



Announcement of the EURADOS InterComparison of Internal DOSE assessment (ICIDOSE 2017)

Introduction

In the recent past EURADOS has coordinated the activities of Working Group 7 (WG7) Internal dosimetry entrusting its members with a variety of tasks with the aim of improving all aspects of internal dosimetry research, including the qualification of internal dose assessment methods, within the quality assurance process for internal dosimetry services.

Several intercomparison exercises on internal dose assessment were performed on international or European basis: e.g. the IAEA Intercomparison and Biokinetic Model Validation of Radionuclide Intake Assessment project (1997), the 3rd European Intercomparison Exercise (2000), the IDEAS/IAEA Intercomparison Exercise (2005), with different aims (e.g. application of ICRP 66 respiratory tract model, finalization of the IDEAS Guidelines).

In the recent past EURADOS WG7 has successfully supported the Intercomparison Exercise after the EURADOS/IAEA Prague Training Course (2009), to test the correct application of IDEAS Guidelines with available software tools).

As a next step in this program now Working Group 7 has the pleasure to announce the EURADOS InterComparison of Internal DOSE assessment (ICIDOSE 2017).

Scope

The main scope of the intercomparison is to check the effective application of the “Technical Recommendations for Monitoring Individuals for Occupational Intakes of Radionuclides” (TECHREC) recently developed by experts involved in WG7 activities. The recommendations will be issued as an official EC publication in the Radiation Protection series documents.

Complementary to the main scope, this intercomparison has been designed to focus on some specific issues for the verification of:

- correct application of the new ICRP Occupational Intake of Radionuclides dosimetric data, utilizing data supplied by ICRP
- proper calculation of the contribution of previous intakes in routine monitoring
- correct modality of treating specific uranium radionuclides data for a unique assessed dose
- adequate selection of data for dose assessment in a DTPA treated accident
- closeness of results provided by accredited dosimetry services (e.g. by ISO 17025) in comparison to other participants.

Intercomparison procedure

After sending the expression of interest form (here attached) an identification code will be sent to the participant with the modality to access the dedicated web-area in which he/she can find: the instructions for participation, the descriptions of the cases to be evaluated, the format(s) for the submission of the results.

Four cases will be used for intercomparison purposes: a ⁶⁰Co monitoring case to be evaluated also with new ICRP OIR models and data; a ¹²⁵I routine thyroid monitoring case, an uranium intake case after confirmatory monitoring, an ²⁴¹Am inhalation accident case comprising DTPA therapy.

Each case description will state the key parameter(s) that will be used for numerical intercomparison – e.g. intake and effective dose – as well as additionally requested information which will be used for qualitative comparisons.

There is no obligation to submit responses for all cases; the participants are free to choose for which case(s) they want to provide responses.

Each participant is allowed to submit only one solution for each case. Participants have the possibility to amend their already submitted results until the submission deadline.

Intercomparison report

The Organization Group will prepare a report summarizing the results of the intercomparison.

The identification code, assigned to each participant and known only to Organization Group, permits to present results in a completely anonymous way.

The participants can make use of their participation to the exercise to prove the quality of their performance to the national competent authority.

Final workshop

A workshop will be specifically dedicated to the presentation and discussion of the results between the Organization Group and all participants. The exact date and place of this meeting will be announced in due course.

Time schedule

Milestones	Date
End of time period for expression of interest to participate in the intercomparison	30 th June 2017
Beginning of the time period to download case descriptions, instructions and forms	1 st September 2017
End of time period for submission of case evaluations	15 th December 2017
Preliminary overall results	February 2018
End of evaluation of intercomparison results	May 2018
Workshop	Autumn 2018
Redaction of EURADOS Report	End of 2018

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