REGIONAL ESTIMATES OF PROSTATE CANCER BURDEN IN ITALY

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Aims and background: Prostate cancer is one of the most common cancers in developed countries and the most common among men in industrialized countries. The introduction of new diagnostic procedures caused an increase in new diagnoses in Italy starting from the early 1990s, while the prognosis of prostate cancer improved due to the use of hormonal treatments. The aim of this paper is to present estimates of prostate cancer mortality, incidence and prevalence over the period 1970-2005 for the Italian regions and for Italy as a whole, and to assess the changes that opportunistic screening and the diffusion of more effective treatments introduced.

Methods: Estimated figures for incidence, prevalence and mortality were obtained with the MIAMOD method. Starting from the knowledge of mortality in the period 1970-1999 and of the relative survival in the period of diagnosis 1978-1994, we derived incidence and prevalence estimates up to the year 2005 by means of a statistical back-calculation approach. Survival at regional and national levels was modelled on the basis of published survival data from the Italian cancer registries.

Results: The incidence trend showed a steep increase all over the country during the entire estimation period 1970-2005 with a more pronounced increase in the Center-North then in the South of Italy. Incidence of northern and central regions was about twice as high as that of southern regions. Mortality trends were however constant or declining in the majority of northern-central regions, while they still increased in the South. A total of around 43,000 incident cases, 174,000 prevalent cases and 9,000 deaths were estimated for Italy in 2005. *Discussion:* The effects of opportunistic screening are reflected in an earlier diagnosis for many patients. The existing North-South gradient in incidence seems to be associated with the different spread of the PSA test in different parts of the country. Prostate cancer remains a great health problem in terms of both incidence and prevalence.

Key words: cancer registries, incidence, mortality, prevalence, prostate cancer, PSA test, survival.

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