Prostate IGRT: CT-MRI fusion and target delineation accuracy

**Figure 1** Distribution of prostate shift in A-P direction (left) and S-I direction (right). Shift was calculated between CT-based and MRI-based prostate contours.

**Figure 2** CT-based (red) and MR-based (green) prostate contours after CT-MR fusion which use bony structure matching. Significant shift was observed between these two contours.

**Figure 3** Correlation of the prostate AP shift with the rectum volume difference (left), and the prostate SI shift with the bladder volume difference (right). Rectum or bladder volume difference was calculated based on their contours on CT and MRI separately. Prostate AP shift is significantly correlated to rectum volume.