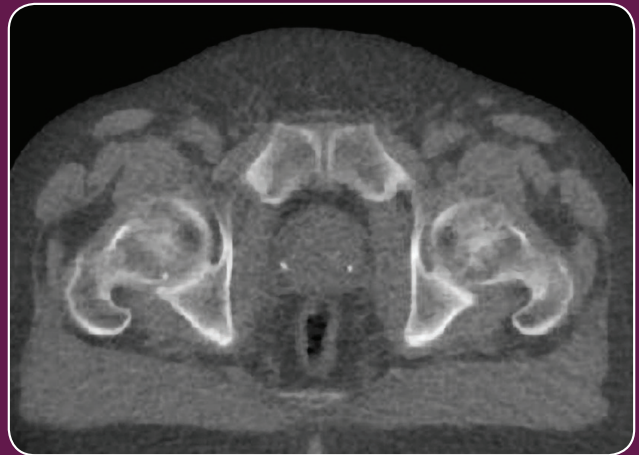


## fan beam MVCT image quality

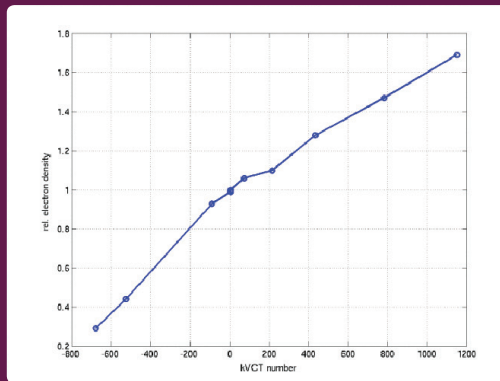
Meeks SL, Harmon JF, Langen KM, Willoughby TR, Wagner TH, Kupelian PA. Performance characterization of megavoltage computed tomography imaging on a helical tomotherapy unit. *Medical Physics*, 2005; 32:8 : 2673-2681

“The uniformity and spatial resolution of MVCT images generated by the HiArt are comparable to that of diagnostic CT images... low-dose MVCT scans provide sufficient contrast to delineate many soft-tissue structures.”

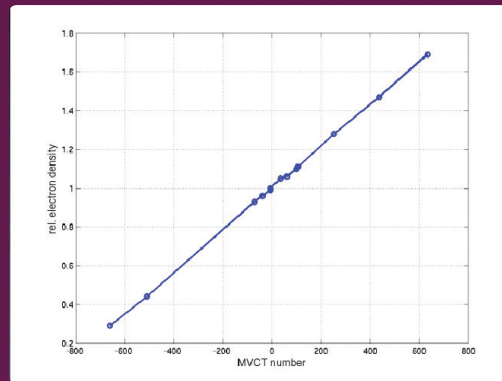


“Axial slice through a MVCT volume acquired for a patient undergoing prostate radiotherapy. Contrast resolution is sufficient to allow the identification of bony anatomy and relevant soft-tissue anatomy, including the prostate and rectum.”

### MVCT to electron density calibration curves



kVCT



MVCT

“CT numbers correlate directly with electron density, thereby providing the potential for reconstruction of the actual dose delivered on a daily basis, in addition to simple anatomic structure alignment.”