

EURADOS Work on Internal Dosimetry

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Abstract—EURADOS Working group 7 is a network on internal dosimetry which brings together researchers from more than 40 institutions in 21 countries. The work of the group is organised in task groups which focus on different aspects such as development and implementation of biokinetic models (e.g. DTPA decorporation therapy), individual monitoring and the dose assessment process, Monte Carlo simulations for internal dosimetry, uncertainties in internal dosimetry and internal microdosimetry. Several intercomparison exercises and training courses were organized. The IDEAS guidelines, which describe – based on ICRP biokinetic models and dose coefficients – a structured approach on assessment of internal doses from monitoring data are maintained and updated by the group. In addition, Technical Recommendations on internal dosimetry (in press) were elaborated on behalf of the European Commission, DG-ENER (TECHREC Project, 2014-2016, coordinated by EURADOS). Quality assurance of ICRP biokinetic models by calculations of retention and excretion functions for different scenarios was performed and feedback provided to ICRP. An uncertainty study of the recent cesium biokinetic model quantified the overall uncertainties and identified the sensitive parameters of the model. Currently a report with guidance on the application of ICRP biokinetic models and dose coefficients is drafted. These and other examples of the group’s activities, which complement ICRP work, will be presented.