

## CANCER PREVALENCE ESTIMATES IN ITALY FROM 1970 TO 2010

Roberta De Angelis<sup>1</sup>, Enrico Grande<sup>1</sup>, Riccardo Inghelmann<sup>1</sup>, Silvia Francisci<sup>1</sup>, Andrea Micheli<sup>2</sup>, Paolo Baili<sup>2</sup>, Elisabetta Meneghini<sup>2</sup>, Riccardo Capocaccia<sup>1</sup>, and Arduino Verdecchia<sup>1</sup>

<sup>1</sup>Reparto di Epidemiologia dei Tumori, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, Istituto Superiore di Sanità, Rome; <sup>2</sup>Unità di Epidemiologia Descrittiva e Programmazione Sanitaria, Fondazione IRCCS "Istituto Nazionale dei Tumori", Milan, Italy

**Aims and background:** The growing number of cancer survivors in Italy is expected to continue to increase as a consequence of population aging and survival improvements, but few estimates are currently available, particularly on the national and regional scale. The purpose of this work is to present detailed and updated prevalence estimates in Italy over the period 1970-2010 by cancer site (all cancers combined, stomach, colon and rectum, lung, breast and prostate) and gender.

**Methods:** Prevalence was derived with the MIAMOD statistical method, using cancer-specific mortality and relative survival as input data. Survival data from the Italian cancer registries were modeled to derive a national estimate for each cancer site and sex. To estimate prevalence trends, survival was assumed to improve in the future with the same rate observed in the period 1978-1994. A double scenario for survival - increasing or stationary - was considered to decompose the prevalence growth from 1995 to 2005 by its determinants: demographic changes, incidence and survival dynamics. The prevalence estimates were also decomposed by disease duration (2, 5 and 10 years) and by age (0-44, 45-59, 60-74 and 75-99).

**Results:** The proportion of cancer survivors in 2010 is expected to be about 4% in women and 3% in men, about twice the

values attained in 1990. The highest dynamics was observed for prostate cancer, with a three-fold increase just in the 1995-2005 period (from 212 to 623 per 100,000), whereas in absolute terms breast cancer presented the highest levels (1,700 per 100,000 in 2010). The overall number of cancer prevalent cases is expected to rise by about 48% in the decennium 1995-2005 (from 1,152,000 to 1,709,000), and this growth is mainly attributable to incidence dynamics (+21%), then to survival improvements (+14%) and population aging (13%). In 2005, the 2-year prevalent cases were estimated to be 20% of all cancer survivors, 21% between 2 and 5 years from the diagnosis, 23% between 5 and 10 years, with 36% surviving for more than 10 years. Prevalence proportion was very high in the elderly (12.6% for 75-84 years and 8% for 60-74 years).

**Conclusions:** Updated prevalence data with appropriate coverage of the national territory are essential to define priorities in health care management and to develop cancer control programs. Prevalence by disease duration and by age should be the basis for planning research on the quality of life of cancer survivors, as long as cancer continues to become an even more chronic disease.

**Keywords:** neoplasms, prevalence, registries, time trends.

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**Acknowledgments:** The study was supported by: the Foundation "Compagnia di San Paolo" (project "Sperimentazione di un sistema di rilevazione e diffusione dei dati di sopravvivenza per tumore"); Italian Ministry of Health (projects "I TUMORI IN ITALIA" promoted by Alleanza Contro il Cancro and "HO CURA"); European Commission, Health and Consumer Protection Directorate-General (project "EUROCHIP-2: European Cancer Health Indicator Project - The Action").

**Correspondence to:** Roberta De Angelis, Reparto di Epidemiologia dei Tumori, Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, Istituto Superiore di Sanità, Viale Regina Elena 299, 00161 Rome, Italy. Tel +39-06-49904289; fax +39-06-49904285; e-mail: roberta.deangelis@iss.it

Received December 20, 2006; accepted March 5, 2007.