

### CME Session 8

Radiation Protection + Dosimetry Committee

Thursday, October 21, 16:50-18:20

### Session Title

**Pregnancy and Breastfeeding in the Context of Nuclear Medicine**

### Chairperson

François Jamar (Brussels, Belgium)

### Programme

16:50 - 17:18 Sigrid Leide-Svegborn (Malmö, Sweden): Status of Guidelines on Breastfeeding

17:18 - 17:46 François Jamar (Brussels, Belgium): The Pregnant Patient - Risks for the Foetus

17:46 – 18:14 Marta Cremonesi (Milan, Italy): How to Estimate the Radiation Doses?

18:14 – 18:20 Session Summary by Chairperson

### Educational Objectives

1. To give guidance on the measures to apply for nursing mothers undergoing NM procedures
2. To give guidance on the risks to embryo/foetus when NM procedures are performed on pregnant and potentially pregnant patients, as well as measures to anticipate these risks
3. To summarize current knowledge on how the doses are measured/estimated to the embryo/foetus in pregnant women

### Summary

The CME session will deal with everyday real-life situations, namely the occurrence of a breastfeeding patient or a pregnant patient for a Nuclear Medicine procedure. Therapy using radionuclides is of course outside the scope but shall be treated as a particular issue in breastfeeding patients. For pregnant patients, two situations will be dealt with: the known pregnant patient, in whom a NM procedure must be performed (eg. PET/CT for cancer, sentinel node procedure, V/Q scan for pulmonary embolism) and separately, the patient with an unknown pregnancy who underwent an inadvertent procedure (*bona fide*). Based on the risks estimates to the unborn child, discussed on a theoretical basis, a guidance will be proposed. Guidelines are not ready yet but will follow, in the coming months. As a third topic, a discussion will be held on how doses can be estimated in these peculiar situations, from the physics and dosimetry viewpoints.

### Key Words

Radiation dose, pregnancy, breastfeeding, risks