

## **Evaluation of different parameters influencing the radiotherapy treatment plans (VMAT-RapidArc)**

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### **Abstract**

Volumetric modulated arc therapy (VMAT) is a modern technique of high accuracy radiotherapy that allows the irradiation of tumor volume using a complete arc instead of fixed beams and protects the healthy tissues in the same time. The complexity of this technique raises the possibility of deviations in treatment plans deliverance to patient. The goal of this study is to evaluate the differences between doses distributions planed in TPS and doses distributions actually delivered by linear accelerator.

**Key words:** VMAT, radiotherapy, tumor volume, dose, linear accelerator.