

# New scanner aims to detect breast cancer in young women

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In an Australian first, WA researchers are testing a simple scanner that could allow GPs to pick up early breast cancers, particularly in younger women who cannot have mammograms.

Edith Cowan University scientists are working with the Chinese developers of the new imaging technique — a near-infrared breast scanner which is painless, does not emit radiation and can be used repeatedly.

Although the researchers say it is not intended to replace the traditional screening of women by mammograms, or breast X-rays, they say it could lead to earlier diagnosis and treatment of breast cancer and save thousands of lives among the one in eight women who develop the disease.

Unlike other scanning techniques, the high-resolution imaging can be used safely on women of all ages and those with implants, regardless of the size or density of their breasts.

ECU's Vario Health Institute is carrying out a clinical trial of women with breast cancer to assess the capabilities of the device and how it might be used widely in Australia.

Director Professor Rob Newton said if the trial proved successful the scanner could save many lives because the key to reducing deaths from breast cancer was early diagnosis and treatment.

"About 14,500 new cases are projected for 2010 but early detection means increased treatment options, improved quality of life and ultimately increased survival," he said.

"This device is not intended to replace mammograms but it's more for wide-scale screening to pick up breast cancer earlier and in large numbers of women so they can go for further testing, such as biopsies or mammograms.



"Mammogram units are very big and expensive and only actively screen women from the age of 50, but this device is relatively inexpensive so much bigger numbers of women, especially younger women, could be screened."

A separate ECU study will use the latest in photonics research to increase the accuracy of the scanner and make it more user-friendly.

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