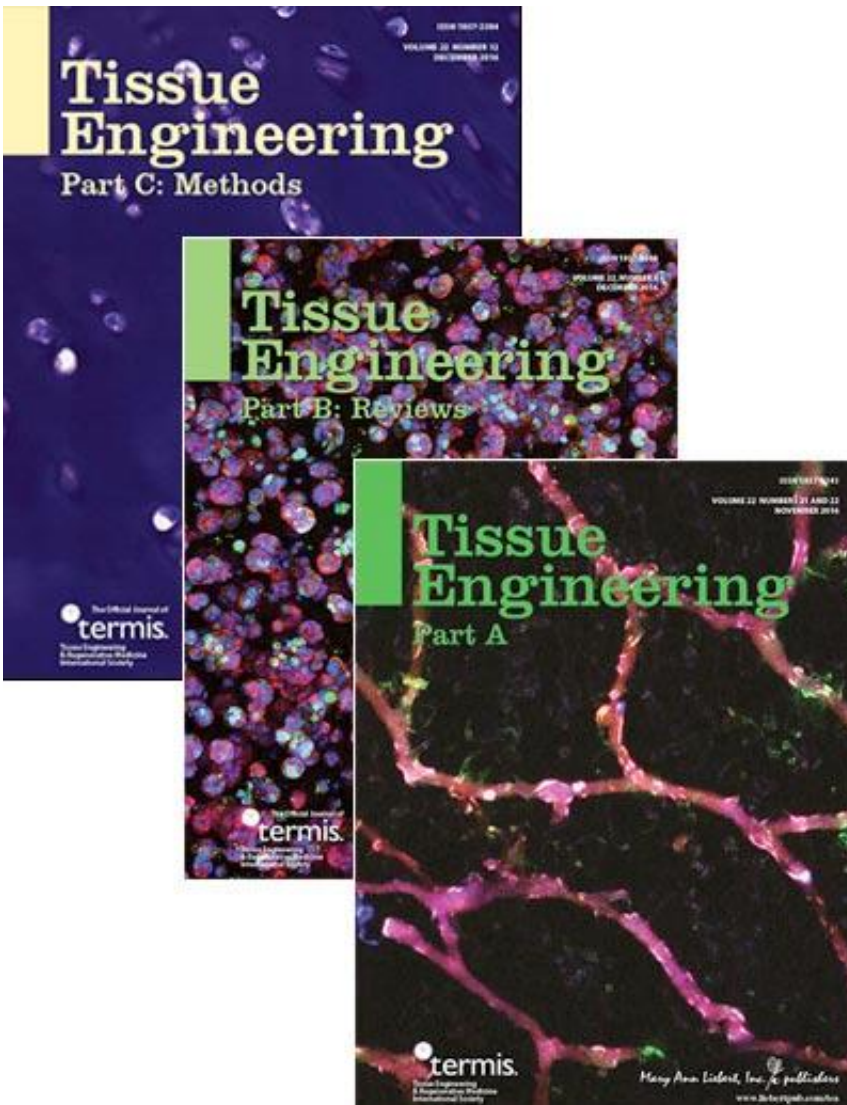


Promising results using silver-releasing scaffolds in MRSA infection of bone

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Tissue Engineering is the preeminent, biomedical journal advancing the field with cutting-edge research and applications on all aspects of tissue growth and regeneration. Credit: Mary Ann Liebert, Inc., publishers

Researchers developed a biocompatible scaffold capable of controlled-release of silver ions and have shown in a new study that it can inhibit infection of bone by methicillin-resistant *Staphylococcus aureus*, known as MRSA. The antimicrobial properties of silver combined with a biodegradable scaffold that can be seeded with bone-forming stem cells offers a potential implant system for treating and preventing bone infection, as described in an article published in *Tissue Engineering, Part A*.

Mahsa Mohiti-Asli, PhD and coauthors from University of North Carolina at Chapel Hill, North Carolina State University (Raleigh), Silpakorn University (Nakornpathom, Thailand), and University of Missouri (Columbia), present an experiment in which they seeded bone-forming [stem cells](#) on three-dimensional scaffolds either with or without MRSA. The researchers assessed bacterial biofilm formation to determine the effect of [silver ions](#) on [bone infection](#) (osteomyelitis). They report their findings in the article entitled "Evaluation of Silver Ion-Releasing Scaffolds in a 3D Coculture System of MRSA and Human Adipose-Derived Stem Cells for Their Potential Use in Treatment or Prevention of Osteomyelitis."

"Hybrid therapeutic approaches such as this combination of a regenerative and anti-infective platform are transforming our attack on complex musculoskeletal diseases," says Co-Editor-in-Chief Peter C. Johnson, MD, Principal, MedSurgPI, LLC and President and CEO, Scintellix, LLC, Raleigh, NC.

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More information: Mahsa Mohiti-Asli et al. Evaluation of Silver Ion-Releasing Scaffolds in a 3D Coculture System of MRSA and Human Adipose-Derived Stem Cells for Their Potential Use in Treatment or Prevention of Osteomyelitis, *Tissue Engineering Part A* (2016). [DOI: 10.1089/ten.tea.2016.0063](https://doi.org/10.1089/ten.tea.2016.0063)

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