PROSTATE CANCER

11 YEARS FOLLOW-UP
FOR ERSPC

Studies investigating the effect of PSA screening on prostate cancer mortality have produced conflicting results and the use of PSA as a screening tool remains controversial. Many clinicians continue to express concern over the effects of overdiagnosing incidental and clinically insignificant cancers, which do not require treatment. A further 2 years of follow-up data have now been accrued in the ERSPC trial—the largest ever trial to investigate prostate cancer screening—and suggest a positive effect of screening on prostate-cancer-related death, but still no effect on all-cause mortality.

182,160 men aged 50–74 years were included in the ERSPC study. Patients received a serum PSA test every 4 years (2 years in Sweden), with prostate cancer mortality as the primary end point. A serum PSA value >3.0 ng/ml was considered a positive test and such men were referred for biopsy.

6,963 prostate cancers were diagnosed in the screening group compared with 5,396 in the control group. 299 men from the screening group and 462 from the control group died from prostate cancer, resulting in death rates of 0.39 and 0.50 per 1,000 person-years, respectively. Overall, the study showed a relative risk reduction of 21% in favor of screening.

Although the total rate ratio for prostate cancer death in men in the screening group was significantly below 1.00 for all ages, subgroup analyses showed that this result was actually only significant for men aged 65–69 years, with no mortality reduction for men ≥ 70 years despite a wide confidence interval. The number of men needed to be invited for screening (NNI) and number needed to detect (NND) to avert one prostate cancer death were reduced by around 50% at 11 years follow-up duration, compared with the data at 9 years, and are expected to decrease further with longer follow-up duration.

The 11-year results of ERSPC—showing a 21% relative risk reduction in support of screening—suggest a benefit of PSA testing but do little to silence the critics of screening programs. The authors suggest exercising caution when making recommendations until more data regarding the adverse effects and cost-effectiveness are available.

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Original article Schröder, F. H. *et al.* Prostate cancer mortality at 11 years of follow-up. *N. Engl. J. Med.* 366, 981–990 (2012)