ABSTRACT TEMPLATE: CHECKLIST AND INSTRUCTIONS

Company name **CORE-BLOOD**, CEO name **Oran Yakubovsky**,
Website N/A

CATEGORY: **Medical Devices**

SESSION : **War-Time Innovation, Peace-Time Solutions; Harnessing Crisis-Driven Breakthroughs for the Future of Medicine**

* **Executive Summary / Investment Rational**

CORE-BLOOD is a breakthrough device delivering optimized blood to combat and civilian trauma patients in hemorrhagic shock, addressing a key gap in current transfusion protocols. Preclinical porcine data show improved survival and metabolic outcomes. Human blood optimization feasibility has been demonstrated. The project is led by experts in surgery, anesthesia, and ECMO from top Israeli medical centers.

* **Core Technology**

CORE-BLOOD centers on a compact, single-operator device that optimizes stored blood just before transfusion without altering transfusion time or causing physiological disruption. Its uniqueness lies in the real-time conversion of standard blood units into fully optimized therapeutic solutions, potentially enhancing tissue viability during the critical pre-surgical window. This addresses a previously unexplored intervention point in hemorrhagic shock.

* **Product Profile/Pipeline**

The CORE-BLOOD device is currently in the preclinical stage. Animal studies (Q1, 2025) show survival and physiological benefits with optimized blood. A human feasibility study is planned (Q4, 2024). Key milestones include completion of animal studies (Q2, 2025), and subsequent transition to engineering development (Q3, 2025). Preliminary discussions and collaborations are underway across multiple clinical and engineering teams.

* **Business Strategy**

Short-term, the team will generate value through validation of the biological and clinical impact of optimized blood, establishing intellectual property and technical protocols. Long-term strategy focuses on dual-use commercialization: military medicine and civilian emergency systems (ambulance services, trauma centers). The device will be developed for portability, ease of use, and compatibility with existing blood bank practices, enabling integration into global trauma systems.

* **What's Next?**

The next phase (Q2, 2025) involves finalizing in-vivo studies and presenting data to support the product’s first-in-human trial readiness (Q3-4, 2025). Engineering of the prototype will begin in parallel with pilot manufacturing planning (Q3, 2025). Organizationally, the team will expand to include biomedical engineers and regulatory consultants. Financial planning will support grant applications, strategic partnerships, and early venture investment to scale development and clinical testing.