

Dr. Chin's rebuttal

Dr. Izawa has presented a concise review and cogent argument for adjuvant radiotherapy (ART) *when* there is early prostate-specific antigen (PSA) relapse.¹ In spite of the data from Pound and colleagues² suggesting a protracted course for many patients with PSA recurrence, Dr. Izawa aptly quoted very poor results for those with serum PSA levels greater than 2 µg/L at time of salvage radiotherapy (SRT), indicating certain patients would definitely have benefited from early therapy.

The toxicity associated with ART cited by Dr. Izawa has been shown in randomized studies to be mild and well-tolerated and there was no long-term difference in quality of life issues when compared with those treated in the salvage setting or not treated at all. Moreover, the dosage used for ART is lower than that required for SRT, which minimizes the toxicity. For those patients who responded to ART, the need for androgen deprivation therapy (ADT) downstream would be obviated, and ART would have spared patients the adverse effects of ADT. In the Southwest Oncology Group (SWOG) 8794/ NCIC (National Cancer Institute of Canada) PR-2 randomized trial, it was shown that at 10 years, 33% of patients in the delayed treatment group had undergone ADT, whereas in the ART group, only 15% required ADT (hazard ratio 0.45, 95% confidence interval 0.29–0.89, $p < 0.001$).

Dr. Izawa correctly identified pitfalls of the previous imperfect trials. Nevertheless, the randomized trials to date have provided level I evidence on the efficacy of ART, supported by other series with lower-level evidence, albeit not directly compared with early SRT. I think we agree the treatment plan for each post-radical prostatectomy patient needs to be individualized, based on the extent and location of margin positivity, preoperative patient and tumour parameters, postoperative urinary and neurovascular bundle status, and so on. Hopefully, current randomized trials such as RADICALS³ will provide some definitive answers for this debate.

This article has been peer reviewed.

Competing interests: None declared.

References

1. Izawa JI. Salvage radiotherapy after radical prostatectomy. *Can Urol Assoc J* 2009;3:245-50.
2. Pound CR, Partin AW, Eisenberger MA, et al. Natural history of progression after PSA elevation following radical prostatectomy. *JAMA* 1999;281:1591-7.
3. Parker C, Sydes MR, Catton C, et al. Radiotherapy and androgen deprivation in combination after local surgery (RADICALS): a new Medical Research Council/National Cancer Institute of Canada phase III trial of adjuvant treatment after radical prostatectomy. *BJU Int* 2007;99:1376-9.