TROCAR PHARMA

RadShield™ (YK-4-250) · First-in-Class Acute Radiation Syndrome Mitigator

Government · Space · Nuclear Incident Response · Oncology Supportive Care

■ **TRIUNITY Capital Ventures**

SERIES A RAISE

$40M · SERIES A PREFERRED

(30% EQUITY)

$93.33M pre · $133.33M post

invest@triunity.vc

88%	0	$34M	$14B+
SURVIVAL @ 14.3 Gy	FDA-APPROVED THERAPIES	DEVELOPMENT COST	RADIATION MITIGATOR MARKET
DoD/AFRRI Preclinical	For Early Lethal ARS	Through Phase 2	Opportunity

THE OPPORTUNITY

A national-security-grade unmet need — radiation mitigation with multiple commercial pathways

Acute Radiation Syndrome (ARS) is lethal at 4–20 Gy due to catastrophic GI tract damage and bone marrow failure. Today, there are **no FDA-approved treatments** for the early lethal effects of radiation exposure. RadShield targets this gap across **defense readiness, space exploration, nuclear incident response,** and medical radiation settings.

THE PROBLEM

Legacy countermeasures do not address GI-ARS survivability

- **High-mortality window:** GI-ARS can kill within days to weeks after radiation exposure.
- **Operational risk:** military and first responders lack deployable post-exposure therapy.
- **Space constraint:** long-duration missions face cumulative radiation exposure risk beyond LEO.
- **Oncology need:** radiation-induced GI injury limits therapeutic dosing and patient outcomes.

WHY NOW

Government Pull + Procurement Path

Active collaboration with DoD/AFRRI and research partners positions RadShield for **funding, validation,** and **government procurement** — while a diversified clinical pipeline expands total addressable market and reduces single-indication risk.

FIVE VALIDATED MECHANISMS

- LGR5+ intestinal stem cell preservation
- DNA double-strand break resolution
- ROS (reactive oxygen species) inhibition
- ATM signaling pathway restoration
- Cytokine storm suppression (TNF-α / IL-6)

PIPELINE UPSIDE

13+ additional indications under development including oncology supportive care, hypertension, NASH, inflammatory diseases, Alzheimer's disease, and viral infections — representing **$100B+ additional total addressable market** and significant valuation optionality for acquirers and strategic partners.

$36.65B 10-YEAR MID-CASE REVENUE PROJECTION

Mid-case 10-year cumulative revenue projection across all four commercial verticals based on validated market penetration assumptions and premium government-grade pricing models.

INTELLECTUAL PROPERTY

- **Georgetown Exclusive License No. 2022-0493** — executed June 2022, sole commercial rights.
- **Harness Dickey IP Counsel** — patent prosecution and portfolio management.
- **Covington & Burling** and **Akin Gump** — regulatory and transactional counsel.

THE SOLUTION

RadShield (YK-4-250): patented small-molecule ARS mitigator — administered post-exposure

- **Mechanism:** modulates the renin-angiotensin system (RAS) via ACE2/Ang II signaling to protect and restore GI tract integrity.
- **Repair + regeneration:** supports intestinal stem cell recovery and DNA damage repair pathways throughout the GI mucosa.
- **Post-exposure dosing:** demonstrated therapeutic benefit when administered within 24 hours of radiation exposure.

PRECLINICAL EVIDENCE

88% survival vs. 58% control

14.3 Gy exposure · DoD/AFRRI studies

30%+ improvement vs. control at a highly lethal dose

DEVELOPMENT PLAN

Stage	Objective	Status
Pre-IND	FDA engagement + design	Completed
GLP Tox	Repeat-dose tox (rat+pig)	Next
cGMP	API manufacture + form.	Planned
IND	FDA IND submission	Planned
Phase 1/2	Safety + surrogate efficacy	Planned

Total development cost through Phase 2: $34M

REGULATORY PATHWAY

- **FDA Animal Rule (21 CFR 314.610):** confirmed pathway via Pre-IND meeting — allows approval without human efficacy trials.
- **Georgetown Exclusive License No. 2022-0493** (June 2022) — sole commercial rights to YK-4-250.
- **NIH Grant 1U01AI187033-01** — Priority Score 30; active federal research validation.
- **$4.5M+ DoD/AFRRI preclinical funding** — independent government-validated efficacy data.

INVESTOR TERMS SUMMARY

Reg D Rule 506(b) offering · Accredited investors only · Minimum investment $100,000 · 400 units available · Post-money valuation $133.33M · No debt overhang · Series A Preferred with standard protective provisions.

COMPETITIVE LANDSCAPE

RadShield is the **only oral, post-exposure countermeasure** targeting GI-ARS survivability. Competitors AEOL-10150 and Ex-RAD are IV/injection-based with no GI-specific efficacy data. BIO 300 addresses hematopoietic ARS only. **RadShield is the sole first-in-class candidate** in the GI-ARS survival window.

KEY MILESTONES

- **Q3 2026:** GLP toxicology studies initiated (rat + mini-pig repeat-dose)
- **Q1 2027:** cGMP API manufacturing and formulation development completed
- **Q3 2027:** IND submission to FDA — Animal Rule pathway confirmed
- **2028–2029:** Phase 1/2 clinical execution with surrogate efficacy endpoints
- **2030+:** NDA submission and government procurement negotiations

MARKET & COMMERCIALIZATION

Multi-market deployment — $67.5B global TAM across four verticals

Defense	Near-term	Readiness + stockpilin…
Civilian Prep.	Mid-term	Nuclear incident respo…
Space	Mid/Long	Astronaut health · d…
Oncology Support	Long-term	Radiation injury mitigat…

USE OF PROCEEDS

IND → Phase 1/2 → Strategic Partnerships

Funding supports GLP toxicology studies, cGMP API manufacturing, IND submission, Phase 1/2 clinical trial execution, and strategic partnership development with government agencies and institutional healthcare stakeholders.

TEAM

- **Milton L. Brown, MD, PhD**
  Co-Founder, Chairman & CEO — drug discovery, immunology, molecular oncology
- **Damian V. Dolland, MBA**
  Co-Founder — capital formation, government relations & strategic partnerships
- **Donald "Skip" Trump, MD**
  Clinical development lead — oncology, radiation medicine
- **Melissa Brooks, CPA**
  Chief Financial Officer — financial operations & compliance
- **Joy Hinton, Esq.**
  General Counsel — regulatory, securities & transactional law

GOVERNMENT CONTRACTING ADVANTAGE

Sole Source Justification Memorandum filed. Positioned for Biodefense procurement under BARDA, DTRA, and DoD stockpile authority. First-mover advantage with no FDA-approved competition in the GI-ARS segment. Congressional support secured — Rep. Steny Hoyer letter of support on file.

DEFENSE & INSTITUTIONAL MARKETS

- **DoD Readiness:** 1.3M+ active duty personnel require deployable post-exposure countermeasures.
- **FEMA / DHS:** nuclear incident response stockpiling for 340M+ U.S. civilians.
- **NASA / SpaceX:** astronaut health protocols for lunar, Mars, and deep-space missions.
- **NCI / Oncology Centers:** GI protection adjunct in 650,000+ annual radiation therapy courses.

DILIGENCE & NEXT STEPS

Qualified investors may request access to the full investor package including PPM, audited financials, Georgetown License Agreement, DoD/AFRRI study summaries, Sole Source Justification Memorandum, and regulatory pathway documentation.

CONTACT & ENGAGEMENT

- **Email:** invest@triunity.vc | **Web:** bankabledeals.com
- **Derrick Phelps** — Capital Consultant, TriUnity Capital Ventures
- **Christopher & Leah** — Investor Relations Team, TriUnity
- Schedule a private briefing at your convenience. Offer

INVESTMENT TERMS

$40M Series A Preferred · 30% Equity

Pre-money: $93.33M · Post-money: $133.33M

Reg D Rule 506(b) · Accredited Investors Only

INVESTOR CONTACT
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DILIGENCE
White Paper + Investor Deck Available Under NDA

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