SUPPLEMENTARY MATERIALS

Image Acquisition

Our breast magnetic resonance imaging protocol included the following sequences: 1) 3-dimensional (3D) axial Dixon-based fat-suppressed T2-weighted fast-spin-echo sequence with repetition time (TR): 2000 ms, echo time (TE): 90 ms, echo train length: 120, field of view (FOV): 340 x 340 mm, matrix: 224 x 320, section thickness: 1.2 mm, no gap, parallel imaging acceleration factor: 2, hypersense acceleration factor: 2, and acquisition time: 3 minutes 13 seconds; 2) dynamic contrast-enhanced high temporal and spatial resolution 3D T1-weighted sequence (Differential Subsampling with Cartesian Ordering) with dual-echo 3D spoiled gradient echo sequence with Dixon fat-water separation methods (TR: 5.5 ms, TE 1: 1.2 ms, TE 2: 2.4 ms/2.5 ms, matrix: 256 x 300, flip angle: 10°, FOV: 340 x 340 mm, section thickness: 1.2 mm, no gap, parallel imaging acceleration factor: 2 x 1, acquisition time of mask images: 88 seconds, six post-contrast image series at 40, 77, 115, 156, 243, and 332 seconds after the start of contrast agent administration). Gadoterate meglumine (Dotarem, Guerbet, Aulnay-sous-Bois, France) was injected into the antecubital vein using an automated injector (Spectris Solaris, Medrad Europe, Maastricht, The Netherlands) at a dose of 0.1 mmol/kg of body weight and at a rate of 3 mL/s, which was followed by a 20-mL saline flush.