

Reviewer's report

Title: Computer Simulation in Conjunction with Medical Thermography as an Adjunct Tool for Early Detection of Breast Cancer

Version: 1 **Date:** 6 January 2004

Reviewer: Erika Denton

Reviewer's report:

General

This is an interesting paper and the authors are endeavouring to increase the specificity of thermography. Thermography has been a subject of discussion for over 20 years, but has not gained acceptance as part of routine breast cancer diagnosis as yet. Whilst this interesting work reduces the false positive rate of breast thermography it does not address the issues around its role in clinical management of patients with suspected breast cancer. It is to be hoped that this work will be extended into a clinical trial to see whether these improvements in the technique are sufficient to find thermography a place in the diagnostic pathway for suspected breast cancer patients.

Discretionary Revisions (which the author can choose to ignore)

No comments.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

It is standard practice in breast cancer diagnosis to practice "triple assessment". This comprises clinical examination, mammography and ultrasound, followed by biopsy if necessary. As this is routine in most centres, reference to this should be made both in the introduction and in the concluding remarks. No reference to ultrasound is made in the text at present.

There are some minor errors of grammar and syntax and some occasional missing words. Most notably in the first line of the introduction, the word "been" has been missed and should be inserted between "not" and "accepted".

In the results and discussion section the text under figure 2 needs changing. The authors state the volunteer undergoes regular screening, by implication this is mammographic screening, but in the text earlier this volunteer only underwent clinical examination, which is not an accepted method of screening for breast cancer. The majority of breast cancer experts would feel that a doctor could not certify a women's breast as normal with certainty without further evidence, usually normal mammograms.

The text in figure 3 needs a word inserting to indicate whether arrow B points at the upper inner or upper outer quadrant.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

No comments.

What next?: Accept after minor essential revisions

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

Statistical review: No

Declaration of competing interests:

none