MEDIRAD

Implications of Medical Low Dose Radiation Exposure

This project has received funding from the Euratom research and training programme 2014–2018 under grant agreement No 755523

Recommendations to enhance effective radiation protection of patients and medical professionals, and to identify further research priorities

1 CONSOLIDATION OF PATIENT DATA REPOSITORIES ACROSS EUROPE

- **Develop an interconnected and sustainable system of image and dose repositories at the European level**
- **Harmonise GDPR implementation in medical radiation protection research**
- **Enhance awareness regarding radioation protection research among public and patients**

2 OPTIMISATION OF RADIATION-BASED PROTOCOLS FOR MEDICAL DIAGNOSTICS OR THERAPY

- **Develop robust tools for optimisation of CT scanning and multimodality imaging**
- **Develop dosimetry-based protocols for molecular radiotherapy across Europe**
- **Deploy a EU-wide strategy to better predict and reduce secondary cardiovascular risks in breast cancer patients treated with radiotherapy**
- **Actively promote good practices aimed at reducing cardiovascular risks after breast radiotherapy**
- **Accelerate the generalised use in clinical practice of modelled total delivered doses to individual patients within Europe**

3 FURTHER OPTIMISATION OF RADIATION PROTECTION FOR PATIENTS AND MEDICAL WORKERS

- **Optimise systems for quantitative imaging irrespective of camera make or model**
- **Encourage harmonisation of practices through active engagement of health professionals, researchers, health authorities and patients**
- **Optimise the use of protective equipment to improve radiation protection of medical workers in interventional settings**

4 FUTURE RESEARCH ON MEDICAL RADIATION PROTECTION IN EUROPE

- **Conduct further research into adverse effects of ionising radiation on healthy tissues**
- **Promote a EU-wide research strategy to use AI for optimising protection in radiation oncology**
- **Develop biologically-based models to evaluate radiation-induced disease risk**
- **Conduct large-scale clinical epidemiological follow-up of patients to assess late health effects of radiation**
- **Investigate new and optimise existing medical imaging procedures to improve benefit/risk ratios and personalised approaches**

For more information: **www.medirad-project.eu**