



### Special Track Session 3

Oncology & Theranostics Committee

### Challenge the Expert

Sunday, September 10, 15:00 – 16:30

### Session Title

**Risk in Diagnostic and Therapeutic Nuclear Medicine**

### Moderators

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### Expert

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### Educational Objectives

1. To summarize and categorize radiobiological basis for risk assessment in Nuclear Medicine;
2. To analyse how these radiation risks should be clearly communicated to each target population (health professionals, patients and relatives / carers / comforters);
3. To review what information written informed consent should contain.

### Summary

In Nuclear Medicine daily practice, as in any other field with radiological exposure, radiation risks are present and it is of utmost importance to have a clear knowledge of them and how to contribute to its minimization, through effective communication. For this purpose, multidisciplinary team work, involving the whole department's staff (including physicians, medical physics, radiopharmacists, technologists and administrative personnel) is essential.

Physicians are responsible for providing patients with all the information on risks, benefits and alternatives useful for them to make a conscious decision. Currently, shared decision making between patients and physicians is the basis for a well succeed medicine, hence, physicians must know how to empower patients to make informed decisions.



In most countries, informed consent is mandatory, not only for therapies with radiopharmaceuticals, but also for diagnostic Nuclear Medicine. This is a legal document that contains specific information for the patient and it involves three critical components: disclosure, decision-making capacity, and voluntariness. But it must be, also, a comprehensive and clear document. Informed consent is a procedure to support, and not to substitute, the physician/patient dialogue and relationship, facilitating a free, informed and aware expression of the patient's will, preserving the principle of patient autonomy. However, the task of informing and seeking consent may be delegated to another health professional, as long as the professional is suitably trained and qualified. For all this, precise knowledge and communication skills are key.

Hence, it is essential that all the community, not only ionizing radiation professionals, but also other health professionals, patients and their relatives / carers / comforters, understand not only the health benefit of the procedures, but also its associated radiological risks and how to deal with them. Effective communication of all this is challenging and techniques to improve it should be used. Better knowledge of risk will certainly help to reduce small individual risk, translating into less population risk.

**Key Words**

ionizing radiation, radiobiology, radiological risk, informed consent, communication