

Preparation of second CONCERT Call priorities - EURAMED priority

Christoph Hoeschen

Otto-von-Guericke-University Magdeburg

Helmholtz Zentrum München

On behalf of EURAMED SC

STRUCTURE

EURAMED has been set up as a joint initiative under the umbrella of the European Institute for Biomedical Imaging Research (EIBIR) but aims to become a separate entity in the future.

The founding organisations are currently working on developing a sustainable structure for its governance and membership in order to allow other interested organisations to participate in its endeavours in the future as well as on setting up an action plan for the coming years.

You can contact EURAMED through the EIBIR office:

office@eibir.org
Neutorgasse 9, 1010, Vienna Austria
+43 1 533 4064 13

The EURAMED Steering Committee Members as of May 2016:

- Christoph Hoeschen, Chair
- John Damilakis, EFOMP
- Wolfgang Doerr, ESTRO
- Guy Frija, ESR
- Gerhard Glatting, EANM
- Hans Langendijk, ESTRO
- Kristoff Muylle, EANM
- Graciano Paulo, EFRS
- Wolfram Stiller, ESR
- Virginia Tsapaki, EFOMP
- Jonathan McNulty, EFRS
- Monika Hierath, EIBIR, Management

VISION

Leading European research activities in medical radiation protection and harmonising clinical practice to advance the European radiation protection safety culture in medicine

MISSION

- Improving medical care through sustainable research efforts in medical radiation protection
- Identifying common research areas
- Serving as a platform for medical radiation protection research
- Developing an aligned approach and response to European research calls

3.1. Measurement and quantification in the field of medical applications of ionising radiation

3.2. Normal tissue reactions, radiation-induced morbidity and long-term health problems

3.3. Optimisation of radiation exposure and harmonisation of practices

3.4 Justification of the use of ionising radiation in medical practice

3.5 Infrastructure for quality assurance

Patient-tailored diagnosis and treatment: full exploitation and improvement of technology and techniques with clinical and dose structured reporting

- optimising radiation protection
 - increasing number of patients exposed to ionising radiation in the context of medical diagnosis and
 - One major approach, the comprehensive tailoring of imaging and therapeutic procedures in terms of the clinical question, anthropometric and physiological parameters as well as individual susceptibility of each patient and especially children and lesion-specific characteristics is a key challenge that still is not addressed properly.
 - Patient-tailored procedures will reduce the risks for individual patients.
 - The patient group and indication dependent optimisation in terms of dose distributions need to be improved and standardized to allow a better compliance with COUNCIL DIRECTIVE 2013/59/EURATOM (BSS) Article 56 (Optimisation in medical use)
 - and to pave the way for susceptibility dependent medical application of ionising radiation.
- ➔ Therefore a full exploitation of technology and techniques is needed with clinical and dose structured reporting.

- The scope of the proposed topic is to foster the full exploitation of technology and its improvement for diagnostic or therapeutic applications to patients dependent on characteristic parameters (individual susceptibility, age, gender etc. and clinical indication)
- in combination with providing documentation and optimisation tools (e.g. by clinical implementation of diagnostic reference levels, harmonisation of procedures for stratified patient groups, maximise clinical information and/or benefit relative to patient risk etc. including corresponding uncertainties).
- A project fitting to this topic will either aim to implement harmonisation or documentation schemes throughout Europe improving patient radiation protection and allowing better data for future patient based radiation biology or show feasibility of individualisation or stratification approaches and determine how such approaches could be implemented in the future.
- Projects need to include clear concepts of dosimetric description of procedures in combination with clinical outcomes (structured clinical and dose reporting) and of ways for standardisation (an example for such an approach could be DRLs based on such structured reporting, but other examples like in theranostics could also be possible).
- It would be helpful to address justification and ethical basis underlying the optimisation process.

- Connections are seen to proposals and interests of
 - **MELODI**
 - **EURADOS**
 - **and SSH**

- Optimised and harmonised practices will lead to reduced uncertainty in radiation exposure and corresponding risks.
- There will be a better dose documentation and a patient tailored optimisation of radiation application to patients to reduce the risk for individualised patients.
- Both aspects would be big steps for a more efficient implementation of the BSS.
- In addition, this individualised risk reduction harmonised throughout Europe will give greater confidence and reassurance to patients.
- This could allow also a better communication for such medical applications.

- Type of action:
Research and innovation actions.
- Project proposals may address part of the scope.
- It would be intended to have connections to other subtopics (like MELODI subtopic or EURADOS subtopic) – a project handling a combination of subtasks could be meaningful in the view of EURAMED
- Subtopic title: **Patient-tailored diagnosis and treatment: full exploitation and improvement of technology and techniques with clinical and dose structured reporting**
- Strong societal impact – implementation of BSS
- Research can be related to diagnostic or therapeutic procedures
- Full exploitation of technologies and harmonisation for stratified patient-groups

! Thanks a lot for your attention !