

## **PRESS RELEASE**

### **Friday 31 October 2014**

#### **SCIENTISTS TRIGGER SELF-DESTRUCT SWITCH IN LUNG CANCER CELLS**

CANCER RESEARCH UK scientists have found a drug combination that can trigger the self-destruct process in lung cancer cells - paving the way for new treatments, according to research that will be presented at the National Cancer Research Institute (NCRI) Cancer Conference in Liverpool next week\*.

When healthy cells are no longer useful they initiate a chain of events culminating in self destruction. But cancer cells swerve away from this suicide path and become immortal. This means that cells grow out of control – causing tumours to form.

The Cancer Research UK team, based at the UCL Cancer Institute, has successfully fixed this fault in lung cancer cells – reprogramming the cells to self-destruct.

Using lung cancer cells and mice the scientists showed that the combination of two drugs, called TRAIL and SNS-032\*\*, altered the molecular switches in the cell suicide process – forcing the cancer cells to self-destruct.

Lead researcher, Cancer Research UK scientist Professor Henning Walczak from the UCL Cancer Institute, said: “Igniting the fuse that causes lung cancer cells to self-destruct could pave the way to a completely new treatment approach – and leave healthy cells unharmed.

“The next step of our work will see how this approach works in other cancer types, and we hope it could ultimately lead to testing this technique in trials to see if it can help patients.”

Nell Barrie, senior science information manager at Cancer Research UK, said: “This important research builds on the progress we’ve made to understand the routes cancer cells use to stay alive. Understanding and targeting these processes will move us closer to our goal of three out of four people beating cancer within the next 20 years.

“There’s an urgent need to save more lives from lung cancer and we hope these findings will one day lead to effective new treatments to help lung cancer patients and potentially those with other cancer types too.”

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#### **ENDS**

**For media enquiries please contact  
Emily Head on 020 3469 8300  
or, out-of-hours, the duty press officer on 07050 264 059.**

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#### **Notes to editors**

\* You can find the abstract for this research online:

<http://conference.ncri.org.uk/abstracts/2014/abstracts/LB052.html>

\*\* This drug combination is in early stage development to potentially treat non small cell lung cancer.



### 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 NCRI Cancer Conference is taking place from 2–5 November 2014 at the BT Convention Centre in Liverpool.
- For more information visit [conference.ncri.org.uk](http://conference.ncri.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 for at least 10 years. 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.