## REGIONAL ESTIMATES OF BREAST CANCER BURDEN IN ITALY

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Aims and background: Breast cancer is the most common cancer and the leading cause of cancer death among women. Knowledge of the present and future burden of the disease at a regional and national scale is a major issue in Italy, where the frequency and coverage of screening programs vary considerably across the country. This study presents estimates and projections of the female breast cancer incidence, prevalence and mortality for Italy and all Italian regions in the period 1970-2010.

Methods: The estimates were obtained by applying the MI-AMOD method, a statistical back-calculation approach to derive incidence and prevalence figures from mortality and relative survival data. Published data from the Italian cancer registries were modelled to obtain regional and national estimates of breast cancer survival.

Results: Breast cancer mortality has been declining from the late 1980s in the northern-central regions and from the mid 1990s in the southern regions Puglia, Sicilia and Sardegna. Stable mortality rates are estimated for the other southern re-

gions in the 2000's first decade. The incidence rate in Italy is estimated as increasing until the late 1990s, and stable thereafter (93 per 100,000). The incidence curve is also estimated to flatten in many northern-central regions from the late 1990s or later. Rising incidence trends are estimated in all southern regions, with the exception of Puglia. About 8,500 deaths, 37,000 new diagnoses and 416,000 prevalent cases for breast cancer are estimated among Italian women in 2005. In the same year, the proportion of prevalent cases in the northern area (1,221 per 100,000) is about twice that estimated in the South (685 per 100,000).

Discussion: The geographical variation in female breast cancer burden can be explained by the unequal distribution of screening. A more widespread screening activity in the southern regions would help to bridge the gap between northern-central and southern regions. Continuous monitoring of regional epidemiological indicators for breast cancer is crucial to evaluate the effect of different health measures taken to control breast cancer in Italy.

Key words: breast cancer, cancer registries, incidence, Italy, mortality, population surveillance, prevalence, survival.

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