

## PSA for prostate cancer detection: In serum, in urine or both?

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See related article on page 377

Since the discovery of prostate specific antigen (PSA) and its relation to prostate cancer detection, there have been countless studies attempting to improve its accuracy. "Improve detection and avoid unnecessary biopsies" has been the objective for more than 2 decades. Surprisingly, after so many years of defining and fine-tuning its use for clinical practice, the PCPT study<sup>1</sup> painfully showed us that prostate cancer can be found no matter what level of serum PSA.

In this issue of *CUAJ* Bolduc and colleagues<sup>2</sup> report on their experience of measuring urinary PSA in the hopes of improving the accuracy of serum PSA in prostate cancer early detection. Although this is not the first time such an attempt has been made, these authors have made some unique observations. Despite the small number of cases, the authors observed that at a cutoff of 150 ng/mL for urinary PSA an impressive sensitivity of 92.5% was achieved. Unfortunately, there was no clear relation with cancer grade, but urinary PSA appeared to be helpful in addition to serum PSA for identifying more advanced stage cancers.

Obviously, a much larger series of cases and controls is required to validate the usefulness in everyday clinical practice. For those urologists who are looking for ways to reduce unnecessary prostatic biopsies, urinary PSA may one day be added to the series of biomarkers and nomograms for such a purpose. However, for those who do not wish

to miss *any* prostate cancers, urinary PSA will probably not be very useful. Interestingly, one can probably say the same for serum PSA. Nevertheless, if urinary PSA can indeed provide additional *prognostic* information over serum PSA in the low levels, then it would be most welcome.

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### References

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