AbstractID: 14598 Title: Stereotactic Body Radiotherapy (SBRT): Technical and clinical considerations

Stereotactic Body Radiotherapy (SBRT) has now been applied clinically for more than a decade. The accumulation of published technical and clinical studies currently available has offered insights into both the efficacy and special concerns associated with the delivery of SBRT to different sites. The safe and effective delivery of SBRT requires careful attention to tumor motion management, special dosimetric and planning challenges, and commissioning of dedicated equipment and quality assurance. This session will provide an overview of these important technical considerations as well as a survey of clinical outcomes reported based on the use of SBRT in the treatment of different tumor sites.

The specific objectives of the session are to:

1. Describe available methods for motion management and the rational selection of planning margins
2. Discuss techniques for SBRT treatment planning and the impact of dose calculation algorithm
3. Describe key elements of commissioning, patient-specific QA, and routine periodic machine performance QA
4. Review clinical observations reported after SBRT for lung, liver, pancreas, spine, head & neck, and prostate