

FAST FACTS

EA1151 - Tomosynthesis Mammographic Imaging Screening Trial (TMIST)

Eligibility Criteria

1. Patients must be women age 45 or older and under age 75 at the time of study entry.
2. Women of childbearing potential must not be known to be pregnant or lactating.
3. Patients must be scheduled for, or have intent to schedule, a screening mammogram.
4. Patients must be able to tolerate digital breast tomosynthesis and full-field digital mammographic imaging required by protocol.
5. Patients must be willing and able to provide a written informed consent.
6. Patients must not have new symptoms or signs of benign or malignant breast disease (eg, bloody or clear nipple discharge, breast lump) based on physician physical exam or self breast exam that have not been previously worked up with imaging. Patients with physiologic nipple discharge or breast pain are eligible as long as other criteria in 3.1.6 are met.
7. Patients must not have had a screening mammogram within the last 11 months prior to date of randomization.
8. Patients must not have previous personal history of breast cancer including ductal carcinoma in situ.
9. Patients must not currently have breast enhancements (e.g., implants or radiopaque injections).
10. **Annual Screening Regimen Eligibility Check**

To be eligible for inclusion in the annual screening regimen one of the following three conditions must be met in addition to the eligibility criteria above:

Patients are pre-menopausal; OR

Post-menopausal aged 45-69 with any of the following four risks factors:

- Dense Breasts (BIRADS density categories c-heterogeneously dense or d-extremely dense), or
- At least one benign breast biopsy with a diagnosis of Lobular Carcinoma in Situ (LCIS) or atypia of any kind (atypical ductal hyperplasia, atypical lobular hyperplasia, atypical hyperplasia NOS, or intraductal papilloma with atypia), or
- Family history of breast cancer (first degree relative with breast cancer) or family history of breast cancer is not known, or, participant positive genetic testing for any deleterious genes that indicate an increased risk for breast cancer, or
- Currently on hormone therapy¹; OR

Post-menopausal ages 70-74 with either of the following three risk factors:

- Dense Breasts (BIRADS density categories c-heterogeneously dense or d-extremely dense), or
- At least one benign breast biopsy with a diagnosis of LCIS or atypia of any kind (atypical ductal hyperplasia, atypical lobular hyperplasia, atypical hyperplasia NOS, or intraductal papilloma with atypia), or
- Currently on hormone therapy¹

Postmenopausal women are defined as those with their last menstrual period more than 12 months prior to study entry. For the purpose of defining menopausal status for women who have had surgical cessation of their periods, women who no longer have menses due to bilateral oophorectomy with either hysterectomy or endometrial ablation will be considered postmenopausal. Women who no longer have menses due to either hysterectomy or endometrial ablation, and who have at least one ovary will be considered premenopausal until age 52 and postmenopausal thereafter.

All other postmenopausal women are eligible for inclusion in the biennial screening regimen.

For those women who cannot be assigned to annual or biennial screening at the time of study entry and randomization because they are postmenopausal, have no family history or known deleterious breast cancer mutation, are not on hormone therapy¹ AND for whom a prior mammogram interpretation is not available, breast density will be determined by the radiologist’s recording of it at the time of interpretation of the first study screening examination, either DM or TM. For those who are randomized to TM, radiologists will assign BI-RADS density through review of the DM or synthetic 2D portion of the TM examination. Such women cannot be part of the planned stratification by screening frequency and are expected to represent far less than 1% of the TMIST population.

¹ For this study we define hormone therapies as those that increase breast cancer risk, including: estrogen, progesterone, estrogen/progesterone analogs, or hormonal birth control prescribed by a doctor, and include hormones in oral contraceptives, patch, gel, etc. BUT, for this study, Soy use is not considered hormone therapy.

Breast density will be determined by prior mammography reports, when available, or by radiologist review of prior imaging.

NOTE: If the latter method is used, a signed, dated attestation by the radiologist indicating the resulting determination must be kept as a record and made available for monitoring/auditing.

All other risk factors used to determine patient eligibility for annual or biennial screening will be determined by subject self-report.

