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TRENDS IN SURVIVAL AND THE PROPORTION CURED OF ADULT ACUTE MYELOID LEUKAEMIA IN ENGLAND, 1971-2006: A POPULATION-BASED STUDY

Anjali Shah(1), Therese Andersson(2), Bernard Rachet(3), Alan Burnett(4), Paul Lambert(5)

- (1) University of Oxford, Childhood Cancer Research Group, Oxford, United kingdom
- (2) Department of Medical Epidemiology and Biostatistics, Karolinska Institute, Stockholm, Sweden
- (3) CR UK Cancer Survival Group, London School of Hygiene and Tropical Medicine, London, United kingdom
- (4) Department of Medical Genetics, Haematology & Pathology, Cardiff University School of Medicine, Cardiff, United kingdom
- (5) Department of Health Sciences, University of Leicester, Leicester, United kingdom

Purpose:

To estimate five-year survival and the proportion of patients 'cured' of acute myeloid leukaemia (AML) and the survival of the 'uncured' by age at diagnosis, and to compare estimates for England with those observed in Sweden.

Method:

This population-based study included records of 47,250 adult patients within the National Cancer Registry who were diagnosed with AML in England during 1971-2006.

Relative survival and cure mixture models were used to produce estimates and predictions of outcome.

Results:

Five-year survival and the proportion 'cured' increased for those under the age of 70 years at diagnosis during 1971-2006, but the magnitude of the increase varied with age. Increasing age at diagnosis was associated with poorer outcome. The most dramatic increase in five-year survival occurred in those aged 15-24 years, from 7% to 50%, but for those over the age of 70 years it remained less than 5%. The proportion 'cured' is predicted to increase to 46% for those aged 15-24 years and 13% for those aged 60-69 years at diagnosis in 2006. The median survival of the 'uncured' increased from 0.41 years in 1975 to 0.93 years in 2000 in those aged 15-24 years, and from 0.19 years to 0.38 years in those aged 60-69 years at diagnosis.

Conclusion:

Improvements in the long-term outcome of patients with AML have been agedependant, with dramatic improvements seen in those diagnosed under the age of 25 years. Whilst these improvements are welcome, long-term outcome of adults with AML in England is still poorer than in Sweden, especially in those under the age of 40 years.
