## METHODOLOGY FOR ESTIMATION OF CANCER INCIDENCE, SURVIVAL AND PREVALENCE IN ITALIAN REGIONS

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Background: The Italian health care system is based on a regional responsibility and organization. Incidence, survival and prevalence of cancer patients were estimated for major cancer sites by single regions in Italy within a collaborative project "ITUMORI IN ITALIA" aimed at providing epidemiological information in a web site, www.tumori.net, for health operators, health programmers, epidemiologists and the general public. The aim of this paper is to present the methodology used to derive regional estimates of cancer burden indicators in Italy for major cancer sites. Methods: Estimates require a complex methodology to be used. We present herein the methodology to provide regional estimates that involves a combined use of multiple methods to model and extrapolate patient survival to derive incidence and prevalence estimates and future projections.

Results: Regional patient survival estimates in Italy are presented and discussed. Cancer survival has greatly improved over the years and differences between northern-central and southern regions have persisted. The fraction of patients cured from cancer is today over 50% for young men and women aged 15-44 and declines to 15%-25% at older ages (75-99).

Discussion: We integrated different methods to derive estimates of cancer burden in Italy, at a regional level, in order to take advantage of all information available and to obtain the most reliable estimates. The value of producing regional estimates of cancer burden indicators was motivated by the lack of such information systematically on the Italian national territory.

Key words: cancer incidence, cancer mortality, cancer prevalence, cancer survival, statistical method.