**Cardiff study suggests targeted treatment for leukaemia group**

22 February 2011

Antibody-directed chemotherapy offers improved survival to particular sub-groups of leukaemia sufferers, a Cardiff University-led study has found.

The findings suggest that the treatment may be effective for the majority of younger acute myeloid leukaemia (AML) sufferers, who can be identified by genetic profiling.

The research team studied more than a thousand patients, predominantly under 60, who received a combination of chemotherapy and the drug Gemtuzumab Ozogamicin (commercial name Mylotarg).

The study found no overall difference in survival rates across the whole study group.

However, once the patients were broken down by pre-determined sub-groups, the researchers found significant differences.

For patients whose chromosomes showed they were already at low risk, the team found that combined treatment delivered a marked survival advantage.

There was no advantage for those at high risk, and a trend towards a benefit for those at intermediate risk.

Around 70 per cent of patients were found to have a predicted improvement of 10 per cent of surviving for five years.

A sub-group with Core Binding Factor (CBF) leukaemia was found to have a particularly clear benefit from the treatment.

Professor Alan Burnett of Cardiff University’s School of Medicine, who led the study, said: "We already know that Acute Myeloid Leukaemia is a collection of diseases.

Our study suggests that particular treatments may need to be targeted to these particular sub-groups.

We have found that CBF patients have distinctly better survival chances, with few additional side-effects, if Mylotarg is combined with conventional chemotherapy.

Further research is required into this prospect."

The research was supported by a grant from the Medical Research Council and conducted at hospitals across the UK and in Denmark.

The findings have just been published in the Journal of Clinical Oncology and are also the subject of an editorial in the Journal.

ENDS

**Cardiff University**Cardiff University is recognised in independent government assessments as one of Britain’s leading teaching and research universities and is a member of the Russell Group of the UK’s most research intensive universities. Among its academic staff are two Nobel Laureates, including the winner of the 2007 Nobel Prize for Medicine, University President Professor Sir Martin Evans.   
Founded by Royal Charter in 1883, today the University combines impressive modern facilities and a dynamic approach to teaching and research. The University’s breadth of expertise in research and research-led teaching encompasses: the humanities; the natural, physical, health, life and social sciences; engineering and technology; preparation for a wide range of professions; and a longstanding commitment to lifelong learning. Three major new Research Institutes, offering radical new approaches to neurosciences and mental health, cancer stem cells and sustainable places were announced by the University in 2010.   
[www.cardiff.ac.uk](http://www.cardiff.ac.uk/)