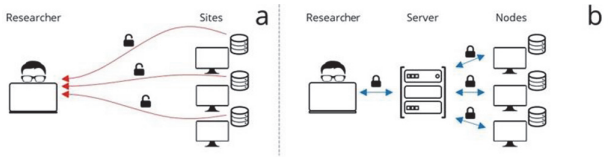



**Abstract 2022-LBA-1282-ESGO Figure 1** Approaches to analysing data from different sources; a) Centralisation. This is the traditional approach, but has several disadvantages such as loss of data control logistics data governance and (most importantly) putting at risk sensitive patient data. b) Federated warring in this docentralised approach, privacy-sensitive patient data are not shared, but kept undisclosed and safe at their original location. Communication within the infrastructure is end-to-end encrypted

**Abstract 2022-LBA-1282-ESGO Table 1** Risk of lymph node metastases, stratified by the most important risk factors

| LVSI | Tumour size | Depth of invasion | pN+ | 95% CI |
|---|---|---|---|---|
| No | ≤20 mm | ≤10 mm | 2% | 2-3% |
| | | >10 mm | 6% | 2-14% |
| | 21-40 mm | ≤10 mm | 5% | 3-8% |
| | | >10 mm | 12% | 8-16% |
| Yes | ≤20 mm | ≤10 mm | 14% | 11-17% |
| | | >10 mm | 18% | 12-27% |
| | 21-40 mm | ≤10 mm | 25% | 20-29% |
| | | >10 mm | 35% | 30-40% |

**LVSI** lymphovascular space invasion; **pN+** lymph node metastases.

**Conclusions** LVSI, tumours size and depth of invasion were the most important risk factors of pN+. Based on that, we identified a group at very low risk of pN+, in whom sentinel lymph node mapping should be considered to replace radical pelvic lymphadenectomy.

## 2022-LBA-1703-ESGO SURVIVAL OUTCOMES IN MINIMALLY INVASIVE SURGERY VERSUS ABDOMINAL SURGERY FOR CERVICAL CANCER-RETROSPECTIVE COHORT FROM A HIGH-VOLUME CANADIAN CENTER (2006–2017)

[1]Vanessa Samouëlian, [2]Audrey Feng-Emond, [1]Béatrice Cormier, [1]Thomas Warkus, [1]Omar Moreira Bacha, [3]Elise de Castro Hillmann. *[1]Gynecology oncology, CHUM, Montreal, QC, Canada; [2]Faculté de Médicine, Université de Montréal, Montréal, QC, Canada; [3]Gynecology oncology, CHUM Research Center, Montreal, QC, Canada*

10.1136/ijgc-2022-ESGO.1011

**Introduction** MIS has been abandoned in many centers for cervical cancer treatment after publication of the LACC trial in 2018. Several critics and theories emerged afterward. Our study looked at data of a single large volume institution. Disease free survival (DFS) and mortality rates were compared for both surgical approaches.

**Methods** We retrospectively reviewed all surgical cervical cancer cases from 2006 to 2017 of the Centre Hospitalier de l'Université de Montréal. Only patients treated by Minimal Invasive Surgery (MIS) or laparotomy were included. We compared cohorts' characteristics and survival outcomes for MIS and laparotomy. Descriptive data is presented in means, standard deviations, and percentages. Kaplan-Meier was used to generate disease free survival (DFS) and overall survival (OS) curves; log-rank was used to compare curves. Survival outcomes of the use of intrauterine manipulator were also investigated. Statistical significance was 0.05.

**Results** 257 patients were included (94 robotic, 38 laparoscopy, 125 laparatomy). Patients' characteristics did not significantly differ among groups. Histology was 50.6% squamous cell carcinoma, 35.4% adenocarcinoma, 3.9% adenosquamous and 10.1% other subtypes. Patients were FIGO stages IA (51.0%), IB (43.1%) and IIA or more (5.9%). Median follow-up was 161 months. Intrauterine devices were used in 70.2% of the MIS group. 48.8% had no residual disease at surgery. No differences in intra-operative, post-operative complications and readmission rates between MIS and laparotomy was observed. Total cohort intra-operative and post-operative complications rates were respectively 4.5% and 25,2%. Recurrence rates and death rates were significantly lower for MIS than for laparotomy approach (respectively 1.5% vs 8.1%, p=0.013, 1,5% vs 4,8%, p=0.043). Disease-specific mortality rate did not statistically differ (MIS=1.5%, laparotomy =4.8%, p=0.121).

**Conclusions** Selected cervix cancer patients may benefit from MIS. Further studies are needed.

## 2022-LBA-746-ESGO IMPLEMENTATION OF A COMPREHENSIVE CANCER GENOME PROFILING PROGRAMME INTO CLINICAL PRACTICE: AN ITALIAN EXPERIENCE IN A REFERRAL CENTRE FOR GYNECOLOGICAL CANCERS

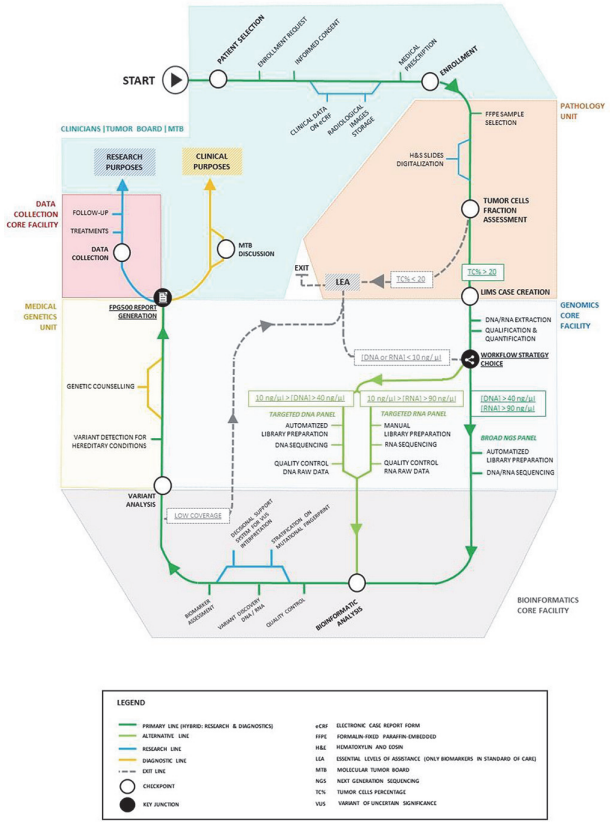
[1]Camilla Nero, [1]Silvia Pelligra, [2]Simona Duranti, [2]Flavia Giacomini, [1]Floriana Camarda, [1]Elena Giudice, [3]Alessia Piermattei, [1]Francesca Sillano, [4]Angelo Minucci, [4]Maria de Bonis, [4]Giuseppina Raspaglio, [5]Luciano Giacò, [6]Emanuela Lucci Cordisco, [4]Marta de Donato, [7]Tina Pasciuto, [8]Diana Giannarelli, [1]Francesco Fanfani, [3]Gian Franco Zannoni, [1]Anna Fagotti, [1]Domenica Lorusso, [1]Giovanni Scambia. *[1]Gynecologic Oncology, Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Roma, Italy; [2]Scientific Directorate, Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Roma, Italy; [3]Gynecologic Oncology and Breast Pathology Unit, Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Roma, Italy; [4]Genomics Core facility, Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Roma, Italy; [5]Bioinformatics Core facility, Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Roma, Italy; [6]Medical Genetics Unit, Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Roma, Italy; [7]Data Collection Core facility- GSTeP, Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Roma, Italy; [8]Epidemiology and Biostatistics core facility- GSTeP, Fondazione Policlinico Universitario Agostino Gemelli IRCCS, Roma, Italy*

10.1136/ijgc-2022-ESGO.1012

**Introduction** The implementation of cancer molecular characterization in clinical practice has improved prognostic re- definition extending the eligibility to a continuous increasing number of targeted treatments. A molecular based primary tumor agnostic approach, could satisfy this purpose. Although in 2020 the European Society of Medical Oncology recommended comprehensive genomic profiling (CGP) implementation at least in academic centers many challenges have to be acknowledged.

**Methods** In the present monocentric interventional prospective study, ten cancer types including ovarian and endometrial cancer treated at our Institution from January 2022, were identified and profiled using a FPG500 molecular platform. An analysis was designed to evaluate the feasibility of CGP from Formalin- Fixed Paraffin- Embedded specimens, turnaround times, presence of targetable alteration as well as a description

of the mutational landscape, enrollment rate in clinical trials, indications for referral to genetic counseling. Molecular features were further correlated with available clinico-pathological variables for each disease type.




**Abstract 2022-LBA-746-ESGO Figure 1**

**Abstract 2022-LBA-746-ESGO Table 1** Main findings of FPG500 CGP programme

| | MOST FREQUENT ALTERED GENES | TMB (<5; 5-10; >10) | MSI (no; yes) |
|---|---|---|---|
| **OVARIAN CANCER** | | | |
| All patients | TP53 (80%), FGF2 (27%), PIK3CA (22%), BRCA2 (21%), BRCA1 (20%), MYC (20%) and NRG1 (20%) | (58%; 34%; 9%) | 99%; 1% |
| AGE <= 50 years (respect to older patients) | ↓ ALK, CCNE1, FGF5, FGF7 | (69%; 25%; 6%) vs (54%; 37%; 9%) | |
| TISSUE FROM UP FRONT DIAGNOSIS (respect to relapses) | ↓ CHEK2 ↑ ESR1, FGF5, FGFR3, PRKDC, TP53 | (59%; 33%; 8%) vs (57%; 33%; 10%) | |
| STAGE I-II (respect to stage III-IV) | ↓ALK, AR, CCNE1, FGF7, FGFR4, JAK2, TP53, ZFHX3 | (68%; 19%; 13%) vs (55%; 38%; 7%) | |
| OVARIAN SAMPLE (respect to omentum or peritoneum) | ↓ ALK, FGFR4, SPEN, SPTA1 ↑ FGF14 | (68%; 24%; 8%) vs (47%; 39%; 9%) | |
| NO RESIDUAL TUMOR (respect to residual tumor) | ↓TP53 ↑ FGFR4, KRAS, FAT1, CHECK2 | (59%; 27%; 14%) vs (53%; 43%; 4%) | |
| **ENDOMETRIAL CANCER** | | | |
| All patients | PTEN (67%), PIK3CA (51%), ARID1A (43%), CTNNB1 (24%), ZFHX3 (22%), TP53 (20%) | (35%; 30%; 35%) | 90%; 10% |
| AGE <= 50 years (respect to older patients) | No difference | (33%; 50%; 17%) vs (35%; 28%; 37%) | |
| STAGE I-II (respect to stage III-IV) | ↓JAK1, LZTR1 ↑AKT1 | (40%; 30%; 30%) vs (11%; 33%; 56%) | |
| ENDOMETRIAL SAMPLE (respect to other sites) | ↓MAP3K1, LZTR1, JAK1, CTCF, CHD4, ARID1A ↑AKT1, ARID5B, CTNNB1, FANCI | (38%; 23%; 38%) vs (18%; 55%; 27%) | |

TMB: Tumor Mutational Burden; MSI: Microsatellite Instability; ↓minor incidence; ↑major incidence

**Results** Out of 188 women, the feasibility of CGP was 98%, with a mean turnaround time of 39 days. 33.5% of the population was referred to genetic counselling. Most significant findings are reported in Table 1.

**Conclusions** Regarding ovarian cancer, as expected, endometrioid and clear cell histotypes had different mutational profiles compared to serous ones (KRAS, ERBB2, FGF7, LRP1B, MDC1 and SPEN vs BRCA 1, FGF2, FGF7, FGFR3, TP53 respectively) with a minimum incidence of mutations. Regarding endometrial cancer, no difference was observed in clinical features for patients with TMB>10. No difference was observed between patients younger or older than 50 years. A TMB>10 was found in 35% of patients with 475 altered genes (mean=28) the most frequent being PTEN (82%), ARID1A (71%), and PIK3CA (65%).

## 2022-LBA-718-ESGO SENTINEL NODE BIOPSY FOR ENDOMETRIAL CANCER BY RETROPERITONEAL TRANSVAGINAL NATURAL ORIFICE TRANSLUMINAL ENDOSCOPIC SURGERY

[1,2]Daniela Huber, [2]Yannick Hurni. [1]*Obstetrics and Gynecology, Valais Hospital, Sion, Switzerland*; [2]*Pediatrics, Obstetrics and Gynecology, Geneva University Hospital, Geneva, Switzerland*

10.1136/ijgc-2022-ESGO.1013

**Introduction** Surgical staging with sentinel lymph node biopsy (SLNB) is an important tool to guide the management of early-stage endometrial cancer. This staging is generally performed by minimally invasive techniques such as conventional, single-site, or robotic laparoscopy. To further reduce the morbidity related to transabdominal surgeries, SLNB by total retroperitoneal transvaginal natural orifice transluminal endoscopic surgery (vNOTES) was recently introduced at our institution. Here, we describe how to perform this surgical technique and we report our preliminary results.

**Methods** Indocyanine green was injected into the cervix to identify sentinel lymph nodes (SLNs). Access to the pelvic retroperitoneal space was achieved through a paracervical incision in the lateral vaginal fornix, providing access to the obturator fossa. A 7 cm GelPoint transvaginal access platform was used as a vNOTES port, and $CO_2$ was insufflated to expand the retroperitoneal space. SLNs were identified using fluorescence imaging, carefully resected, and removed transvaginally.

**Results** Eleven patients underwent SLNB by vNOTES at our institution between October 2021 and July 2022. Indications to perform SLNB were endometrial cancer (8 cases) and endometrial complex atypical hyperplasia (3 cases). The median operative time was 113 (81–211) minutes. The median estimated blood loss was 20 (20–400) mL. The overall bilateral detection rate was 100% (10/10). We completed all procedures without significant intraoperative complications, but 1 case required conversion to conventional laparoscopy. The median postoperative stay was 2 (2–4) days. We observed one case of postoperative deep vein thrombosis and an asymptomatic vaginal vault hematoma in one patient and a retroperitoneal hematoma requiring surgical drainage in another. Definitive results are not available at the time of abstract submission and will be updated later.