

Research on the Optimization of Treatment for Spinal Metastases With Radioactive Particle Implantation Using TPS and Mechanical Dual Simulation

NCT07171996

Status	RECRUITING
Phase	Not Applicable
Sponsor	Li Min
Enrollment	150 participants

Key Eligibility Criteria

Inclusion (11)

- Age ≥18 years.
 - Radiologically or histologically confirmed bone metastasis with a lesion suitable for percutaneous radioactive seed implantation (e.g., I-125), per multidisciplinary assessment.
 - Indication for local palliation/control: moderate-to-severe pain at lesion (e.g., BPI/VAS ≥4) and/or imaging evidence of progression or high-risk features warranting local therapy.
 - Measurable/evaluable target lesion on CT/MRI; target location accessible for needle placement per institutional practice.
 - ECOG performance status 0-2.
- ... and 6 more (see full listing online)

Exclusion (11)

- Need for urgent surgical decompression or stabilization (e.g., acute/impending neurologic compromise, unstable pathologic fracture) that precludes percutaneous implantation at this time.
 - Uncorrected coagulopathy or ongoing antithrombotic therapy that cannot be safely managed periprocedurally.
 - Active systemic or local infection at/near the planned access route.
 - Diffuse marrow replacement or extensive cortical destruction where percutaneous implantation is unsafe or unlikely to achieve local control without stabilization, per MDT judgment.
 - Prior radiation or surgery to the index lesion that, in the investigator's opinion, makes additional seed implantation unsafe or non-beneficial; postoperative bed without a discrete target for seed placement.
- ... and 6 more (see full listing online)

Locations (1 total)

The 960 Hospital of the People's Liberation Army of China, Jinan, Shandong, China