

## PROSTATE CANCER

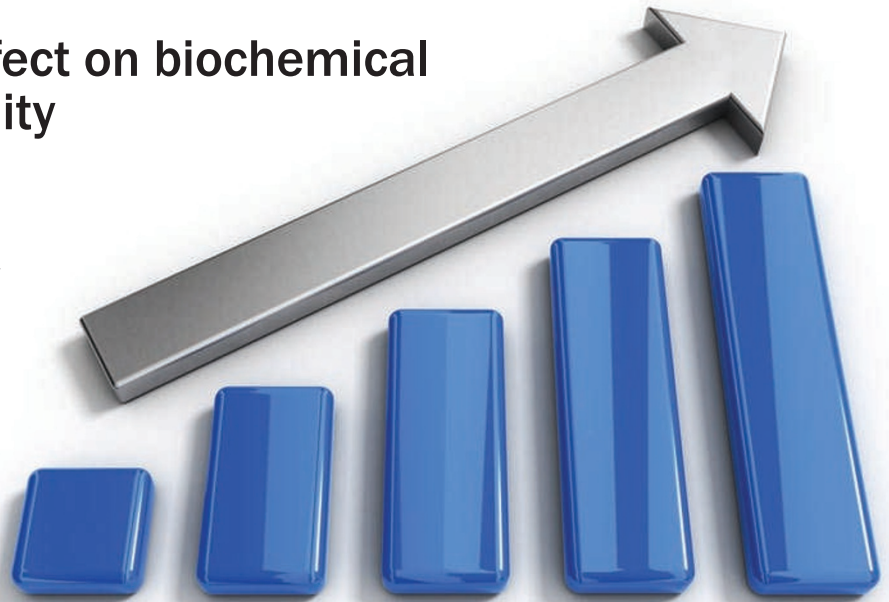
### HDRT has positive effect on biochemical failure but not mortality

A meta-analysis comparing high-dose radiotherapy (HDRT) and conventional-dose radiotherapy (CDRT) for localized prostate cancer has concluded that the rate of biochemical failure is markedly reduced by the former. This superiority of outcome following HDRT applied to men with high, moderate or low-risk disease. Lead author Gustavo Viani from the Marilia School of Medicine, São Paulo, Brazil, suggests that HDRT “be offered as a treatment for all men with localized prostate cancer.”

The authors’ literature search identified seven randomized controlled trials that met their inclusion criteria. Data from 2,812 treatment-naïve men with localized malignancy were pooled. Analysis revealed a significant drop in the incidence of biochemical failure in those who received HDRT. There was no difference in overall or disease-specific survival, however, between the HDRT and CDRT groups. Adverse gastrointestinal effects were more likely following high-dose therapy.

Hard evidence on which to base selection of treatment for localized prostate cancer is scarce. “The decision

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depends on many factors, including institutional standards, individual physician judgment, patient preference and resource availability,” explains Viani. One issue that this meta-analysis provides some clarification on is the value of HDRT for patients at low risk of biochemical progression. Previous studies have hinted that this group does not benefit from HDRT. Subgroup analysis of data from 602 low-risk patients by Viani and colleagues shows that the likelihood of biochemical failure is reduced by half following HDRT.

“Our meta-analysis also detected a linear correlation between the total dose of radiotherapy and biochemical failure,” adds Viani. This confirms the findings of previous studies, that every 1 Gy increase in total dose reduces the risk of biochemical failure by 1.8%.

*Kathryn Senior*

**Original article** Viani, G. A. et al. Higher-than-conventional radiation doses in localized prostate cancer treatment: a meta-analysis of randomized, controlled trials. *Int. J. Radiat. Oncol. Biol. Phys.* 74, 1405–1418 (2009).