

EURADOS Working Group 10

Retrospective Dosimetry

Motivation

To establish a network of contacts and collaborations throughout European laboratories with expertise in the area of physical and biological retrospective dosimetry

Aims

- To establish a multiparameter approach to dose assessment in retrospective dosimetry (including emergency response) based on biological and physical methods
- To disseminate the knowledge about retrospective dosimetry among authorities, scientific institutions and stakeholders
- To evaluate newly developed physical and biological dosimetry methods
- To establish a common approach for uncertainty estimation in biological and physical retrospective dosimetry
- To elaborate an approach for dosimetry after partial body or internal exposure

Actions

Completed

- Review paper of retrospective dosimetry methods
- Questionnaire on current European retrospective dosimetry resources and needs
- Organization of the EURADOS School on Retrospective Dosimetry. Helmholtz-Zentrum Muenchen, October 22-26, 2012
- First inter-laboratory comparison exercise of newly developed methods based on OSL and EPR

In progress

- Inter-comparison on gene expression and TL on display glass
- EURADOS Report on WG10 inter-comparison exercises (scheduled for 2016)
- EURADOS School on uncertainty estimation in biological and physical retrospective dosimetry (planned for April 2016)
- Biodosimetry after internal or mixed internal/external exposure
- Dose conversion coefficients for physical dosimetry

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Publications

- > Ainsbury, L. et al (30 co-authors), **2011**. Review of retrospective dosimetry techniques for external ionizing radiation exposures. *Radiat. Prot. Dosim.* **147**, 573–59

- Bassinet, C. et al. (21 co-authors), **2014**. Retrospective radiation dosimetry using OSL of electronic components: Results of an inter-laboratory comparison. *Radiat. Meas.* **71**, 475-479.
- Fattibene, P. et al. (20 co-authors), **2014**. EPR dosimetry intercomparison using smart phone touch screen glass. *Radiat. Environ. Biophys.* **53**, 311-320.

Additional information

WG10_AM2015_Progress Report