PRESS RELEASE
Wednesday 5 November 2014

TRIAL RESULTS REVEAL FIRST TARGETED TREATMENT TO BOOST SURVIVAL FOR OESOPHAGEAL CANCER

PATIENTS with a specific type of oesophageal cancer survived longer when they were given the latest lung cancer drug, according to trial results being presented at the National Cancer Research Institute (NCRI) Cancer Conference today (Wednesday).*

Up to one in six patients with oesophageal cancer were found to have EGFR duplication in their tumour cells and taking the drug gefitinib, which targets this fault, boosted their survival by up to six months, and sometimes beyond.

This is the first treatment for advanced oesophageal cancer shown to improve survival in patients whose initial course of chemotherapy treatment has failed. It is also the first time a targeted treatment of any kind has proved effective in this disease, although chemotherapy and some targeted drugs have shown benefit in the second line treatment of other cancers of the digestive system including stomach cancer.

The trial – called ‘TRANS-COG’ – looked for extra copies of a gene called EGFR in tumour samples from 295 deceased oesophageal cancer patients who had received either gefitinib or placebo as part of the COG trial.**

Of the 48 patients who had extra EGFR copies in their tumour cells, 13 per cent of those who had gefitinib survived for at least a year, while none of the patients who received a placebo survived that long.***

Giving gefitinib to patients who didn't have extra EGFR copies made no difference to how long they survived. This suggests that EGFR testing could identify a subgroup of oesophageal patients who may benefit from gefitinib.

Dr Russell Petty, a medical oncologist from the University of Aberdeen, who is presenting the data, said: “This is exciting news in our field. It's the first time any drug has shown survival benefit for oesophageal patients who have stopped responding to their initial treatment. To date there's been disappointingly little progress in treating this cancer type, which kills nearly 8,000 people a year and sadly is often diagnosed late making it difficult to treat successfully.

“It's thought that up to 16 per cent of oesophageal cancer patients could benefit from gefitinib, providing valuable extra months of life to people who would otherwise have had very few options available to them.”

Irene Black’s late husband, Roy, was diagnosed with oesophageal cancer in January 2011 aged 78, after having problems swallowing and later being rushed into A&E for an emergency endoscopy. He was given an intense course of chemotherapy and radiotherapy at Aberdeen Royal Infirmary, but unfortunately the cancer stopped responding and the family were told it was incurable. It was then that Roy decided to join the trial.

Irene said: “There is no doubt in my mind that, if it wasn’t for the trial, Roy wouldn't have been with us for so long. He managed to get back to his bingo, which he loved, surrounded by friends and we booked a four night holiday on the west coast at Fort William. I will always
treasure that holiday - if it wasn’t for the trial we may not have had the special time together at the end.

“It’s comforting to know that the trial Roy took part in when he was alive may help patients with this devastating type of cancer live longer in the future.”

Professor Matt Seymour, NCRI’s clinical research director said: “Although the survival benefit for these patients was relatively modest, this trial is an important step forwards for a type of cancer where progress in treatment has fallen behind other cancers in recent decades. While there has been some success in treating other cancers of the digestive system, oesophageal cancer remains extremely difficult to treat, with only 13 per cent of patients surviving five years or more. It will be interesting to see whether this drug, if properly targeted at the right patients, could offer similar benefits to those with earlier stage disease and also whether other drugs that target EGFR could prove to be even more effective.”

The TRANS-COG trial was funded by the Scottish Government’s Chief Scientist Office, the Cameron Clinical Academic Fellowship and the Grampian Gastro-oesophageal Cancer Research Fund (GASTROCAN).

ENDS

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

Notes to editors
* Petty R. et al, Epidermal growth factor receptor copy number gain (EGFR CNG) and response to gefitinib in oesophageal cancer (OC): Results of a biomarker analysis of a phase III trial of gefitinib versus placebo (TRANS-COG).


** About the COG trial
The COG trial (Cancer Oesophagus Gefitinib) was a randomised phase III trial involving 450 people with oesophageal cancer whose tumours had become resistant to conventional treatment. The trial results showed that oesophageal cancer took longer to start growing again in people taking gefitinib, but overall there was no survival benefit from receiving the drug.

The TRANS-COG trial was later set up to see whether the number of EGFR copies in patients’ tumour cells was linked to how well they did on gefitinib treatment.


*** Table 1: Survival for gefitinib and placebo in patients with normal and higher levels of the EGFR gene in their tumour.

<table>
<thead>
<tr>
<th>Elevated EGFR</th>
<th>3 months</th>
<th>6 months</th>
<th>9 months</th>
<th>12 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gefitinib</td>
<td>79%</td>
<td>38%</td>
<td>27%</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>Placebo</td>
<td>64%</td>
<td>14%</td>
<td>5%</td>
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<tr>
<td>----------------</td>
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<td>-----</td>
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</tr>
<tr>
<td>Normal EGFR*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 months</td>
<td>61%</td>
<td>33%</td>
<td>16%</td>
<td>7%</td>
</tr>
<tr>
<td>6 months</td>
<td>45%</td>
<td>29%</td>
<td>22%</td>
<td>14%</td>
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<td>9 months</td>
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<td>12 months</td>
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*NOTE: It was not possible to say whether or not the difference in survival between the Gefitinib and placebo groups occurred due to chance in patients with normal EGFR levels (i.e. not significant).

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)