

Updated Analysis of Clinical Utilization of Salvage Radiotherapy in Biochemically Recurrent Prostate Cancer

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Abstract
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Mitchell Finkelstein ¹

1. Barrett, The Honors College, Arizona State University, Tempe, USA

Corresponding author: Mitchell Finkelstein, mitchell.finkelstein@outlook.com

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Abstract

Purpose: Recent advancements in the management of biochemical recurrence (BCR) following local treatment for prostate cancer (PCa) have broadened the spectrum of therapeutic options. We examined the clinical utilization of salvage radiotherapy (SRT) in contemporary BCR PCa patients.

Methods: This is a retrospective review of prospectively collected data; we reviewed active PCa patients within the Precision Point Specialty (PPS) Analytics Portal for PCa. This database contains electronic medical records for over 80 active community urology practices. For this analysis, BCR data was collected of over 37000 patients, from a large multi-center, multi-specialty group facilitating advanced genitourinary care across the northeast, midwest, and south regions of the United States. SRT eligible after surgical definitive therapy was classically defined as radiation administered > 1 year post-radical prostatectomy and/or after a post-nadir prostate specific antigen (PSA) \geq 0.1 ng/ml. Failure after primary radiation, HIFU, or cryotherapy therapy was classically defined as PSA 2 ng/ml above nadir. None of the BCR patients included had evidence of metastatic disease. Data on clinicopathologic features, primary therapy, PSA kinetics, and salvage therapy were collected. The analysis examined the relationship of various predictors of utilization adjusting to confounders.

Results: In this analysis, seven percent of patients had BCR. Of these BCR patients, 72% were post- RP. Only 66% of radiation eligible patients received SRT post-RP, cryotherapy, or HIFU. In contemporary BCR patients with aggressive disease noted to have Gleason 8 or higher, the radiotherapy utilization rate was only 28%. The median time to SRT following RP was 24 months. In patients who did not undergo SRT, the median age was 77 with a median PSA of 0.4. The median time to SRT following cryotherapy/HIFU was 48 months; the median age was 78, with a median PSA of 4.5. Further, Gleason grade and pathologic stage were the variables that had the greatest influence on the decision to use SRT. A retrospective review of prospectively collected next generation imaging data and genomic biomarkers continues.

Conclusion: The data suggests clinical underutilization of SRT in eligible BCR patients with PCa in this community setting. These findings indicate a need for enhanced collaboration between specialties to optimize the care of real-world community PCa patients.