



## TEN BEST READINGS IN UROLOGIC CANCERS

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The 10 best recent articles in the medical literature relating to urologic cancer are reviewed here.

Spermon JR, Roeleveld TA, van der Poel HG, et al. Comparison of surveillance and retroperitoneal lymph node dissection in stage I nonseminomatous germ cell tumors. *Urology*. 2002;59:923-929.

Disease-free survival was the same for patients with stage I non-seminomatous germ cell tumor treated by either surveillance or retroperitoneal lymph node dissection. Both groups were comparable for patient age, presence of vascular invasion, and embryonal cell component.

Skotheim RI, Monni O, Mousses S, et al. New insights into testicular germ cell tumorigenesis from gene expression profiling. *Cancer Res*. 2002;62:2359-2364.

This cDNA microarray study identified new gene targets associated with a common genomic rearrangement as well as other genes with potential importance in testicular tumorigenesis in two distinct regions on chromosome arm 17q.

Hinton S, Catalano P, Einhorn LH, et al. Phase II study of paclitaxel plus gemcitabine in refractory germ cell tumors (E9897): a trial of the Eastern Cooperative Oncology Group. *J Clin Oncol*. 2002;20:1859-1863.

This regimen achieved a response rate of 21.4%, including three complete responses. Toxicity was acceptable with only one incident of neutropenic fever.

Lammle M, Beer A, Settles M, et al. Reliability of MR imaging-based virtual cystoscopy in the diagnosis

of cancer of the urinary bladder. *AJR Am J Roentgenol*. 2002;178:1483-1488.

Computer reconstruction of pelvic MRI-based images was able to detect 90% of bladder tumors with a diameter of 0.4 to 6.4 cm. The detection rate for tumors 1 cm or greater was 100%.

Wallace DM, Bryan RT, Dunn JA, et al. Delay and survival in bladder cancer. *BJU Int*. 2002;89:868-878.

In their assessment of 1,537 cases of urothelial cancer, the authors reported a significantly better survival for patients referred for treatment within 14 days of the onset of symptoms. The adverse effects of delay seem to be more pronounced for patients with pT1 tumors.

Edwards J, Duncan P, Going JJ, et al. Identification of loci associated with putative recurrence genes in transitional cell carcinoma of the urinary bladder. *J Pathol*. 2002;196:380-385.

To study genetic alteration at chromosome 9 associated with recurrence, 109 primary and recurrent transitional cell carcinomas were examined. The risk of recurrence was significantly higher in patients with deleted tumor suppressor gene-1 (TSG-1) region in chromosome 9 where tumor suppressor genes reside than in those who retained this region.

Lau WK, Cheville JC, Blute ML, et al. Prognostic features of pathologic stage T1 renal cell carcinoma after radical nephrectomy. *Urology*. 2002;59:532-537.

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Renal cell carcinoma subtype is a strong independent prognostic variable for patients with pT1 tumors treated by radical nephrectomy. For the clear cell type, Fuhrman grade and tumor size are independently associated with cancer-specific survival and metastasis-free survival.

Antonia SJ, Seigne J, Diaz J, et al. Phase I trial of a B7-1 (CD80) gene modified autologous tumor cell vaccine in combination with systemic interleukin-2 in patients with metastatic renal cell carcinoma. *J Urol.* 2002;167:1995-2000.

The combination of the B7-1 gene modified autologous tumor cell vaccine and interleukin-2 is safe and has acceptable toxicity. Immunological and clinical responses were observed in some of the patients.

Ritter MA, Gilchrist KW, Voytovich M, et al. The role of p53 in radiation therapy outcomes for favorable-risk to intermediate-risk prostate cancer. *Int J Radiat Oncol Biol Phys.* 2002;53:574-580.

This study investigated whether p53, a potential molecular determinant, could predict long-term radiation therapy outcome in a restricted group of relatively favorable-risk prostate cancer patients treated uniformly with irradiation alone. The authors reported that p53 status in pretreatment biopsies predicted for long-term biochemical control after radiation therapy in favorable to patients with intermediate-risk prostate cancer.

Ernst T, Hergenbahn M, Kenzelmann M, et al. Decrease and gain of

gene expression are equally discriminatory markers for prostate carcinoma: a gene expression analysis on total and microdissected prostate tissue. *Am J Pathol.* 2002;160:2169-2180.

A total of 2,600 mRNA sequences were analyzed from 26 prostate tissue samples. Expression levels of 63 genes were significantly increased, whereas expression of 153 genes was decreased in prostate cancer compared with adjacent normal tissue. Development of prostate cancer is associated with down-regulation as well as up-regulation of genes that show complex differential regulation in epithelia and stroma.