

## Metachronous malignancies in men with previous prostate cancer in Umbria, Italy, 1994-2003

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### ABSTRACT

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Data about second primary tumors after prostate carcinoma are controversial. Some authors emphasize an increased incidence of some cancer sites, others an overall diminution. With the aim to provide further information to define the issue, we have analyzed the frequency of second metachronous primary malignancies in patients with diagnosed prostate cancer in the Umbria region of Italy. A total of 410 metachronous cancers among 4528 prostate cancer patients were abstracted from incident cases of the RTUP, over the period 1994-2003. This cohort was compared with all cases (except prostate cancers) recorded in the RTUP archive. The expected number of cases was obtained from indirect standardization with regional incidence rates of several sites. The significance of the observed/expected ratios and the corresponding 95% confidence intervals were based on the Poisson distribution. A significant standardized incidence ratio was found for all sites but prostate, with 410/351 observed/expected cases. The significance disappears considering all sites except prostate and skin non-melanomas. Among several sites, significant standardized incidence ratios were found for skin non-melanomas, for bladder, for rectum, but not for colon cancers. Kidney, ureter and urethra showed a nonsignificant standardized incidence ratio. Nasopharynx showed a significant standardized incidence ratio, but the result was based on a very small number of cases. In our data, the increase in urinary bladder and rectal cancers, after prostate cancer diagnosis, seems to be real: it is plausible that the number of second cancers may be due to increased urologist surveillance, which, in our Region, does not seem to be reduced in elderly men.

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**Key words:** cancer registry, incidence, multiple primary cancers, prostate cancer.

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