

RADIXACT® SYSTEM WITH SYNCHRONY® FIDUCIAL TRACKING FOR STEREOTACTIC BODY RADIOTHERAPY IN PROSTATE CANCER: A SINGLE-CENTER EXPERIENCE ON TOXICITY

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Purpose:

To evaluate the safety of patients with localized prostate cancer undergoing SBRT using the Radixact® System with Synchrony® Fiducial Tracking™, a real-time motion tracking and correction system.

Methods:

Design	Retrospective study of 43 prostate cancer patients
Risk Groups	21% low risk, 35% favorable intermediate, 30% unfavorable intermediate, 14% high risk
Dose	36.25 Gy in 5 fractions, delivered every other day
Planning	The prostate was contoured as the CTV, and a 4 mm margin was added in all directions to create the PTV, except posteriorly (3 mm)
Motion Management	Synchrony real-time adaptive tracking with 3 fiducial markers
Follow-up	Median of 14 months (range: 0–32 months)



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Results:

All patients completed the planned ultra-hypofractionated regimen without treatment interruptions.

Acute Toxicity	<ul style="list-style-type: none"> • GU: 42% had symptoms; 5% had Grade 2 • GI: 28% had symptoms; 2% had Grade 2 • No grade ≥3 toxicities
Late Toxicity (Available for 40 Patients)	<ul style="list-style-type: none"> • GU: 23% had symptoms; 3% had Grade 2 • GI: 28% had symptoms; 15% had Grade 2 (mostly managed with topical therapy; one required endoscopic treatment) • No grade ≥3 toxicities

Conclusion:

“Our initial findings suggest that prostate SBRT using Radixact TomoTherapy® with Synchrony fiducial tracking is a safe treatment approach with acceptable acute and early late toxicity rates. However, as we acknowledge, expanding the patient cohort and extending the follow-up period are crucial to definitively assess the long-term safety profile and clinical outcomes of this treatment modality for localized PC”

Synchrony® is available in the US and EU markets. This feature may not be commercially available in all markets and is subject to regulatory clearance or approval. Kindly contact your regional Accuray representative or distributor to confirm the regulatory status.

Important Safety Information:

Most side effects of radiotherapy, including radiotherapy delivered with Accuray systems, are mild and temporary, often involving fatigue, nausea, and skin irritation. Side effects can be severe, however, leading to pain, alterations in normal body functions

(for example, urinary or salivary function), deterioration of quality of life, permanent injury, and even death. Side effects can occur during or shortly after radiation treatment or in the months and years following radiation. The nature and severity of side effects depend on many factors, including the size and location of the treated tumor, the treatment technique (for example, the radiation dose), and the patient’s general medical condition, to name a few. For more details about the side effects of your radiation therapy, and to see if treatment with an Accuray product is right for you, ask your doctor. Accuray Incorporated as a medical device manufacturer cannot and does not recommend specific treatment approaches. Individual results may vary.

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