

## SUPPLEMENTARY MATERIALS

### **GLP-1-targeting magnetic nanoparticles for pancreatic islet imaging**

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#### **Supplemental Materials:**

For the ex vivo MR imaging, the imaging protocols consisted of Multi-Slice Multi Echo T2-weighted map (for T2 relaxivity measurements). Parameters: TR = 3,200 ms and multiecho TE = 8, 16, 24, 32, 40, 48, 56, and 64 ms; number of averages (NA) = 1; FOV read = 128 mm, Fov phase = 100mm, flip angle = 180 deg, slice thickness = 0.5 mm, and scan time = 10 min 13 sec.

For the in vivo MR imaging, Multi-Slice Multi Echo T2-weighted map of a mouse pancreas were obtained with the following parameters: TR = 2,000 ms/TE = 8, 16, 24, 32, 40, 48, 56, 64, 72, 80 ms; slice orient: coronal; number of averages (NA) = 2, rapid acquisition with relaxation enhancement factor = 8; FOV = 4.0 cm<sup>2</sup>, matrix size 128, spatial resolution 312 mm<sup>2</sup>, slice thickness = 0.5 mm, flip angle = 180 deg, resolution read = 0.025 cm/pixel, and scan time = 8 min 32 sec. T2\*-weighted 3D images were obtained with the following sequence parameters: TR = 30 ms; TE = 10 ms; slice orient: Axial; number of averages (NA) = 1; FOV = 3.2 cm<sup>2</sup>, matrix size 160, spatial resolution 312 mm<sup>2</sup>, slice thickness = 32 mm, flip angle = 16.5 deg; resolution read = 0.02 cm/pixel; and scan time = 12 min 48 sec.