

## Is cancer overtaking cardiovascular diseases as the killer number one in men in Tuscany?

Lucia Giovannetti, Giuseppe Gorini, Andrea Martini, Elisabetta Chellini, Maria Grazia Fornai, Brunella Sorso, and Adele Seniori-Costantini

*Environmental and Occupational Epidemiology Unit, ISPO Cancer Prevention and Research Institute, Florence, Italy*

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### ABSTRACT

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**Aims and background.** For the first time in 2006, cancer became the main cause of death in men in Italy, exceeding cardiovascular disease. The aim of the study was to verify whether the overtaking of cancer male mortality occurred also in Tuscany or in some of its 12 subregional areas and whether there was a geographical trend.

**Methods.** Age-standardized mortality rates from the Tuscan Regional Mortality Registry, 1987-2008, were calculated for neoplasms, cardiovascular diseases, and respiratory diseases, considering the whole region and its 12 areas. Joinpoint analyses were carried out to study temporal trend.

**Results.** Up to 2008, the number of male deaths for neoplasms (6,786) in Tuscany did not exceed deaths from cardiovascular disease (7,065). Instead, overtaking occurred in some subregional areas from 2004 onwards. When we compared age-standardized mortality rates, cancer became the first cause of death in Tuscany from 2004 onwards (age-standardized mortality rates for cancer 236.5 per 100,000; for cardiovascular disease 227.8 per 100,000). Age-standardized mortality rates for cardiovascular disease recorded an annual 2.4% decrease until 1998, then a 3.5% decrease. Age-standardized mortality rates for all cancers recorded an annual 1.6% decrease in the whole period.

**Conclusions.** Our study confirmed a geographical trend in cancer overtaking as the main cause of death in males: from the more urbanized areas in northern Tuscany, where the phenomenon occurred earlier, to the southern part. Free full text available at [www.tumorionline.it](http://www.tumorionline.it)

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**Key words:** cancer mortality, cardiovascular mortality, joinpoint analysis, Tuscany.

*Conflict of interest statement:* the authors have no potential conflict of interest.

*Correspondence to:* Dr Giuseppe Gorini, Environmental and Occupational Epidemiology Unit, ISPO Cancer Prevention and Research Institute, via di S. Salvi 12, 50135 Florence, Italy.  
Tel +39-055-6268347;  
fax +39-055-6268385;  
e-mail [g.gorini@ispo.toscana.it](mailto:g.gorini@ispo.toscana.it)

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