SBRT and 11 with surgery. Complete response was achieved in 80% and 90.9%, respectively. 9(56%) vs 1(11,1%) patients were alive and without disease at the end of follow-up (median follow-up: 5.9 years) in local and systemic treatment groups, respectively (p=0.05) (image 2). Median-time-to-progression was higher in local-treatment group (3.5 vs 0.7 years, p=0.029), as well as 5-year-OS (80.8% vs 44.4%, p=0.88). No statistically significant differences were found between multiple-site metastatic patients and isolated lung recurrent patients regarding molecular profiling: 21.9% were MSI, 34.4% NSMP, 21.9% p53-abn and 0% POLEmut (p=0.537). Disease-free-survival (DFS) by molecular classification was similar between isolated lung recurrent patients after their treatment (figure 1).

Conclusion Isolated lung recurrent patients locally-treated had the best DFS, OS, and a higher median-time-to-progression. Among tumors recurring in the lung, NSMP was the most frequent group. DFS was similar after lung recurrence treatment regarding molecular profile in the oligometastatic cohort.

1. Guiseppe Cucinella, 1,2Gabriella Schiavini, 3Xun Clare Zhou, 4Mariam Ahili, 6Sumer Wallace, 7Christoph Wohlmuth, 8Glaucio Balbi, 9Nedim Tokgozoglu, 10Francesco Raspagliesi, 12,13Alessandro Buda, 14Vanna Zanagnolo, 15Ignacio Zapardiel, 16Spyridon Mastroyannis, 2Vito Chiandetti, 3Amy L. Weaver, 3Michaela E. McGree, 1Andrea Mariani, 1Gretchen Glaser. 1Department of Obstetrics and Gynecology, Mayo Clinic, Rochester, MN; 2Department of Gynecologic Oncology, University of Palermo, Palermo, Italy; 3IEO, European Institute of Oncology IRCCS, Milan, Italy; 4Harford HealthCare, Hartford, CT, 5Cleveland Clinic, Cleveland, OH; 6University of Wisconsin School of Medicine and Public Health, Madison, WI; 7Sunnybrook Health Sciences, University of Toronto, Toronto, ON, Canada; 8Department of Obstetrics and Gynecology, Paracelsus Medical University, Salzburg, Austria; 9A.C. Camargo Cancer Center, Sao Paulo, Brazil; 10Turkish Society of Gynecologic Oncology, Istanbul, Turkey; 11Fondazione IRCCS Istituto Nazionale Tumori -Milan, Milan, Italy; 12University of Milano-Bicocca, Monza, Italy; 13Ferrero Hospital, Verduno, Italy; 14La Paz University Hospital-IPAPAZ, Madrid, Spain; 15Mater Hospital Brisbane & Mater Research Institute, University of Queensland, Brisbane, Australia; 16University of Pennsylvania Health System, Philadelphia, PA; 17Barcelona Clinic Hospital, Barcelona, Spain; 18University of Navarra, Pamplona, Spain; 19Department of Gynaecology, Medical University of Graz, Graz, Austria; 20Clinica Universidad de Navarra, Madrid, Spain; 21Hospital Britanico de Buenos Aires, Buenos Aires, Argentina; 22Hospital Universitario Puerta de Hierro-Majadahonda, Madrid, Spain; 23Curie Institute, Paris, France; 24Meix Medical Center, Faculty of Medicine, Tel-Aviv University, Israel; 25Lahey Clinic, Burlington, MA; 26University of Chicago, Chicago, IL; 27Obstetrics and Gynecology Residency Program, University of Connecticut, CT; 28Department of Gynecologic Oncology, Koc University School of Medicine, Istanbul, Turkey; 29San Gerardo Hospital, University of Milano-Bicocca, Monza, Italy; 30Department of Quantitative Health Sciences, Mayo Clinic, Rochester, MN.

Abstracts

2022-RA-998-ESGO INTERMEDIATE-RISK ENDOMETRIAL CANCER: ISOLATED TUMOR CELLS (ITC) VERSUS NODE-NEGATIVE IN SENTINEL LYMPH NODE MAPPING. AN INTERNATIONAL MULTI-INSTITUTIONAL COMPARATIVE STUDY

Introduction/Background The clinical impact of isolated tumor cells (ITC) (≤0.2 mm) in sentinel lymph nodes (SLN) of endometrial cancer (EC) is unclear. This study compared the recurrence-free survival (RFS) of intermediate-risk EC patients who underwent SLN biopsy and were node-negative vs. those who had ITC.

Methodology Patients with SLN-ITC, between 2012 and 2019, were identified from 21 centers worldwide, while SLN-node-negative patients were identified from Mayo Clinic, Rochester, between 2013 and 2018 and served as comparing group. Only patients with uterine-confined EC and intermediate-risk factors [grade 1 or 2 endometrioid and myometrial invasion (MI) ≥50%; grade 3 endometrioid and MI <50%; non-endometrioid without MI] were included. Adjuvant therapy (ATx) included vaginal brachytherapy (VB), external beam radiation and/or chemotherapy (EBRT±CHT). The primary outcome was non-vaginal recurrence (hematogenous, peritoneal or lymphatic).

Results Of 200 patients included, 74 had ITC and 126 were node-negative. Sixteen patients had a non-vaginal recurrence and the median follow-up for patients without recurrence was 2.9 (IQR, 1.8–3.8) and 2.8 (0.8–4.4) years for the two groups, respectively. Among the 162 patients with ATx (VB
only = 112; EBRT ± CHT = 50), there was no significant difference in non-vaginal RFS between ITC vs. node-negative patients \( p = 0.34 \); 4-year RFS 84.1% (95% CI, 72.1–98.1%) vs. 91.5% (95% CI, 84.1–99.4%) for 61 ITC vs. 101 node-negative). However, we observed worse non-vaginal RFS in the subgroup of 32 patients with concurrent ITC and LVSI \( p = 0.006 \), figure 1). In particular, the 4-year RFS was 64.6% (95% CI, 43.2–96.8%) in this subgroup compared to 93.3% (95% CI, 81.5–100%) and 91.7% (95% CI, 83.9–100%) for the node-negative patients with and without LVSI, respectively. There were no recurrences among 29 patients with ITC and no LVSI.

Abstract 2022-RA-999-ESGO Figure 1 Non-vaginal recurrence-free survival among patients with intermediate risk factors who received adjuvant therapy, according to nodal status and LVSI

Conclusion Our results on intermediate-risk EC, who received ATx, suggest that the simultaneous presence of ITC and LVSI is associated with a poorer prognosis. Further studies are warranted.

2022-RA-999-ESGO

CLINICAL RELEVANCE OF CLINICOPATHOLOGICAL AND MOLECULAR FACTORS IN WOMEN WITH SURGICALLY TREATED STAGE IV ENDOMETRIAL CANCER

Linda Nooij, Margot Uijterwaal, Christianne Lok, Cor de Kroon, Jennieke Kasius, Ronald Zeeuwe, Cees Gerensteijn, N Horeweg, Tjalling Bosse, Jacollen van der Marel, Gynaecology, LUMC, Leiden, Netherlands; Gynaecology, Amsterdam UMC, Amsterdam, Netherlands; Gynaecology, AvD, Amsterdam, Netherlands; Gynaecology, UMCU, Utrecht, Netherlands; Radiation Oncology, LUMC, Leiden, Netherlands; Pathology, LUMC, Leiden, Netherlands

Introduction/Background Risk stratification, treatment and prognosis of stage I-III endometrial cancer (EC) are dependent on its molecular subclassification. The role of this classification has not been investigated for stage IV EC. Studies on optimal treatment for stage IV EC are scarce and management is authority based and individualized. Cytoreductive surgery (CRS) combined with chemotherapy has been associated with superior overall survival (OS). This study aims to investigate whether the molecular EC subclassification can be used as a predictive marker for successful CRS.

Methodology A retrospective cohort study was performed from 01-01-2000 until 31-12-2018 including 157 surgically-treated stage IV EC patients from five hospitals in The Netherlands. Tumour samples were molecularly classified according to the WHO 2020 classification and estrogen receptor (ER) expression status was evaluated. Molecular risk factors for intra-abdominal residual disease were identified by multivariable logistic regression analysis. OS after CRS was estimated using Kaplan-Meier’s method, groups were compared using the log-rank test. Prognostic factors for OS were determined by multivariable Cox regression analyses.

Results Molecular classification shows a dissimilar distribution compared to stage I-III EC; i.e. POLE mutation (POLEmut) 3.2%, mismatch-repair deficient (MMRd) 13.4%, no specific molecular profile (NSMP) 24.8%, p53 abnormal (p53abn) 58.6% (table 1). A trend for incomplete CRS was observed for p53-abn and NSMP EC (OR 3.25, \( p = 0.094 \) and OR 4.12, \( p = 0.057 \)) respectively, compared to MMRd EC. Complete CRS, histotype, grade and ER status had a significant impact on OS (figure 1A-C). Molecular classification not (figure 1D). Optimal (HR2.99, \( p < 0.0001 \)) and incomplete CRS (HR2.73, \( p < 0.0001 \)), grade 3 endometrioid (HR3.00, \( p = 0.001 \)) and non-endometrioid histotypes (HR2.50, \( p = 0.006 \)) were independent risk factors for shorter OS.

Abstract 2022-RA-999-ESGO Figure 1

Conclusion Our results on intermediate-risk EC, who received ATx, suggest that the simultaneous presence of ITC and LVSI is associated with a poorer prognosis. Further studies are warranted.

2022-RA-999-ESGO

CLINICAL RELEVANCE OF CLINICOPATHOLOGICAL AND MOLECULAR FACTORS IN WOMEN WITH SURGICALLY TREATED STAGE IV ENDOMETRIAL CANCER

Linda Nooij, Margot Uijterwaal, Christianne Lok, Cor de Kroon, Jennieke Kasius, Ronald Zeeuwe, Cees Gerensteijn, N Horeweg, Tjalling Bosse, Jacollen van der Marel, Gynaecology, LUMC, Leiden, Netherlands; Gynaecology, Amsterdam UMC, Amsterdam, Netherlands; Gynaecology, AvD, Amsterdam, Netherlands; Gynaecology, UMCU, Utrecht, Netherlands; Radiation Oncology, LUMC, Leiden, Netherlands; Pathology, LUMC, Leiden, Netherlands

Introduction/Background Risk stratification, treatment and prognosis of stage I-III endometrial cancer (EC) are dependent on its molecular subclassification. The role of this classification has not been investigated for stage IV EC. Studies on optimal treatment for stage IV EC are scarce and management is authority based and individualized. Cytoreductive surgery (CRS) combined with chemotherapy has been associated with superior overall survival (OS). This study aims to investigate whether the molecular EC subclassification can be used as a predictive marker for successful CRS.

Methodology A retrospective cohort study was performed from 01-01-2000 until 31-12-2018 including 157 surgically-treated stage IV EC patients from five hospitals in The Netherlands. Tumour samples were molecularly classified according to the WHO 2020 classification and estrogen receptor (ER) expression status was evaluated. Molecular risk factors for intra-abdominal residual disease were identified by multivariable logistic regression analysis. OS after CRS was estimated using Kaplan-Meier’s method, groups were compared using the log-rank test. Prognostic factors for OS were determined by multivariable Cox regression analyses.

Results Molecular classification shows a dissimilar distribution compared to stage I-III EC; i.e. POLE mutation (POLEmut) 3.2%, mismatch-repair deficient (MMRd) 13.4%, no specific molecular profile (NSMP) 24.8%, p53 abnormal (p53abn) 58.6% (table 1). A trend for incomplete CRS was observed for p53-abn and NSMP EC (OR 3.25, \( p = 0.094 \) and OR 4.12, \( p = 0.057 \)) respectively, compared to MMRd EC. Complete CRS, histotype, grade and ER status had a significant impact on OS (figure 1A-C). Molecular classification not (figure 1D). Optimal (HR2.99, \( p < 0.0001 \)) and incomplete CRS (HR2.73, \( p < 0.0001 \)), grade 3 endometrioid (HR3.00, \( p = 0.001 \)) and non-endometrioid histotypes (HR2.50, \( p = 0.006 \)) were independent risk factors for shorter OS.

Abstract 2022-RA-999-ESGO Figure 1