AbstractID: 1836 Title: Evaluation of a Computed Radiography for IMRT Dosimetry

Intensity Modulated Radiotherapy (IMRT) is a new form of radiation treatment that evolved from the 3D treatment planning. Increase in its use created a need for the fast, practical and reliable patient treatment QA. Film dosimetry is the most popular tool for individual patient IMRT QA. The exposure of the radiographic film in a phantom allows moderately fast 2D measurements. As film dosimetry relies on the optical density of the film, and film development is a chemical process, the accuracy of the results strongly depends on the dose deposition (film saturation), film processing and reading conditions. The purpose of this project is to investigate possible use of the computed radiography (CR) system instead of film for patient IMRT QA. Kodak ACR-2000i system is used for the study and obtained results would be presented.