AUA 2008: CURRENT REGENERATIVE MEDICAL TECHNIQUES HOLD GREAT PROMISE FOR BLADDER REGENERATION

ORLANDO, FL, May 18, 2008 – Bladder regeneration via a neo-bladder replacement may prove to be effective in humans. The results of a new study, conducted in large mammals, presented today at the 103rd Annual Scientific Meeting of the American Urological Association (AUA), suggest that this process could result in a regenerated bladder with similar characteristics of the native bladder and without the risks associated with a donated organ or other undesirable outcomes associated with current surgical interventions. Researchers from Tengion, Inc., whose science and technology facility is located in Winston-Salem, NC, presented their findings to reporters in a special press conference on May 18, 2008 at 9:30 a.m.

Patients with advanced bladder disease often require cystectomy (removal of the bladder). Replacement bladders made from intestinal tissue have been proven to be successful but have also been associated with many well documented complications, such as chronic urinary retention, hematuria and infection.

Growing a replacement organ for a patient using his or her own cells presents a new option. After a bladder biopsy is obtained from a patient, bladder progenitor cells are grown in culture and seeded on a biodegradable bladder-shaped scaffold made from collagen and/or polyglycolic acid. The neo-organ is then implanted into the patient.

Fourteen large mammals that underwent radical cystectomy were implanted with the neo-bladder construct and within six months, structure and pharmacological characteristics of the neo-bladder were similar to the native bladder. There was no evidence of abnormal tissue development, immune response or evidence of systemic response to the neo-bladder regeneration. Results suggest that the new organ had successfully and safely regenerated.

“This treatment option essentially regenerates the patient’s own bladder, reducing the risk of rejection and the need for immunosuppressant drugs,” said Timothy Bertram, D.V.M., Ph.D. “If successful in human clinical trials, patients should expect to regenerate normal bladder structure and function.”

In addition to the author, Anthony Y. Smith, M.D., a member of the AUA Public Media Committee, will be on hand to answer questions and provide third-party perspective on the study.

NOTE TO REPORTERS: Experts are available to discuss these studies outside normal briefing times. To arrange an interview with an expert, please contact the AUA Communications Office at the number above or e-mail Wendy Isett at wisett@auanet.org.

**About the American Urological Association:** Founded in 1902 and headquartered near Baltimore, Maryland, the American Urological Association is the pre-eminent professional organization for urologists, with more than 15,000 members throughout the world. An educational nonprofit organization, the AUA pursues its mission of fostering the highest standards of urologic care by carrying out a wide variety of programs for members and their patients, including UrologyHealth.org, an award-winning on-line patient education resource, and the American Urological Association Foundation, Inc.

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