

ALL in first relapse – The ALL R3 Trial

Background

The large majority of children diagnosed with ALL are cured with the standard treatment protocols which is frontline chemotherapy along with long term maintenance. However, there is still a small percentage of children where the leukaemia either stops responding to treatment (is refractory) or comes back (relapses). In such cases, these children will be put onto a different treatment regime.

ALL R3

In the UK and Ireland these children are usually treated with a protocol called **ALL R3**. This is a Phase 3 trial that has been running since 2003 and is due to close at the end of 2013.

In this trial the children are treated with blocks of chemotherapy, using some different agents and some of the same drugs. The children are classified as high intermediate or standard risk based on a number of factors. Children in the high risk group and some in the intermediate risk group (based on response to treatment) may require bone marrow transplants whilst low risk will continue on the R3 protocol.

Results and Outcomes

Amongst other things, this trial found that mitoxantrone showed a significant improvement in survival when compared against the existing drug idarubicin. Mitoxantrone also seemed to be particularly effective when the children went on to receive bone marrow transplants.

The ALL R3 trial is delivering a significantly higher than cure rate compared to previous trial UKAll R2 (thanks partly to the use of mitoxantrone) and is due to continue to December 2013. This ALL R3 Protocol is also now being used in some hospitals in the USA and Canada, as well as trial centres in Australia and New Zealand.

Further Research relevant to ALL R3

In Europe, there is another trial running to compare ALL R3 against ALL-REZ BFM 2002, which is the treatment protocol used in Germany and other countries, to see which can deliver a better outcome for children with relapsed ALL. There is also research to see if the ALL R3 Protocol can be adapted with the use of another drug called **clofarabine** for children in the high risk category, or epratuzumab for other children. Look out for further information on these drugs in the research section.

More Information

If you would like more information on the ALL R3 trial or have a specific question, please contact us at info@mychildhascancer.co.uk.