

## News

# Breast cancer test could spare women chemotherapy

By Sarah Knapton SCIENCE EDITOR

THOUSANDS of breast cancer patients could be spared chemotherapy after scientists developed a new test which shows if the disease is likely to return.

The test, called MammaPrint, was designed by the University of California and looks for 70 gene variants in blood or saliva which are known to increase the risk of cancer returning.

It can predict which women are at low risk for years after they have sur-

gery to remove cancerous tumours and could allow half of early stage breast cancer patients to avoid the severe physical and emotional side-effects that come with chemotherapy.

"There are breast cancers that pose little or no systemic risk," said Prof Laura Esserman, a breast cancer specialist and surgeon at the University of California. "Women who have a tumour that is classified as ultra-low risk by 70-gene signature can be reassured that their long-term outcome is

## 50,000

The number of people in Britain diagnosed with breast cancer each year. The new test could predict the risk of cancer returning

expected to be excellent, with or without endocrine therapy.

"Having a test that accurately identifies a population of women who have

very little risk to begin with should be welcomed by patients and clinicians alike. These tools will enable doctors to better personalise therapy to safely minimise treatment and reassure women if a cancer is ultra-low risk."

The new study involved 652 women who had breast cancer tumours removed 20 years ago. The test identified 42 per cent of patients as high-risk, and 58 per cent as low-risk. The investigators found that low-risk patients had a 95 per cent survival rate at five years.

Around 50,000 people a year are diagnosed with breast cancer in Britain, and the trial results suggest that thousands could avoid chemotherapy.

Most women in the early stages of the disease are given chemotherapy after surgery or radiotherapy, as a preventive measure to minimise the risk of tumours returning and spreading.

However the treatment is toxic because it fails to distinguish between healthy and cancerous cells and as such, side-effects include severe nau-

sea, hair loss, ulcers, chest pain and bleeding. The test could also help women avoid breast cancer screening, which some doctors think may actually increase the risk of cancer returning.

The MammaPrint test is not yet available in Britain after the National Institute for Health and Care Excellence (Nice) said that it needed more proof that it would work on an English population.

The research was published in the journal *JAMA Oncology*.