Abstract Title: Patient-Specific Synthetic CT Generation for MRI-Only Prostate Radiotherapy Treatment Planning Session Title: MRI in Treatment Planning Date and Time: 08/02/2018 | 1:00PM-3:00PM Presenting Author: Xiaofeng Yang

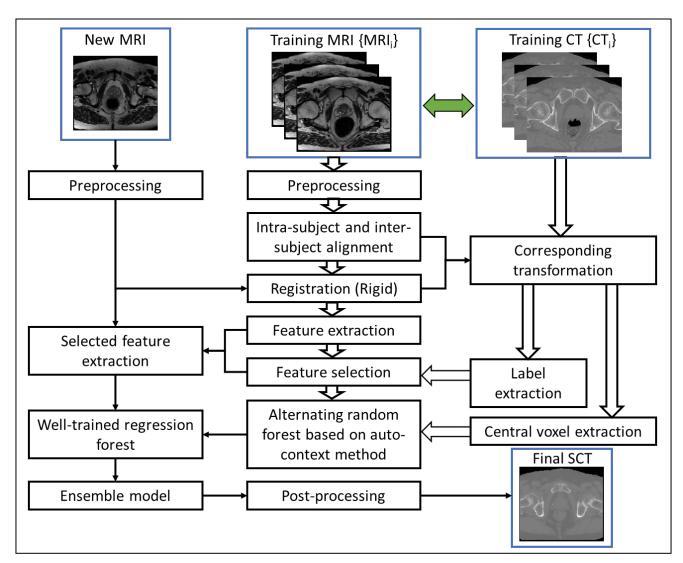


Figure 1. Schematic flow chart of the proposed algorithm for MRI-based synthetic CT (SCT) generation.

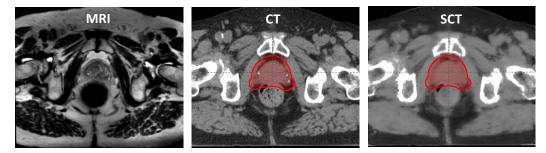


Figure 2. MRI-based SCT generation results. Images from left to right are MRI, planning CT and MRI-based SCT.

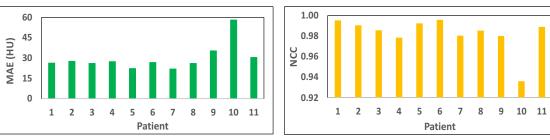


Figure 3. The mean absolute error (MAE) and normalized cross-correlation (NCC) between CT and MRI-based SCT for each patient.

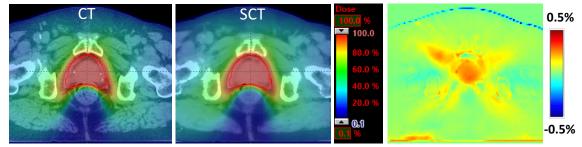


Figure 4. Dosimetric comparison between CT and MRI-based SCT. Images from left to right are CT-based plan, SCT-based plan and dose difference between these two plans.