REGIONAL ESTIMATES OF LUNG CANCER BURDEN IN ITALY

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Aims and background: The aim of this paper is to present the Italian regional and national estimates of the mortality, incidence and prevalence over the period 1970-2010 for lung cancer, one of the most common cancers in Italy and Europe, especially among men.

Methods: The estimates were obtained with the MIAMOD method, a statistical back-calculation approach to derive incidence and prevalence figures using mortality and relative survival data. Published survival data from the Italian cancer registries were appropriately modelled in order to estimate survival at regional and national level.

Results: For men, the Italian lung cancer mortality and incidence rates reached their maximum values during the late 1980s and steeply decreased thereafter. This pattern is quite uniform across all regions, even though the decrease was de-

layed and less steep in the South of the country. For women, both indicators appear to be increasing at the national level, even though a certain regional variability in incidence trends remains within the country: some regions (such as Lazio, Umbria, Marche, Campania, Sardegna and Friuli Venezia Giulia) present increasing trends, while in others a clear levelling off is visible. A total of 33,500 incident cases, 72,000 prevalent cases and 28,000 deaths are estimated in Italy in 2005. *Conclusions:* This study produced an up-to-date description of lung cancer epidemiology both at national and regional level. The marked difference in lung cancer figures and trends between sexes suggests that prevention policies have led to changes in smoking habits for men, while for women they were lacking in efficacy. The attention should now focus on

women, whose risk trend is the least favorable.

Key words: cancer registries, incidence, lung cancer, mortality, population surveillance, prevalence, regression analysis, smoking habits.

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