Late breaking abstracts

2022-LBA-790-ESGO SENTINEL LYMPH NODE DETECTION WITH MAGTRACE® IN CERVICAL CANCER

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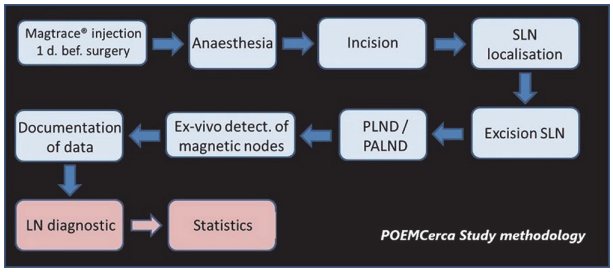
Introduction This prospective observational study, named **POEMCerca** (**P**olish **E**valuation of Magtrace® in **Cer**vical **Ca**ncer) aims to evaluate efficacy of the Magtrace® system in SLN (Sentinel Lymph Nodes) detection in early stage cervical cancer patients in comparison with the standard of care. The nanoparticle paramagnetic detection systems of SLN have been prooved so far to be comparable and non-inferior to the standard procedure of systematic lymphadenectomy in breast cancer and vulvar cancer patients.

Methods 16 patients with stage I cervical cancer received a cervical injection of superparamagnetic iron oxide tracer (Magtrace®). Magtrace® localized and detected SLN with magnetic counts and with visual inspection for their brownish colour. For each SLN the anatomic site, magnetic counts and colour was documented before biopsy. Afterwards, systematic lymphadenectomy – pelvic (PLND) and paraaortic (PALND) – in some cases (high grade tumour and/or adenocarcinoma) was performed as the standard of care.

Results SLN were detected in every patient. Bilateral SLN were found in 87.5% of cases. The mean SLN count per patient was 3.9. All SLN were assessed as brownish stained. In one SLN micrometastasis was detected. Statistic results have been presented in the table 1.



Abstract 2022-LBA-790-ESGO Figure 1

Abstract 2022-LBA-790-ESGO Table 1 Statistic results of the POEMCerca study

Statistic	Value	95% CI
Sensitivity	6.25%	0.16% to 30.23%
Specificity	100.00%	79.41% to 100.00%
Negative Likelihood Ratio	0.94	0.83 to 1.06
Positive Predictive Value	100.00%	
Negative Predictive Value	90.57%	89.43% to 91.59%
Accuracy	90.62%	74.98% to 98.02%

Conclusions This preliminary study showed efficient Magtrace® detection of SLN in early stage cervical cancer patients which is not inferior to the standard of care.

2022-LBA-1282-ESGO IDENTIFYING WOMEN WITH EARLY-STAGE CERVICAL CANCER AT LOW RISK OF LYMPH NODE METASTASES, IN A LARGE INTERNATIONAL COHORT – A LOGISTIC REGRESSION ANALYSIS, WITHOUT SHARING PRIVACY-SENSITIVE PATIENT DATA

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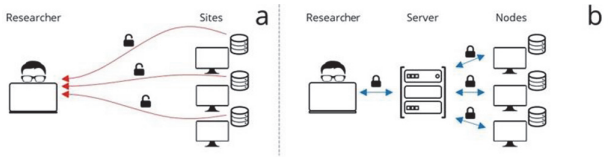
Introduction Standard treatment of early-stage cervical cancer is radical hysterectomy with pelvic lymphadenectomy. However, a generic benefit of systematic lymphadenectomy is questionable, as most women will not have metastatic nodes. This study aimed to classify the most important risk factors of lymph node metastases (pN+) and to identify a group of women at low risk of pN+, in a large cohort of Danish, Swedish and Dutch women, using federated learning.

Methods Women diagnosed with cervical cancer between 2005–2020 were identified from nationwide population-based registries: the Danish Gynaecological Cancer Database, Swedish Quality Registry of Gynaecologic Cancer and Netherlands Cancer Registry. Inclusion criteria were: squamous cell carcinoma, adenocarcinoma or adenosquamous carcinoma; FIGO 2009 stage IA2, IB1 and IIA1; treatment with radical hysterectomy and pelvic lymph node assessment. We applied privacy-preserving federated logistic regression to identify risk factors of pN+ (figure 1). Significant factors were used to identify a low-risk group (pN+ &le5%).

Results A total of 3,606 women were included. The most important risk factors of pN+ were lymphovascular space invasion (LVSI) (odds ratio [OR] 5.16, 95% confidence interval [CI] 4.59–5.79), tumour size 21–40 mm (OR 2.14, 95% CI 1.89–2.43) and depth of invasion &gt10 mm (OR 1.81, 95% CI 1.59–2.08]). Tumours without LVSI, a size ≤20 mm and a depth of invasion ≤10 mm were associated with a low risk of pN+ (2%, 95% CI 2–3%) (table 1).



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)

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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

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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