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Survival variations by country and age for lymphoid and myeloid malignancies in Europe 2000–2007: Results of EUROCARE-5 population-based study

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Abstract ***Background:*** Significant advances in the management of patients with lymphoid and myeloid malignancies entered clinical practice in the early 2000's. The EUROCARE-5 study database provides an opportunity to assess the impact of these changes at the population level by country in Europe. We provide survival estimates for clinically relevant haematological malignancies (HM), using the International Classification of Diseases for Oncology 3, by country, gender and age in Europe.

Methods: We estimated age-standardised relative survival using the complete cohort approach for 625,000 adult patients diagnosed in 2000–2007 and followed up to 2008. Survival information was provided by 89 participating cancer registries from 29 European countries. Mean survival in Europe was calculated as the population weighted average of country-specific estimates.

Results: On average in Europe, 5-year relative survival was highest for Hodgkin lymphoma (81%; 40,625 cases), poorest for acute myeloid leukaemia (17%; 57,026 cases), and intermediate for non-Hodgkin lymphoma (59%; 329,204 cases), chronic myeloid leukaemia (53%; 17,713 cases) and plasma cell neoplasms (39%; 94,024 cases). Survival was generally lower in Eastern Europe and highest in Central and Northern Europe. Wider between country differences (>10%) were observed for malignancies that benefited from therapeutic advances, such as chronic myeloid leukaemia, chronic lymphocytic leukaemia, follicular lymphoma, diffuse large B-cell lymphoma and multiple myeloma. Lower differences (<10%) were observed for Hodgkin lymphoma.

Conclusions: Delayed or reduced access to innovative and appropriate therapies could plausibly have contributed to the observed geographical disparities between European regions and countries. Population based survival by morphological sub-type is important for measuring outcomes of HM management. To better inform quality of care research, the collection of detailed clinical information at the population level should be prioritised.

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