



Special Track Session 11

T&E Committee

Tuesday, October 20, 15:00–16:30

Session Title

Challenge the Expert: Overdiagnosis in Thyroid Cancer: Balancing Early Detection with Clinical Significance

Moderators

Petra Petranović Ovčariček (Zagreb, Croatia)

Michael C. Kreissl (Magdeburg, Germany)

Expert

Markus Luster (Marburg, Germany): Finding the Bad One: How to Diagnose (Clinically Relevant) Thyroid Cancer

Challengers

Friederike Eilsberger (Marburg, Germany)

Pascalie Mossel (Leiden, Netherlands)

Isabel Marín-Melero (Charleroi, Belgium)

Alicja Thies (Magdeburg, Germany)

Lotte Elshof (Utrecht, Netherlands)

Educational Objectives

1. Recognise the clinical, epidemiologic, and imaging-related drivers of thyroid cancer overdiagnosis, with particular attention to incidentally detected small papillary thyroid carcinomas.
2. Differentiate findings that are likely to represent clinically significant disease from low-risk abnormalities that may be suitable for surveillance, integrating ultrasound, molecular imaging, pathology, biomarkers, and patient-specific risk factors.
3. Apply a risk-adapted nuclear medicine strategy that supports appropriate use of radioiodine imaging and therapy, avoids unnecessary escalation, and improves multidisciplinary decision-making.

Summary

The increasing detection of small thyroid nodules and indolent papillary thyroid cancers has improved diagnostic sensitivity, but it has also created a major clinical challenge: identifying which findings truly require intervention. This session will examine how ultrasound, cross-sectional imaging, molecular imaging, biochemical markers, and pathology can contribute both to early detection and to overdiagnosis. Particular emphasis will be placed on the role of nuclear medicine physicians in distinguishing clinically meaningful disease from low-risk findings, selecting patients appropriately for radioiodine imaging and therapy, and supporting active surveillance when treatment is unlikely to improve outcome. Through practical cases and multidisciplinary perspectives, the session will provide a balanced framework for avoiding both undertreatment of relevant disease and overtreatment of biologically indolent thyroid cancer.

Key Words

Thyroid cancer; Overdiagnosis; Overtreatment; Thyroid incidentaloma; Active surveillance; Risk stratification; Radioiodine; Thyroid imaging; Ultrasound; Multidisciplinary decision-making