

## **Joint Symposium 21**

Oncology Committee / European Society of Gynaecological Oncology (ESGO)

**Tuesday, October 15, 14:30-16:00**

### **Session Title**

**Ovarian Cancer**

### **Chairpersons**

Roberto Delgado Bolton (Logroño, Spain)

Francesco Giammarile (Vienna, Austria)

### **Programme**

- 14:30 - 14:50 Annamaria Ferrero (Torino, Italy): Staging, Prognosis and Relapse Detection - The Clinician's Point of View
- 14:50 - 15:10 Roberto Delgado Bolton (Logroño, Spain): Staging, Prognosis and Relapse Detection with PET/CT and PET/MR - The Nuclear Medicine Physician's Point of View
- 15:10 - 15:30 Mikkel Rosendahl (Copenhagen, Denmark): Response Assessment with Imaging - The Clinician's Point of View
- 15:30 - 15:50 Nicolas Aide (Caen, France): Response Assessment with PET/CT and PET/MR - The Nuclear Medicine Physician's Point of View

### **Educational Objectives**

1. To analyse the clinician's point of view on the role of imaging techniques in general on what is needed when referring ovarian cancer patients for staging, prognosis, relapse detection, and response assessment. The most important issues that should be solved and reported by the imaging techniques will be discussed.
2. To analyse the nuclear medicine physician's point of view on the role of the nuclear medicine imaging techniques PET/CT and PET/MR in staging, prognosis and relapse detection, and response assessment. The most important issues that can be solved and reported by PET/CT and PET/MR will be discussed.
3. To reach a consensus between the clinicians working in the field of ovarian cancer and the nuclear imaging physicians working in the field of PET/CT and PET/MR in ovarian cancer. The goal will be to reach a consensus statement and recommendations for the use of imaging in this setting.

### **Summary**

Epithelial ovarian cancer (EOC) is the most fatal gynaecological malignancy, as it is usually diagnosed at an advanced stage. Although primary cytoreductive surgery (CRS) followed by taxane/platinum-based chemotherapy (CHTx) is considered the standard approach, unfortunately patients have a high death rate following this ineffective and somewhat life-threatening therapy. Several authors have

suggested that maximal cytoreduction after surgery is one of the most powerful prognostic factors. Nevertheless, the presence of residual large-volume disease after surgery does not preclude benefits from subsequent treatments. The prognostic impact of the residual (loco-regional/peritoneal) tumour burden assessed by PET/CT has not yet been completely investigated. In fact, the appraisal of the peritoneal involvement is usually performed by contrast-enhanced CT and magnetic resonance imaging, but sensitivity is reduced because the anatomical imaging considers only size criteria and does not distinguish the functional alterations that may occur within the tumour tissue. Recently, PET/CT has exhibited valuable diagnostic accuracy for identifying primary tumours, regional lymph nodes, distant metastases and significant peritoneal involvement resulting from EOC. Moreover, some studies have shown that PET/CT is useful for monitoring response to treatment, both surgical and chemotherapeutic, and for detecting residual disease during and/or after the completion of therapy.

In this clinical setting it is important to analyse the clinician's point of view on the role of imaging techniques in general on what is needed when referring ovarian cancer patients for staging, prognosis, relapse detection, and response assessment. The most important issues that should be solved and reported by the imaging techniques will be discussed. Moreover, it is also key to analyse the nuclear medicine physician's point of view on the role of the nuclear medicine imaging techniques PET/CT and PET/MR in staging, prognosis and relapse detection, and response assessment. The most important issues that can be solved and reported by PET/CT and PET/MR will be discussed. Finally, the objective of the joint symposium is to reach a consensus between the clinicians working in the field of ovarian cancer and the nuclear imaging physicians working in the field of PET/CT and PET/MR in ovarian cancer. The goal will be to reach a consensus statement and recommendations for the use of imaging in this setting.

### **Key Words**

Ovarian cancer; diagnosis; staging; response; relapse; PET; CT; MRI