



CHILDREN'S CANCER  
INSTITUTE AUSTRALIA

## MEDIA RELEASE

EMBARGOED UNTIL 9:30am, 12 March, 2013

### **A world-first clinical trial has increased the survival rate for most common childhood cancer**

***A decade-long international clinical trial has doubled the survival rate from 35 per cent to 70 per cent for high-risk acute lymphoblastic leukaemia (ALL).***

The results of the Study were published in the prestigious journal, *Leukemia*, today.

The pioneering clinical trial was initiated at the Sydney Children's Hospital Randwick and The Children's Hospital at Westmead and was conducted across Australia, New Zealand and the Netherlands.

Children with ALL at the highest risk of relapse were identified early in their treatment plan using a novel test developed by scientists at Children's Cancer Institute Australia (CCIA). This test detects Minimal Residual Disease (MRD) in the bone marrow of children with ALL, who would otherwise appear to be responding well to treatment.

Children with high risk ALL were then treated with a new intensive chemotherapy protocol, and in many cases allogeneic bone marrow transplant.

The trial represents a major step toward personalised cancer care. It is also one of the first studies to show that, by identifying high risk patients early in the treatment plan, consequent changes in treatment can improve the chance of cure.

"The MRD test can detect one leukaemia cell among 100,000 healthy cells in the bone marrow, and this allows clinicians to tailor a child's treatment. When a child is classified as high-risk through the MRD test, their therapy is intensified in order to improve the chance of survival," says Professor Glenn Marshall, Director of the Kids Cancer Centre, Sydney Children's Hospital Randwick, and, Head, Translational Research at CCIA.

The Study enrolled more than 650 Australian children, and also ran in the Netherlands and New Zealand. Dr Luciano Dalla-Pozza, Head of Oncology at The Children's Hospital at Westmead says the trial has dramatically changed treatment approaches for ALL.

"As our studies have shown so impressively, being able to tailor a specific therapy regimen for high-risk children shortly after diagnosis, based on the results of our MRD test, provides children at high risk of relapse with a much better chance of survival," says Dr Dalla-Pozza.

In another first, MRD levels were used to assess the response to individual chemotherapy drugs in high risk patients, informing future ALL trials.

Professor Murray Norris, Deputy Director of CCIA, led the research team that pioneered the MRD test and says its success is due largely to the close partnership between CCIA and The Sydney Children's Hospitals Network.

“MRD testing is now considered part of the Standard of Care, and our test results are routinely used to guide treatment decisions in clinics across the country,” says Professor Norris.

This collaborative partnership has recently led to the creation of a new network of all clinicians and scientists working on child cancer research in NSW, the Kids Cancer Alliance (KCA), funded by the Cancer Institute NSW. The KCA formalises the close affiliation between Sydney Children’s Hospital, The Children’s Hospital at Westmead, John Hunter Children’s Hospital, CCIA, Kids Research Institute and Children’s Medical Research Institute, and will further drive improvements in the treatment of children with cancer.

“We wouldn’t have the KCA today if it wasn’t for the close collaboration over the last ten years,” says KCA Director, Professor Marshall. “Our alliance offers a unique opportunity for clinical and laboratory researchers to work together to improve the outcomes for children with cancer.

*The trial was conducted under the Australian and New Zealand Children’s Haematology Oncology Group (ANZCHOG) and supported by the National Health and Medical Research Council (NHMRC), Cancer Council NSW, the Cancer and Leukaemia Research and Support Fund of The Children’s Hospital at Westmead, Sydney Children’s Hospital Foundation, Rianna and Ricky Ponting, Children’s Cancer Institute Australia, Steven Walter Children’s Cancer Foundation, Cancer Institute NSW and the Leukaemia Foundation.*

*The collaborative work in translating the development of the MRD test from bench to bedside received the Excellence in Translational Cancer Research Award in 2012 at the Cancer Institute NSW Premier’s Awards for Outstanding Cancer Research, for successfully bringing scientific innovations into clinical practice.*

**A media conference announcing the Study’s findings will be held at Sydney Children’s Hospital, High Street Randwick on Tuesday, 12 March 2013 at 8:20am.**

**For more information, please contact:**

Jessica Rubinchtein, Public Affairs, Sydney Children’s Hospitals Network 9382 3571 or 0404 001 722  
Catherine Blake, Public Affairs, CCIA, 9385 8879 or 0421 455 990

**- ENDS-**