

Diagnostic Radiology

Thermography, Mammography, and Clinical Examination in Breast Cancer Screening LEGACY

Review of 16,000 Studies¹

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Abstract

Cited by

PDF

Breast cancer screening detected 139 biopsy-proved malignancies in 16,000 self-selected women (8.7/1,000). In these, xeroradiography detected 78% (109), clinical examination 55% (76), and thermography 39% (54). In all 16,000 women, the thermogram was interpreted as positive in 17.9% (2,864). The greatest effectiveness of mammography vs. clinical examination was seen in detection of early breast cancers (small lesions with negative axillary lymph nodes). In this group, thermography was less effective than it was in patients with larger lesions and lymph node metastases.

Keywords: Index terms ([Breast, special procedures 0\[0\].120](#)) ; [Breast neoplasms, diagnosis](#) ; [Mammography](#) ; [Thermography](#) ; [Xeroradiography](#)

Assignment 3

Q1: Calculate TP,FP, TN,FN.

What is sensitivity and specificity of thermography for breast cancer screening?

Q2: Critically compare the results of Q1 recent claim of Indian med-tech startup Niramai which claims 98% Sensitivity and 68% Specificity.

<https://waset.org/publications/10008935/thermal-yti-x-an-advanced-artificial-intelligence-based-solution-for-non-contact-breast-screening>

What design/technological innovation could be responsible for possible improvement?