



US DEPARTMENT OF DEFENSE
BLAST INJURY RESEARCH PROGRAM
COORDINATING OFFICE

Transplants and Grafts

Vascular Grafts to Address Vascular Trauma and Replacement

A group of investigators managed by the TIRM PMO and sponsored by USAMMDA are conducting research to mitigate vascular injuries sustained in theater. Researchers at Johns Hopkins University, funded through AFIRM and collaborating with Humacyte, a company funded by DoD, are developing an off-the-shelf human tissue engineered vascular prosthesis. This decellularized human collagen-based vascular tissue technology has performed well in both canine and baboon studies, and will enter Phase 1 clinical trials in 2015 to support a trauma indication. New technology in vascular grafts, which improves long term patency and durability of the grafts while reducing complications from infection, may reduce limb loss and long term disability for Service Members.