

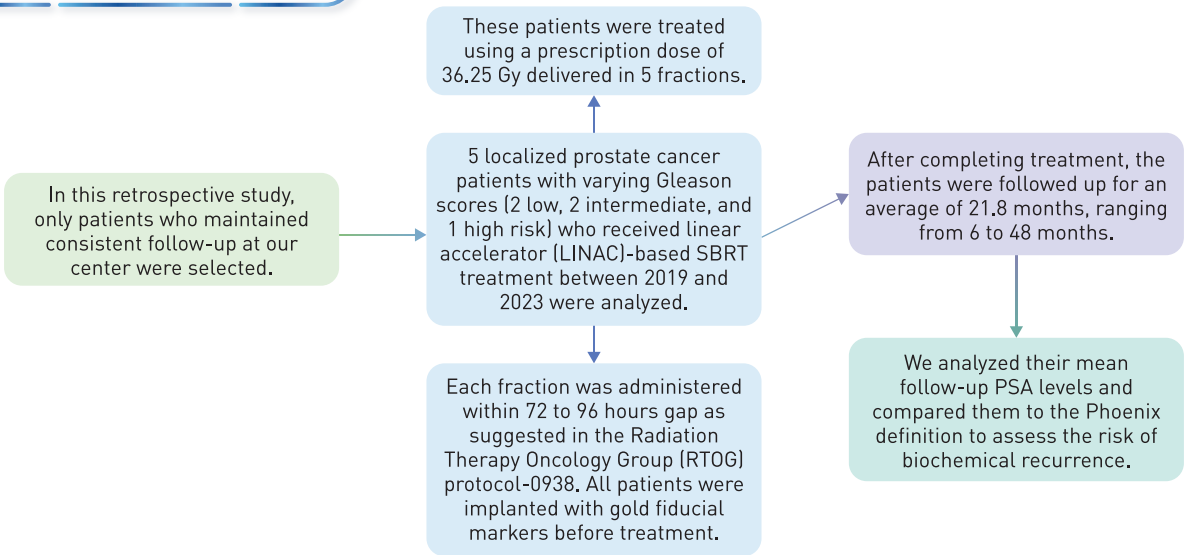
LINAC-Based SBRT For Localized Prostate Cancer Patients: A Retrospective, Single Centre Study

Teo Kok Phin, Dr John Low Seng Hooi, Mohamad Afandi bin Azman
Sunway Medical Centre, Kuala Lumpur, Malaysia

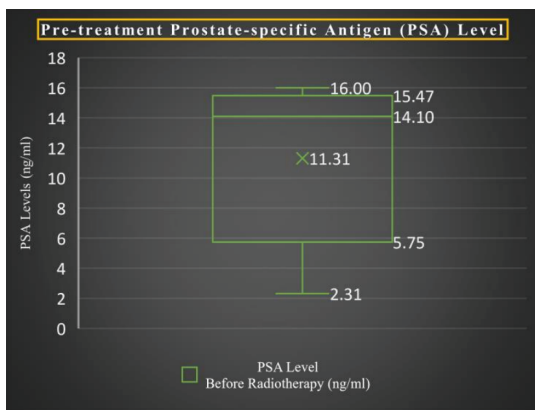
INTRODUCTION

In recent years, cancer centers worldwide have increasingly adopted **stereotactic body radiation therapy (SBRT)** as a cutting-edge technique for treating prostate cancer. SBRT delivers higher single-dose fractions, offering advantages such as reduced treatment time and minimized toxicity and late effects for patients. However, the efficacy of SBRT in treating localized prostate cancer remains a compelling research question.

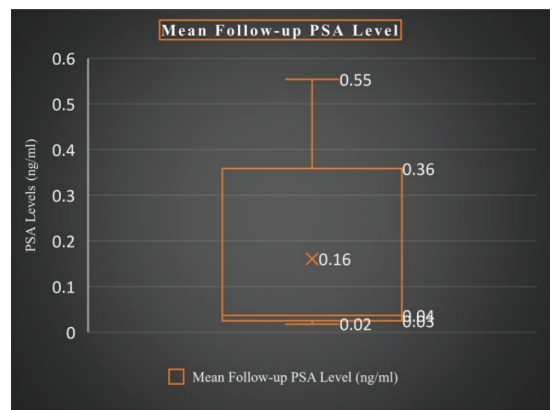
MATERIALS & METHODOLOGY



RESULTS



The average pre-treatment prostate-specific antigen (PSA) level across all patients was **11.31 ng/ml**, ranging from 2.31 to 16.00 ng/ml.



The mean follow-up PSA level for these five patients was **0.16 ng/ml**, ranging from 0.02 to 0.55 ng/ml, which was lower than the biochemical recurrence threshold (PSA nadir + 2 ng/ml).

DISCUSSION

The prescribed dose regimen of 36.25 Gy in five fractions effectively reduces PSA levels to a safe range, thus preventing biochemical recurrence in these patients. The insertion of gold fiducial markers aids in improving the dose distribution precision in planning target volume, providing a superior advantage in treatment planning.

CONCLUSION

In conclusion, the LINAC-based SBRT treatment technique is well-suited for localized prostate cancer patients across low, intermediate, and high-risk categories.

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