A shear-thinning and dissolvable hydrogel

A biocompatible shear-thinning hydrogel that can be injected through needles, catheters, or microcatheters and can be dissolved on demand.

IP Status: PCT Pending; Application No. PCT/US2025/011893

Applications

- Embolic agents
- Bio-inks for 3D bioprinting
- Tissue engineering
- Drug delivery systems

Technology Overview

Embolization procedures stop blood flow to a specific blood vessel. Currently, there are no embolic agents that are rapidly dissolvable, and most of the embolic agents are not retrievable. If an off-target embolization happens, it is not reversible, and the organ will die. Researchers at the University of Minnesota have developed a novel biocompatible shear-thinning hydrogel that can be injected through needles, catheters, and microcatheters and can be dissolved on demand using an aqueous solution.

Phase of Development

TRL: 3

Proof of concept demonstrated

Desired Partnerships

This technology is now available for:

- License
- Sponsored research
- Co-development

Please contact our office to share your business' needs and learn more.

Researchers

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Technology ID

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Category

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Life Sciences/Human Health

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