

RESTRICTED

**INTERNATIONAL ATOMIC ENERGY AGENCY**  
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## IAEA/WHO POSTAL DOSE QUALITY AUDIT

**Institution:** Voronezhskiy Regional Oncology Hospital  
**Address:** ul. Vaytsehovskogo, 4  
 Voronezh  
**Country:** Russian Federation

**RPLD batch No:** BT\_Pilot  
**RPLDs irradiated by:** Druzhinina, Pavlov  
**Date of irradiation:** 2023-02-02  
**Evaluation:** 2023-06-08

### RESULTS OF RPLD MEASUREMENTS FOR HIGH DOSE RATE BRACHYTHERAPY

Radionuclide	Radiation unit	Set #	User stated dose [Gy]	IAEA (measured) dose [Gy]*	IAEA mean dose [Gy]	% deviation relative to IAEA mean dose**	$\frac{\text{IAEA mean dose}}{\text{User stated dose}}$
Ir-192	Varian GammaMed plus iX #0746	BT0012	2.00 2.00	1.98 1.99	1.98	0.8	0.99

\* Corrections have been applied to account for the differences between TG-43 conditions and the irradiation conditions. The uncertainty in the RPLD measurement of the dose is 2.3% (1 standard deviation); this does not include the uncertainty intrinsic to the dosimetry protocol.

The validity of the results can be affected by the correctness of the information supplied by the user.

\*\* % deviation relative to IAEA measured dose =  $100 \times (\text{User stated dose} - \text{IAEA mean measured dose}) / \text{IAEA mean measured dose}$ . A relative deviation with negative (positive) sign indicates that the user estimates lower (higher) dose than what is measured; a patient would therefore receive higher (lower) dose than what is intended by the factor given in the last column.



J. Swamidas, Ph.D.  
 Head - Dosimetry Laboratory

**Date: 2023-07-05**



M. Carrara, Ph.D.  
 DMRP Section Head

**IMPORTANT NOTICE:** This information is provided only as an independent verification of the Dose, not as an alternative to calibration by a qualified physicist. IT DOES NOT CONSTITUTE A STATEMENT WITH REGARD TO THE QUALITY OF BRACHYTHERAPY TREATMENTS OF THE HOSPITAL.