

## Rebuttal: Should Canadians be offered systematic prostate cancer screening?

YES

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Let's be clear. We need to acknowledge at least one point: the introduction of systematic screening for prostate cancer substantially reduces the mortality rate from this disease in the population. And a correction needs to be made: the incidence of cancer detectable by systematic biopsy, regardless of the detection rate of the prostate-specific antigen (PSA) test, is 15% and not 60% as suggested by my opponents.<sup>1</sup> Rather than depriving men of the potential benefits of systematic screening, efforts should be made instead to minimize the collateral damage that can be associated with it.

We hope to reduce the number of unnecessary biopsies thanks to a new test, the PCA3 gene test, that detects cancerous prostate cells in the urine.<sup>2</sup> This test, which is more specific than the PSA blood test, also helps to identify patients at higher risk of having fatal cancer. Patients with a low-grade small-volume cancer (like many cancers detected through screening) are increasingly being asked to consider follow-up without treatment unless the cancer shows clinical progression.<sup>3</sup> These patients are also the subject of clinical trials involving medications or changes to diet to minimize progression of the cancer. On the other hand, patients with higher-grade cancers should be treated with prostatectomy, as this is the only treatment that has been shown to reduce mortality by more than 50%.<sup>4</sup> In fact, several population studies show a cancer mortality rate 2 to 3 times lower among patients treated with surgery than among those treated with radiation therapy.<sup>5,6</sup>

When the surgery is performed by experts, the sequelae of impotence and urinary incontinence occur much less frequently than indicated by the rates reported in the Swedish study cited by my opponents.<sup>7</sup> For example, fewer than 5% of patients experience incontinence over the long-term, and in most cases, this problem can be corrected with minor surgery. Finally, the inconveniences of screening can also be minimized thanks to treatment with 5- $\alpha$  reductase agents (finasteride or dutasteride) that reduce the incidence of cancer by 25%<sup>1</sup>

NO

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We agree that the reason for systematic screening is the severity of the disease, having an effective method of early detection, and the availability of an early treatment that has a substantial effect on mortality rates. In 2007, however, informed consent to participate in screening is essential. To obtain informed consent, all the conclusive evidence on the risks and benefits of screening must be clearly presented. We did this in our article.<sup>1</sup>

Increasingly, the use of the prostate-specific antigen test is being questioned. Several recent studies and reviews have discussed the important limitations of this marker both for detection of the disease and for making a prognosis for patients with prostate cancer.<sup>2-6</sup>


Treating localized cancer with prostatectomy has only a modest effect on mortality from prostate cancer.<sup>7</sup> The reduction in mortality, expressed only in relative terms (reduction of 50%), is misleading and not useful for communicating the facts to patients. As described in our article,<sup>1</sup> of 100 patients who underwent prostatectomy and were followed up after 10 years, only 5 had actually benefited from the procedure, and 95 had undergone the procedure for nothing and had risked having serious side effects!

It is too early to attribute the drop in the mortality rate due to prostate cancer in certain populations to screening. Without the results of the randomized clinical trials currently under way, the inadequacy of the data supporting systematic screening is repeatedly mentioned—with good reason.<sup>4,8,9</sup>

While we are aware that certain men could benefit from early detection of prostate cancer, we cannot dismiss the negative effect of detecting "low-risk" cancers in otherwise healthy men. Unfortunately, it is not possible to tell patients who plan to undergo prostate cancer screening whether it would be more advantageous than disadvantageous to do so. Simply making a diagnosis of prostate cancer negatively affects their quality of life.<sup>10</sup>

These rebuttals are responses from the authors who were asked to discuss whether Canadians should be offered systematic screening for prostate cancer in the Debates section of the June issue (*Can Fam Physician* 2007;53:989-92 [Eng], 994-7 [Fr]).

YES

while preventing the complications caused by benign hypertrophy of the prostate and that make the PSA test much more accurate. 

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**Competing interests**

None declared

**References**

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NO

In light of what we know, systematic screening for prostate cancer is not justified. Our role consists of clearly communicating the benefits and risks associated with screening to our patients, taking their values and preferences into account, and ensuring that they understand the potential consequences of their choices. In this way, we help them to make decisions they are comfortable with, regardless of the outcome. This is a proven approach.<sup>11</sup> 

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**Competing interests**

None declared

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