

EURADOS Network on Internal Dosimetry

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EURADOS (European Radiation Dosimetry Group) is a European organization of laboratories and institutions involved in the field of the dosimetry of ionizing radiation. The working group on Internal Dosimetry (WG7) acts inside EURADOS as a network of scientists, services, regulators and laboratories collaborating for the coordination of research and the dissemination of knowledge in the complex world of the assessment of doses due to intakes of radionuclides. The EURADOS Network on Internal Dosimetry consists of 29 institutes from 18 countries; it started as a European group but EURADOS has now established agreements for collaboration with other institutions from America, including USTUR (United States Transuranium and Uranium Registries), the Human Monitoring Laboratory (Health Canada), LLRI (Centre for Countermeasures Against Radiation, USA) and ARN (Autoridad Regulatoria Nuclear Argentina). A priority is to maintain links with the European Commission and IAEA and to guarantee that the work generated by EURADOS WG7 is in coherence with the latest ICRP developments and ISO standards on internal dosimetry, providing state-of-the-art tools and publications of relevance for the internal dosimetry community. Tasks under development aim to provide reference documents such as the new version of the IDEAS Guidelines for the harmonization of internal dose assessments, research on new biokinetic models such as the EURADOS/CONRAD DTPA Therapy Model, the application of new ICRP and NCRP biokinetic models, training actions (the EURADOS/IAEA Advanced Training Course organized in Prague in 2009) and intercomparison exercises (e.g. the USTUR/EURADOS Intercomparisons for In-vivo monitoring and Monte Carlo calculations using USTUR phantoms). The EURADOS Internal

Dosimetry Group has established joint actions with EURADOS WG6 "Computational Dosimetry" for the application of Monte Carlo Methods and Voxel Phantoms to internal dosimetry, and with institutions such as CEA (Commissariat de la Energie Atomique) for the validation and development of the MADOR code: a new tool for use following the administration of DTPA after intake of radionuclides such as plutonium. The main aim of the Internal Dosimetry group is to achieve harmonization on the assessment of internal doses and the coordination of research, using the Network for the dissemination of scientific knowledge.

Key words: internal dosimetry, in-vivo monitoring, in-vitro monitoring

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