

The Siemens™ Primus™ LINAC with Multi-leaf collimators was installed in our facility during September 1998. Since then we have applied the auto-sequencing technique from the Primus LINAC to treat the prostate cancer. We utilized the six-field prone patient setup to achieve better tumor conformality and dose uniformity. In order to study the efficiency of treating the prostate cancer, 20 patients were analyzed for the treatment time period. From the conventional blocking fields, it usually takes about 10 minutes or more to finish one treatment course. It involves the changing blocks, setting gantry angles, verify the SSDs, ...etc. From our experience, if the patient were set up correctly, it only takes less than 4 minutes for completely finishing the daily treatment. The efficiency comes from the auto blocking of the MLC, dynamic gantry angle changes, and the high dose rate for delivery. The verification process was also performed between each port. The average treatment time for the 20 patients is 3.75 minutes for the 180 cGy per fraction. Compared to the conventional technique, it provides clinical benefit with geometrical accuracy.