

JOURNAL  
OF  
CLINICAL  
AND  
HEALTH SCIENCES

JCHS

SUPPLEMENTARY ISSUE

MARCH 2026  
VOLUME 11 ISSUE 1 (SUPPLEMENTARY)



Fakulti  
Sains Kesihatan



EMERGING TRENDS  
IN MEDICAL IMAGING:  
FROM PATIENTS TO PIXELS  
SYMPOSIUM

Official Journal of  
Faculty of Medicine  
Universiti Teknologi  
MARA



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eISSN-0127-984X

## **ADD003**

### **Accuracy Of Ibreast-Exam (IbE) in Detection of Breast Lesion**

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**Introduction:** The Malaysia Cancer Registry Report 2017-2021 presented that breast cancer remains the most common cancer affecting Malaysians, with the incidence rate of 39% in females. A greater incidence rate of breast cancer is observed at the age of 40 to 74, the prime age at which a citizen should seek clinical breast examination. The report highlighted that 51% were diagnosed at late stages, urging the need for fast and accurate detection of breast abnormalities as an initiative to reduce mortality. Mammography is the gold standard of breast lesion detection, yet it is inaccessible in rural areas. iBreast-Exam (iBE) is a radiation-free, portable breast tumour detection device used to scan the breasts and visualise the variations of tissue density. The innovation aims to provide a reliable clinical breast examination tool, replacing the conventional palpation method. Therefore, this study was conducted to determine the accuracy of iBE in differentiating normal and abnormal breast tissue. **Methods:** A retrospective cross-sectional study was conducted involving 80 Sabahan women aged 40 years and above who underwent both iBE scan and mammography. The McNemar test was used to measure the sensitivity and specificity while the Receiver Operating Characteristics (ROC) is analysed to measure the accuracy of the diagnostic tests. **Results:** Upon investigation, iBE accurately identified 70 breast abnormalities with a sensitivity of 89% and specificity of 50% with mammography as the reference standard. **Conclusions:** iBE is a reliable complementary test for clinical breast examination to initiate more comprehensive breast imaging investigations.

**Keywords:** iBreast-Exam, handheld breast scanner, clinical breast examination