

Women with dense breasts (especially those who are extremely dense) may wish to seek supplementary screening in addition to mammography. Supplementary screening with ultrasound, while not proven in randomized controlled trials to improve mortality, has been shown to improve cancer detection for women with dense breasts and detect cancers at a smaller size and earlier stage, compared with screening with mammography alone.⁵ Earlier detection can allow for less morbid and less costly treatment and will hopefully have an impact on mortality. Women with greater than 25% lifetime risk of breast cancer, (whether or not their breasts are dense) should have MRI screening in addition to mammography).⁶

Your patients are notified of their breast density after having a mammogram and will need to decide with their provider's assistance whether or not they wish to undergo supplementary screening, which has the possibility of more false positives but has the ability to detect breast cancer occult on mammography. This decision will be influenced by their other risk factors for breast cancer and their personal values and philosophy.

For more resources on counseling women with dense breasts about their imaging options go to quick links on front page.

References:

1. **Population-Attributable Risk Proportion of Clinical Risk Factors for Breast Cancer;** Engmann et al;JAMA Oncol. 2017;3(9):1228-1236. doi:10.1001/jamaoncol.2016.6326
2. **Breast cancer screening using tomosynthesis in combination with digital mammography compared to digital mammography alone: a cohort study within the PROSPER consortium;** Conant et al; Breast Cancer Research and Treatment. 2016 <https://doi.org/10.1007/s10549-016-3695-1>
3. **Breast Cancer Screening Using Tomosynthesis and Digital Mammography in Dense and Nondense Breasts;** Rafferty et al; JAMA. 2016;315(16):1784-1786
4. **Adjunct Screening With Tomosynthesis or Ultrasound in Women With Mammography-Negative Dense Breasts (ASTOUND);** Tagliafico et al. Journal of Clinical Oncology. 2016;34:1882-1888
5. **Sensitivity and specificity of mammography and adjunctive ultrasonography to screen for breast cancer in the Japan Strategic Anti-cancer Randomized Trial (J-START): a randomized controlled trial;** Ohuchi et al; The Lancet, [Volume 387, Issue 10016](#), 23-29 January 2016, Pages 341-348
6. **American Cancer Society Guidelines for Breast Screening with MRI as an Adjunct to Mammography;** Saslow et al; CA, A Cancer Journal for Clinicians, 57: 75-89. doi:10.3322/canjclin.57.2.75