

## PRESS RELEASE

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### SEA SPONGE DRUG COULD BOOST ADVANCED BREAST CANCER SURVIVAL BY FIVE EXTRA MONTHS

THE cancer drug eribulin, originally developed from sea sponges, could give women with advanced triple negative breast cancer an average of five extra months of life, according to research presented at the National Cancer Research Institute (NCRI) Cancer Conference in Liverpool today (Monday).

Researchers led by Professor Chris Twelves, based at the University of Leeds and Leeds Teaching Hospitals NHS Trust, looked at two major clinical trials of more than 1,800 women with breast cancer that had started to spread to other parts of the body. The phase III trials – the final stage of testing before deciding whether a drug can be prescribed to patients – compared the survival of women treated with eribulin\* to those given standard treatment.

The two studies showed an overall improvement in survival of more than two months for women treated with eribulin\*\*. The most significant improvement was seen in women with the advanced triple negative form of breast cancer, where there are limited treatment options; these women's survival improved by nearly five months. There was also a survival boost of more than two months for women with the HER2 negative form of breast cancer\*\*\*.

Cancer spreading to other organs – called metastasis – is responsible for around 90 per cent of all cancer deaths. And, when patients with breast cancer are diagnosed after the disease has started to spread, 10-year survival is around one in 10, compared to nearly nine in 10 for those diagnosed at the earliest stage.

Study author, Professor Chris Twelves, said: "Our results show a substantial improvement in survival for women with metastatic triple negative breast cancer, and a more modest, but significant, benefit for those with HER2 negative breast cancers.

"Eribulin has previously been offered to women who've already been through several lines of chemotherapy. But the European Union has recently approved eribulin for patients who have received less treatment for their breast cancer, which means we hope to give more patients another treatment option in the not-too-distant future."

"Despite advances in the diagnosis and treatment of women with breast cancer, more than 11,600 women still die from invasive breast cancer each year in the UK. New and better treatments are needed for people fighting the disease."

Eribulin works by stopping the cancer cells from separating into two new cells. It is a type of drug called a microtubule inhibitor. Eribulin was originally developed from a sea sponge called *Halichondria okadai* but is now made in the laboratory.

Martin Ledwick, head information nurse at Cancer Research UK, said: "These results are encouraging and may offer valuable extra time to patients whose cancers have stopped responding to conventional treatments and have few options left. Advanced breast cancer can be very difficult to treat so these results take us a small, important step in the right direction.

“Although eribulin isn’t a cure, it’s an extra treatment option for patients with advanced breast cancer, which can be priceless to them and their families.”

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For media enquiries please contact Greg Jones on 0151 707 4642/3/4/5  
or, out-of-hours, the duty press officer on 07050 264 059

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#### Notes to editors

Read the full abstract - <http://conference.ncri.org.uk/abstracts/2014/abstracts/A036.html>

\*Eribulin (also called eribulin mesylate or Halaven) is a chemotherapy drug used to treat advanced breast cancer. It is usually given to people who have already had at least two other courses of chemotherapy. Eribulin works by stopping (inhibiting) the cancer cells from separating into two new cells. It is a type of drug called a microtubule inhibitor.

\*\* Overall survival for women treated with eribulin was 15.2 months, compared to 12.8 months for women given standard therapies. Women with HER+ breast cancer saw no statistically significant improvement.

\*\*\* HER2 stands for human epidermal growth factor receptor. It is a protein found in small amounts on some normal cells, including breast cells, stomach cells and bladder cells. It is one of the proteins involved in cell growth. Some cancers have cells with large amounts of this protein and they are called HER2 positive. These cancers can be treated with drugs that target the HER2 protein. If a cancer does not have large amounts of the HER2 protein it is called HER2 negative.

Triple negative breast cancers are cancers that don’t have receptors for oestrogen, progesterone or Her2. Only around 15 out of every 100 breast cancers (15%) are triple negative.

#### About the NCRI

- The National Cancer Research Institute (NCRI) is a UK-wide partnership between the government, charity and industry. Its role is to promote cooperation in cancer research.
- NCRI Partners are: the Association of the British Pharmaceutical Industry (ABPI); Biotechnology and Biological Sciences Research Council; Breakthrough Breast Cancer; Breast Cancer Campaign; Cancer Research UK; Children with Cancer UK; Department of Health; Economic and Social Research Council; Leukaemia & Lymphoma Research; Ludwig Institute for Cancer Research; Macmillan Cancer Support; Marie Curie Cancer Care; Medical Research Council; Northern Ireland Health and Social Care (Research & Development Office); Prostate Cancer UK; Roy Castle Lung Cancer Foundation; Scottish Government Health and Social Care Directorates (Chief Scientist Office); Tenovus; Welsh Government (National Institute for Social Care and Health Research); Worldwide Cancer Research (formerly the Association for International Cancer Research); Wellcome Trust; and Yorkshire Cancer Research.
- For more information visit [www.ncri.org.uk](http://www.ncri.org.uk)

#### About the NCRI Cancer Conference

- The National Cancer Research Institute (NCRI) Cancer Conference is the UK’s major forum for showcasing the best British and international cancer research.
- The Conference offers unique opportunities for networking and sharing knowledge by bringing together world-leading experts from all cancer research disciplines.



- The tenth NCR1 Cancer Conference is taking place from 2–5 November 2014 at the BT Convention Centre in Liverpool.
- For more information visit [conference.ncr1.org.uk](http://conference.ncr1.org.uk)

#### About Cancer Research UK

- Cancer Research UK is the world's leading cancer charity dedicated to saving lives through research.
- Cancer Research UK's pioneering work into the prevention, diagnosis and treatment of cancer has helped save millions of lives.
- Cancer Research UK receives no government funding for its life-saving research. Every step it makes towards beating cancer relies on every pound donated.
- Cancer Research UK has been at the heart of the progress that has already seen survival rates in the UK double in the last forty years.
- Today, 2 in 4 people survive cancer. Cancer Research UK's ambition is to accelerate progress so that 3 in 4 people will survive cancer within the next 20 years.
- Cancer Research UK supports research into all aspects of cancer through the work of over 4,000 scientists, doctors and nurses.
- Together with its partners and supporters, Cancer Research UK's vision is to bring forward the day when all cancers are cured.
- For further information about Cancer Research UK's work or to find out how to support the charity, please call 0300 123 1022 or visit [www.cancerresearchuk.org](http://www.cancerresearchuk.org). Follow us on Twitter and Facebook.