



US DEPARTMENT OF DEFENSE
BLAST INJURY RESEARCH PROGRAM
COORDINATING OFFICE

Burn Injury Treatment

Improved Cutaneous Coverage Following Severe Burn Injury

Researchers at Wake Forest University, funded through AFIRM, are collaborating with researchers at USAMMDA, US Army Institute of Surgical Research and Stratatech Corporation to conduct a multicenter clinical trial to assess the safety, tolerability, and efficacy of prolonged exposure to increasing amounts of a single application of StrataGraft skin tissue (compared to autografts) in deep partial-thickness burns. StrataGraft is a living, meshable, suturable human skin substitute that reproduces many of the structural and biological properties of normal human skin. Data obtained from the first clinical trial cohort suggested StrataGraft works to facilitate wound closure and is replaced as the patient's own cells close the wound. Two additional cohorts completed follow-up in 2014, one of which doubles the area of burn treated with StrataGraft, and the other, which looks at the use of cryopreserved material; data analysis is underway. Stratatech is preparing to initiate a Phase 3 clinical trial in 2015. StrataGraft is a promising alternative approach for cutaneous skin coverage after extensive burn injuries.