

Another Study of Prostate-Specific Antigen Screening

In a Swedish trial, screening was associated with an absolute reduction of 0.4% in prostate cancer mortality.

Last year, conflicting results from two trials of prostate cancer screening were published: The European ERSPC showed a barely significant absolute reduction in prostate cancer mortality, and the U.S. PLCO showed no benefit from screening ([JW Gen Med Mar 18 2009](#)). Now, we have a randomized trial from Sweden; it originally was designed independently from the ERSPC, but eventually, 60% of its participants were included in the ERSPC. In 1994, 32,000 men aged 50 to 64 lived in Göteborg, Sweden; 20,000 of these men were randomly selected and randomly assigned to receive either prostate-specific antigen (PSA) screening every 2 years or no screening; 76% of screening invitees accepted. Initially, a PSA cutoff level of 3.4 ng/mL prompted further evaluation, but this threshold later was lowered to 2.5 ng/mL.

During median follow-up of 14 years, prostate cancer was diagnosed significantly more often in the screening group than in the control group (12.7% vs. 8.2%). The incidence of death from prostate cancer was significantly lower in the screening group than in controls (0.5% vs. 0.9%; $P=0.002$); however, overall mortality was identical in the groups (19.9%). Investigators who assigned cause of death were blinded to whether deceased patients had been screened.

Comment: In this study, screening was associated with lower prostate cancer-specific mortality but no change in overall mortality. Strengths of the study are its population-based design and a longer average follow-up than that provided in the ERSPC and PLCO trials. Nonetheless, overdiagnosis and overtreatment continue to be vexing problems associated with prostate cancer screening.

— [Allan S. Brett, MD](#)

Published in [Journal Watch General Medicine August 3, 2010](#)

CITATION(S):

Hugosson J et al. Mortality results from the Göteborg randomised population-based prostate-cancer screening trial. *Lancet Oncol* 2010 Aug; 11:725. ([http://dx.doi.org/10.1016/S1470-2045\(10\)70146-7](http://dx.doi.org/10.1016/S1470-2045(10)70146-7))