

Description of Additional Supplementary Files

Supplementary Movie 1. Magnetic actuation of robot in stomach phantom – 100 μm -thick aluminium scales @ 50 % overlap with a 65 mT rotating field.

Supplementary Movie 2. In situ demagnetisation enables different locomotion modes.

Supplementary Movie 3. Selective cargo release.

Supplementary Movie 4. Robot with thermal adhesive.

Supplementary Movie 5. Application of heat to a wound mitigates blood loss.

Supplementary Movie 6. Ultrasound guided robot in ex-vivo porcine small intestine.