

## Incidence of hematologic malignancies in Europe by morphologic subtype: results of the HAEMACARE project

Milena Sant,<sup>1</sup> Claudia Allemani,<sup>1</sup> Carmen Tereanu,<sup>1</sup> Roberta De Angelis,<sup>2</sup> Riccardo Capocaccia,<sup>2</sup> Otto Visser,<sup>3</sup> Rafael Marcos-Gragera,<sup>4</sup> Marc Maynadié,<sup>5</sup> Arianna Simonetti,<sup>2</sup> Jean-Michel Lutz,<sup>6</sup> Franco Berrino,<sup>7</sup> and the HAEMACARE Working Group

<sup>1</sup>Department of Preventive and Predictive Medicine, Unit of Analytical Epidemiology, Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy; <sup>2</sup>Department of Cancer Epidemiology, National Centre for Epidemiology, Surveillance and Health Promotion, Istituto Superiore di Sanità, Rome, Italy; <sup>3</sup>Amsterdam Cancer Registry, Amsterdam; The Netherlands; <sup>4</sup>Girona Cancer Registry, Girona, Spain; <sup>5</sup>Côte D'Or Cancer Registry of Haematological Malignancies, University of Burgundy, Dijon, France; <sup>6</sup>Geneva Cancer Registry, Geneva, Switzerland; and <sup>7</sup>Department of Preventive and Predictive Medicine, Unit of Etiological Epidemiology and Prevention, Fondazione IRCCS Istituto Nazionale dei Tumori, Milan, Italy

**Changing definitions and classifications of hematologic malignancies (HMs) complicate incidence comparisons. HAEMACARE classified HMs into groupings consistent with the latest World Health Organization classification and useful for epidemiologic and public health purposes. We present crude, age-specific and age-standardized incidence rates for European HMs according to these groupings, estimated from 66 371 lymphoid malignancies (LMs) and 21 796 myeloid malignancies (MMs) registered in 2000-2002 by 44 European cancer registries, grouped**

**into 5 regions. Age-standardized incidence rates were 24.5 (per 100 000) for LMs and 7.55 for MMs. The commonest LMs were plasma cell neoplasms (4.62), small B-cell lymphocytic lymphoma/chronic lymphatic leukemia (3.79), diffuse B-cell lymphoma (3.13), and Hodgkin lymphoma (2.41). The commonest MMs were acute myeloid leukemia (2.96), other myeloproliferative neoplasms (1.76), and myelodysplastic syndrome (1.24). Unknown morphology LMs were commonest in Northern Europe (7.53); unknown morphology MMs were commonest in**

**Southern Europe (0.73). Overall incidence was lowest in Eastern Europe and lower in women than in men. For most LMs, incidence was highest in Southern Europe; for MMs incidence was highest in the United Kingdom and Ireland. Differences in diagnostic and registration criteria are an important cause of incidence variation; however, different distribution of HM risk factors also contributes. The quality of population-based HM data needs further improvement. (*Blood*. 2010; 116(19):3724-3734)**