



Letter to the Editor

Re: E. David Crawford, Per-Anders Abrahamsson. PSA-based Screening for Prostate Cancer: How Does It Compare with Other Cancer Screening Tests? *Eur Urol* 2008;54:262–73

In their recent review, Crawford and Abrahamsson conclude that while we await better prognostic markers, prostate-specific antigen (PSA) can be regarded as an appropriate screening tool for prostate cancer at the population level [1]. Many, however, would consider such a forthright statement to be at odds with the current lack of population-based evidence for and against the effectiveness of PSA-based screening.

Given the diversity in the natural history of prostate cancer, many PSA-detected cancers may not be of clinical relevance [2]. PSA screening cannot predict with any certainty which patients in a population will become symptomatic in their lifetimes and consequently, a large number of men are diagnosed and treated unnecessarily. In contrast to the authors comments in their review, there are substantive quality-of-life issues associated with the PSA test and with a subsequent prostate cancer diagnosis. Further research into the physical and psychological aspects of living with a prostate cancer diagnosis and the additional impact of treatment on quality of life is still needed.

In the context of PSA testing, one must distinguish counselling of the *individual patient* with recommendations regarding *population-based* screening. The current lack of evidence regarding the consequences of mass screening for a mainly healthy population, in terms of a mortality reduction and of the impact on quality of life, does not necessarily apply to early detection efforts in a clinical setting, where the patient and the doctor can make an informed decision about whether to commence an individual screening program [3].

If we lack conclusive population-based evidence to support PSA screening, either from observational or randomised trials, any comparison with other screening programmes cannot be used as a justification for PSA-based screening. Thus, while it is interesting to compare PSA-based screening with other screening programmes, the fact that mass screening for cervical cancer was introduced without level one evidence of efficacy cannot be used as justification for hastening mass screening for prostate cancer before the results of the ongoing randomised trials are known. The balance of evidence would suggest that there remains insufficient knowledge to assess whether the benefits outweigh the harms of population-based PSA screening, as reflected in the recent recommendations from the European Association of Urology [4] and the US Preventive Services Task Force [5].

In addition to answering the question of whether PSA screening reduces mortality, the randomised studies will continue to contribute to resolving the many other open issues regarding PSA screening [6]. Which age groups should we screen and to what screening intervals? Is the use of PSA kinetics applicable? Only when we have definitive answers to such questions can PSA be regarded as an appropriate screening tool for prostate cancer at the population level.

Conflicts of interest: The authors have nothing to disclose.

References

- [1] Crawford ED, Abrahamsson P-A. PSA-based screening for prostate cancer: how does it compare with other cancer screening tests? *Eur Urol* 2008;54:262–73.
- [2] Draisma G, Boer R, Otto SJ, et al. Lead times and over-detection due to prostate-specific antigen screening: estimates from the European Randomized Study of

- Screening for Prostate Cancer. *J Natl Cancer Inst* 2003;95:868–78.
- [3] Damber JE, Aus G. Prostate cancer. *Lancet* 2008;371:1710–21.
- [4] Heidenreich A, Aus G, Abbou CC, et al. European Association of Urology guidelines on prostate cancer. http://www.uroweb.org/fileadmin/tx_eauguidelines/Prostate%20Cancer.pdf. Accessed October 31, 2008.
- [5] Screening for prostate cancer: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med* 2008;149:185–91.
- [6] Schroder FH. Screening for prostate cancer (PC)—an update on recent findings of the European Randomized Study of Screening for Prostate Cancer (ERSPC). *Urol Oncol* 2008;26:533–41.

Rune Kvåle*
Eivor Hernes
Freddie Bray

*Department of Clinical and Registry-Based Research,
The Cancer Registry of Norway, Oslo, Norway*

*Corresponding author. Department of Clinical and Registry-Based Research, The Cancer Registry of Norway, Postboks 5313 Majorstuen, NO-0304 Oslo, Norway. Tel. +47 23 33 39 44, +47 22 45 13 00 (Switchboard); Fax: +47 22 45 13 70

E-mail addresses: Rune.Kvale@kreftregisteret.no
rkvaale@hotmail.com

November 21, 2008

Published online on November 29, 2008