

AbstractID: 7843 Title: Latest clinical development for H&N and CNS

Daily target localization is a critical step to ensure accurate delivery of 3-D conformal radiation therapy and intensity-modulated radiation therapy. Current in-room localization technologies for HN and CNS treatment include 2D kilovoltage (kV) or megavoltage (MV) radiography, CT on-the-rail, cone beam CT (CBCT), megavoltage CT (MVCT), and optical guidance systems.

This lecture will provide an overview of the current in-room target localization technologies for HN/CNS treatment, including the system design and characteristics, patient alignment process, and their integrations in clinical workflow. The accuracies of these techniques and consequently the margin considerations will be discussed.

Educational Objectives:

1. Understand the latest commercial available in-room localization techniques for HN treatment.
2. Understand the accuracies of these localization systems
3. Understand the margin considerations associated with using these systems.