

REAL-TIME AUTOMATED MARKER TRACKING SYSTEM

Dedicated to improve treatment quality, we have introduced the real-time automated marker tracking system for prostate cancer patients. Submillimeter accuracy is achieved by tracking marker location in real time. Combined with a hydrogel rectal spacer, the risk of side effects can be further reduced.

WHY DO WE NEED AUTO-TRACKING?

Ensuring accuracy is the greatest challenge in traditional prostate radiotherapy, as the location of prostate is significantly affected by variations in bladder volume, bowel motility and rectal conditions during each treatment. Our automated marker tracking system constantly monitors the implanted metal markers in real time, precisely tracking the prostate's dynamic position to ensure accurate dose distribution to the treatment area.

BENEFITS

► Real-Time Intrafractional Tracking

- Automatically pauses treatment when marker deviation is detected
- 6D correction with X-ray image guidance

► Efficient Treatment

- Reduces treatment sessions from 38 times traditionally to 20 or even 5 times
- Each treatment session requires only 15 minutes

► Lower Risks of Side Effects

- Smaller treatment area, reducing radiation exposure to healthy tissue
- Optional hydrogel implant to reduce the risk of side effects, such as rectal bleeding

► Safe and Precise

- Implants biocompatible gold markers (usually three) with minimally invasive procedure
- Submillimeter accuracy to ensure precise dose distribution



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