



## NEW CANCER RESEARCH UK TRIAL OFFERS HOPE FOR CHILDHOOD CANCER

CHILDREN in the UK with a high risk form of the childhood cancer neuroblastoma [*footnote 1*] are set to benefit from a new international clinical trial – funded by Cancer Research UK – which uses immunotherapy to help prevent the disease from coming back. The phase III trial, which opens in the UK this month [*December 2009*], builds on early promising results from a US study [*footnote 2*] which found that treatment with immunotherapy – boosting the immune system to fight the disease – improved the chances of survival from the disease.

Around 100 children are diagnosed with neuroblastoma every year in the UK, usually under the age of five. Overall six out of ten children are successfully treated, but for children with advanced forms of the cancer it is very difficult to treat successfully. Doctors estimate that around 40 children per year in the UK would be eligible for and potentially benefit from this new treatment. This immunotherapy treatment hunts down neuroblastoma cells that have survived conventional treatment by recognising specific molecules on their surface called GD2 antigens. After sticking to the neuroblastoma cells the antibodies then recruit the body's immune defences to attack and destroy neuroblastoma cells reducing the chance of the disease coming back.

The trial [*footnote 3*], which is part of a larger European one, will run in all 20 childhood cancer clinical trial centres [*footnote 4*] across the UK and it will recruit 160 children over the next four years.

Dr Penelope Brock, a consultant paediatric oncologist at Great Ormond Street Hospital, who will lead the UK trial, said: “The launch of this trial in the UK is really fantastic news for our patients. Early results from the US trial found that children who received the immunotherapy treatment had less chance of the disease coming back two years later, compared with the patients who did not receive the immunotherapy. We need to build on these results and devise better immunotherapy approaches that improve survival further.”

In the US study, half the children received immunotherapy treatment. The European study will see all eligible children receive immunotherapy, and it will also attempt to reduce some of the treatment's severe side effects seen in the US study. Dr Brock added: “We have worked very closely with the doctors involved in the US trial to design the European study and we very much hope that it will lead to another treatment option for children with high risk neuroblastoma, who have more chance of the disease coming back.”

James McGuire from Harrow Weald in North London, whose two-year-old daughter Sophie is being treated for neuroblastoma at Great Ormond Street Hospital, said: “We're delighted that Sophie will be one of the first children who could benefit from this new treatment. Based on the positive outcomes from the earlier trial, I am hopeful that this treatment will play a critical role in saving Sophie's life. We have a difficult time ahead of us but it's encouraging to know that Sophie will receive immunotherapy, which is at the forefront of neuroblastoma treatment available in the world today.”

Professor Peter Johnson, Cancer Research UK's chief clinician, said: “The neuroblastoma research community across Europe have worked incredibly hard to design a trial which Cancer Research UK's independent funding committee agreed was of world class standard. We are very pleased to be funding this trial which will ensure that all children in the UK who could benefit from this promising new treatment can receive it in one of our network childhood cancer centres across the UK. Cancer Research UK is the largest single funder of children's cancer research in the country and the launch of today's trial demonstrates our total commitment to ensuring more children survive cancer with the fewest possible side effects.

## Footnotes

1. Neuroblastoma is a form of childhood cancer which grows from undeveloped tissue of the nervous system. It normally develops in the abdomen, adrenal glands or the nerve tissue at the back of the abdomen. For more information about neuroblastoma visit Cancer Research UK's patient information website CancerHelp UK [www.cancerhelp.org.uk](http://www.cancerhelp.org.uk)

2. In a meeting in June this year the North American Children's Oncology Group presented early results from a randomised clinical trial. In this trial one group received immunotherapy and chemotherapy and the other received chemotherapy with no immunotherapy. The children who received the immunotherapy had a better chance of surviving without a recurrence of their neuroblastoma two years later.

3. This trial will be open to high risk neuroblastoma patients who are nine months from diagnosis and within four months of the last round of aggressive treatment to control the tumour, meaning that they have minimal residual disease – when small numbers of neuroblastoma cells remain in the body while the patient is in remission. All children eligible for this trial will first receive all the standard treatments for neuroblastoma which includes chemotherapy to shrink the tumour and target cells that have spread, surgery to remove as much of the neuroblastoma as possible, a stem cell transplant and radiotherapy.

## 4. Childhood cancer trial centres in the UK

Royal Aberdeen Children's Hospital;  
Royal Hospital for Sick Children, Belfast;  
Birmingham Children's Hospital;  
Royal Hospital for Sick Children, Bristol;  
Addenbroke's Hospital, Cambridge;  
Children's Hospital of Wales, Cardiff;  
Royal Hospital for Sick Children, Edinburgh;  
Royal Hospital for Sick Children, Glasgow;  
St James's University Hospital, Leeds;  
Leicester Royal Infirmary;  
Alder Hey Children's Hospital, Liverpool;  
Royal Manchester Children's Hospital;  
Great Ormond Street Hospital, London;  
University College London Hospital;  
Royal Victoria Infirmary, Newcastle;  
Queen's Medical Centre, Nottingham;  
John Radcliffe Hospital, Oxford;  
Sheffield Children's Hospital;  
Southampton General Hospital;  
Royal Marsden Hospital, Sutton.

## About Cancer Research UK

- Cancer Research UK is the world's leading charity dedicated to beating cancer through research.
- The charity's groundbreaking work into the prevention, diagnosis and treatment of cancer has saved millions of lives. This work is funded entirely by the public.
- Cancer Research UK has been at the heart of the progress that has already seen survival rates double in the last thirty years.

- Cancer Research UK supports research into all aspects of cancer through the work of more than 4,500 scientists, doctors and nurses.
- Together with its partners and supporters, Cancer Research UK's vision is to beat cancer.

For further information about Cancer Research UK's work or to find out how to support the charity, please call 020 7121 6699 or visit [www.cancerresearchuk.org](http://www.cancerresearchuk.org).

Read how the trial was reported in the media:

**Daily Telegraph** - <http://www.telegraph.co.uk/health/healthnews/6769790/Pioneering-new-treatment-could-offer-hope-to-childhood-cancer-sufferers.html>

**Press Association** -

<http://www.google.com/hostednews/ukpress/article/ALeqM5iNZN34pd0YG8Xg6hSx9cdzfLiWHg>

**Daily Mail**, includes picture of the press conference and Sophie McGuire, -

<http://www.dailymail.co.uk/health/article-1234689/British-children-test-cancer-cure.html>

**Sky News** - [http://news.sky.com/skynews/Home/UK-News/Sophie-McGuire-Cancer-Great-Ormond-Street-Hospital-Cancer-Patient-Toddler-In-Immunotherapy-Trial/Article/200912215497087?lpos=UK\\_News\\_First\\_Home\\_Article\\_Teaser\\_Region\\_2&lid=ARTICLE\\_15497087\\_Sophie\\_McGuire%2C\\_Cancer%3A\\_Great\\_Ormond\\_Street\\_Hospital\\_Cancer\\_Patient\\_Toddler\\_In\\_Immunotherapy\\_Trial](http://news.sky.com/skynews/Home/UK-News/Sophie-McGuire-Cancer-Great-Ormond-Street-Hospital-Cancer-Patient-Toddler-In-Immunotherapy-Trial/Article/200912215497087?lpos=UK_News_First_Home_Article_Teaser_Region_2&lid=ARTICLE_15497087_Sophie_McGuire%2C_Cancer%3A_Great_Ormond_Street_Hospital_Cancer_Patient_Toddler_In_Immunotherapy_Trial)

**BBC News** - <http://news.bbc.co.uk/1/hi/health/8401508.stm>

**Times** – [http://www.timesonline.co.uk/tol/life\\_and\\_style/health/article6950871.ece](http://www.timesonline.co.uk/tol/life_and_style/health/article6950871.ece)

**Times case study** - <http://www.timesonline.co.uk/tol/news/uk/health/article6950901.ece>

**Daily Mirror** - <http://www.mirror.co.uk/news/top-stories/2009/12/10/x-factor-cash-for-cancer-kids-115875-21885876/>