Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript

HHS Public Access

Author manuscript

Int J Radiat Oncol Biol Phys. Author manuscript; available in PMC 2019 April 01.

Published in final edited form as:

Int J Radiat Oncol Biol Phys. 2018 April 01; 100(5): 1097. doi:10.1016/j.ijrobp.2018.01.104.

Live to SABR another day?

Phuoc T. Tran[1], **Felix Feng**[2], and **Piet Ost**[3]

[1]Departments of Radiation Oncology and Molecular Radiation Sciences, Oncology and Urology, Sidney Kimmel Comprehensive Cancer Center, John Hopkins University, USA

[2]Departments of Radiation Oncology, Medicine and Urology, Helen Diller Family Comprehensive Cancer Center, University of California, San Francisco, USA

[3]Department of Radiation Oncology and Experimental Cancer Research, Ghent University, Belgium

Standard of care treatments should be considered and discussed - continuous and even intermittent androgen deprivation therapy (ADT)[1–3].

For nodal recurrences, 3 different scenarios have been retrospectively evaluated (reviewed in ref[4]): stereotactic ablative radiotherapy (SABR), whole pelvic radiotherapy (WPRT) or salvage lymph node dissection (sLND). These treatments resulted in median progression-free survival (PFS) of 1–3 years, but was influenced by a heterogeneous use of ADT. The Belgian phase II, randomized STOMP trial without ADT used SABR and sLND, resulted in a 21 month freedom from palliative ADT without grade >1 toxicity (*J Clin Oncol in press*). WPRT with or without nodal boost probably prevents pelvic recurrences[5], but it is unknown if it improves harder endpoints as compared to repeated SABR or sLND. Furthermore, it is unknown how these local therapies should be combined with systemic therapy.

This patient should be enrolled on studies examining the potential role of metastasis-directed therapy, such as the Baltimore ORIOLE trial[6], British CORE (NCT02759783), Canadian PCS IX (NCT02685397), French STEREO-OS (NCT03143322), OLIGOPELVIS (NCT02274779/GETUG P07) and soon to be opened Belgian-Suisse STORM trial. The role of pelvic sLND for recurrent nodal PCa as assessed by 68Ga-PSMA PET-CT is being prospectively evaluated (NCT02974075).

If the patient has no access to a trial option, but wants a more aggressive treatment beyond ADT then SABR to all the suspicious nodes (e.g. 30 Gy in 3 fractions), comprehensive WPRT (e.g. 46–54 Gy from the aortic bifurcation down to distal iliacs with a nodal boost) or sLND is also not unreasonable.

CORRESPONDENCE Phuoc T. Tran, Department of Radiation Oncology & Molecular Radiation Sciences, 1550 Orleans Street, CRB2 Rm 406, Baltimore, MD 21231 (phone: 410-614-3880; fax: 410-502-1419; tranp@jhmi.edu.

CONFLICT OF INTEREST

PTT co-owns the patent “Compounds and Methods of Use in Ablative Radiotherapy” (patent#: 9114158). PTT receives institutional research support from Medivation Inc-Astellas Pharma and has consulted for Dendreon Pharmaceuticals, Inc and RefleXion Medical.

Author Manuscript Author Manuscript Author Manuscript Author Manuscript

FUNDING ACKNOWLEDGEMENTS

PTT- Nesbitt-McMaster Foundation, American Lung Association (LCD-339465), Movember, PCa Foundation and the NIH (R01CA166348 & U01CA183031).

References

1. Hussain M, Tangen CM, Berry DL, et al.: Intermittent versus continuous androgen deprivation in prostate cancer. N Engl J Med 368:1314–25, 2013 [PubMed: 23550669]
2. Crook JM, O'Callaghan CJ, Duncan G, et al.: Intermittent androgen suppression for rising PSA level after radiotherapy. N Engl J Med 367:895–903, 2012 [PubMed: 22931259]
3. Salonen AJ, Taari K, Ala-Opas M, et al.: The FinnProstate Study VII: intermittent versus continuous androgen deprivation in patients with advanced prostate cancer. J Urol 187:2074–81, 2012 [PubMed: 22498230]
4. De Bleser E, Tran PT, Ost P: Radiotherapy as metastasis-directed therapy for oligometastatic prostate cancer. Curr Opin Urol 27:587–595, 2017 [PubMed: 28816714]
5. Rischke HC, Schultze-Seemann W, Wieser G, et al.: Adjuvant radiotherapy after salvage lymph node dissection because of nodal relapse of prostate cancer versus salvage lymph node dissection only. Strahlenther Onkol 191:310–20, 2015 [PubMed: 25326142]
6. Radwan N, Phillips R, Ross A, et al.: A phase II randomized trial of Observation versus stereotactic ablative RadiatIon for OLigometastatic prostate CancEr (ORIOLE). BMC Cancer 17:453, 2017 [PubMed: 28662647]