
EURADOS WG13

Dosimetry in nuclear medicine

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Opening session; Annual meeting 2026

February 16

Helsinki, Finland



WG13 Dosimetry in nuclear medicine

Radionuclide therapy is growing

⇒ Better dosimetry means better outcomes and safety for the patients

WG13 is EURADOS youngest working group

⇒ well-defined topics with strong participation (some across WG's or other societies)

⇒ Emerging, new topics that are still being explored, searching for concrete objectives and more participation

Theme 1:
Patient-centered
dosimetry & safety

Theme 2:
Modelling, data and AI
to support dosimetry

Theme 3:
Small-scale dosimetry
to support
radiobiological
understanding

WG13 Dosimetry in nuclear medicine



- **Task 13.1: The development of a computational framework to assess the external dose rates from NM patients**

- Joint action between WG6 – WG7 – WG12
- In collaboration with EANM (RP committee)
- Contribute to a new ICRP Task group 130: Doses from radiopharmaceuticals during pregnancy and lactation
- Focus: How to further align with the current European movement towards **harmonised patient release criteria and guidance for patients and families**

Theme 1:
Patient-centered
dosimetry & safety

New interest

Presentation:
Tracking system for
caregivers
(+ poster)

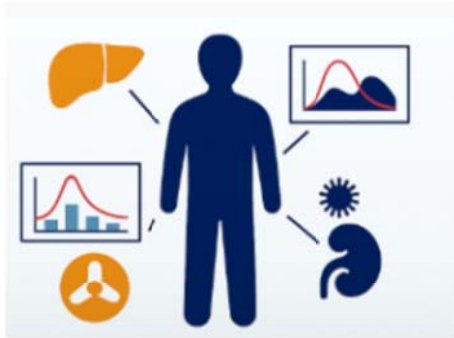
- **Task 13.4: Clinical dosimetry in TRNT**

- **Task 13.6: Dosimetry for extravasation cases in TRNT** → dedicated joint session with WG6

- Focus: Explore how WG13 can use its expertise to shape and concretise these tasks,
- More participation is very welcome !!
- In synergy with the work from EANM and EFOMP special-Interest-Group for Radionuclide Internal Dosimetry (SIG-FRID)

WG13 Dosimetry in nuclear medicine

Theme 2:
Modelling, data and AI
to support dosimetry

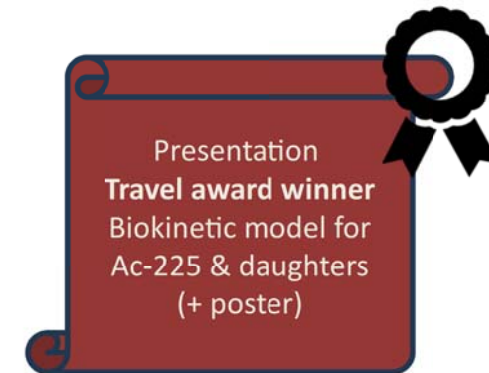


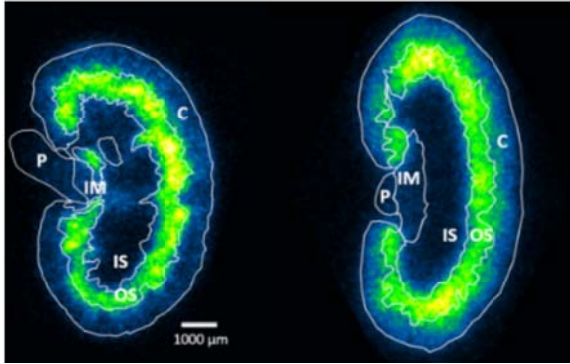
- **Task 13.2: Pharmacokinetic modelling**

- Joint collaboration with WG7
- Focus: Make pharmacokinetic models more patient-specific, more scalable and validated. Assess the associated uncertainties.
 - Currently Lu-177 & I-131
 - Valuable input for other WG13 tasks

- **Task 13.3: AI for pharmacokinetic modelling and dosimetry in TRNT**

- Focus: Explore if and how WG13 can use its expertise to shape and concretise this task, following a literature review
- More participation is very welcome !!

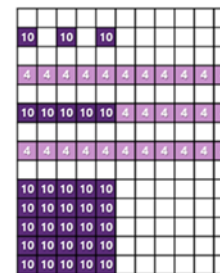




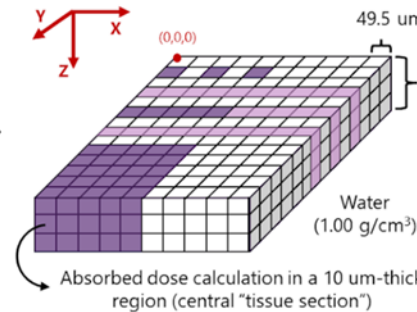
- **Task 13.5: Small-scale dosimetry**

- Focus: Contributes in better understanding how radiopharmaceuticals actually behave inside tissues
- Ongoing: the organisation of **an intercomparison** on how to integrate high-resolution **autoradiography** images into **Monte Carlo** simulations
- ⇒ to allow realistic **modelling of energy deposition at small-scale**

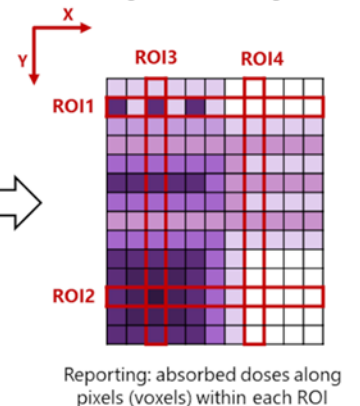
"Autoradiography"
image (.tif)



Monte Carlo model



Absorbed dose map
(e.g. .tif or .txt image)



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Expertise / interest in

- PK modelling / Clinical imaging / Simulation skills / AI/data science / preclinical work /

Welcome to WG13 !!!