Methodology A Delphi survey was carried out among a panel of French and French-speaking Swiss experts. The questionnaire included 58 questions divided into 8 categories: characterization of experts, histomolecular characteristics, radiological data, management of low-risk, intermediate-risk, intermediate-high-risk, high-risk and metastatic cancers. The experts were asked to reply on a 9-point scale, both on the validity and the clarity of each suggestion. After the answers were analysed, a second round was sent to the same experts for selected suggestions. To be accepted, each proposal had to obtain a median greater than or equal to 7/9.

Results The study was conducted between December 2021 and March 2022. 58 (57.4%) of 101 experts responded in the first round and 41 proposals were found. 5 questions were voted redundant and 19 discordant. These questions were reworded and partially split and at the end of the 2nd round, out of the 20 proposals 16 were validated and 4 rejected. In total, the study presents an analysis of 61 questions.

Conclusion These consensual recommendations are expected to standardize the management of endometrial cancer in France and French-speaking Switzerland and to optimize clinical practices.

Introduction/Background The significance of lymphadenectomy in uterine cancer has not yet been completely established. However, excessive lymphadenectomy significantly reduces the postoperative quality of life. Hence, noninvasive and highly accurate lymph node metastasis (LNM) diagnostic methods are strongly needed as alternatives to dissection. Therefore, we attempted a novel approach for the LNM diagnosis, in which the probability of metastasis is calculated using preoperative clinical variables and biomarker measurements.

Methodology Preoperative clinical variables included serum tumor marker values and magnetic resonance imaging findings etc. Each variable’s discrimination power was evaluated by univariate analysis and validated combination of variables that contributed most to the LNM discrimination. The most promising mRNA biomarkers that correlate with expression difference between -positive and -negative groups were identified by CAGE (Cap Analysis Gene Expression), a genome-wide analysis.

Results Ten clinical variables that contributed most to the LNM discrimination were extracted. Two promising biomarkers, SEMA3D and Novel isoform of TACC2, and two companion markers were identified. For all uterine cancers,
the calculated predictive probability values were significantly different between the LNM-positive and -negative groups ($P = 1.39 \times 10^{-10}$), and high diagnostic accuracy of 83.6% area under the curve (AUC) was obtained. The LNM diagnosis requires essentially minimize the time difference between the diagnosis and hysterectomy. Therefore, reverse transcription-polymerase chain reaction enabled quantification from RNA in one step within 30 min, for intraoperative diagnosis.

**Conclusion** This diagnostic method uses rapid nucleic acid amplification for intraoperative quantification of biomarkers in the primary tissue. Furthermore, the predictive model combined with various clinical variables can be used to discriminate LNM with high accuracy and facilitate individualization of the surgical treatment.

**Abstract** 2022-RA-809-ESGO

**UNDERLYING CAUSES AND PROGNOSIS OF MISMATCH REPAIR DEFICIENCY IN ENDOMETRIAL CANCER OTHER THAN MLH1 PROMOTER HYPERMETHYLATION**

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**Introduction/Background** The vast majority of mismatch repair-deficient (MMRd) endometrial carcinomas (EC) are due MLH1 promoter hypermethylation. Here, we aimed to investigate the prevalence, prognosis and underlying causes (including Lynch syndrome (LS)) of MMRd EC other than MLH1 promoter hypermethylation.

**Methodology** From the 409 MMRd ECs that were identified by MMR-immunohistochemistry (IHC) in the PORTEC-1, -2 and -3 trials, 97 cases did not have MLH1 promoter hypermethylation. These 97 cases were analyzed by matched tumor-normal tissue NGS. A significant proportion of all (discrepant) MMR-IHC did not reveal misinterpretation of MMRd status. Somatic POLE mutations were identified in 7/97 cases (7%). The 5-year RFS did not differ significantly between LS-associated and non-LS-associated MMRd EC (5-year RFS 94.1% [95% CI 86.5–100%] vs 93.5% [95% CI 87.5–99.9%]), respectively; $p=0.72$; figure 1).

**Conclusion** Identification of an underlying cause for unmethylated MMRd is feasible in the majority of EC cases applying matched tumor-normal tissue NGS. A significant proportion was confirmed to be LS-associated or sporadic MMRd, while only a small subset remained unresolved. Although this distinction did not carry prognostic relevance, identification of definitive sporadic causes may release patients and relatives from burdensome LS-surveillance.

**Abstract** 2022-RA-815-ESGO

**ENDOMETRIAL CANCER INCIDENCE IN PATIENTS WITH ATYPICAL ENDOMETRIAL HYPERPLASIA ACCORDING TO MODE OF MANAGEMENT**

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**Introduction/Background** It is well established that around one-third of patients with atypical Endometrial hyperplasia (AEH) develop endometrial cancer (EC). The aim of the study is to determine the incidence of EC in AEH patients in UHL and to explore the reasons why AEH patients opted for conservative management.