Test could avoid breast chemotherapy

Chris Smyth Health Editor

Thousands of women with breast cancer could avoid needless chemotherapy using a genetic test that judges whether their disease will return.

Almost half of women given gruelling chemotherapy to stop their cancer returning do not actually need it, a trial has found.

Scientists claimed that the £2,000 test could dramatically improve quality of life and even save the health service money by cutting out pointless treatment. The National Institute for Health and Care Excellence is expected to look later this year at whether it should be routinely used in the NHS.

About 54,000 British women a year develop breast cancer, which is mostly picked up at an early stage. After surgery and radiotherapy to remove a tumour, they face a difficult decision on whether to have chemotherapy to cut the chances of their cancer returning.

The MammaPrint test examines 70 genes in tumour samples which are thought to influence whether a cancer will return. A trial of 6,700 women compared the test with traditional methods of classifying women as high or low risk.

"At present, most oncologists make recommendations for adjuvant chemotherapy after considering common clinical and biological criteria such as patients' age, and the stage and grade, as well as the hormonal receptor and HER2 status of her tumour," said Martine Piccart of Jules Bordet Institute in Brussels, who presented the results yesterday to the American Association for Cancer Research in New Orleans.

"Using MammaPrint could change clinical practice by substantially de-escalating the use of adjuvant chemotherapy and sparing many patients an aggressive treatment they will not benefit from."

Among patients classified as high risk by standard methods, 46 per cent were judged low risk by MammaPrint and survival was just as good for those not given chemotherapy, with 95 per cent still alive after five years.

The results suggest that about 8,000 British women a year might be spared gruelling treatment.

Professor Laura van 't Veer of the University of California San Francisco, who invented the test, said: "For women who are considered clinically high risk the standard route is chemotherapy, but about half can safely forgo it. This is of huge benefit for patients."

She said that the study was now looking at whether a smaller group judged low risk by traditional methods but high risk by MammaPrint would live longer if given chemotherapy.

She argued that widespread use of the test "will save costs and increase quality of life. Women can also stay in work so there is also a benefit for society."

Baroness Morgan of Drefelin, chief executive of Breast Cancer Now, said the results were very promising, adding: "This test could identify women that will gain no benefit from chemotherapy. By the same token, the test could also more accurately identify patients for whom chemotherapy will help reduce the risk of their cancer spreading."

Professor Arnie Purushotham of Cancer Research UK, which helped to fund the study, said: "This approach allows us to better select patients for chemotherapy and only treat women who will respond while avoiding treating those who won't benefit."