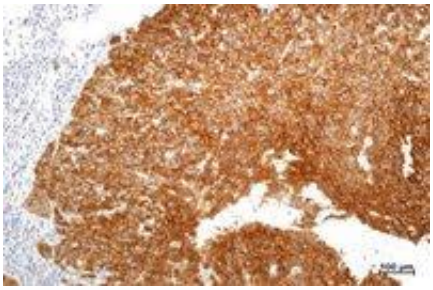
Scientists find promising new target for aggressive breast cancer

March 20 2013



Women with triple-negative breast cancer are more likely to have high levels of the MET biomarker in their tumours, making it a good new target for cancer drugs according to research published in the *British Journal of Cancer*, today (Wednesday).

Scientists from Austria and Greece examined 170 tumour samples from patients with triple negative breast cancer – a less common but aggressive type of the disease.

They found that over half of these women had high levels of the MET biomarker. The MET protein plays an important role in cell development but is often faulty in cancer cells.

The study also showed that women with high levels of this biomarker

were three times more likely to have a breast cancer recurrence within five years of diagnosis than those with low levels (33 per cent compared to 11 per cent).

And nearly 90 per cent of tumours – called G3 – that are known to be more likely to spread, had high levels of the biomarker.

Over 7,500 women develop triple negative breast cancer each year. But the disease is often hard to treat as it does not contain any of the receptors such as oestrogen, progesterone or HER2 that are targeted by common treatments such as hormone therapy or Herceptin.

Professor Martin Filipits, study author from the Medical University of Vienna, said: "Our findings suggest that levels of the MET biomarker in a patient's breast tumour could be an important way of predicting the best type of treatment for women with triple negative breast cancer.

"This aggressive type of breast cancer is harder to treat as the tumours don't have the receptors that the common drugs can target – blocking the growth of the tumour.

"But knowing which women have high levels of this molecule in their breast tumours could help doctors to adapt the type of treatment they're given.
"Levels of this biomarker could also give an idea of how likely the cancer is to come back."

Dr Julie Sharp, senior science information manager at Cancer Research UK, said: "Triple negative breast cancer can be very difficult to treat but this interesting research could open up the possibility of new approaches to monitor and treat this aggressive disease.

"Last year a Cancer Research UK study found that even among patients

with the same type of breast cancer, such as triple negative, no two women's tumours will be exactly the same. What we call 'breast cancer' is in fact at least ten different diseases, each with its own molecular fingerprint, and each with different weak spots.

"This is a challenge and we continue to support research that aims to identify these weak spots and develop better treatments for all types of breast cancer."

More information: Zagouri, F et al, High MET expression is an adverse prognostic factor in patients with triple-negative breast cancer (2013) *BJC*, DOI:10.1038/bjc.2013.31

Provided by Cancer Research UK

Citation: Scientists find promising new target for aggressive breast cancer (2013, March 20) retrieved 23 April 2024 from https://medicalxpress.com/news/2013-03-scientists-aggressive-breast-cancer.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.