

## NovaSterilis Honored at American Association of Tissue Banks Annual Meeting

Presentation on Terminal Tissue Sterilization wins "Best of Show" Award

*SAN DIEGO, CA, August 27<sup>th</sup>, 2003* – While attending the 27th annual meeting of the American Association of Tissue Banks (AATB) held August 23 – 27 in San Diego, CA, scientists from **NovaSterilis, Inc.** of Ithaca, NY presented the results of an investigation entitled "Terminal Tissue Sterilization Using Supercritical Carbon Dioxide." In a joint project involving the Intermountain Tissue Center of Salt Lake City, UT, a team consisting of Jane Shelby, Angela White, **David Burns**, and Tim Christensen documented the special properties of supercritical carbon dioxide (SCD) for sterilizing bone and other musculoskeletal tissue. The study also showed that bone tissue could be sterilized with no loss of strength or deterioration in bone density. The presentation was selected by conference organizers for the "Best of Show" award, in recognition of the novelty, significance, and timeliness of the research.

Musculoskeletal allografts have become increasingly important in orthopedic medicine over the last decade, with surgeons performing more than two million musculoskeletal allografts in the past five years. Because of potential exposures to pathogens, the safety of allograft tissue remains a primary focus for the tissue banking industry, clinicians, and the FDA. Recent occurrences of disease transmission have further heightened concerns about human transplant tissue.

Current methods for terminal sterilization of these tissues are limited to gamma irradiation and ethylene oxide. Both methods compromise the structural and biological properties of such allografts. As an alternative to terminal sterilization, disinfectant and cold washing procedures are in widespread use that reduce, but do not eradicate, potential pathogens.

The new technique reported by **NovaSterilis** for SCD bone sterilization is the first effective method for the bacterial decontamination of bone. At the AATB meeting, **NovaSterilis** described the design of a novel reactor for using SCD in conjunction with novel processing and additive protocols that enhance sterilization. The company presented results indicating that sterilization was non-destructive to allograft tissue, and that the strength of sterilized bone tissue was maintained.

*NovaSterilis develops supercritical carbon dioxide sterilization technology for biomedical applications.*