JENTHERA
THERAPEUTICS

NOVEL IN-VIVO TARGETED CRISPR THERAPEUTIC PLATFORM

NON CONFIDENTIAL

TEAM, ADVISORS AND PARTNERS

JENTHERA THERAPEUTICS

FOUNDERS

Dr. Philip Roche, Scientific and clinical innovator

+15 years industrial research in drug development, biology, bioengineering and biometrics. Peer reviewed author, lead inventor on multiple patents

Laurent D. Ziri CPA, CA, Strategy and operations

+17 years experience in strategic and large scale operations management and medical technology transfer

Sandra Azoulay CPA, CA, Finance and communications

+15 years corporate advisory in healthcare

Preclinical biotech with a novel CRISPR therapeutics platform

Focus on oncology

Founded in 2019

3 internal programs

- **INVIVO CAR -** LEAD PROGRAM
- Non-Small cell Lung cancer (KRAS)
- B-ALL

2 partnered programs

Illumina ACCELERATOR · MaRS · NRC-CNRC Canada · THE UNIVERSITY OF TEXAS MD Anderson Cancer Center Making Cancer History® · CREATIVE DESTRUCTION LAB · MassBio MASSACHUSETTS BIOTECHNOLOGY COUNCIL

IN VIVO CRISPR DELIVERY

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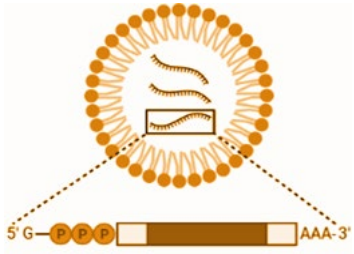
VIRAL PARTICLES

1. Size
2. Tissue Tropism
3. Integration
4. Immunogenicity

LIPOSOMES



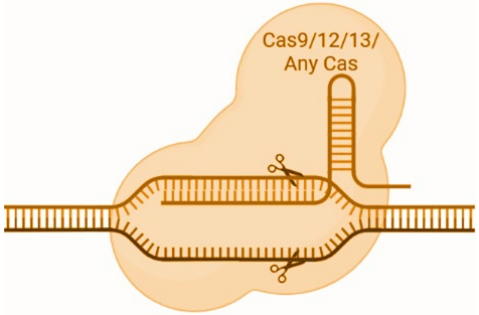
1. Non-targeted delivery
2. Liver accumulation
3. Poor stability

THE IDEAL: TARGETED RIBONUCLEOPROTEIN (RNP – NUC-NAB)

TARGETED DELIVERY
Distribute and accumulate like a Biologic/Mab

LOW OFF TARGET EVADE IMMUNE SYSTEM

RAPID LEAD GENERATION



SCALABLE PRODUCTION

FLEXIBLE TO ENGINEER

LEAD NUCLEASE NAB PROGRAM - INVIVO CAR-T

Nuclease | **Cell Specific NANO-ANTIBODY** | **Tagged DNA template**

Conversion of T-cells to CAR-T, Ex-vivo & In-vivo

THERAPEUTIC PROGRAM - IN-VIVO CAR-T

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EX-VIVO T-CELL DELIVERY

- ✓ **4 Leads** designed, expressed and QA
- ✓ **Rapid** Delivery to Jurkat and Primary T-cells
- ✓ Delivered to **over 90%** of CD4+ T-cells
- ✓ **No** Nucleofection, Lipids or Polymers

EX-VIVO HIGH FREQUENCY CAR INSERTION

- ✓ High Delivery and high insertion of CAR
- ✓ Edited Cells proliferation with high viability
- ✓ CD19+ Raji cell co-culture causes CAR+ cells expansion
- ✓ CAR expressed at **78%** primary T-cells and **90%** Jurkat cells
- ✓ **No** selection, sorting or magnetic enrichment

EFFICACY IN-VIVO CAR GENERATION

CD4+ targeted Nuc-Nab **Delivery In-vivo** under 24hrs

In-vivo CAR generation by Nuc-Nab

CAR T cells Proliferate

B-cell Lymphoma (Raji) **Reduction and Elimination**

✓ **FIRST** IN-VIVO CAR-T CRISPR RNP SYSTEM

✓ Next Stop Preclinical Development to Clinical Evaluation

COMPARATIVE INVIVO CAR-T: Nuc-Nab vs Lenti

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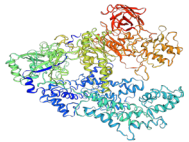
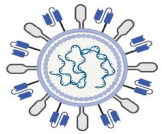


JENTHERA NUC-NAB



UMOJA UB-VV100

Ex-vivo cell delivery %	Over 90% after 3 days	38% after 7 days
Ex-vivo editing %	Over 78% after 3 days	24% after 7 days
CAR-T cells In-vivo	90 CAR-T cells per microliter of blood	30 cells per microliter of blood
Eradication of malignant B Cells in NSG mice	Total eradication of initial and Secondary challenge	Total eradication of initial challenge. Second challenge not evidenced
Cost of production	$	$$$$
Funding	250K (Pre-Seed 2020-2021)	267M$ (Series B June 2021)

CONCLUSIONS

Unlocking unprecedented therapeutic possibilities in gene editing

1. FULL SPECTRUM GENE EDITING THERAPEUTIC PLATFORM

Deliverable in-vivo | Multi-valent Multi-specific Modular | Knock-ins, Knock-outs Complex manipulations | Largely extended range of cells and targets

2. 2 PROGRAMS READY FOR PRECLINICAL

2 challenging therapeutic areas with solid in-vivo data

- In-vivo T-cell reprogramming
- KRAS targeting in NSCLC

3. DIRECT RNP DELIVERY

Safety from off-target and immunogenicity | Well defined, cost-effective biologic production/CMC | Rapid iterative lead selection process shortening drug discovery | Tailored precision leading to high efficacy

4. FUNDRAISING

$25M Series A (tranched)

Leading to first-in human

QUESTIONS

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