



Re: PGC and PSMA in prostate cancer diagnosis: tissue analysis from biopsy samples

Alberto A. Antunes, Sabrina T. Reis, Kátia R. Leite, Danilo M. Real, Juliana M. Sousa-Canavez, Luiz H. Camara-Lopes, Marcos F. Dall'Oglio, Miguel Srougi

Laboratory of Medicine Investigation, Division of Urology, University of Sao Paulo Medical School (AAA, STR, KRL, DMR, MFD, MS) and Genoa Biotechnology SA (KRL, JMS, LHC), São Paulo, Brazil

Int Braz J Urol. 2013; 39: 649-56.

To the editor,

Sir, the recent article on “PGC and PSMA in prostate cancer diagnosis: tissue analysis from biopsy samples (1)” is very interesting (1). Antunes et al. concluded that “PGC gene expression is significantly higher in prostatic tissue in men affected by PCa when compared to normal prostates (1).” This report repetitively confirmed a similar report by Antunes et al. in J Urol (2). There are some concerns on using PGC in diagnosis of prostate cancer. A recent report by Diamandis et al. showed “no correlation between prostate-specific antigen concentrations and concentrations of PGC in serum of prostate cancer patients (3)”. Diamandis et al. concluded that that PCG “is not useful for either diagnosing or monitoring prostatic carcinoma (3)”. Also, the diagnostic property of PCG should be discussed. The abnormal PCG value can be seen in several disorders including breast diseases, which can also be seen in male although it is uncommon. The immunoassay test also has its diagnostic limitation at 0.1 microgram/L. To implement PCG in clinical practice, further validation study is required.

REFERENCES

1. Antunes AA, Reis ST, Leite KR, Real DM, Sousa-Canavez JM, Camara-Lopes LH, et al.: PGC and PSMA in prostate cancer diagnosis: tissue analysis from biopsy samples. *Int Braz J Urol.* 2013; 39: 649-56.
2. Antunes AA, Leite KR, Sousa-Canavez JM, Camara-Lopes LH, Srougi M: The role of prostate specific membrane antigen and pepsinogen C tissue expression as an adjunctive method to prostate cancer diagnosis. *J Urol.* 2009; 181: 594-600.
3. Diamandis EP, Nadkarni S, Bhaumik B, Abdelrahman A, Melegos DN, Borchert G, et al.: Immunofluorometric assay of pepsinogen C and preliminary clinical applications. *Clin Chem.* 1997; 43: 1365-71.

Correspondence address:

Somsri Wiwanitkit, MD
Wiwanitkit House, Bangkhuae, Bangkok Thailand
E-mail: somsrwiwan@hotmail.com

REPLY BY THE AUTHORS

The search for a method that could overcome PSA limitations is a very hard field of work. The high concentrations of PGC in the seminal fluid drew our attentions to this molecule as a potential marker for prostate cancer diagnosis. Although the blood tests have not demonstrated

usefulness, hopefully the tissue analysis may become an important way to differentiate benign from malignant prostatic cells and thus avoid unnecessary prostate biopsies in a large group of men. Now, prospective validations are necessary to confirm our results.

The authors