



FOR IMMEDIATE RELEASE

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**MTEC PARTNERS WITH THE U.S. ARMY TO DESIGN AND DEVELOP
EXTRACORPOREAL LIFE SUPPORT DEVICES**

Charleston, SC – In partnership with the U.S. Army Medical Research and Materiel Command (USAMRMC), the Medical Technology Enterprise Consortium (MTEC) is pleased to announce that Human Biomed, Inc. of South Burlington, Vermont, has been awarded funds to develop a lightweight, rugged, user-friendly extracorporeal life support (ECLS) device. This research project is issued under MTEC’s Extracorporeal Life Support Solicitation, which sought the design and prototyping of a life support device that combines extracorporeal renal and lung support functions.

Entitled “Development of Multi-Functional Extracorporeal Life Support (ECLS) System for Lung and Kidney Support: Pneuma-K ECLS System,” Human Biomed, Inc.’s project will receive funding in the amount of \$1 million from USAMRMC. Funding will support the development and construction of a single “bridge” ECLS device that can be used in the field to support patients with both acute kidney injury and acute respiratory distress syndrome.

Current military conflicts have exposed service members to complex injuries and combat polytrauma, including blast injuries (improvised explosive devices), penetrating wounds (projectiles and gunfire) and blunt force trauma, often accompanied by hemorrhagic shock and infection. In combination, these injuries have led to alarming rates of respiratory and renal failure. The use of conventional lung rescue strategies and renal replacement therapies can prove challenging to rescue severe cases.

The project team funded through this award will focus their activities on designing and building combination ECLS devices for use in field hospitals and during the transport of patients in fixed wing medical evacuations. These types of devices will replace all or part of the function of the lungs for patients with acute respiratory distress syndrome, and/or of the function of the kidneys for patients with acute kidney injury. On the battlefield, where every ounce of weight and cubic foot of space is coveted, a combination ECLS device is more practical than traditional life support devices and will help keep warfighters alive until more definitive support or transport is available.

"We are excited to be a part of this development effort," said Edward Brown, a product manager with the U.S. Army Medical Materiel Agency, a subordinate organization of USAMRMC. "The goal is to provide renal replacement therapy and partial lung support, in order to reduce the health impacts of acute kidney injury and acute respiratory distress syndrome until injured Service Members can reach definitive care. This capability will lead to better outcomes, shorter hospital stays and improved quality of life."

Lester Martinez, MD, MPH, Major General (Retired), U.S. Army, President and Chairman of MTEC Board congratulated Human Biomed, Inc. on the award. "Human Biomed’s ECLS development work has the potential to make profound differences in warfighters’ lives, helping to ensure that they have access to prolonged care in the field. The MTEC membership is proud to participate in this effort to improve battlefield trauma care and evacuation," Martinez stated.

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MTEC is a biomedical technology consortium collaborating with multiple government agencies under a 10-year renewable Other Transaction Agreement with the U.S. Army Medical Research and Materiel Command. To find out more about MTEC, visit <http://www.mtec-sc.org>.