

**Title:** Supplementary Movie 1:

**Description:** Injecting Piezoelectric hydrogel with X RAY guidance.

**Title:** Supplementary Movie 2:

**Description:** Injection NFs-PLLA hydrogel using a G-29 needle to show injection ability of the hydrogel with G29 needle.

**Title:** Supplementary Movie 3:

**Description:** Rabbit under US activation treatment.

**Title:** Supplementary Movie 4:

**Description:** Rabbit behaves normally after US activation treatment.