**Supplemental Methods**

 Detailed Breast MRI Scanning Information per Center. MRI Scanning Details. A total of 17 participants completed their study MRI scans on a 1.5T GE Signa NV-CV/i scanner with an 8 channel breast coil (GE HD Breast, Milwaukee, WI) using the radial IDEAL‐GRASE sequence in the axial orientation with acquisition parameters as described. (25) Beginning in 2015, 39 participants started and completed their study MRI scans on a 3T Siemens Skyra with a 16-channel breast coil (Sentinel, Erlangen, Germany) using a 3D Cartesian six‐echo gradient echo pulse sequence as described. Subsequently, 34 and 6 participants started and completed their study MRIs scans on a 3T Siemens Biograph mMR and a 3T Siemens Prisma Fit, respectively, using an 8-channel breast coil (Sentinel, Erlangen, Germany).