

IRAZÚ ONCOLOGY

First-in-class OMV immunotherapy —
antigen, adjuvant, and checkpoint in
one

Team: Proven Leadership & Advisors

Leadership Team



Jeffrey Strovel, PhD
CEO



Marcio Chedid, PhD
CSO



James Wooldridge, MD
Acting CMO



Elizabeth Smith, PhD, MBA
SVP Corporate Strategy



Board & Advisors

Marco Chacon, PhD
Founder & Chairman



James Berens
Wexford SciTech



Rick Kohr
Evergreen Advisors



Nilo Azad, MD
JHU



Aaron Rapoport, MD
UMB



Román Macaya, PhD, MBA
Harvard



Caroline Popper, MD, MPH
JHU



Paul Boyce, MS
Illumina



Executive Summary



Cancer Vaccines are Delivering

The field has arrived. Merck's own mRNA-4157 + KEYTRUDA cut melanoma recurrence 49% at 5 years, and BioNTech's \$1.25B CureVac acquisition confirms peak conviction in therapeutic cancer vaccines.



The Platform

One self-adjuvanted OMV construct that fires both innate and adaptive immunity — with lymph node tropism, no cold chain, and plug-and-play antigen swapping. 15+ years of R&D.



The Unmet Need

~70% of patients fail anti-PD-(L)1 therapy, with no immunotherapy that both drives antigen-specific immunity and remodels the TME. A \$14.7B CPI-refractory market by 2030 — NSCLC, CRC, gastric, HNSCC. IRZ-03 is built for it.



Strategic Fit

A first-in-class, off-the-shelf platform that complements checkpoint blockade — designed to re-sensitize CPI-refractory tumors and extend the IO franchise. FDA Pre-IND alignment achieved; IND targeted H1 2028. Open to research and licensing partnerships on the OMV platform.

Multiple Challenges Exist Today for IO Therapy

60–70% of patients fail checkpoint inhibitors. Antibody checkpoint blockade occupies the PD-1/PD-L1 axis but leaves PD-L1⁺ tumor and stromal cells intact — IRZ-03 is designed to eliminate them

IRAZU'S OMVs: A First-in-Class Multimodal IO Platform

Intrinsic Lymph Node Occupation

OMVs naturally traffic to lymph nodes and activate resident dendritic cells, overcoming the rate-limiting step in T cell priming without LNPs, conjugates, or intranodal delivery.

Self-Adjuvancy

Co-delivering antigen and danger signal to the same APC simultaneously, something admixed formulations cannot reliably do

Low-Cost Manufacturing

Bacterial fermentation at a fraction of the cost of mRNA manufacturing — scalable to global demand

Off-the-Shelf

No patient-specific manufacturing — ready for immediate treatment initiation

Multi-Target, Multi-Mechanism

Three validated antigens targeting adaptive immunity and TME remodeling in a single molecule. More mechanistic breadth than bispecifics.

Durable Memory Response

Long-lasting immunological memory for sustained protection against recurrence

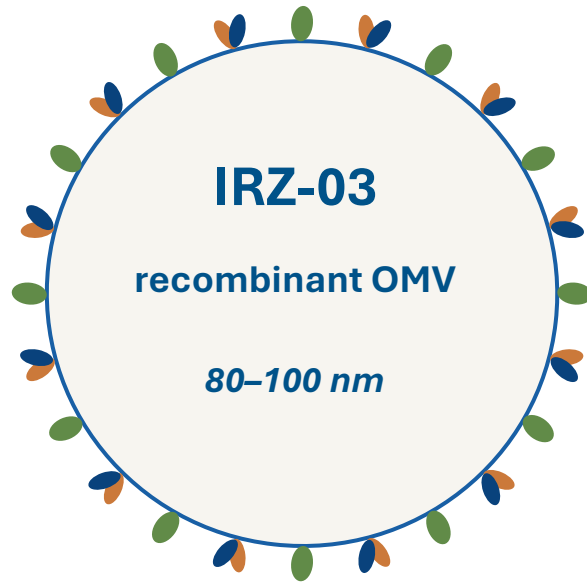


IRZ-03 is designed to be the first cancer immunotherapy to simultaneously drive antigen-specific immunity and remodel the tumor microenvironment.

Solution: IRZ-03 Elimination of Tumor + Suppressive TME

IMPROVED TOLERABILITY

Attenuated TLR2/4 signaling · Immunomodulatory LPS
· Flagellin KO



DURABLE MEMORY RESPONSE

Long-lasting immunological memory for sustained protection against recurrence

1

Tumor & TME Targeting, Clinically Validated

MUC-1 + CEA Fusion (tumor antigens)  · PD-L1 (TME target) 

SpyCatcher/SpyTag enables plug-and-play swapping

2

Coordinated Innate Activation

TLR2/4 self-adjuvancy · Native lymph-node tropism

Antigen + danger signal co-delivered to the same APC

3

Potent Adaptive Priming

CEA/MUC-1-specific CTLs · B cell response · IFN- γ

Promotes durable immunologic memory

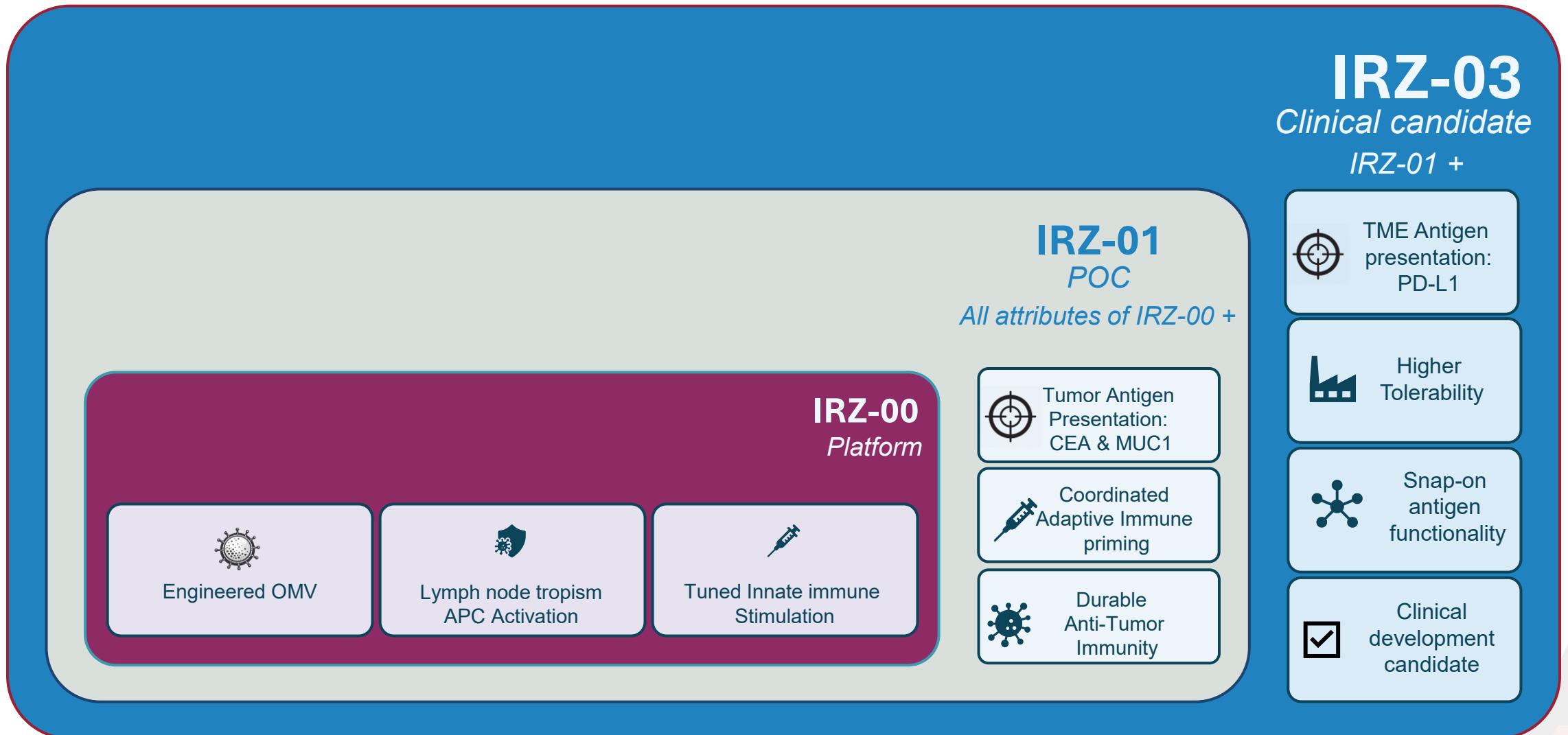
4

TME Remodeling — Differentiator

PD-L1-specific T cell immunity






Eliminates PD-L1⁺ suppressive cells: tumor, TAMs, MDSCs

Rational Platform Development



Platform Differentiation

Irazu's OMVs vs. competing cancer vaccine modalities

Feature	Irazu's OMVs	mRNA-LNP	Peptide
 Lymph Node Tropic	Intrinsic	Moderate	Poor
 Self-Adjuvanted	Yes (TLR2/4)	Partial	No
 Tumor & TME Targeting	Yes	No	Yes or No
 Manufacturing	Very Low COGs	> \$200K/pt	Low COGs
 Plug-and-Play	Yes	Partial	Yes

 Advantage

 Moderate

 Limitation

Irazu is Developing Off-the-Shelf Immunotherapies for Patients with Solid Tumors

Jeffrey Strovel, PhD

Chief Executive Officer

Irazú Oncology

4 N. Martin Luther King Jr. Blvd., Baltimore, MD, 21201

M (301) 580-9858

jstrovel@irazuoncology.com

IRAZÚ ONCOLOGY