

Of 31 cognitive variables included in the analysis, none were significantly related to serum estradiol before treatment. During androgen deprivation therapy, however, significant associations were revealed between three of these variables and serum estradiol decline: visual memory and recognition speed of numbers were both temporarily impaired after 6 months of treatment, whereas verbal fluency showed a marginal improvement at 12 months.

The authors say that these findings are expected to have important implications for informed patient care and will require further investigation, particularly with respect to longer treatment periods and to patients with impaired cognitive performance.

**Original article** Salminen EK *et al.* (2005) Estradiol and cognition during androgen deprivation in men with prostate carcinoma. *Cancer* [doi: 10.1002/cncr.20962]

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## Chemoprevention of prostate cancer: a new analysis

The Prostate Cancer Prevention Trial showed that a daily dose of 5 mg of finasteride cut the number of new cases of prostate cancer by 24.8%, compared with placebo, during the 7-year study period; however, the study also found a 6.9% increase in the proportion of high-grade tumors, prompting a debate about the overall benefit of this chemoprevention

strategy. Unger *et al.* have weighed the risks and benefits in their recent analysis, which examines the likely effect of finasteride on population mortality.

The team applied results from the Prostate Cancer Prevention Trial to data from the Surveillance, Epidemiology and End Results survey in the US. The analysis included men aged  $\geq 55$  years who were diagnosed with prostate cancer between 1993–1997, and normal survival was estimated using data from the National Center for Health Statistics.

According to the analysis, the reported 24.8% reduction in new prostate cancer cases would save 316,760 person-years in the US population over a 10-year period. This figure decreased to 262,567 once the increased proportion of high-grade tumors (Gleason score 8 or above) was taken into account. The authors went on to model the effects of even higher rates of high-grade tumors, and showed that 159,680 person-years would be saved even if the rate of high grade tumors in the population doubled from its current rate of about 20% to 40%.

While the clinical significance of the increased rate of high-grade tumors continues to be investigated, this new analysis indicates that finasteride could have a significant impact on prostate cancer mortality if applied at a population level.

**Original article** Unger JM *et al.* (2005) Estimated impact of the Prostate Cancer Prevention Trial on population mortality. *Cancer* [doi: 10.1002/cncr.20919]