## Cancer mortality in Italy, 2003

Matteo Malvezzi<sup>1,2</sup>, Paola Bertuccio<sup>1,2</sup>, Liliane Chatenoud<sup>1</sup>, Eva Negri<sup>1</sup>, Carlo La Vecchia<sup>1,2</sup>, and Adriano Decarli<sup>1-3</sup>

<sup>1</sup>Istituto di Ricerche Farmacologiche "Mario Negri", Milan; <sup>2</sup>Istituto di Statistica Medica e Biometria "GA Maccacaro", Università degli Studi di Milano, Milan; <sup>3</sup>Unità di Statistica Medica e Biometria Fondazione IRCCS Istituto Nazionale Tumori, Milan, Italy

## ABSTRACT

Aims and background. This report provides data and statistics for cancer mortality in Italy in 2003, updating previous work on the issue.

Methods. Cancer death certification numbers by cause and estimates of the resident population in 2003, stratified by sex and quinquennium of age, were obtained from the World Health Organization database. In 2003, cause of death encoding was changed from the 9<sup>th</sup> to the 10<sup>th</sup> Revision of the International Classification of Diseases (ICD). All cancers and groups of cancers, classified according to the 10<sup>th</sup> revision of the ICD, were grouped into 30 categories, besides other and unspecified sites. Mortality rates were age-standardized on the world standard population in five-year age groups up to 80-84 years and 85+.

Results. The total number of cancer deaths in Italy was 167,144 in 2003 (96,127 men and 71,017 women), with age-standardized death rates of 160.63 and 89.32 per 100,000 inhabitants, respectively. Lung cancer mortality in men confirmed the favorable trend, with rates of 43.72/100,000 and 51.68/100,000 in the all ages and truncated groups, respectively. Most other tobacco-related cancers were also declining in men but not in women. Cancers of the female breast and uterus (cervix and corpus) continue to decrease, with overall rates of 17.11/100,000 and 3.71/100,000. Declines were also observed in stomach and testis cancers. A few cancer sites such as prostate and multiple myeloma appeared to rise, but these trends were mainly due to the ICD change and the stricter age-standardization categories (80-84 and 85+ instead of 80+).

**Conclusions.** Trends in cancer mortality remained favorable for most major cancer sites, mainly in men for tobacco-related cancers. Due to the classification changes brought about by the change of ICD and the stricter age standardization, the present mortality rates should only be compared to previous ones with due caution.

**Key words:** cancer, mortality, Italy, ICD-10.

Acknowledgments: The study was conducted with the contribution of the Italian Association for Cancer Research. Paola Bertuccio was supported by a fellowship from the Italian Foundation for Cancer Research (FIRC). The authors thank Mrs Ivana Garimoldi for editorial assistance.

Correspondence to: Dr Matteo Malvezzi, Istituto di Ricerche Farmacologiche "Mario Negri", Via Giuseppe La Masa 19, 20156 Milan, Italy.
Tel +39-0239014669;
fax +39-0233200231;
e-mail malvezzi@marionegri.it

Received March 20, 2009; accepted May 14, 2009.