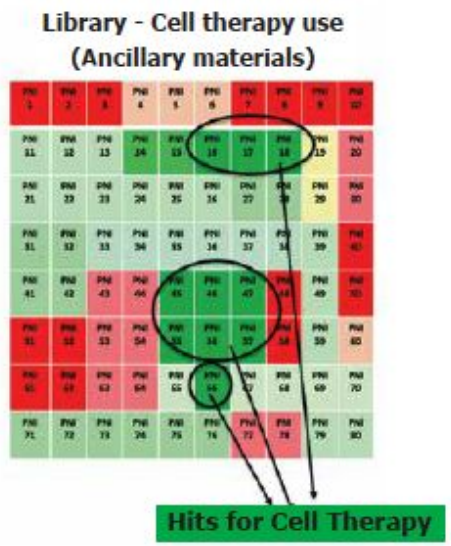
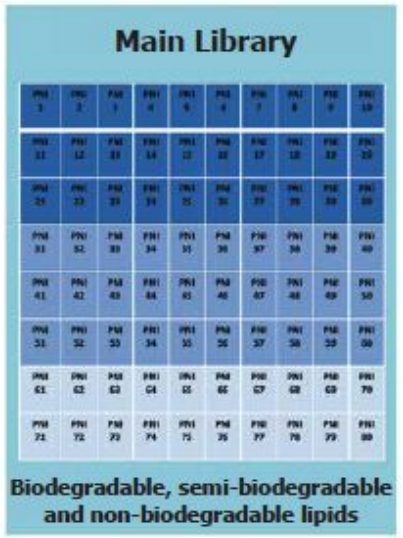
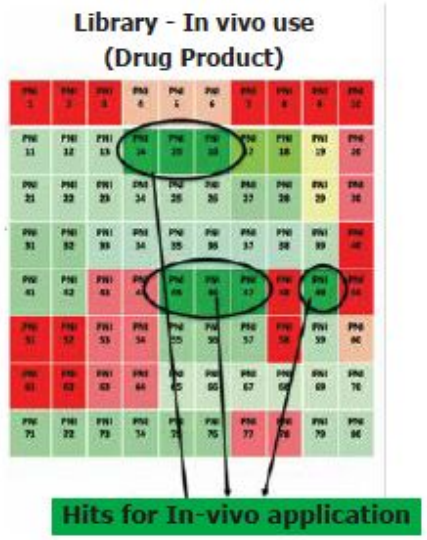
Our ionizable lipid portfolio contains multiple ionizable cationic lipids more potent than MC3









Applications Demonstrated

- Vaccines
- Protein Replacement
- Cell Therapy

GenVoy™ LNPs Enable Delivery for Key Applications in Genomic Medicine

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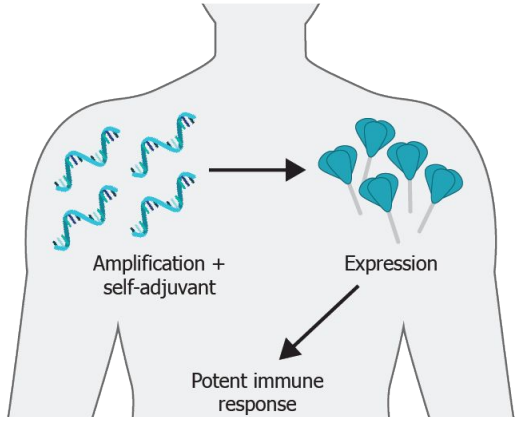
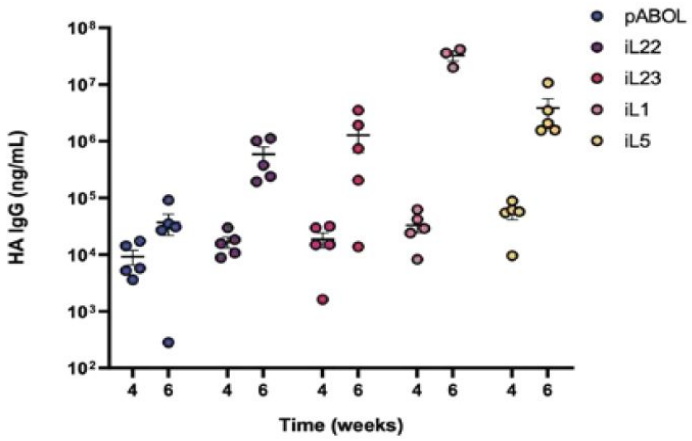
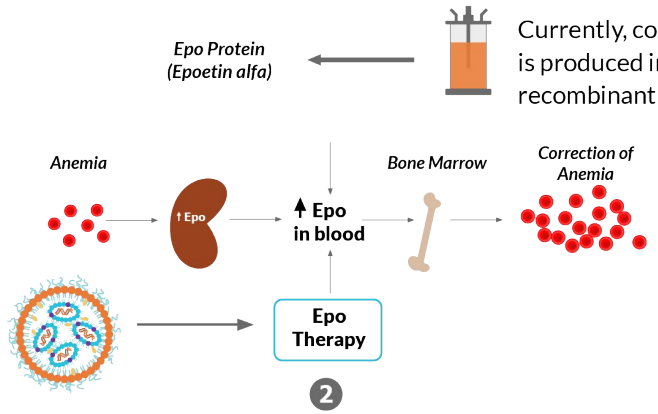
Vaccines



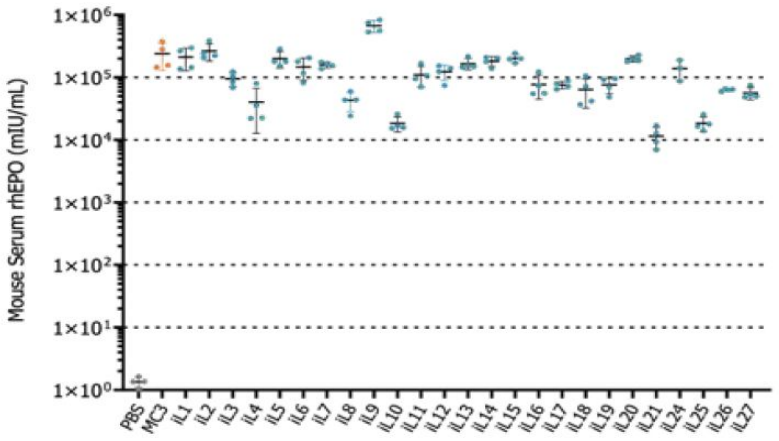


HA IgG Generation in Mice

Gene Therapy

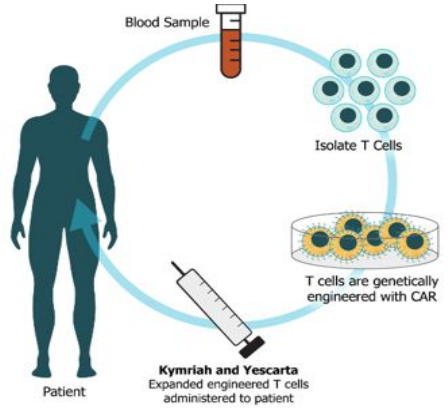


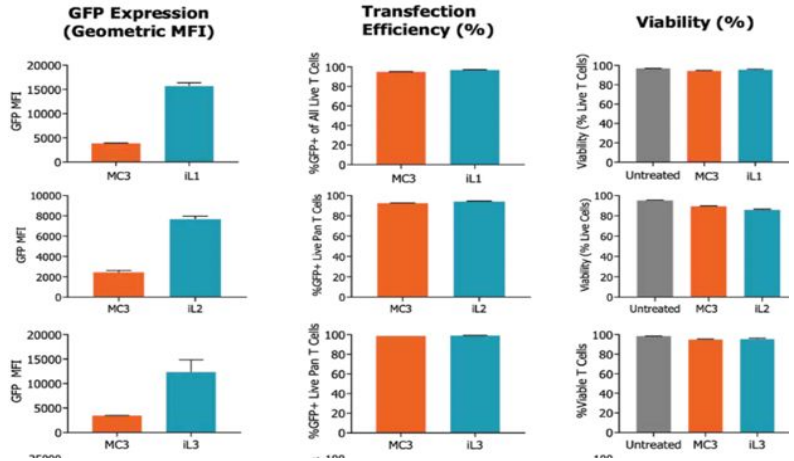
Currently, commercial **Epoetin alfa** is produced in cell culture using recombinant DNA technology



Epo Production in Mice + Gene Editing

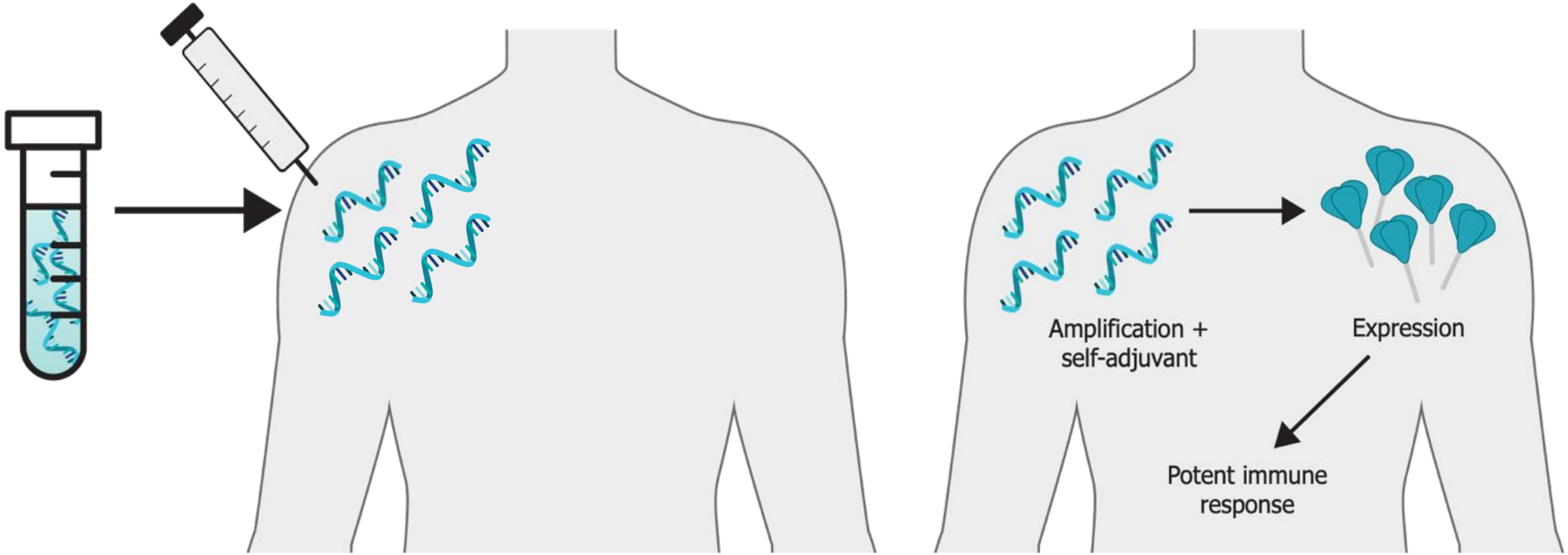
Cell Therapy (ex vivo)



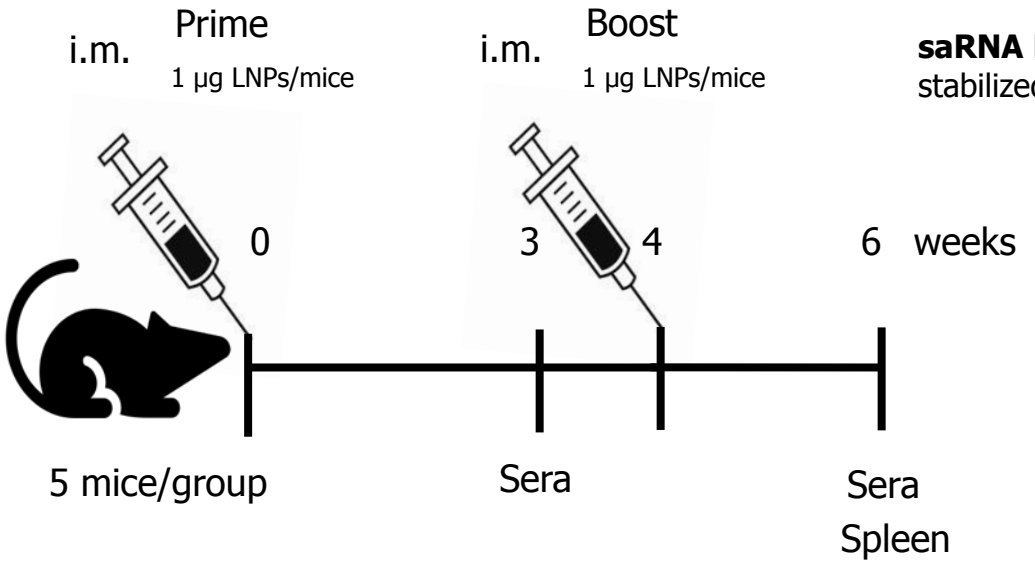


GFP Expression in Primary Human T Cells

Vaccines



In Vivo Testing of saRNA LNPs



saRNA LNPs encoding a pre-fusion stabilized SARS-CoV-2 spike protein.

Sera →
- SARS CoV2 specific IgG ELISA
- Cytokine measurements/Neutralization assays

Spleen →
- Isolation of splenocytes
- *Ex vivo* restimulation with SARS-CoV-2 peptides
- Intracellular cytokine staining/Cytokine measurements

SARS-COV-2 Spike Encoded saRNA

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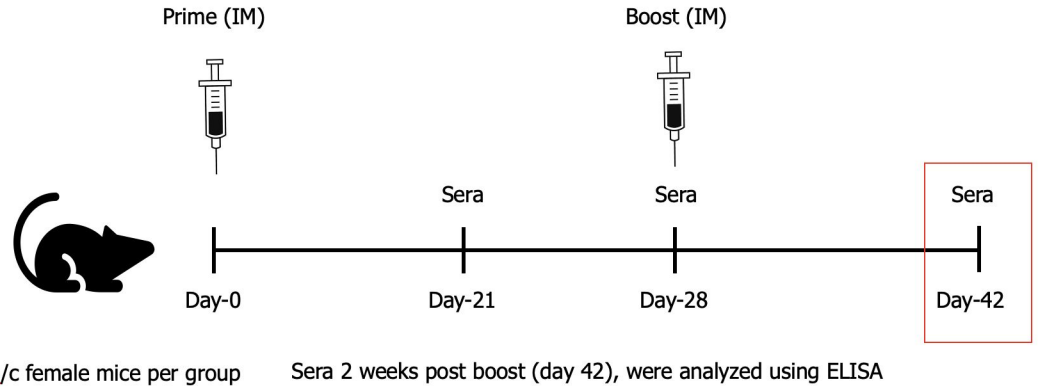
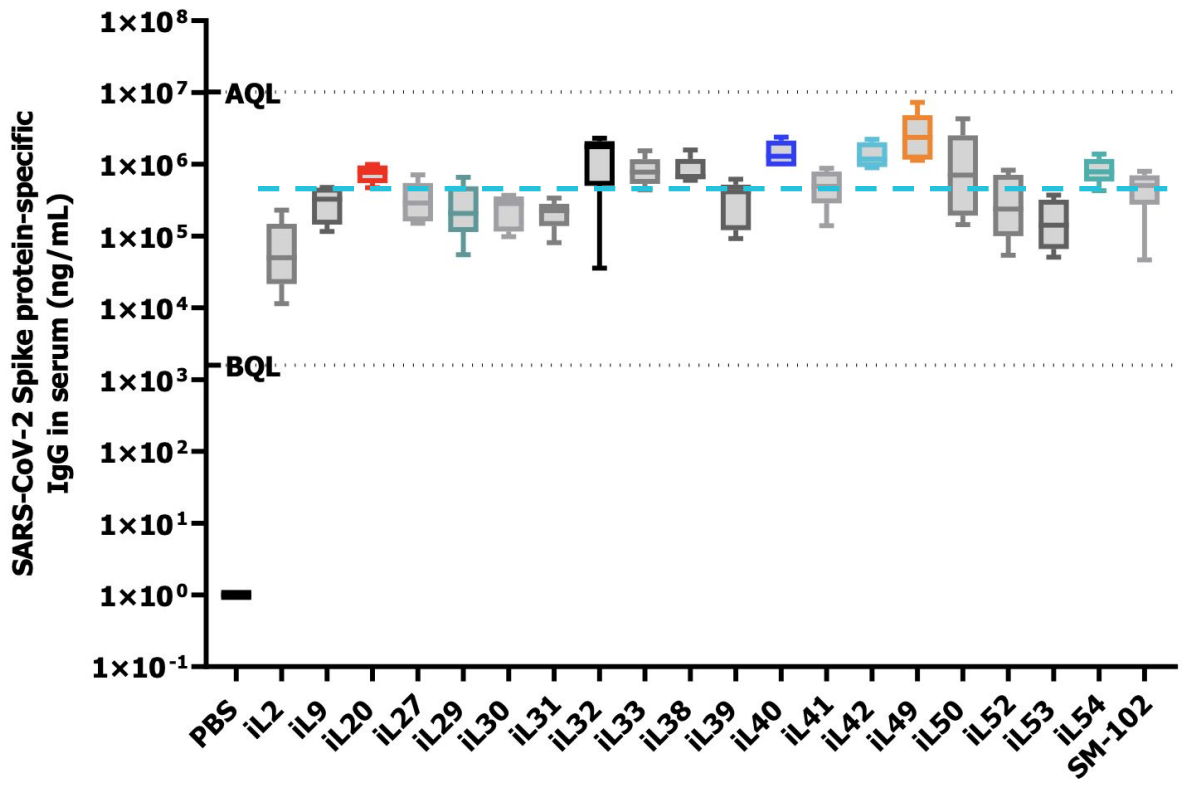
ELISA Data for 2 weeks sera post boost (Day 42)



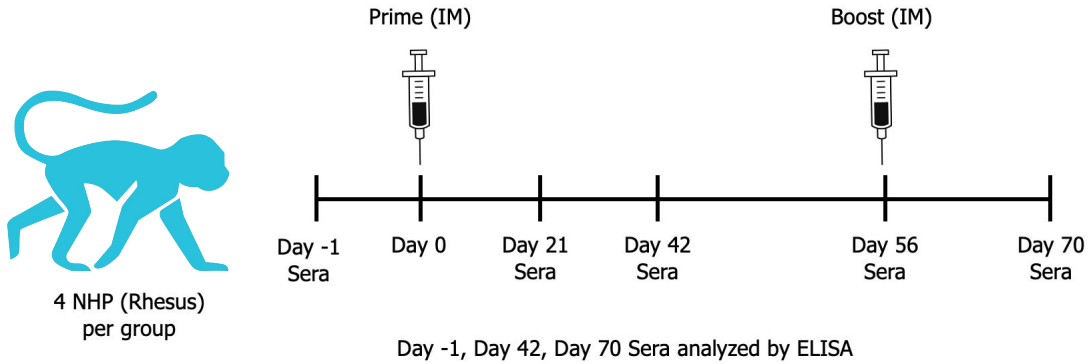
5 Balb/c female mice per group

Sera 2 weeks post boost (day 42), were analyzed using ELISA



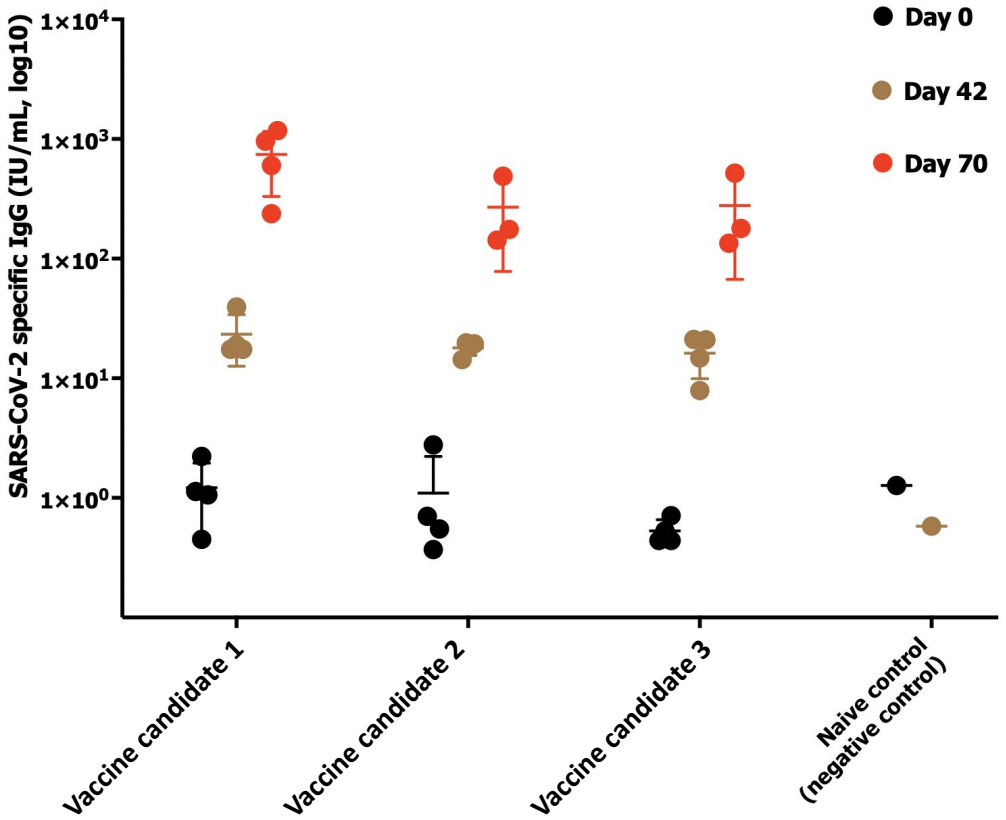
Data indicates that a no. of PNI lipids are extremely effective for vaccine applications

Vaccine Candidates Showed High IgG Levels in NHPs



Day -1, Day 42, Day 70 Sera analyzed by ELISA

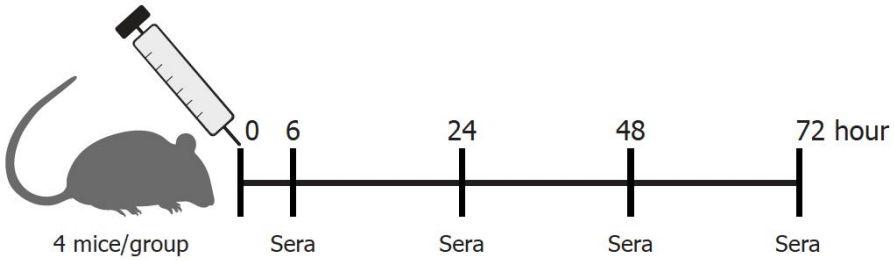
- Significant difference in IgG levels at Day 42 compared to pre-bleeds.
- High response was observed on Day 42 for all the candidates following Prime
- The response on Day 70 is much higher than other time points, a response typical of the boost.



WHO SARS-CoV-2 human IgG standard was used to establish a quantitative curve for relative quantification ant-spike IgG in the serum specimens

Calibration Control with known IgG concentrations and serum naïve Rhesus Monkeys (NHP02SRMUN, BIOIVT) were used as positive and negative controls

Tolerability of Lipids following IV administration



72h study
CD-1 male mice
6wk old
n=4/LNP

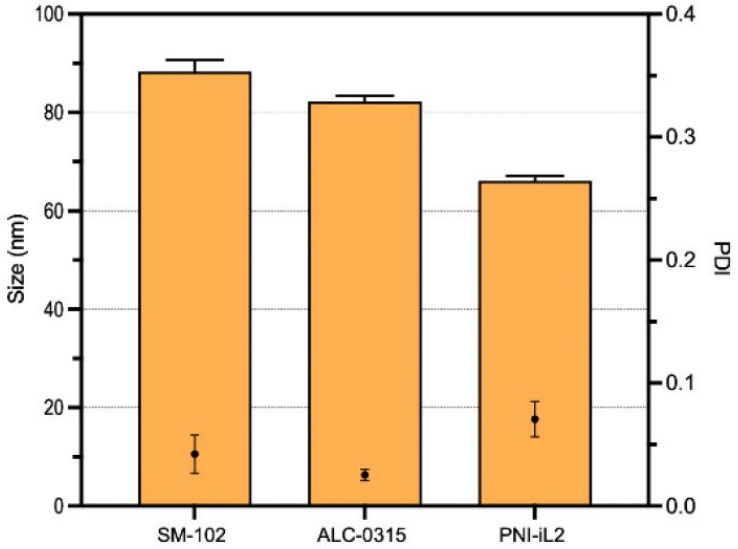
LNP	0-72 h post dose: Clinical Observations – Moderate Dose	0-72 h post dose: Clinical Observations – High Dose	72 h post dose: Necropsy – Moderate Dose	72 h post dose: Necropsy – High Dose	72 h post dose: Liver Histology – Moderate Dose	72 h post dose: Liver Histology – High Dose
Control PBS	Normal		Normal		Normal	
SM-102	Mild signs recover w/in 6h	Moderate signs lasted full 72h	Normal	¾ Normal ¼ Euthanized @ 1h	Normal	Slight apoptosis & inflammation
ALC-0315	Mild signs recover w/in 72h	Mild to moderate for 6-72h	Normal	¾ Normal ¼ Enlarged Spleen	Mild apoptosis & inflammation	Mild apoptosis & inflammation
PNI iL2	Normal	Mild signs recover w/in 6h	Normal	Normal	Slight apoptosis & inflammation	Slight apoptosis & inflammation

Normal — Slight — Mild — Moderate — Severe

Clinical observations were relatively higher, lasted longer, and occurred with greater frequency in the LNPs with SM-102 and ALC-0315, than compared to a matched mg/kg dose of PNI LNP.

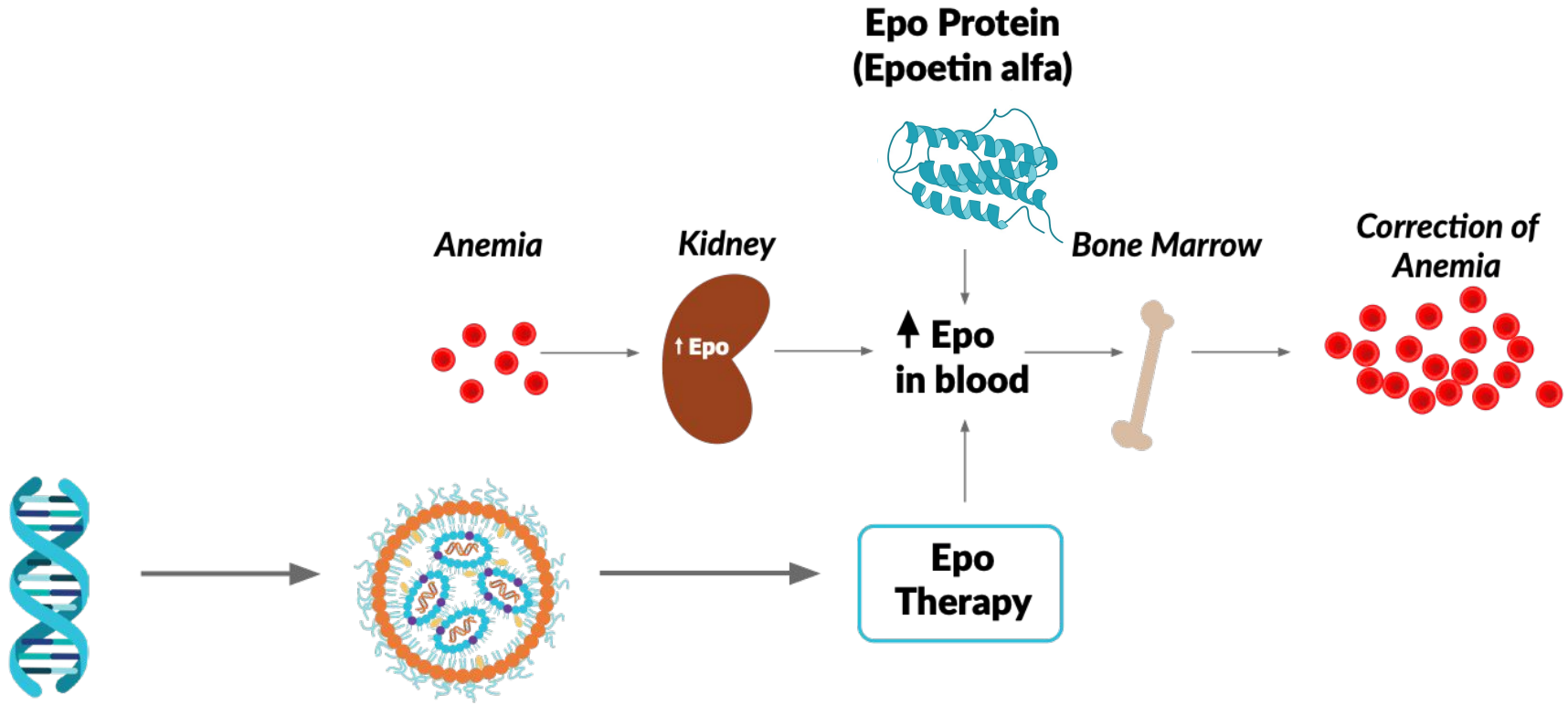
Necropsy were normal for most groups.

Liver histology showed relatively higher apoptosis and inflammation in the LNP containing ALC-0315 compared to all other groups at matched doses.



PNI Ionizable Lipid showcased good tolerability in a blinded study.

Gene Therapy



Gene Therapy

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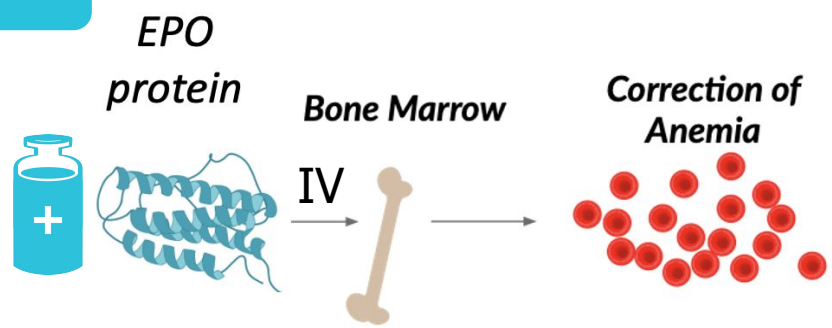
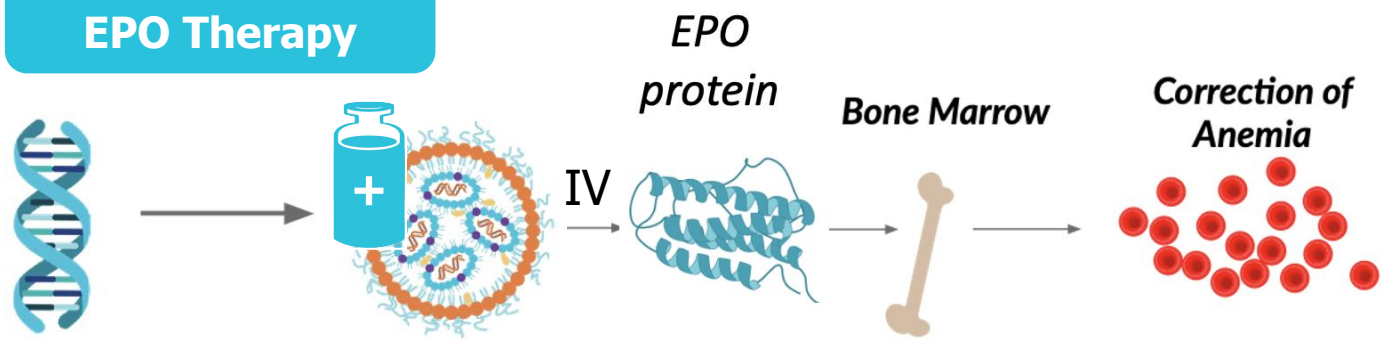
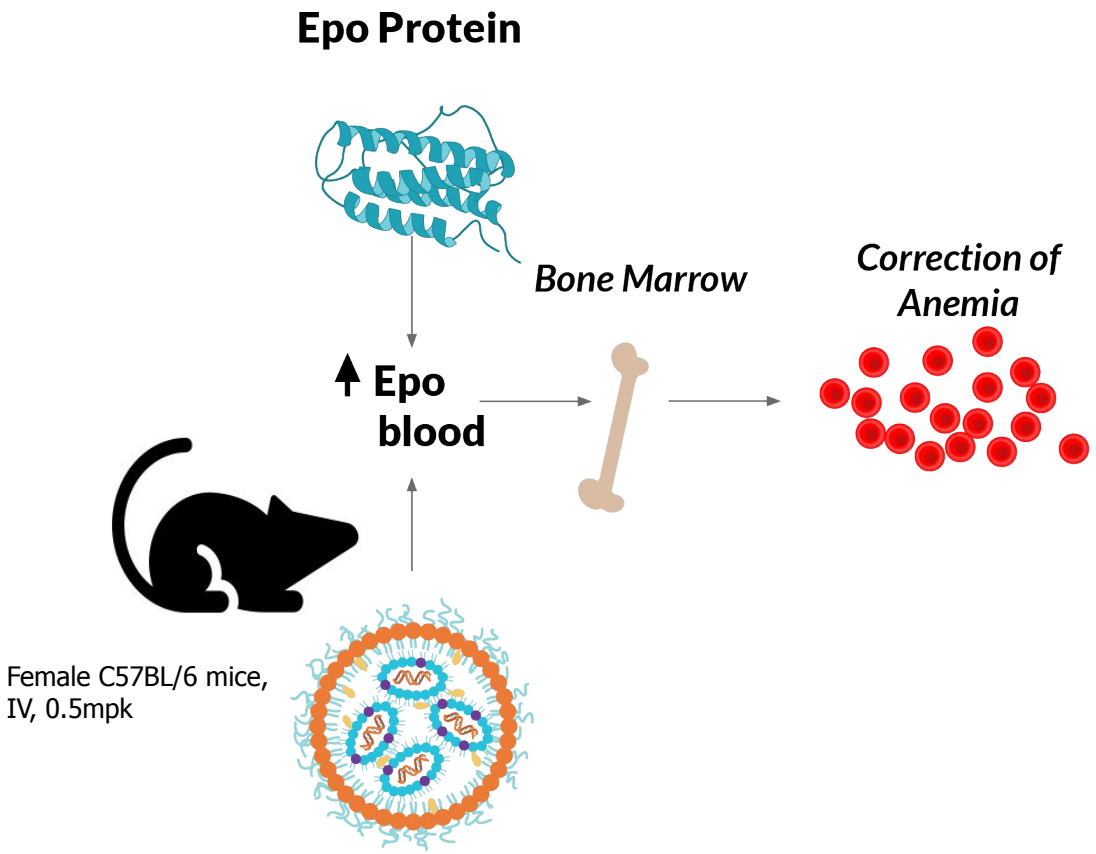
Current Treatment – EPO Therapy

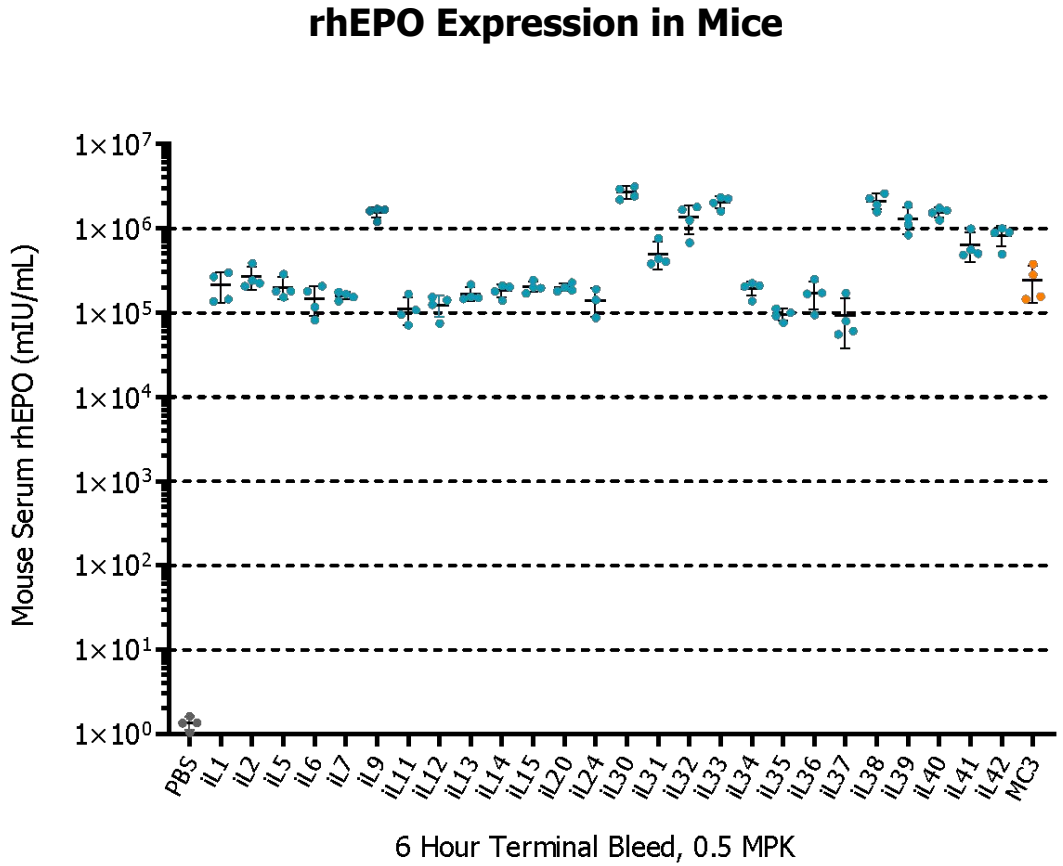


Genetic Medicine EPO Therapy



Erythropoietin (EPO) Expression – An Example for Protein Replacement Therapy





Data indicates that Precision NanoSystems' ionizable lipids demonstrate its ability to deliver mRNAs encoded for therapeutically relevant proteins

Gene Editing

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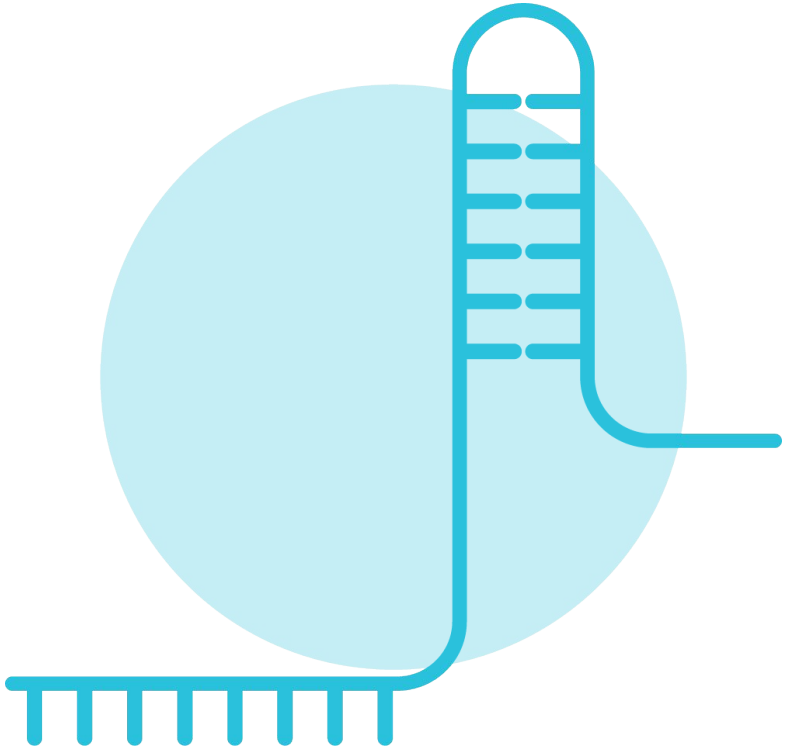
CRISPR & Base Editing



CRISPR to Reduce Transthyretin Amyloidosis - Intellia's NTLA -2001

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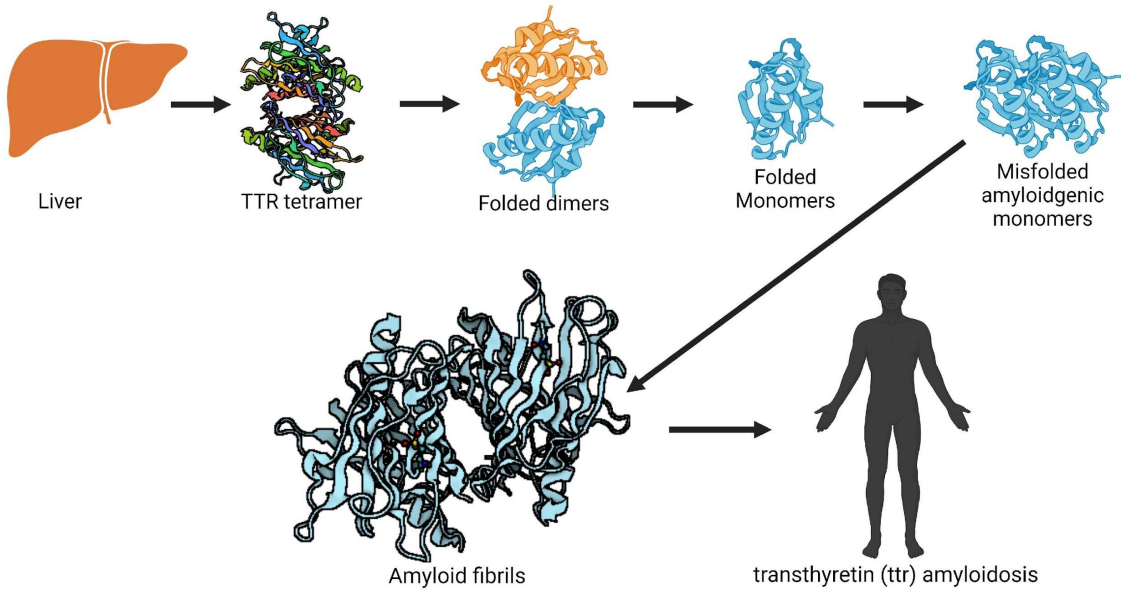
Intellia's NTLA-2001 Phase -1 clinical trial data shows high promise for Transthyretin amyloidosis as single dose treatment

NCT04601051

Transthyretin Amyloidosis (ATTR)

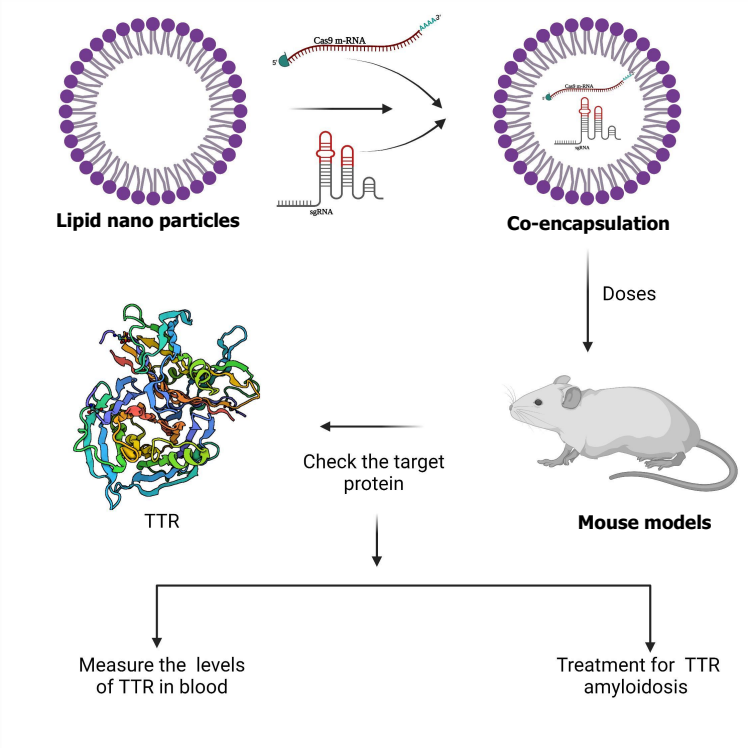


- A life-threatening genetic disease, caused by progressive accumulation of misfolded transthyretin (TTR) protein in tissues of nerves and heart
- Polyneuropathy & Myopathy can result
- Leads to cardiovascular disorders

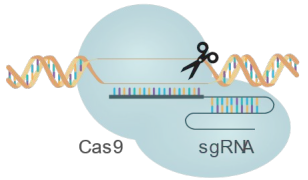
- **Current treatment options**
  - Patisiran® (Onpattro™)
  - Inotersen (Tegsedi™)

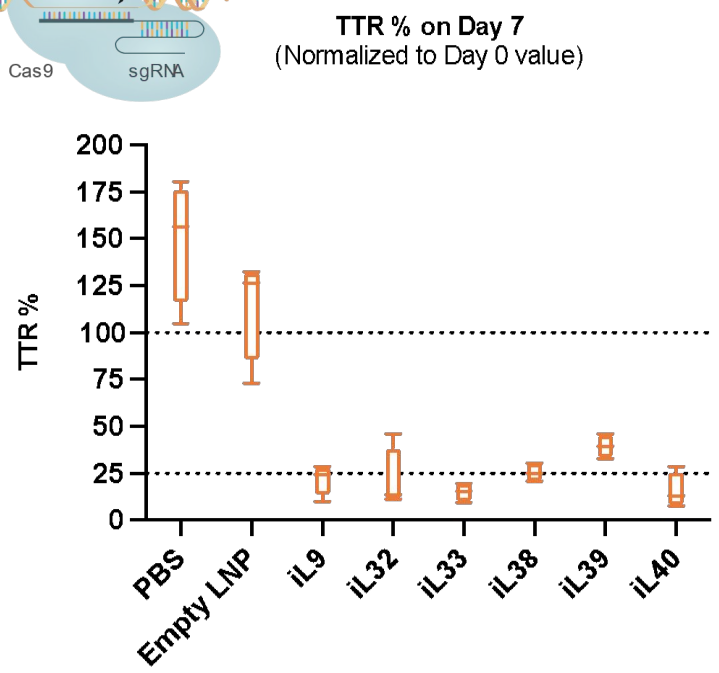
Image credit - BioRender

TTR CRISPR Gene Editing – Preliminary Data with Precision NanoSystems Ionizable Lipids as a Delivery System



A Single Administration of CRISPR/Cas9 Lipid Nanoparticles Achieves Robust and Persistent In Vivo Genome Editing.)



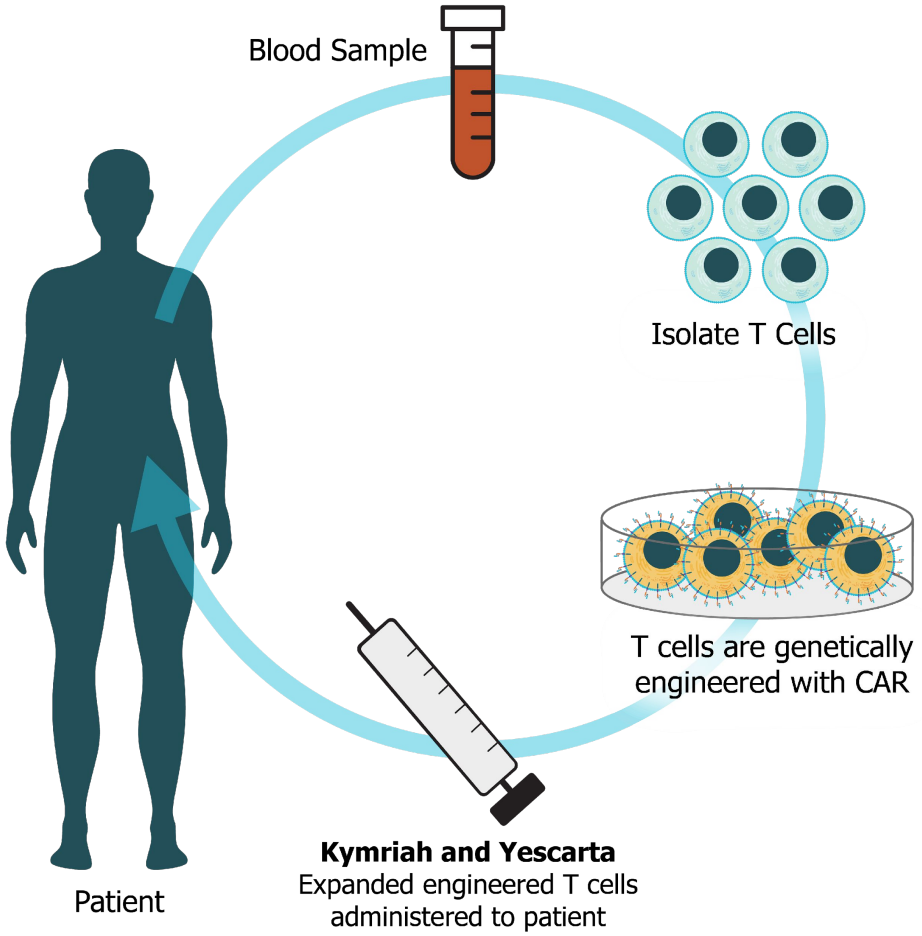


TTRguide-Cas9 mRNA LNP: Co-encapsulation of guide and Cas9 mRNA at 1:1 wt ratio

Preliminary results show more than 75% reduction in TTR protein levels with majority of tested lipids with one injection (3 mg/Kg)

Finn et.al., Cell Reports, 2017 (DOI: 10.1016/j.celrep.2018.02.014

Cell Therapy



5 years from FDA approval. Novartis

Image credit: Novartis

Image source: https://emilywhiteheadfoundation.org/news/celebrating-10-years-cancer-free/

LNP mediated delivery of nucleic acid therapeutics have the potential to become similar **life saving genomic medicines**

Off-the-shelf T Cell LNP Reagent for Accelerating T Cell Therapies

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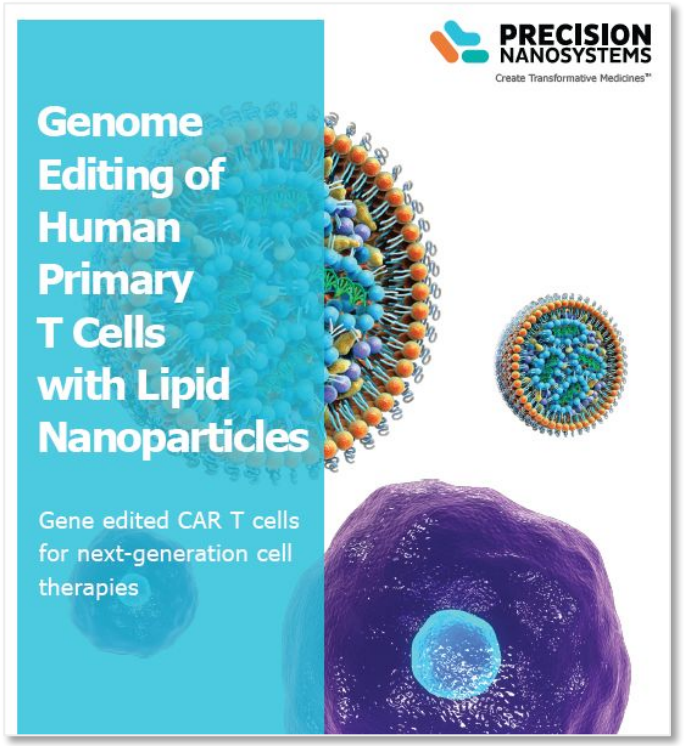
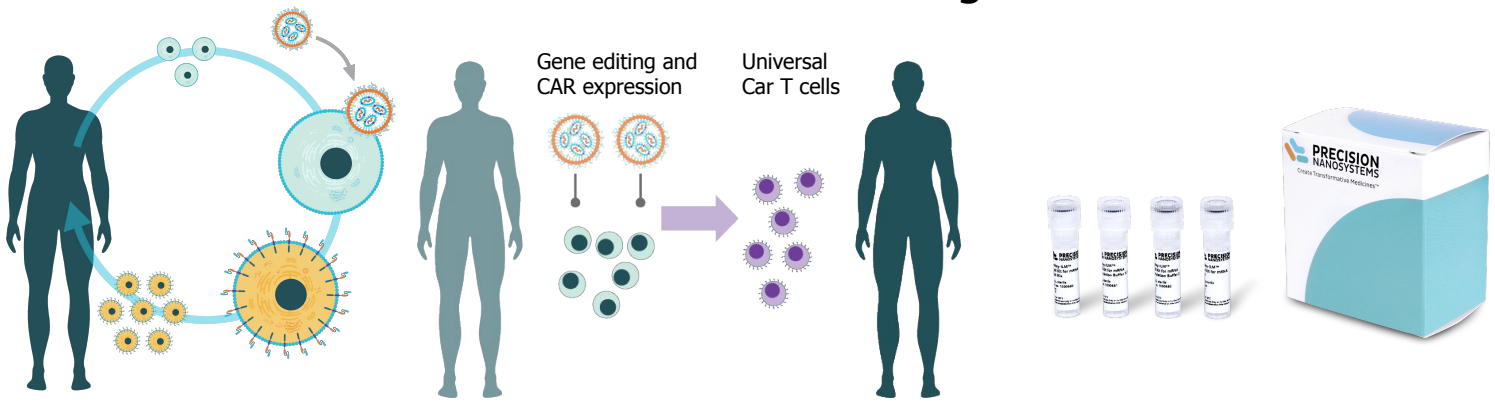
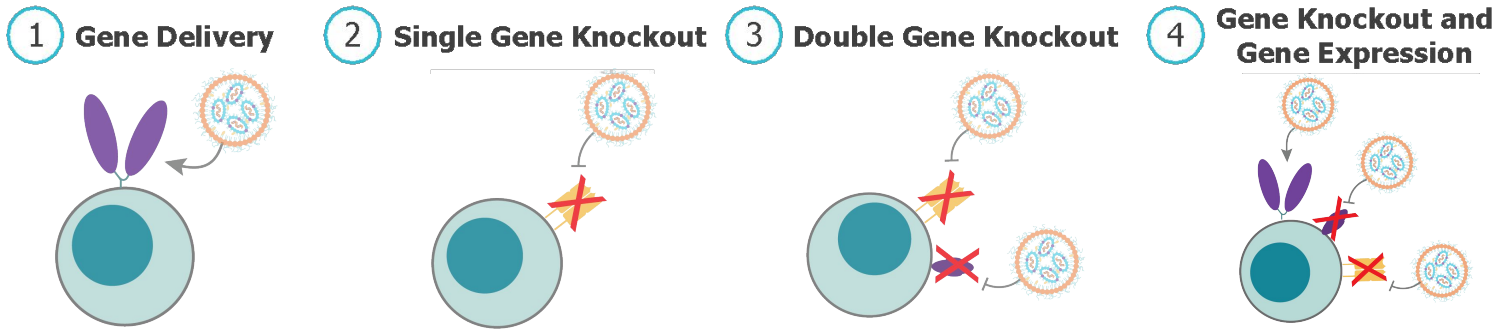
Immense possibilities with **Precision NanoSystems' Ionizable Lipids in T cell product kit.**



Application Note

First-to-market: An off-the-shelf T cell LNP reagent





2nd generation CD19 CAR expression

TCR knockout using Cas9 mRNA and sgRNA

TCR and CD52 double knockout

TCR knockout and subsequent CAR expression

1 mRNA Delivery with High Efficiency and Cell Viability

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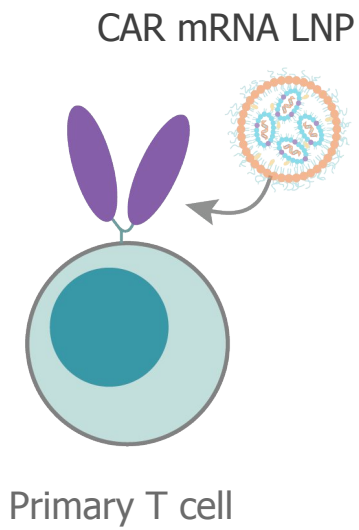
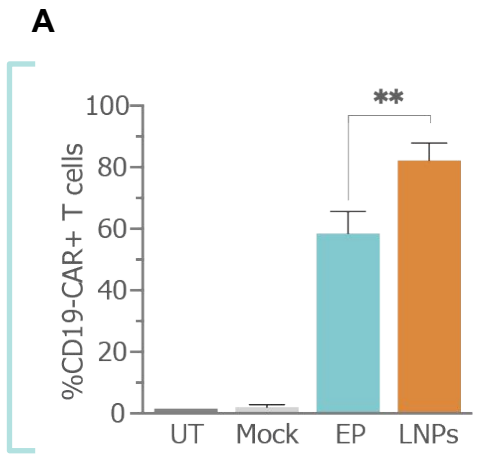
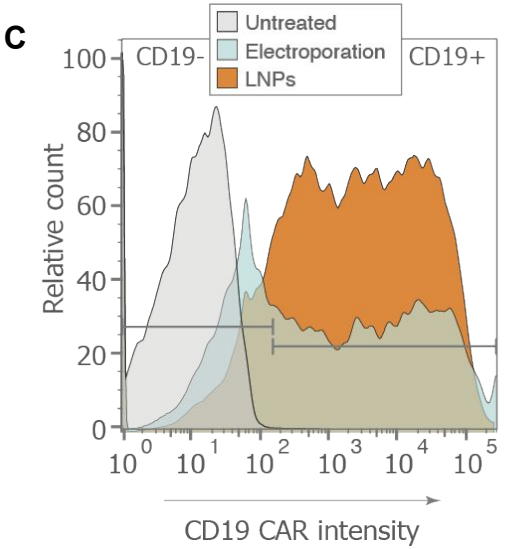
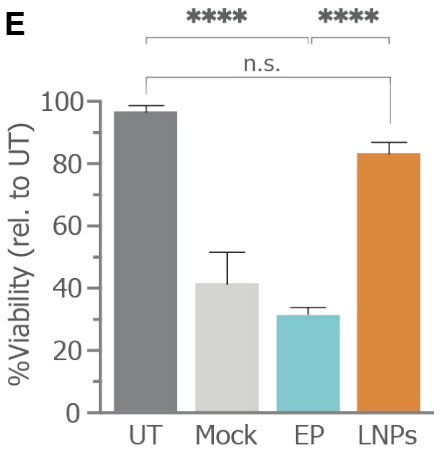
Create Transformative Medicines™



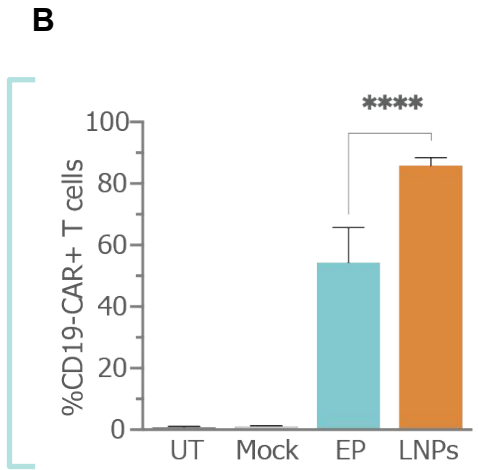
24 h detection

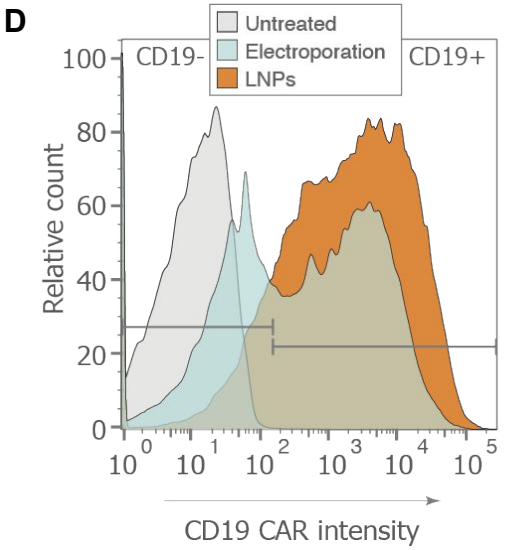


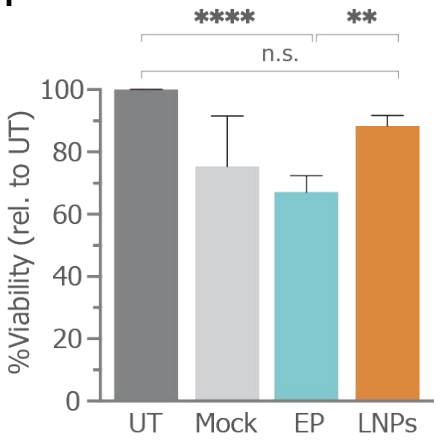




48 h detection







2 Single Target Knockout with High Efficiency and Cell Viability

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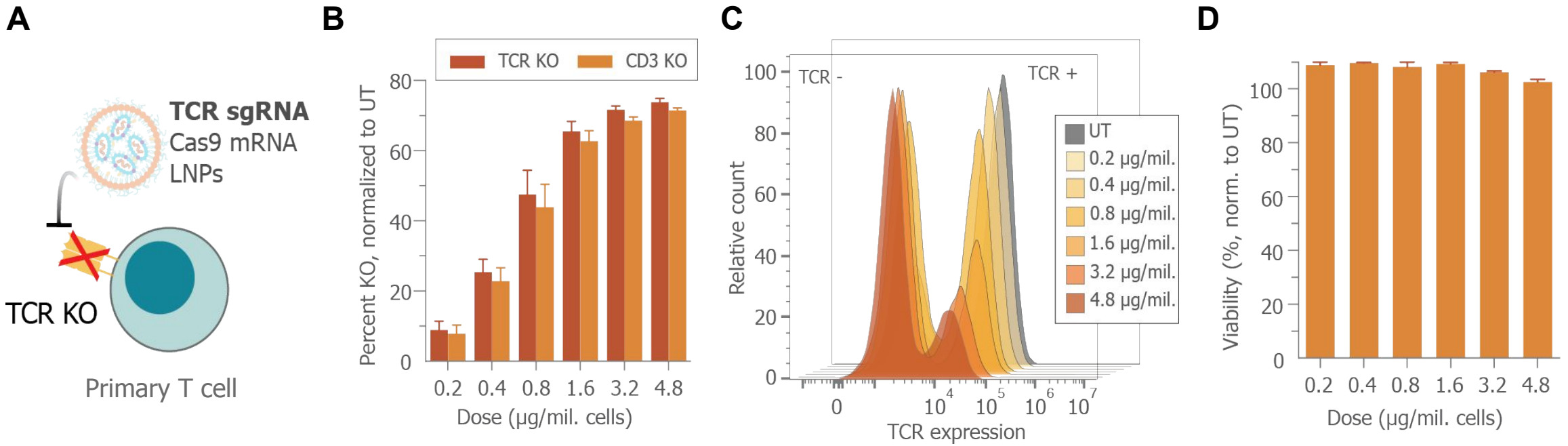
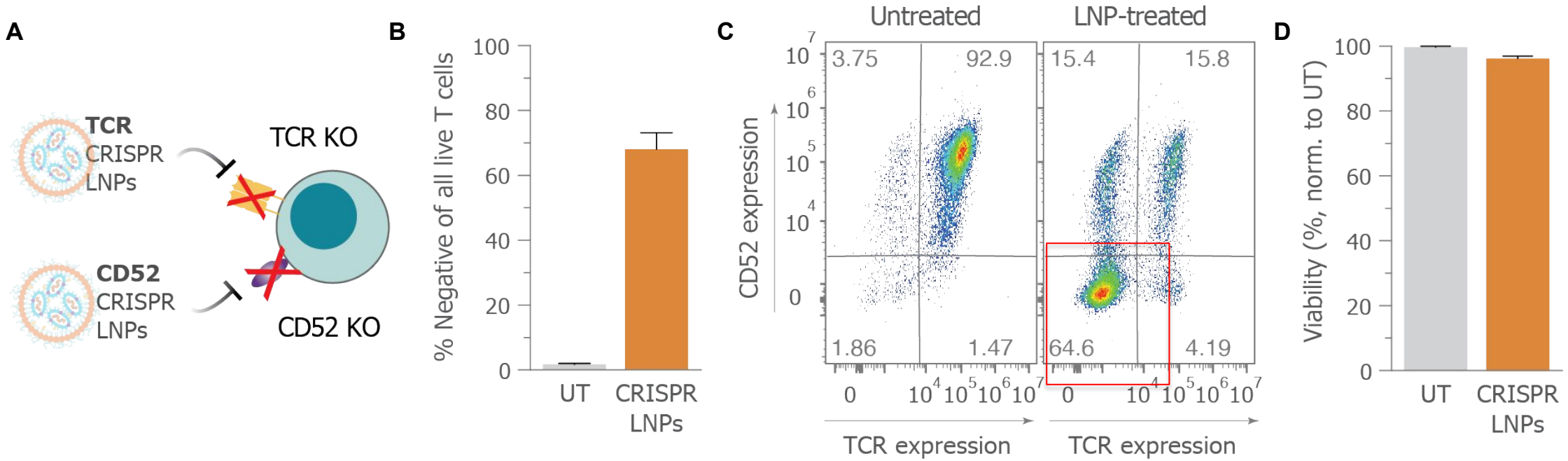
Create Transformative Medicines™



3 Double Target Knockout to Model Allogeneic Cell Therapy

PRECISION NANOSYSTEMS
Create Transformative Medicines™



4 Multi-step Cell Engineering of Knockout Followed by Delivery

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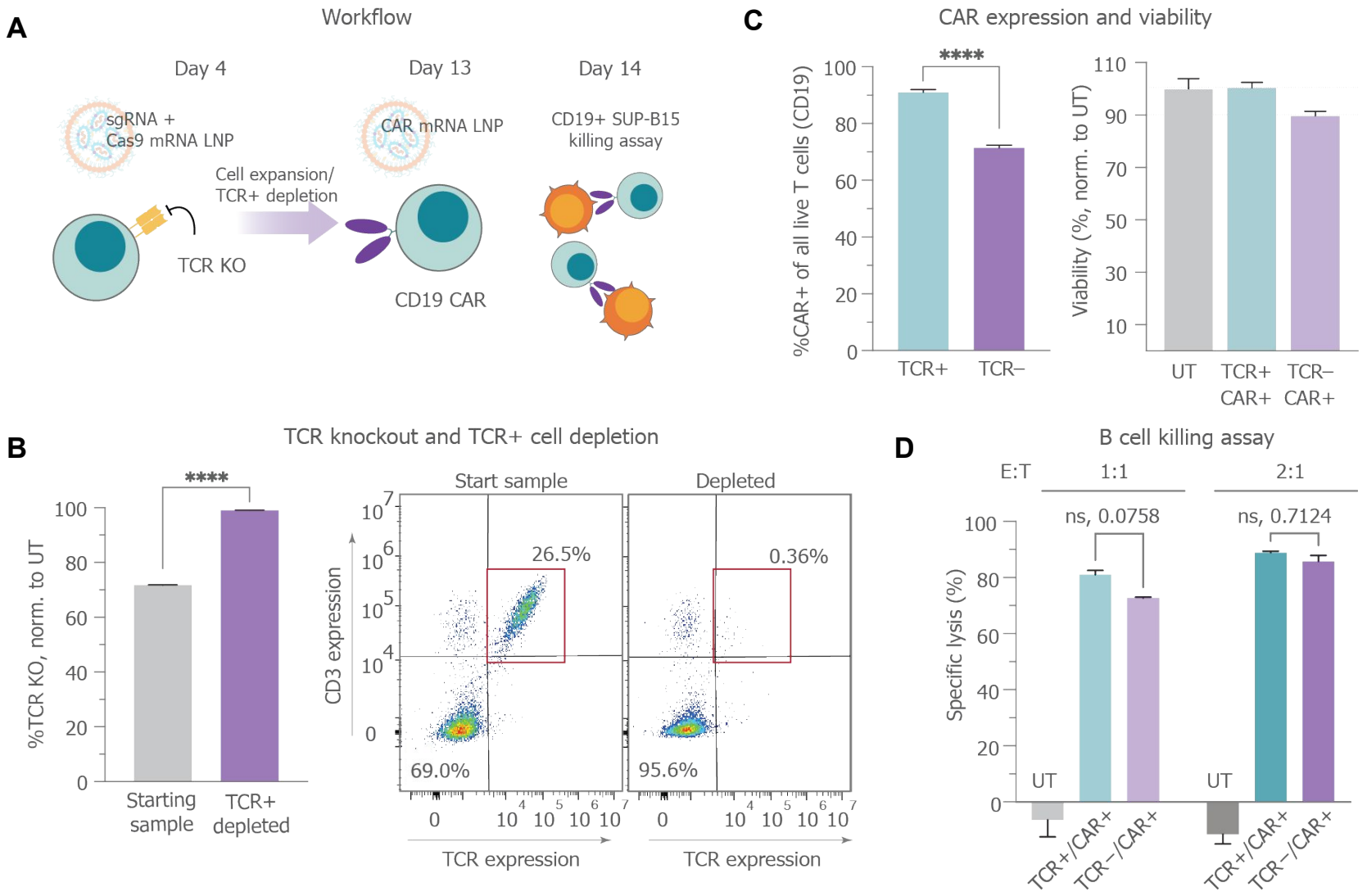

GFP expression in primary human T cells using PNI proprietary Lipid & LNP composition

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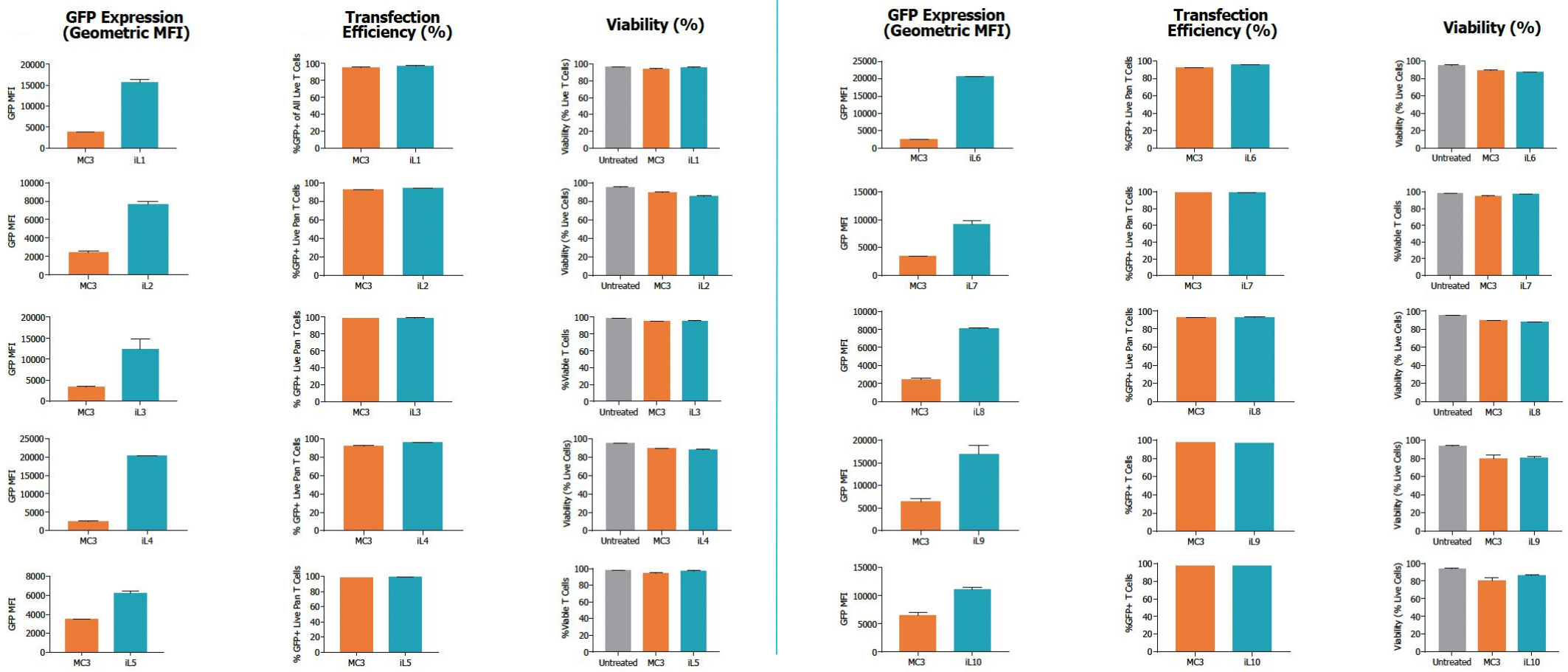

Enable Gene Editing and Delivery in Human Primary T Cells using Lipid Nanoparticles: Seamlessly Scalable from Discovery to Preclinical

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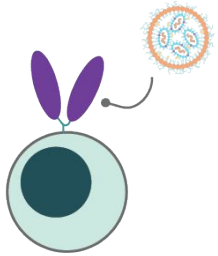
CD19 CAR mRNA LNP

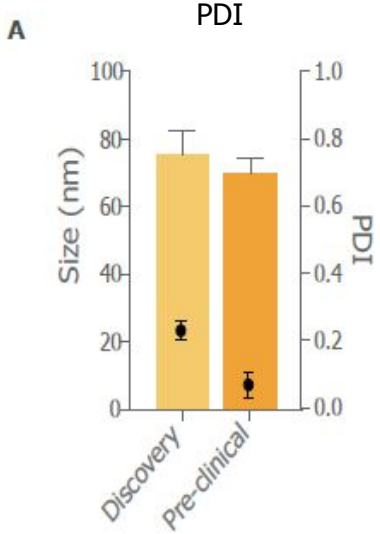


Discovery
Sufficient RNA-LNP for ~10 million CAR T

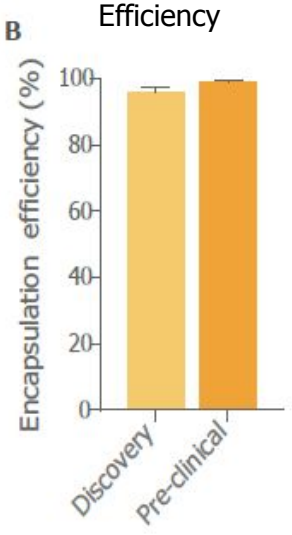
New

Preclinical
Sufficient RNA-LNP for ~700 million CAR T

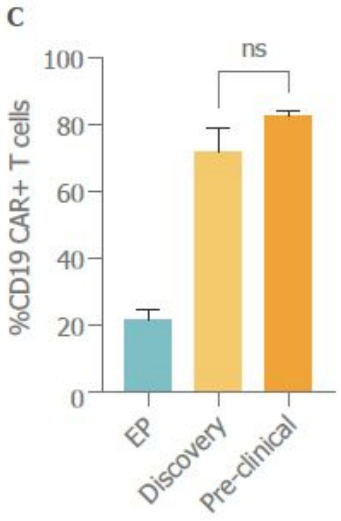
Particle Size and PDI



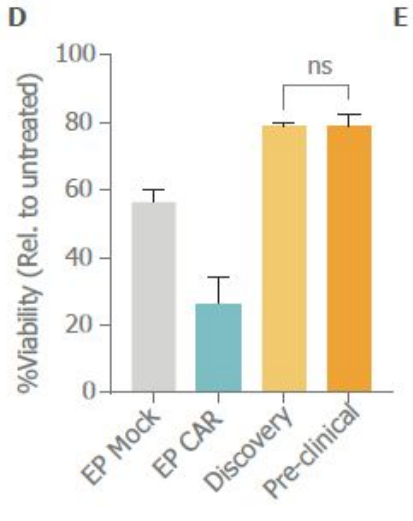
Encapsulation Efficiency



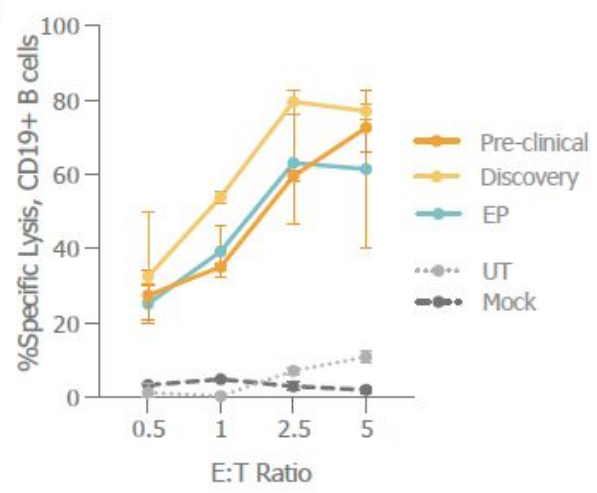
CAR Expression



Cell Viability



Tumor Cell Killing



Enable Gene Editing and Delivery in Human Primary T Cells using Lipid Nanoparticles: Seamlessly Scalable from Discovery to Preclinical

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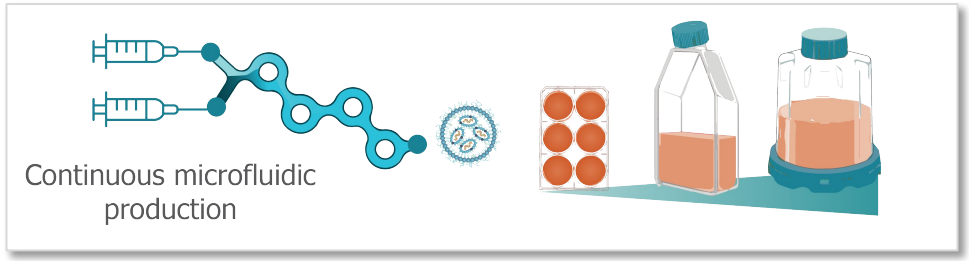
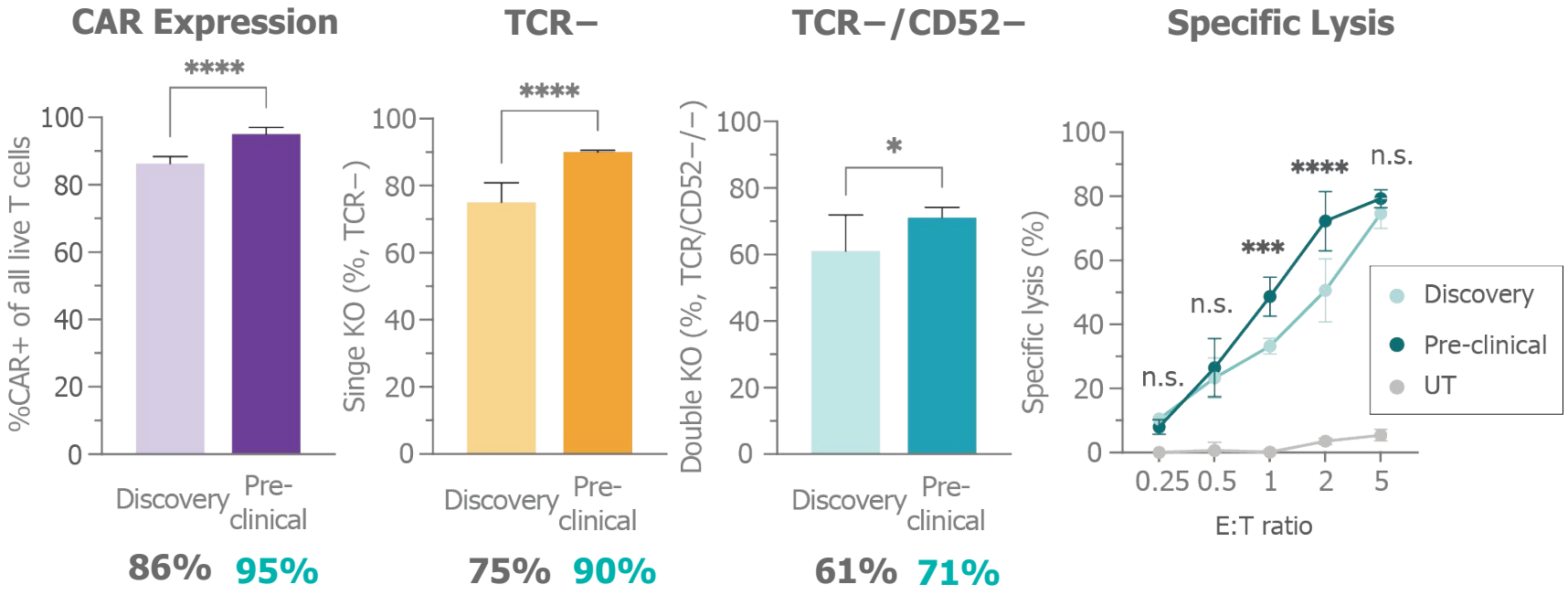


	Discovery Scale	Pre-clinical Scale
RNA wt.	10 µg	4 mg
LNP vol.	0.5 mL	18 mL
CAR T numbers	20 million	1 billion



Expertise Drives Optimal LNP Formulations for New Applications

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LNP composition significantly affects CD34+ HSPC editing efficiency

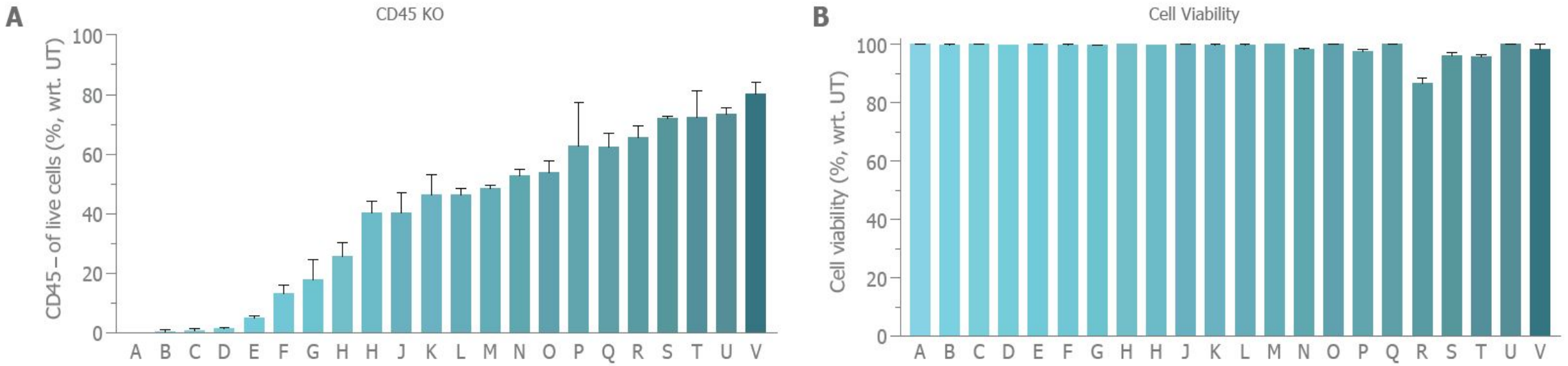


Figure 2. Various LNP compositions were designed from a proprietary lipid library and screened to identify lead candidates. **A)** CD45 knockout efficiency and **B)** cell viability as analyzed by flow cytometry.

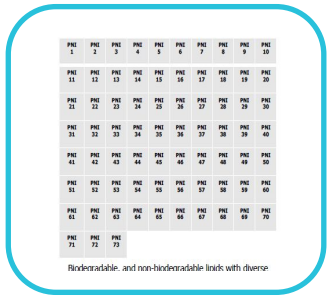
Optimized Pharmacokinetic Profiles

Leverage Precision NanoSystems expertise optimize delivery efficiency, potency, and biodistribution for novel genomic medicines

Access to our Ionizable Lipids

The “Lipid Menu”

Ionizable lipid portfolio



Category 3 “Exploratory”
Fit-for-purpose lipid formulation

Category 2 “Ready to test”
LNP panels with in-house POC data

Category 1 “Ready to use”
LNP formulation in RUO kits, can be licensed for clinical use

Client tested examples with preliminary positive results
Ocular delivery (intravitreal)
Myeloid delivery (intravenous)

Vaccine use (intramuscular)
Liver delivery (intravenous)

T-cell kit for *ex-vivo* use

RUO Reagent Kits Optimized for NanoAssemblr® Systems

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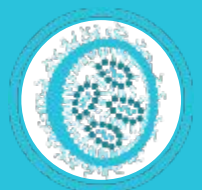
Discovery | Preclinical | Clinical | Commercial



GenVoy™ Delivery Platform

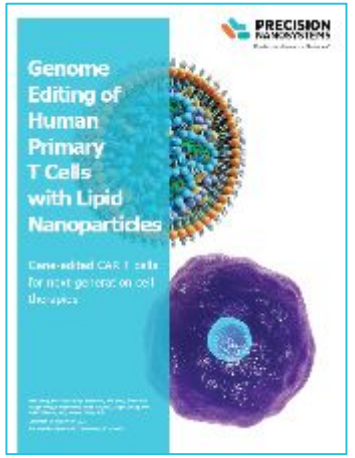
Research Use Only Lipid Nanoparticle Reagent Kits

GenVoy-ILM™ for Ignite

- Tool for trying LNP technology for the first time
- Benchmark for developing formulations

T Cell Kit for Spark and Ignite

- Validated for CRISPR and multiplex gene editing



Off-the-shelf LNP kits

Lowering the barrier to entry for developing genomic medicines by offering easy to use LNP kits with a clear path to the clinic

Proprietary Clinical Lipids & Lipid Nanoparticle Portfolio

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Discovery | **Preclinical** | **Clinical** | **Commercial**

GenVoy™ Delivery Platform

Proprietary Lipids & Lipid Nanoparticle Library

Licensing Paths
1. RUO kit ☐ REA
2. T Cell kit ☐ License
3. Research Evaluation ☐ License

RUO kits model

GenVoy-ILM™

License & Partnering Model

Research Evaluation
Lipid mix/LNP for formulation development & optimization to select and validate lead candidate potency

T Cell Kit

Lipid Licensing & Collaboration
Non-exclusive license including patent rights, lipid supply and Biopharma Services for Process Development, scale up, and GMP batches

Flexible Licensing

Affordable non-exclusive licensing and flexible deal packages to enable custom solutions

Selected Lipid Licensee & Collaborators

Precision NanoSystems and Replicate Bioscience in licensing deal to scale up genomic medicines

NEWS PROVIDED BY
Replicate Bioscience →
Jul 26, 2022, 08:00 ET

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Precision NanoSystems

(PRNewsfoto/Replicate Bioscience)

- Companies aim to support development of up to 15 new genomic medicine products
- Replicate's commercial licensing of lipid nanoparticle technology from Precision NanoSystems at foundation of deal

https://www.newswire.ca/news-releases/precision-nanosystems-and-replicate-bioscience-in-licensing-deal-to-scale-up-genomic-medicines-888682943.html

Precision NanoSystems and Aurora Vaccines Join Forces to Accelerate the Development of Vaccine Candidate for Hepatitis C Virus

Thursday, July 14, 2022

Company Profile | Follow Company

Vancouver, BC, July 14, 2022--(T-Net)--**Precision NanoSystems** (PNI), a leader in non-viral delivery of genomic medicines, announced that it has entered into a strategic collaboration agreement with Aurora Vaccines to accelerate the development and manufacture of its Hepatitis C vaccine candidate.

https://www.bctechnology.com/news/2022/7/14/Precision-NanoSystems-and-Aurora-Vaccines-Join-Forces-to-Accelerate-the-Development-of-Vaccine-Candidate-for-Hepatitis-C-Virus.cfm

PRECISION NANOSYSTEMS

End to End Solutions for Genomic Medicine Development

Genomic Medicines are Complex and Require Specialized Reagents, Instruments, and Services

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Create Transformative Medicines™

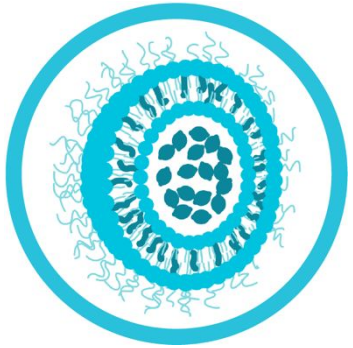
The development of genomic medicines is inherently complex

Biopharma Services

Drug development expertise at all stages

Payload— Genetic API

saRNA Platform



GenVoy Delivery Platform

Proprietary PNI lipids to enable development from the bench to the clinic and beyond

NanoAssemblr Manufacturing

Scalable production for all stages of development

- Development
- Downstream Process
- Safety
- Administration

Nanoparticles can be made a number of ways

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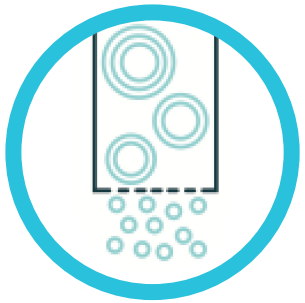
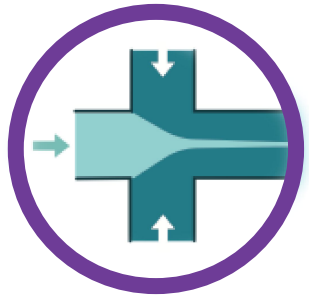


Sonication/Extrusion

- − Limited applications
- − Difficult to reproduce
- − Harsh process conditions
- − Difficult to scale

T-tube and Impingement Jet Macromixing

- − Limited applications
- − Difficult to reproduce
- − Not suited for rapid development
- + Gentler process conditions
- + Demonstrated scale-up for limited applications



Other Microfluidic Approaches

- − Challenges scaling up
- − Not designed for specific nanoparticle manufacturing
- + Expanded applications
- + Reproducible
- + Non-turbulent process conditions
- + Suited to small volume formulations

NxGen Microfluidics

- + Easy to scale
- + Broad range of applications
- + Potential multi-mixer integration opens possibilities
- + Reproducible
- + Non-turbulent process conditions
- + Compatible with series mixing and other complex architectures

PNI/Pall NxGen technology comes with freedom of usage (IP protected)

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PNI's Second Generation Technology

Scalable Solutions from Research Through to Commercial

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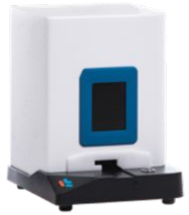
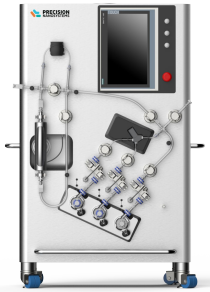
Discovery	Early Preclinical	Late Preclinical	Clinical and Commercial
Spark™ Rapid screening, in vitro studies	**Ignite/Ignite+™** Formulation development at bench scale, early PD	**Blaze/Blaze+™** Process development, CMC, larger animal studies	**Commercial Formulation System** Clinical and commercial manufacturing under cGMP conditions

Existing preclinical systems to accelerate drug development through de-risking MFG runs at bench scale



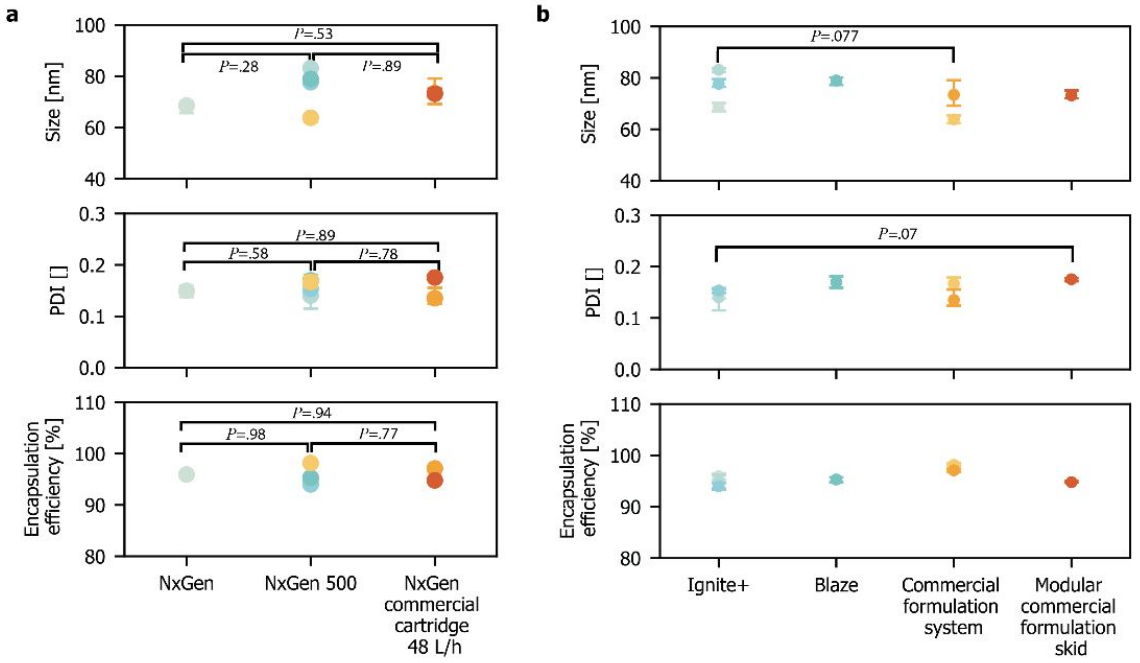


	Discovery	Early Preclinical	Late Preclinical	Clinical and Commercial
NxGen™ Mixer	NxGen™	NxGen™ NxGen™ 500	NxGen™ 400 NxGen™ 500	NxGen™ commercial cartridge 12 L/h* NxGen™ commercial cartridge 48 L/h
Volume per Run^	25 µL – 250 µL	1 mL – 60 mL	20 mL – 10 L	1L – 100 L (8.3hr) 1L – 400 L (8.3hr)
RNA per Run#		Up to 4.5mg Up to 13.5mg	Up to 2.3g	Up to 22.3g Up to 90g

NxGen™ technology enables consistent mixing parameters across all scales

*NxGen™ commercial cartridge 12 L/h is equivalent to NxGen 500
^Undiluted mRNA-LNP formulation
#3:1 FRR, 0.3mg/ml RNA

Consistent CQAs Following Downstream Processing



Condition	NanoAssemblr(r) system	NxGen mixer cartridge	Total flow rate [L/h]	Batch volume [mL]	RNA Encapsulated [mg]
1	Ignite+	NxGen	0.72	30	1.1
2	Ignite+	NxGen 500	6.9	30	1.1
3	Ignite+	NxGen 500	12	30	1.1
4	Blaze	NxGen 500	6.9	30	1.1
5	commercial formulation system	NxGen commercial cartridge 12 L/h [NxGen 500]	12	100	3.3
6	commercial formulation system	NxGen commercial cartridge 48 L/h	48	100	3.3
7	modular commercial formulation skid	NxGen commercial cartridge 48 L/h	48	150	5.0

- LNP size, PDI, and EE% post-formulation, dilution, TFF and sterile filtration are consistent across a range of flow rates on Ignite+, Blaze, GMP System and commercial systems

n=3, error bars represent 1 standard deviation

Expertise & Capabilities for Developing Nucleic Acid Therapeutics

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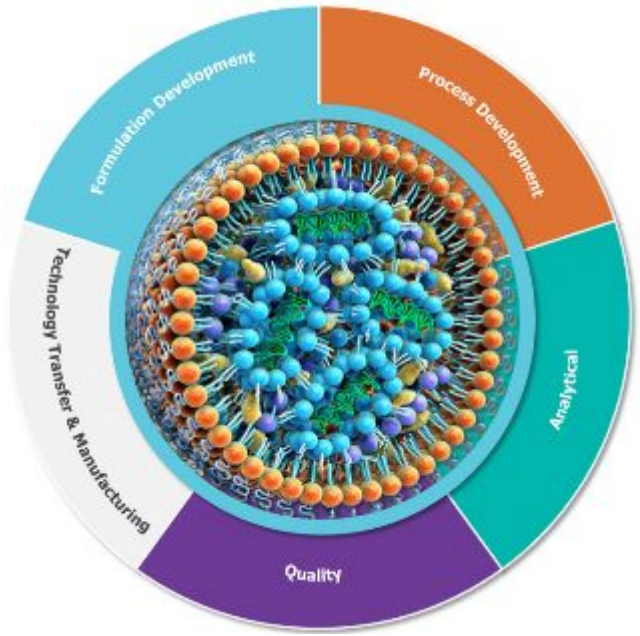
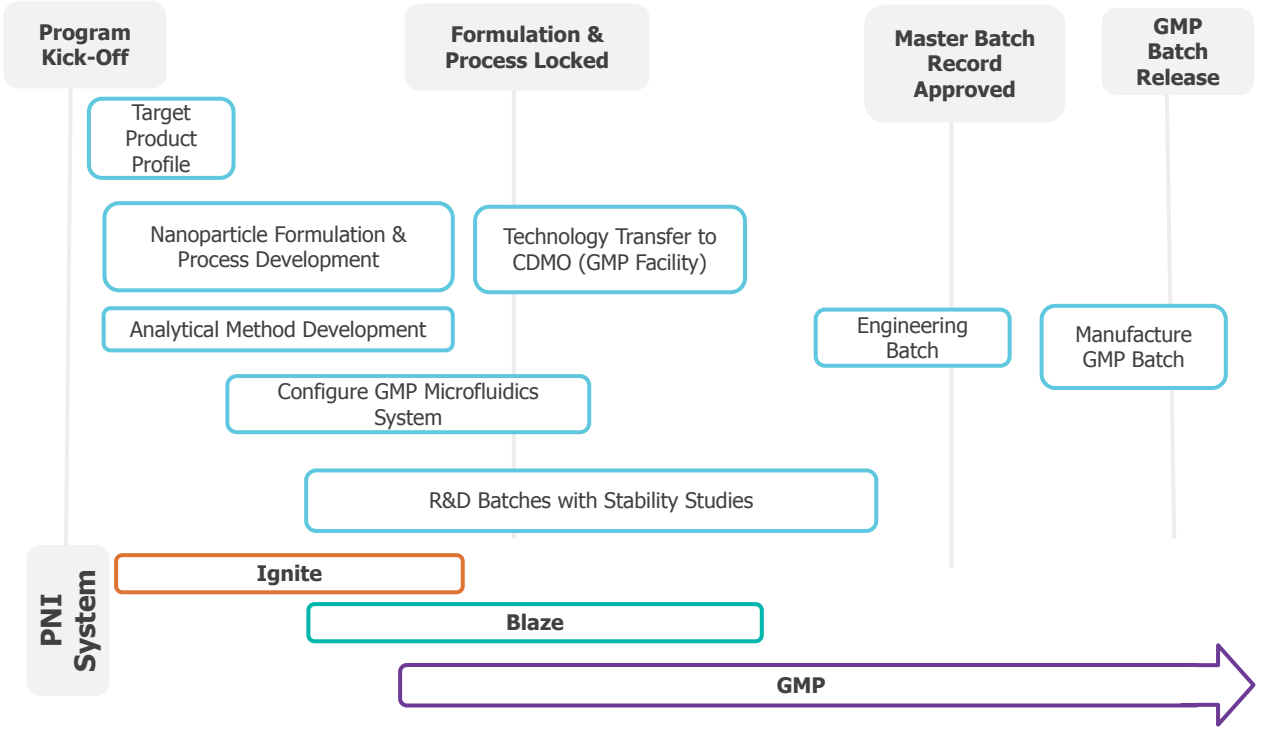
Drug Development Expertise

Core Capabilities for mRNA-LNP Vaccine Development



Expertise Across the Entire Path to the Clinic



Trusted Expertise

Experience across a broad range of drug payloads and carriers. Cumulative experience on over 150 projects, 26 clinical stage programs, production of >44 GMP batches producing 2 approved drugs.

Unparalleled Formulation and Drug Development Expertise

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Expertise

Value-Added Services and Expertise

Formulation Development

- Formulation development to optimize product's physico-chemical properties and biological activity
- Identify critical quality attributes and draft drug product specifications
- Projects encompass a broad spectrum of payloads and delivery technologies

Process Development

- Process transfer from Ignite™ and scale-up with Blaze™ and GMP
- Example projects include scale-up process development, nanoparticle purification, terminal sterilization processes, and design of experiment (DoE) studies to optimize manufacturing parameters

Analytical

- Comprehensive analytical capabilities to support drug development, including genomic medicines
- Example methods include: UPLC (QQQ, CAD, PDA, ELSD) for lipids/drug substance, bioanalyzer for DNA, RNA, protein quantification & in vitro RNA potency assays

Technology Transfer & Manufacturing

- Build custom GMP platform per client specifications and prepare demonstration batch at scale on GMP manufacturing system
- Prepare GLP-Tox batch & perform release and stability testing
- Provide relevant documentation & on site training

Quality

- Support IQ/OQ of GMP manufacturing systems
- Assist with CMC regulatory submissions
- Programs supported by relevant Quality Management Systems (QMS) including Pharmaceutical Quality System for drug products and ISO-9001 (under development) for manufacturing systems

Precision NanoSystems Biomanufacturing Centre – Coming Soon

1055 Vernon Drive, Vancouver, BC, Canada

New Headquarters

Approx 75,000 sq.ft. 4th floor Offices
3rd floor Labs and Offices 2nd floor B

BMC – 2nd Floor

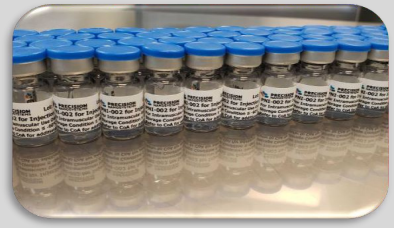
32,000 sq.ft. Launching H1, 2024
Cleanrooms, Labs, Office, Warehouse

2024 Biomanufacturing Centre

- An end-to-end, turnkey facility offering genetic payload, lipid delivery, and NanoAssemblr manufacturing platforms
- Includes modular GMP cleanrooms for mRNA drug substance manufacturing and two suites for drug product manufacturing with solution preparation, drug compounding, and fill/finish facilities
- Controlled non-classified GMP space with QC lab, QC microbiology lab, QC stability and raw material storage chambers, process engineering lab, and controlled ambient storage with shipping and receiving area
- First GMP manufacturing line qualification expected in 2023
- **Manufacturing capacities*:**

  Clinical Formulation
  - Clinical batches up to 20-50 L pre-dilution
  - Formulated drug product with up to 10 g of RNA payload
  - Filling capabilities up to 2400, 2-mL vials

  Commercial Formulation
  - Commercial batches up to 50-100 L pre-dilution
  - Formulated drug product with up to 50 g of RNA payload



***Tentative estimations based on an saRNA LNP vaccine product**

Summary

Precision NanoSystems Solutions Are Versatile

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Drug Products *(Nanomedicines)*

Vaccines
- E.g., mRNA & DNA
- Focus on infectious diseases and cancer
- Population-based to individualized

Gene Therapy
- E.g., siRNA, mRNA, DNA, CRISPR
- Focus on rare and genetic diseases
- Population-based to individualized

Cell Therapy
- E.g., siRNA, mRNA, DNA, CRISPR
- Focus on oncology regenerative medicines
- Autologous & allogeneic

Protein and Small Molecule Nanomedicines
- Focus on all major indications
- Improved targeting, specificity, release kinetics and solubility

=

Drug Payloads

Nucleic Acids

- Exogenous genes that silence, express or edit a genetic mutation causing a disease

Messenger RNA (mRNA)

Self-amplifying mRNA (SAM)

Small RNA (siRNA, microRNA)

CRISPR Guide RNA (gRNA)

Long noncoding RNA (lncRNA) and other emerging modalities

DNA

Proteins

- Peptides, antibodies, and recombinants that regulate biological processes or activate a therapeutic response

Small Molecules

- Low molecular weight organic compounds that aid in regulating biological process

+

Drug Carriers

Lipid Nanoparticles (LNPs)

Deliver Nucleic Acids & Proteins

Liposomes

Deliver Nucleic Acids, Proteins & Small Molecules

Exosomes

Deliver Nucleic Acids, Proteins & Small Molecules

Polymer Particles

Deliver Nucleic Acids, Proteins & Small Molecules

Emulsions

Deliver Small Molecules

Peptide NPs

Deliver Proteins and Nucleic Acids

NPs Encapsulating Viruses

Deliver DNA

We are part of the Danaher Life Sciences family

Accelerating Tomorrow's Genomic Medicines

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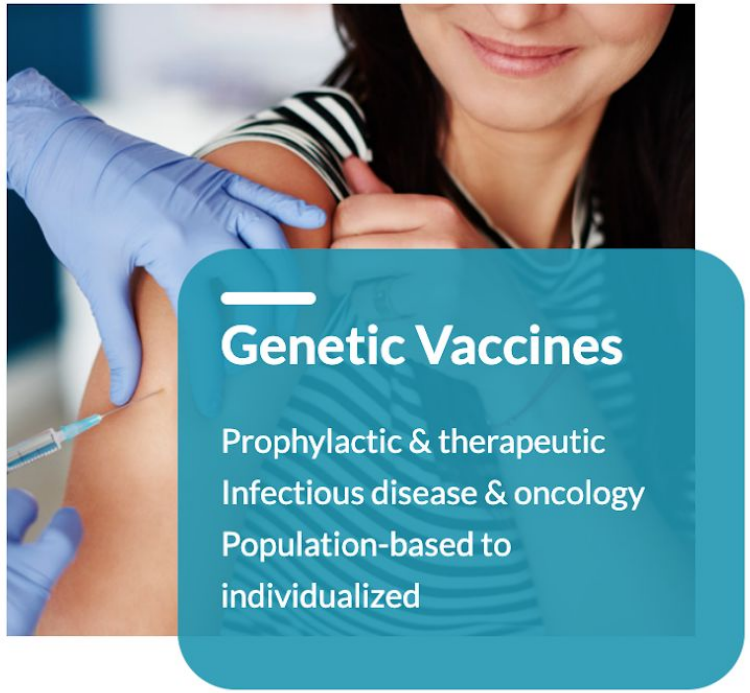
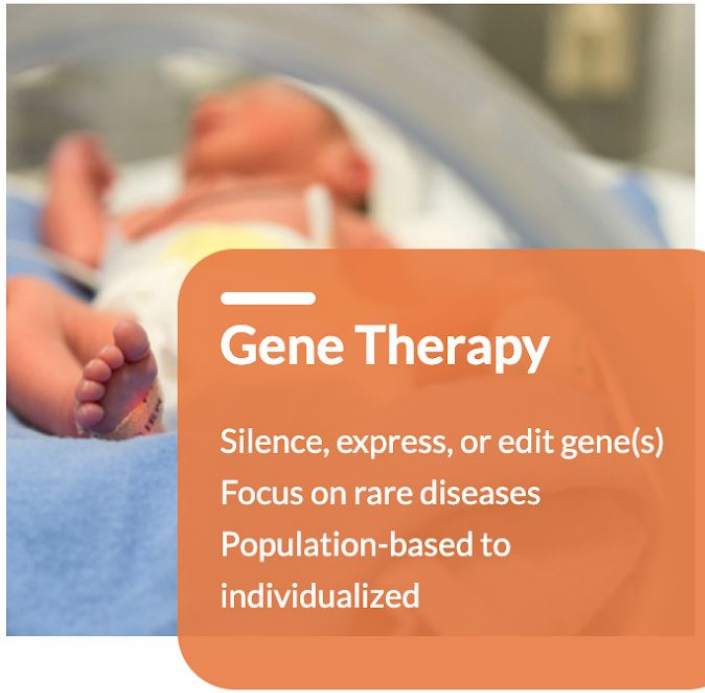
From idea to approved medicine.



Genetic Vaccines

Prophylactic & therapeutic
Infectious disease & oncology
Population-based to individualized



Gene Therapy

Silence, express, or edit gene(s)
Focus on rare diseases
Population-based to individualized

Cell Therapy

Immune cells including T-Cells
Focus on oncology
Autologous & allogenic

These therapeutic modalities have broad application in the prevention and treatment of diseases including infectious disease, rare disease and cancer

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Thank you for listening!

Questions?

Visit us at Booth 310!

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