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ORIGINAL PAPER

Trends in prostate cancer incidence between 1996 and 2013 in two Swiss regions by age, grade, and T-stage

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Abstract

Purpose To investigate differences in prostate cancer incidence between two distinct Swiss regions from 1996 to 2013 stratified by age group, grade, and T-stage.

Methods The dataset included 17,495 men living in Zurich and 3,505 men living in Ticino, diagnosed with prostate cancer between 1996 and 2013. We computed age-standardized incidence rates per 100,000 person-years using the European Standard Population. Trends were assessed using JoinPoint regression analysis Software.

Results Age-standardized incidence rates were generally higher in Zurich compared to Ticino but the difference decreased over time. Incidence rates increased significantly up to 2002 in Zurich and 2007 in Ticino and then decreased. A statistically significant increase was observed for men aged < 65 years, for grade 3 tumors, and for T-stage 2 and 3 tumors. The largest decrease was seen for grade 1 tumors. Furthermore, the incidence of tumors of unknown grade or T-stage decreased significantly in both regions.

Conclusions The trends in prostate cancer incidence rates were similar in both regions, although on a higher level in Zurich compared to Ticino. However, the difference decreased over time. The distribution of T-stage and grade did not explain the difference in incidence rates. Different use of opportunistic screening may play a role.

Keywords Prostate cancer · Switzerland · Time trend · Staging · Grading