

Estimates of the incidence and prevalence of renal cell carcinoma in Italy in 2002 and projections for the years 2007 and 2012

Cristina Bosetti¹, Cosetta Bianchi², Eva Negri¹, and Carlo La Vecchia^{1,3}

¹Istituto di Ricerche Farmacologiche "Mario Negri", Milan; ²Bayer SpA Divisione Farmaceutica, Milan;

³Istituto di Statistica Medica e Biometria "GA Maccacaro", Università degli Studi di Milano, Milan, Italy.

ABSTRACT

Aims and background. Data on kidney cancer incidence and prevalence are not available on a national and regional level. We provided estimates of the number of incident and prevalent cases of kidney and renal cell cancer in Italy overall and in various regions in 2002 and gave projections for the years 2007 and 2012.

Methods. We derived annual numbers of incident cases combining mortality data provided by the World Health Organization and information on relative survival from kidney cancer and we subsequently derived 5-year prevalence by combining incidence with information on survival. We provided different projection estimates for the years 2007 and 2012 for incidence and prevalence, on the basis of various hypothetical scenarios, i.e., stable rates over time or steady falls by 1% per year.

Results. In 2002, there were about 8000 incident cases and 26,800 prevalent cases of kidney cancer in Italy. Of these, approximately 6800 and 22,750 were incident and prevalent cases of renal cell cancer, respectively. The most reliable estimate of incident kidney cancer cases in Italy over the period 2007-2012 is likely to range between 7000 and 9000. Of these, between 6000 and 8000 are renal cell cancer cases. The best estimate of prevalence of kidney cancer is between 20,000 and 34,000 cases and that of renal cell cancer between 17,000 and 29,000 cases.

Conclusions. Incidence and prevalence of renal cell cancer are likely to remain approximately stable between 2002 and 2007. Increased diagnostic attention due to widespread use of echography and other diagnostic techniques may, however, lead to earlier detection of kidney neoplasms and consequently to an apparent increase in the incidence of renal cell cancer.

Key words: incidence, Italy, mortality, prevalence, renal cell cancer.

Acknowledgments: This work was conducted with the contribution of the Italian League Against Cancer and the Italian Association for Cancer Research. The work of this paper was undertaken while CLV was a senior fellow at the International Agency for Research on Cancer. The authors thank Mrs I Garimoldi for editorial assistance.

Correspondence to: Dr Cristina Bosetti, Istituto di Ricerche Farmacologiche "Mario Negri", Via La Masa 19, 20156 Milan, Italy.
Tel +39-02-39014526;
fax +39-02-33200231;
e-mail bosetti@marionegri.it

Received February 5, 2008;
accepted October 28, 2008.