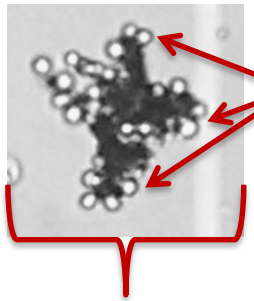
T-cell Enrichment using MagCloudz platform

- Peripheral blood mononuclear cells (PBMC) were isolated from whole blood
- T-cell populations were enriched using bio-tinyated anti-CD3
- Data sets include Human Peripheral Blood and Umbilical Cord Blood



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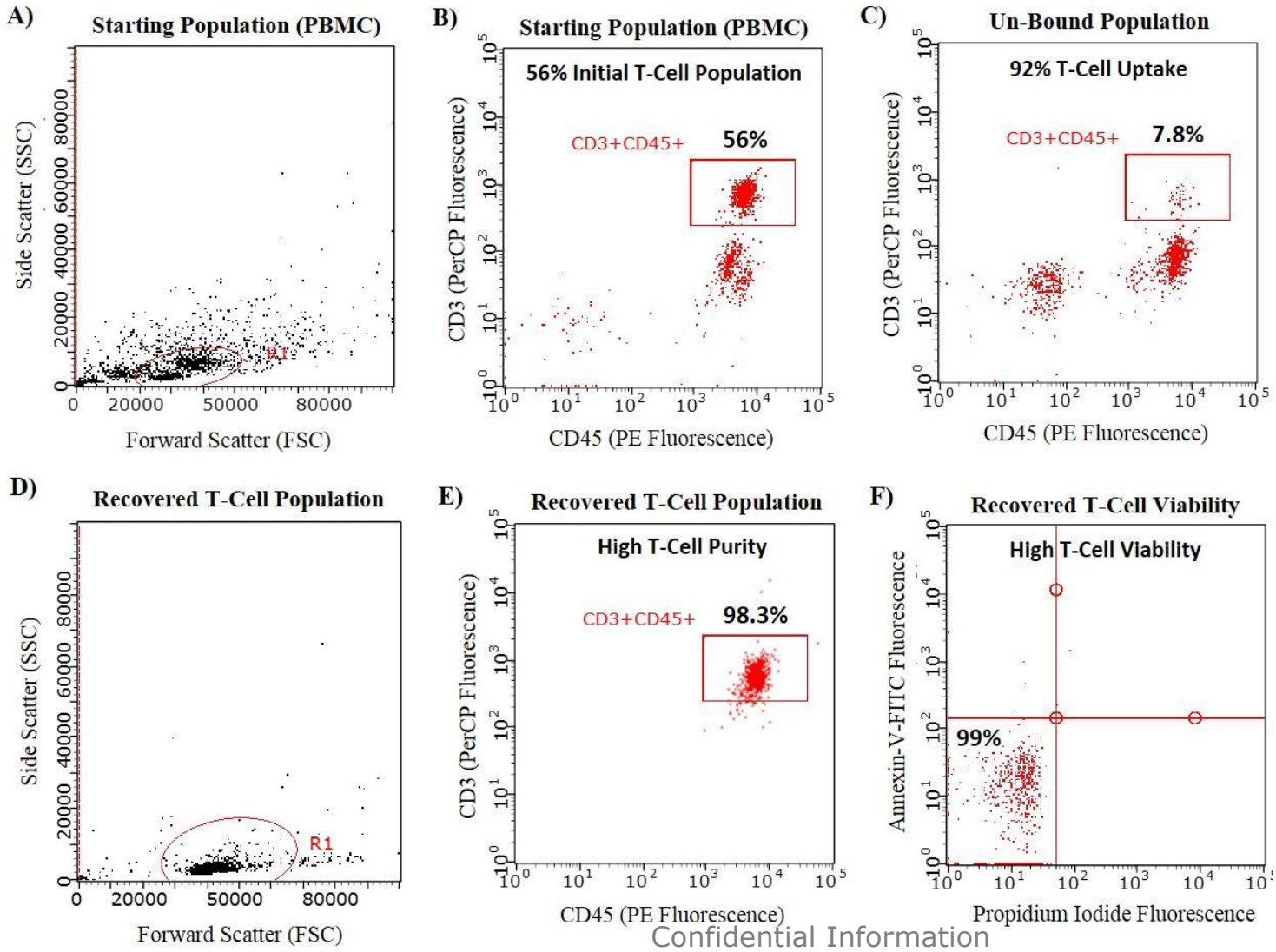
MagCloudz with QuickGel™ Technology

T-Cell Enrichment from PBMC Fractions

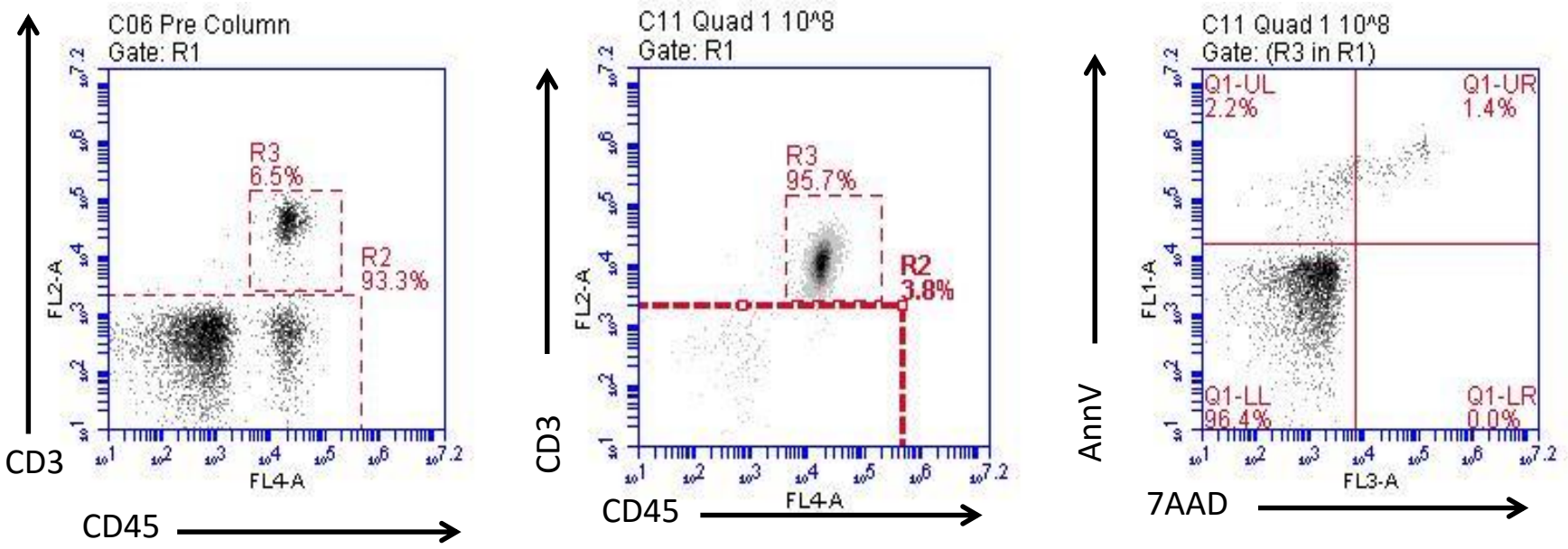


80% recovered T-cells

MagCloudz™ with QuickGel™ Technology

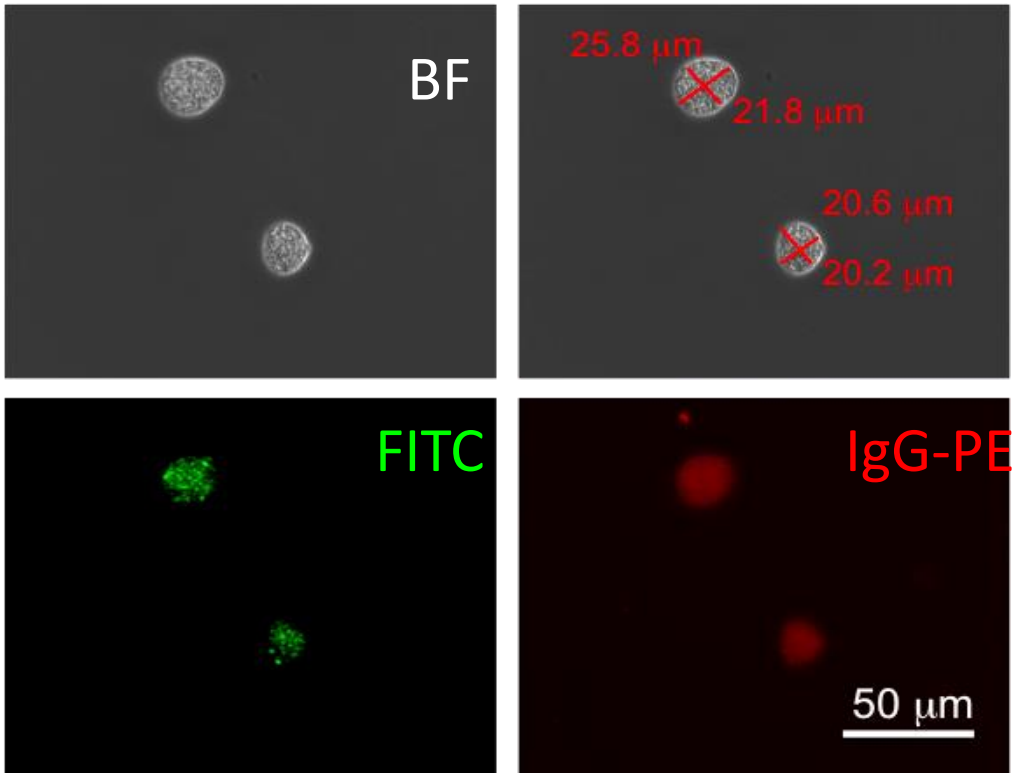
T-Cell Enrichment from HUCB Fractions

- Human umbilical cord blood (HUCB) was enriched for T-Cell populations:



Attributes of Quickbeads

- ✓ Plug and play (easy to use) chemistry
- ✓ Bio-friendly release
- ✓ Mono-dispersed
- ✓ Very-low settling velocity
- ✓ 100x great magnetic moment than conventional beads



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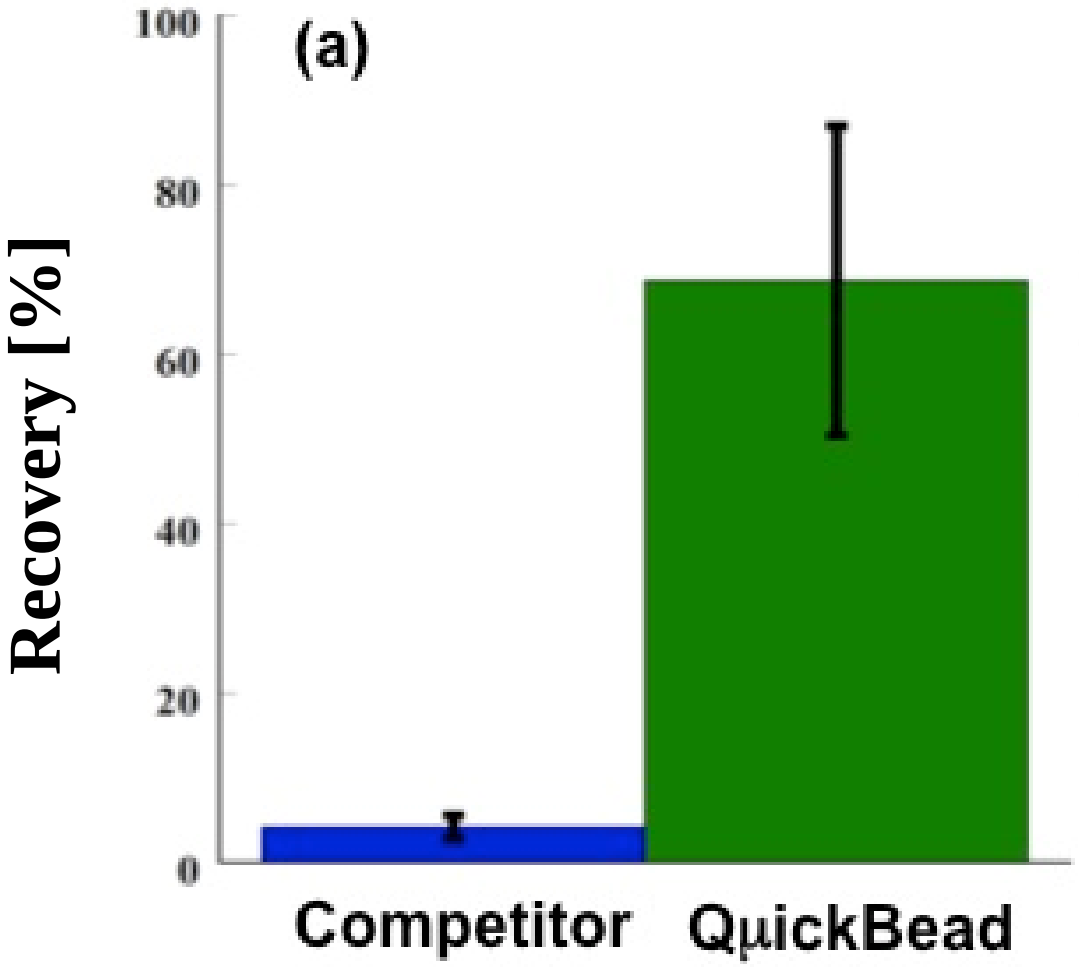
Recovery Benchmark



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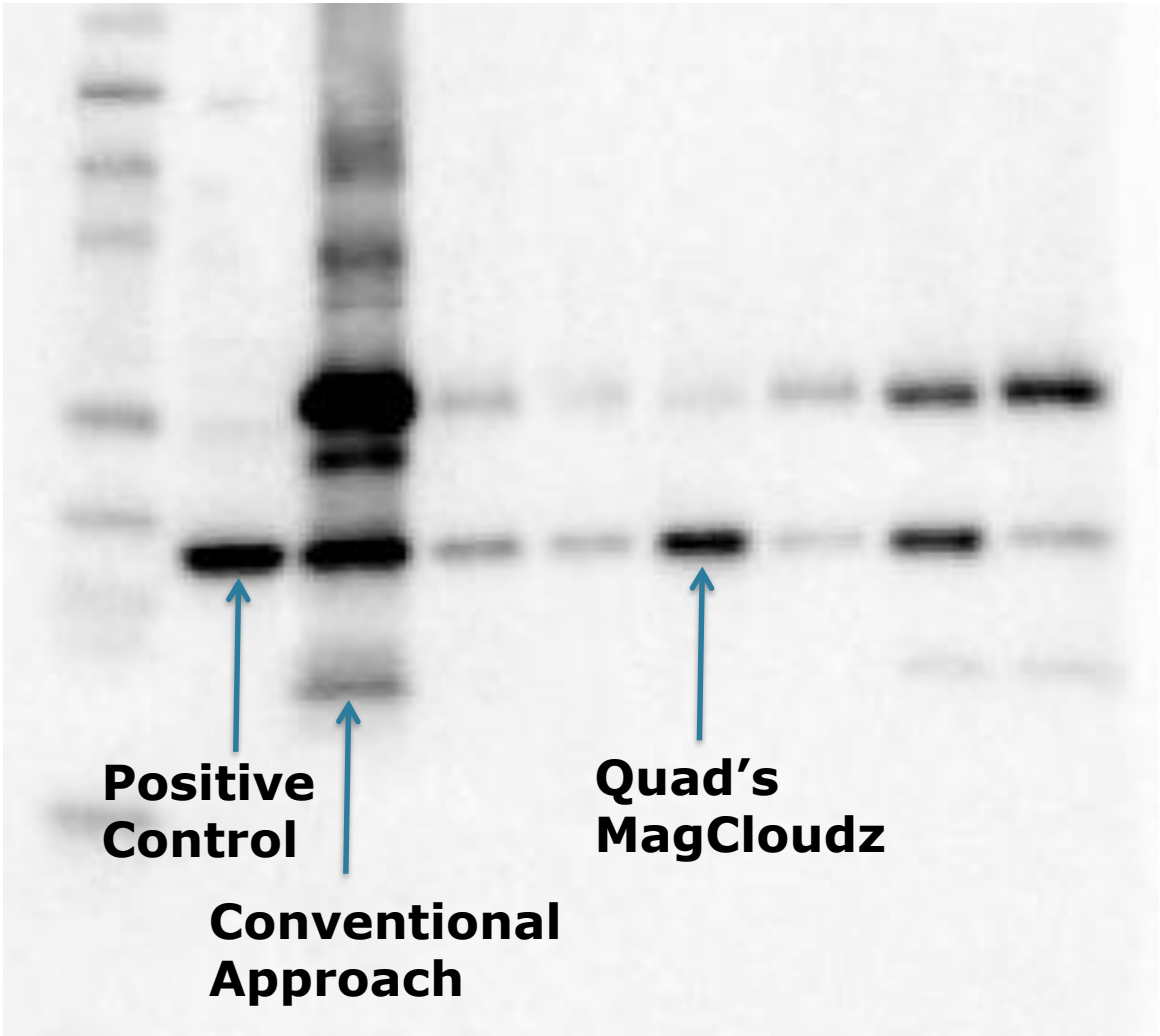
MagCloudz™ with QuickGel™ Technology

Strategic demonstrates protein purification: Quad's MagCloudz yield much cleaner results



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Cell Sorting Features for CAR-T Immunotherapy

	Desired Features*	Quad Technologies	Company M	Company L
Cell Viability	≥ 70%	✔	✔	X
Purity	≥ 80%	✔	✔	✔
Residual Magnetic Particles	100 magnetic particles ≤ 3,000,000 cells	✔	X	✔
High Throughput	> 5,000,000 cells/s	✔	✔	X
Sterile	Yes	✔	✔	✔
Ability to Multi-sort	CD4+CD8+	✔	X	X

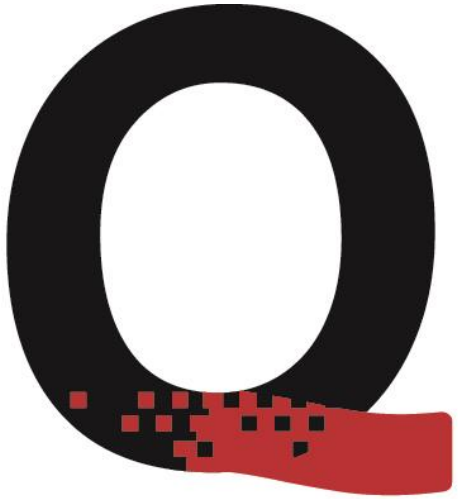
*Carl June et. Al New England Journal of Medicine (2014)

What is in the Box?

Quad Technologies

Summary

- First viable magnetic separation product with ***cell release capabilities***
- Simple, short workflows with ***time and cost savings*** over competitors
- Our MagCloudz system achieves ***high purity, efficiency & excellent viability*** of isolated cells



Science. Enabling life.™

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