

Any CAR. Any delivery. One signaling layer.

NanoKar is not a competing CAR-T. Our ITAM tuning platform engineers the CD3 ζ signaling domain that every approved CAR-T shares, addressing the persistence and toxicity barriers limiting the field today. Solid tumors are the open field in cell therapy, and calibrated signaling is how cell therapy gets there.

Data generated with ex vivo engineered CAR-T, the format every approved product uses, and encoded at the construct level, so it carries into in vivo delivery.

THE CHALLENGE



Limited persistence: 30-60% of hematological malignancies relapse as CAR-T cells exhaust before clearing the cancer.



Severe toxicity: Severe CRS rates reach 48% in some approved-product trials (ELIANA), and CRS remains a boxed warning across the class.



Solid tumors: A pooled objective response rate of approximately 9% across solid-tumor trials, a vast unmet need.

THE PLATFORM



Tunable Toxicity

Dial T-cell reactivity up or down at the signaling source to control CRS risk.



Enhanced Persistence

Long-lived memory T cells with reduced exhaustion markers (PD-1, Tim-3, Lag-3).



Any CAR, Any Target

Integrates into any CAR specificity (T, NK, macrophage) and is portable across ex vivo and in vivo delivery.



Delivery-Agnostic

Encoded in the construct. Travels with ex vivo, allogeneic, and in vivo delivery.

100%

Survival Across Five Serial Tumor Re-Challenges (CD19 Model)

PRECLINICAL VALIDATION

Lead ζ -ITAM construct in a CD19 xenograft B-ALL model, tested across five consecutive tumor re-challenges from a single dose.



Outperformed standard CD3 ζ :

Improved tumor control versus the same CAR with the standard domain.



Reduced exhaustion: Lower PD-1,

Tim-3, and Lag-3, a predictor of durability.



Durable memory: Elevated IL-7R⁺ CD4⁺ memory populations.



Sustained activity: Cytokine production maintained at 29 days.

PIPELINE

Target	Indication	Stage
CD19	B-cell malignancies (B-ALL, lymphoma)	✓ Preclinical
HER2	Breast cancer (solid tumor)	✓ Preclinical
GD2	Glioblastoma (solid tumor)	✓ Preclinical
Nectin4	Bladder cancer	Pending
EGFRvIII	Glioblastoma (solid tumor)	Pending
B7-H3	Ovarian cancer	Pending
BCMA	Multiple myeloma	Pending

TRACTION & IP



Intellectual Property: Patent pending. Non-provisional application filed 2025, provisional application filed 2026.



License: Exclusive worldwide license from the University of Utah. Transfers to a successor entity on change of control.



Publishing: Manuscript under revision (2026).



Next milestones: Solid-tumor efficacy readouts underway, with preclinical expansion toward IND-enabling studies.



Full data package and mutual NDA available on request.

Craig Mosman, Chief Executive Officer
craig@nanokartherapeutics.com

Altitude Lab, Salt Lake City, UT