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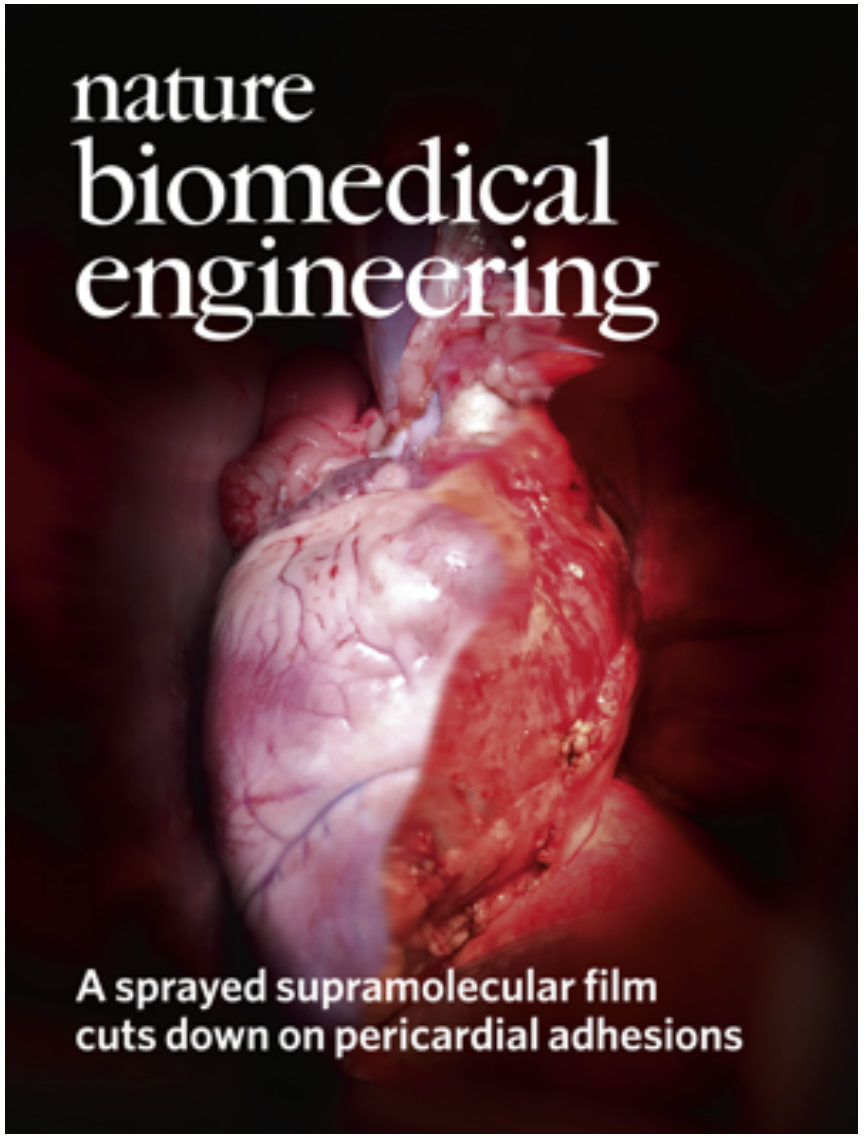

A sprayed supramolecular film cuts down on pericardial adhesions

This issue highlights a thermogelling polymer endotamponade for retinal-detachment repair, a supramolecular gel as a post-operative pericardial adhesion barrier, a mechanical injector that targets tissue by sensing the loss-of-resistance on encountering softer tissue or a cavity, a viscoelastic adhesive epicardial patch for treating myocardial infarction, bioresorbable photonic devices for the spectroscopic characterization of tissues and biofluids, and wireless soft optofluidic probes with plug-like drug cartridges for chronic in vivo pharmacology and optogenetics.

The cover illustrates a sprayable supramolecular hydrogel that adheres to the pericardium to reduce the incidence and severity of post-surgical adhesions. The image is a composite of two photographs, one from a gel-coated sheep heart (left) and one from an uncoated sheep heart (right).

Image: Athena Chien, Stanford University. Cover design: Alex Wing