



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

## TEN BEST READINGS ON PROSTATE CANCER

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Smith MR, McGovern FJ, Zietman AL, et al. Pamidronate to prevent bone loss during androgen-deprivation therapy for prostate cancer. *N Engl J Med.* 2001;345:948-955.

This open-label study randomized 47 men with advanced or recurrent prostate cancer and no bone metastases to receive either leuprolide alone or leuprolide plus pamidronate. Pamidronate prevented bone loss in the hip and lumbar spine as assessed by bone mineral density measured by dual-energy x-ray absorptiometry.

Gleave ME, Goldenberg SL, Chin JL, et al. Randomized comparative study of 3 versus 8-month neoadjuvant hormonal therapy before radical prostatectomy: biochemical and pathological effects. *J Urol.* 2001;166:500-507.

Biochemical and pathological regression of prostate tumors continues between 3 and 8 months, suggesting that the optimal duration of neoadjuvant hormonal therapy is longer than 3 months.

Figg WD, Dahut W, Duray P, et al. A randomized phase II trial of thalidomide, an angiogenesis inhibitor, in patients with androgen-independent prostate cancer. *Clin Cancer Res.* 2001;7:1888-1893.

Thalidomide is active in patients with metastatic prostate cancer who have failed multiple previous therapies.

Hobisch A, Ramoner R, Fuchs D, et al. Prostate cancer cells (LNCaP) generated after long-term interleukin 6 (IL-6) treatment express IL-6 and acquire an IL-6

partially resistant phenotype. *Clin Cancer Res.* 2001;7:2941-2948.

Long-term treatment of LNCaP human prostate cancer cells with IL-6 leads to elimination of inhibitory growth response.

Vis AN, Hoedemaeker RF, Roobol M, et al. Tumor characteristics in screening for prostate cancer with and without rectal examination as an initial screening test at low PSA (0.0-3.9 ng/mL). *Prostate.* 2001;47:252-261.

Digital rectal examination is not necessary as initial screening test for prostate cancer at low PSA values. At PSA levels below 3 ng/mL, 289 rectal examinations are required to find one case of clinically significant carcinoma.

Choo R, DeBoer G, Klotz L, et al. PSA doubling time of prostate carcinoma managed with watchful observation alone. *Int J Radiat Oncol Biol Phys.* 2001;50:615-620.

PSA doubling time can be estimated from a linear regression of ln(PSA) on time, with an assumption of a simple exponential growth model. Doubling time of untreated prostate cancer varies widely and may be a useful tool to guide intervention for patients managed by observation.

Small EJ, McMillan A, Meyer M, et al. Serum prostate-specific antigen decline as a marker of clinical outcome in hormone-refractory prostate cancer patients: association with progression-free survival, pain end points, and survival. *J Clin Oncol.* 2001;19:1304-1311.

A posttherapy decline in PSA of equal or greater than 50% last-

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ing at least 28 days was associated with longer median overall survival, median progression-free survival, and median time to pain progression in patients with hormone-refractory prostate cancer treated in a randomized phase III trial of suramin plus hydrocortisone vs placebo plus hydrocortisone.

Pollack A, Zagars GK, Smith IG, et al. Preliminary results of a randomized radiotherapy dose-escalation study comparing 70 Gy with 78 Gy for prostate cancer. *J Clin Oncol.* 2000;18:3904-3911.

A dose increase of 8 Gy using conformal radiotherapy resulted in a substantial improvement in prostate cancer freedom from biochemical and/or disease failure rate at 5 years in patients with pretreatment PSA of more than 10 ng/mL.

Djavan B, Mazal P, Zlotta A, et al. Pathological features of prostate cancer detected on initial and repeat prostate biopsy: results of the prospective European Prostate Cancer Detection Study. *Prostate.* 2001;47:111-117.

At least 10% of patients presenting with a PSA range of 4-10 ng/mL and a negative initial prostate biopsy will be diagnosed with cancer on repeat biopsy. Pathological and biochemical features are similar on cancers detected on initial and repeat biopsy. Cancers detected on repeat biopsy were less multifocal and located in a more apico-dorsal location.

Teh BS, Aguilar-Cordova E, Kerren K, et al. Phase I/II trial evaluating combined radiotherapy and in situ gene therapy with or without

hormonal therapy in the treatment of prostate cancer: a preliminary report. *Int J Radiat Oncol Biol Phys.* 2001;51:605-613.

In situ gene therapy and radiation therapy with or without hormonal therapy were safe. No patients dropped out of the trial or had to withhold treatment due to severe toxicity.