# Salvage radiotherapy with or without hormone therapy: for whom and when?

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*Provenance:* This is an invited article commissioned by Editor-in-Chief Tom F. Lue, MD, ScD (Hon), FACS (Professor and Vice Chair, Department of Urology, University of California San Francisco, San Francisco, USA).

Response to: Williams S, Yaxley JW, Coughlin GD, et al. A randomised control trial of salvage radiotherapy and androgen deprivation therapy following prostatectomy: commentary on five year follow-up findings. Transl Androl Urol 2016;5:971-73.

Lee WR. Invited commentary on GETUG-AFU 16. Transl Androl Urol 2016;5:958-60.

Submitted Jan 25, 2017. Accepted for publication Feb 05, 2017.

doi: 10.21037/tau.2017.03.26

View this article at: http://dx.doi.org/10.21037/tau.2017.03.26

We thank Dr. Williams for their comments (1) on the recent published results of the GETUG 16 trial (2) and the potential impact that could have these results on daily practice. First, as it was underlined in the publication, it is truth that 5 years is a too short time for determining an impact on overall survival but the disease-free survival was the primary end point of the trial and by increasing the biological relapse free survival (BRFS) we avoid secondary treatments such as chemotherapy or second line of hormone therapy for one third of patients compare to salvage radiotherapy alone arm. I agree also with Williams: in a next future, a probably dramatic improvement to identified subclinical metastases would avoid for some patients an inappropriate radiotherapy treatment, but that means also that selected patients with pure pelvic or prostate bed relapse would have a higher benefit of salvage radiotherapy combined with short term hormone therapy.

Regarding the commentary provided by Dr. Lee (3), I can only be in accordance with him: it is important to note that the two trials population of GETUG 16 and RTOG 9601 have an overlap but are also significantly different. For GETUG 16 population, all of them have been in complete remission after surgery and could be considered as real relapsed patients. For the RTOG 9601 (and waiting the final publication), the population is a mixed of relapsed patients and, in fact, patients with persistent disease after primary surgical treatment. Patients with persistent elevated prostate-specific antigen (PSA) carry a worsened

prognostic as stressed by Dr. Lee and the published results of RTOG 0621 (4).

The PSA level at time of salvage treatment is also of concern: more than 80% patients of GETUG 16 had a PSA <0.5 much lower than RTOG 9601 (IQR of baseline PSA: 0.4–1.1) and with patients allowed to be as high as 4 (less than 2 for GETUG): the difference between the BRFS rate of the two trial is a reflect of this completely different population: the BRFS is 62% and 88% at 5 years for the arm A and B for GETUG 16, but only 40% and 57% for RTOG 9601. However, even if the RTOG 9601 is not yet published, the overall survival would not be very different in the two trials since the OS is 96% at 5 years for the GETUG 16 and more or less 81% at 10 years for the RTOG 9601 with a slight higher rate for GETUG 16 due to the lower follow up and the better prognostic population.

Based on these two trials, we can assume that combined treatment is a valuable salvage treatment if not yet a standard. The choice of hormone therapy is well discussed in the comment published by A. D'Amico accompanying the GETUG 16 publication in the *Lancet Oncology* (5): for men with a high life expectancy, who have obtained a complete response after surgery and a PSA <1  $\mu$ g/L at relapse the short-term hormone therapy as described in the GETUG 16 protocol seems to be the best choice.

For patients with more aggressive criteria (PSA at relapse >1, no complete response after surgery, life expectancy >12 years, a longer hormone therapy seems to be more indicated.

## **Acknowledgements**

None.

#### **Footnote**

*Conflicts of Interest:* The author has no conflicts of interest to declare.

#### References

 Williams S, Yaxley JW, Coughlin GD, et al. A randomised control trial of salvage radiotherapy and androgen deprivation therapy following prostatectomy: commentary on five year follow-up findings. Transl Androl Urol

Cite this article as: Carrie C. Salvage radiotherapy with or without hormone therapy: for whom and when? Transl Androl Urol 2017;6(2):336-337. doi: 10.21037/tau.2017.03.26

- 2016;5:971-73.
- Carrie C, Hasbini A, de Laroche G, et al. Salvage radiotherapy with or without short-term hormone therapy for rising prostate-specific antigen concentration after radical prostatectomy (GETUG-AFU 16): a randomised, multicentre, open-label phase 3 trial. Lancet Oncol 2016;17:747-56.
- 3. Lee WR. Invited commentary on GETUG-AFU 16. Transl Androl Urol 2016;5:958-60.
- Hurwitz MD, Zhang Q, Sartor O, et al. Adjuvant Radiation, Androgen Deprivation, and Docetaxel for High-Risk Prostate Cancer Postprostatectomy: Results of RTOG 0621. Int J Radiat Oncol Biol Phys 2014;90:S2.
- 5. D'Amico AV. Can short-term hormone therapy for rising PSA prolong survival? Lancet Oncol 2016;17:687-8.