

Breast Ultrasound Helps Mammography Find More Cancer

A study in the journal *Lancet* concludes that adding ultrasound to mammography screening detects more early invasive breast cancer and probably reduces mortality. The Japanese trial is believed to be the first of its kind in a large randomized multicenter population, and that also focused on younger women at average risk with dense breast tissue. The Japan Strategic Anti-Cancer Randomized Trial (J-START) involved the screening of nearly 73,000 women ages 40 to 49 at 42 study sites across 23 prefectures in Japan. The researchers screened a large cohort of women with ultrasound and mammography, then compared them with women who received only mammography for sensitivity, specificity, and other factors. The results were encouraging for breast ultrasound, with 57 percent more cancers detected in women who received both procedures. However, specificity was lower, and the question remains as to whether the results can be extrapolated to other populations outside Asia, where rates of dense breast tissue may not be as high. Mammography is the only proven method of screening that reduces mortality, but it is inaccurate in dense breasts. The study showed that ultrasound combined with mammography resulted in correct identification of cancer in more than nine out of 10 cases for 91.1 percent sensitivity, compared to 77 percent sensitivity for women who received mammography alone. Adding ultrasound to mammography also detected more cancers at an early stage, with 144 cancers at stage 0-1, compared to 79 cancers at stage 0-1 detected by mammography alone.