

Analyze of Quality Assurance (QA) of brachytherapy evolution from GammaMedplus to Bravos System ★

Octavian Cordun ^{1,2}, Artur Buzdugan ²

¹Oncological Institute of Moldova, 30, Testemitanu St., MD-2025, Chisinau, Republic of Moldova, e-mail: ocordun@yahoo.com, ORCID: 0009-0007-8733-524X

²Department of Microelectronics and Biomedical Engineering, Technical University of Moldova, 168, Stefan cel Mare Av., MD-2004, Chisinau, Republic of Moldova, e-mail: artur.buzdugan@mib.utm.md, ORCID: 0009-0002-9226-004X

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Abstract: In this work, we analyze the differences between the QA of operated old GammaMedplus brachytherapy system and the recent implemented lasted model equipment (Bravos), including new dosimetric equipment and facility that is used in treatment at the moment in Moldovan Oncological Institute [1, 2].

Methods: The new QA implementation includes introduction of CamScale System (built-in), used for daily measurements of dummy and source cable, elaboration and update of the daily and quarterly (or every source change) protocols.

Results: The daily QA with CamScale show an ascending error growth of both source and dummy cable (0.11 mm maximum), but that does not exceed the nominal threshold (0.2 mm). In case of outs of limits or necessity for calibration process is quick and not need special additional equipment.

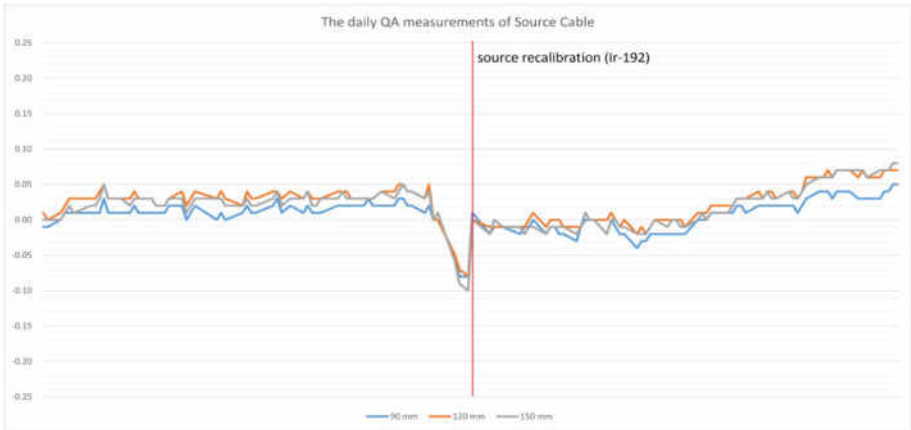


Fig.1. The daily QA measurements of Source Cable.

Conclusions: The implementation of the new QA program has improved the precision of source positioning in brachytherapy treatments, thereby enhancing patient safety and optimizing treatment efficacy. This advancement has contributed to a higher overall standard of care in brachytherapy nationwide.

References

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