

Breakthrough Breast Cancer

An important new treatment has been announced by scientists working in Edinburgh.

The team are the first to identify a gene's key role in causing the spread of HER2 positive breast cancer to other parts of the body. The gene is called C35 and becomes overactive in this type of tumour.

What makes the discovery even more exciting is that there are drugs in development which could potentially kill cancer cells which rely on this gene. They do this by disabling a protein associated with the gene, which stops it from working. It is thought this type of drug would therefore be a new treatment for HER2 positive breast cancer and save the lives of women with this type of the disease. The research is published today online in the British Journal of Cancer.

HER2 positive breast cancer affects around 9,000 women in the UK each year and 800 women in Scotland – making up about 20% of all breast cancer cases. While it can be treated with the targeted treatment, Herceptin (trastuzumab), that drug does not work for all patients, and can stop working for others after time. This means new treatments are vitally needed to save lives of women with this type of the disease.

Research leader Dr Elad Katz, from the Breakthrough Breast Cancer Research Unit, said: "With all cancers, the key is working out how they form and spread. Identifying this gene's key role in the spread of this type of breast cancer is a significant finding.

"We are at an early stage, but there is now a real possibility there could be a new treatment for women with HER2 positive breast cancer."

Professor David Harrison, Director of the Breakthrough Breast Cancer Research Unit at the University of Edinburgh, said:

“This is an important development because we now know one of the key triggers to the spread this type of cancer. It is exciting to know there is a drug out there which could potentially stop this process happening and save the lives of women with breast cancer.

“We now need to do more work in the lab to prove this concept before we can start patient trials.”

The BBC report the story [here](#).