Key Varian Medical Systems® Halcyon™ System QA Publications
System Acceptance

Acceptance and verification of a Halcyon-Eclipse linear accelerator-treatment planning system without 3D water scanning
S Gao, et al. The University of Texas MD Anderson Cancer Center, Houston, TX, Accepted by JACMP, Aug 2019

- Study successfully compares IC PROFILER™ with 1D SCANNER™ vs. a 3D scanner for acceptance and commissioning.

Patient QA ArcCHECK® Studies

Clinical Evaluation of Lung SBRT for the Halcyon Platform and Dosimetric Comparison with the Truebeam STx and Millennium MLC Systems,
ArcCHECK used to perform patient-specific QA on lung SBRT plans.

Optimized Volumetric Modulated Arc Therapy (VMAT) Technique for Left Sided Breast Cancer Comprehensive Radiation Therapy Via the Halcyon Delivery System,
S Goddu, et al., Washington University School of Medicine, St. Louis, MO, TU-F115-GePD-F7-4, AAPM 2019
ArcCHECK used to validate breast plans.

Plan Quality and Delivery Efficiency Comparison Between Halcyon 2.0 and Tomotherapy Hi-Art,
W Feng, et al., St. Barnabas Medical Center, Livingston, NJ, PO-GePV-T-207, AAPM 2019
ArcCHECK used to validate delivery comparison.

Plan Quality Comparison for Cervical Carcinoma Treated with Halcyon and Trilogy Intensity Modulated Radiotherapy,
C Li, et al., Department of Radiation Oncology Physics, Shandong Cancer Hospital Affiliated to Shandong University, Jinan, PO-GePV-P-89, AAPM 2019
ArcCHECK used for validation.

Experience in commissioning The Halcyon linac,
T Netherton, et al., University of Pennsylvania, Perelman Center for Advanced Medicine, Philadelphia, PA, Med. Phys., July 2019
Validation of beam models at two centers using ArcCHECK, Daily QA 3, IC PROFILER, EDGE Detector and other vendors’ devices.