SUPPLEMENTARY MATERIALS 2

Computed Tomography (CT) Acquisition Protocol

All computed tomography (CT) scans were obtained using a 16- or 64-channel multidetector-row CT (Somatom Sensation 16 and Sensation 64; Siemens Healthineers and Lightspeed VCT, GE Healthcare). Portal-phase abdominopelvic CT was performed 70 seconds after the intravenous administration of a 2.0 mL/kg nonionic contrast agent (iopromide, Ultravist 300, Bayer Schering Pharma) using an automatic injector at a rate of 3–4 mL/s. CT images were obtained from the dome of the diaphragm to the symphysis pubis with detector collimations of 16 mm x 0.75 mm or 64 mm x 0.6 mm. The primary scanning parameters were as follows: tube current-time product = 160 mAs; maximum tube voltage = 120 kVp; table speed = 24 mm/rotation; and gantry rotation time = 0.5 seconds. Axial and coronal images were reconstructed with 3-mm-thick sections and 3-mm intervals, or 5-mm-thick sections and 5-mm intervals using a filtered back-projection algorithm.

Magnetic Resonance Acquisition Protocol

Liver MRI images were acquired using a 1.5T (Philips Healthcare) or 3T MRI system (Siemens Healthineers; Philips Healthcare). MRI was performed using an extracellular contrast agent (ECA) or a gadoxetic acid contrast agent (Gd-EOB). MRI sequences that were similar for ECA-MRI and Gd-EOB-MRI included dual-echo in-phase and opposed-phase spoiled gradient-echo T1-weighted images as well as multi-shot and single-shot turbo-spin-echo T2-weighted images. Dynamic fat-suppressed spoiled gradient-echo T1-weighted images were acquired before and after the injection of contrast material (arterial, portal venous, 3-minutes delayed, and 5-minutes delayed phases). For ECA-MRI, variable gadolinium-based contrast agents, including gadopentetate dimeglumine (Magnevist, Bayer Schering Pharma) and gadoterate meglumine (Dotarem, Guerbet), were used, and a 0.1-mmoL/kg gadolinium agent was administered intravenously. To perform a dynamic scan, 0.1 mL/kg (0.025 mmoL/kg) gadoxetic acid disodium (Primovist, Bayer Schering Pharma) was injected, and additional hepatobiliary phase images were obtained after 15 or 20 minutes.