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LETTERS TO THE EDITOR

Treatment of refractory prostate cancer with somatostatin analogues and glucocorticoids

Dear Editor,

The incorporation of corticosteroids, like dexamethasone, in the treatment of hormone-refractory prostate cancer is generally considered to generate beneficial, mostly palliative effects [1]. Moreover, the treatment of prostate cancer with somatostatin analogues, like octreotide, can produce antineoplastic results in several cases of hormone-refractory prostate cancer [2]. Based on these observations and experimental findings, Koutsilieris et al. [3], as well as some other investigators used octerotide or somatostatin analogues in combination with dexamethasone in order to reverse antiandrogen prostate cancer resistance. Concurrent therapy with androgen ablation gave very good results in the treatment of prostate cancer patients in advanced stages.

However, Trafalis et al. [4] showed that treatment, *in vitro* and *in vivo*, of the octreotide receptor-2 (oct-2) positive P388 rodent lymphocytic leukemia with octreotide generates a minimum antineoplastic effect while the concurrent administration of octreotide with dexamethasone entirely neutralizes the anti-lymphomatic action of dexamethasone. The nature of this inhibitory mechanism is unclear. Recently, in preclinical experimental drug screening settings (*in vitro* and *in vivo*) for the treatment of TRAMPC1 rodent prostate cancer, we observed that, similarly with P388 leukemia, the combination of octreotide with dexamethasone is completely ineffective (unpublished results).

Moreover, Vainas [5] reviewed the administration of octreotide either alone or in combination with corticosteroids as a therapeutic modality against prostate cancer in advanced stages and noticed that even though some clinical trials exhibited very promising results, primarily concerning symptom palliation and progression-free survival (PFS), they presented some uncertainties with regard to the trial design, the somatostatin receptor (SSTR) subtype determination and tumor localization with SSTR scintigraphy before the start of a selective somatostatin analogue, and finally the randomization in groups according to hormone resistance, dosage regimen and route of administration.

Thus, clinical trials in a randomized fashion showing the effectiveness of treatment with somatostatin analogues and dexamethasone with hormone ablation against advanced prostate cancer are needed. Based on preclinical data we believe that because of these ambiguous results the concurrent administration of octreotide with dexamethasone as anticancer treatment should be carefully considered and the results of this therapeutic approach should be interpreted with circumspection.

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D.T. Trafalis*, A.E. Athanassiou

Department of Medical Oncology - A, Metaxa Cancer Hospital, Piraeus, Greece

**Corresponding author:*
Dimitris T. Trafalis
drtrafalis@aim.com
dtrafalis@yahoo.com