

The advantages of daily prostate localization during radiation therapy seem to be established over the last few years. However, the methodology to perform the localization and the adjustments are still subject to debate.

In this review three views are presented by three different speakers.

Firstly, comparison of Ultrasound based localization and marker based localization is presented as well as a marker based adjustment protocol. (F. Van den Heuvel)

Secondly a study presenting comparisons of Ultrasound based localization with a CT-on-rails method is presented (L. Dong).

Thirdly a marker vs CT-conebeam study will be presented (D. Jaffray). In addition to these major topics, data on inter- and intra-fractional prostate movement will be presented. The presentations will be followed by a round-table discussion lasting for about 20 minutes.

The educational goals for this review are:

- Introducing knowledge on the inter- and intra fractional movement of the prostate.
- Objectively assess the advantages and disadvantages of different localization techniques, taking into account factors like accuracy and economical feasibility.