Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Methods: We retrospectively analyzed the data of 684 patients treated between 2009 and 2013 for carcinoma endometrium in a tertiary care oncology center. The three years overall survival (OS) and disease-free survival (DFS) estimates were generated independently using the Kaplan Meier method for the new and previous classification system. Akaike information criterion and concordance index was calculated between both staging systems to identify better predictive model.

Results: After re-classification, 43% of patients in the high-risk group based on the 2016 system are shifted to the high-intermediate group and 93% of patients migrated from the high-intermediate to intermediate-risk group (Table). The 3-year OS for low risk, intermediate risk, high intermediate risk, high risk, and advanced patients according to the 2016 risk stratification system was 98.3%,95.7%,98%,90.1%, and 64.2% respectively and was 98.3%, 96.6%,92.9%,88.9% and 61.3% respectively according to the 2020 system. The 3-year DFS was 97.9%,79.3%,88.9%,77.3% and 57.2% according to the 2016 system and 97.9%,83%,85.3%,72.2% and 53.8% respectively with the 2020 system. The survival rate decreased from low to advanced risk groups and the newer high-risk group has a lower survival rate than the previous one. The Akaike Information Criterion was lower (0.685 versus 0.702) and Concordance Index values were better (1566.661 versus1545.505) for ESGO 2020 system for DFS, indicating that the newer edition gives a better predictive model.

Table: 22P ESGO 2016 and ESGO-2020 cross-tabulation

		ESGO-2020					Total
		Low	Intermediate	High-Intermediate	High	Advanced	
ESGO 2016	Low	216	0	0	0	0	216
	Intermediate	0	81	0	0	0	81
	High-Intermediate	0	54	4	0	0	58
	High	0	1	124	158	0	283
	Advanced	0	0	0	2	44	46
Total		216	136	128	160	44	684

Conclusions: The new 2020 risk stratification appears better predictive of survival events.

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23P Systematic literature review of real-world outcomes of chemotherapies for advanced or recurrent endometrial cancer

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Background: Prognosis in advanced or recurrent endometrial cancer (aEC) is poor (5-year overall survival [OS] 15%-17%). Paclitaxel plus carboplatin (PC) is standard of care (SOC) first-line (1L) chemotherapy (CT), and no 2L SOC is established. We conducted a systematic literature review to assess the real-world effectiveness and safety of CTs in aEC.

Methods: MEDLINE, Embase, and the Cochrane Library and five relevant conference databases (2018-2020) were searched (January 2000-July 2020) for aEC studies that met prespecified inclusion/exclusion criteria. Uterine cancer was included to capture all relevant evidence. Key outcomes included OS, progression-free survival (PFS), and adverse events (AEs).

Results: 84 publications met the criteria, and most assessed outcomes in (neo) adjuvant settings. Totals of five and six studies reported OS or PFS in 1L and ≥2L, respectively. Studies were from the US (n=6), Asia (n=2), Europe (n=2), and South America (n=1), and sample sizes ranged from 20 to 3197. CTs in 1L studies included PC (n=2), taxane-based CT (n=1), platinum-based CT (n=1), or any CT (n=1); ≥2L CTs included PC (n=3), doxorubicin (n=2), or any platinum-based CT (n=1) Median OS (mOS) was reported in four of five 1L studies: 11 to 28.5 months with CT not specified, 16.9 months with taxane-based CT, and 12.5 months with PC. A median PFS (mPFS) of 5.1 months was reported in one study. All six ≥2L studies reported mOS and mPFS. Of the four studies that investigated platinum-based therapies, two provided results split by treatment-free interval (TFI). One study reported mOS as 13 months for patients with treatment-free intervals (TFI) ≥ 6 months from prior systemic therapy and 5.5 months for those with TFI < 6 months. AEs (from 3 studies) were nausea (18.9%), palmar-plantar erythrodysesthesias (16.4%), and muscle weakness (12.3%) for doxorubicin, neurotoxicity (0%-10.6%) and hypersensitivity reaction (0%-2.4%) for PC, and neutropenia (16%) for carboplatin plus epirubicin.

Conclusions: The limited evidence found low OS and PFS for aEC following CT in both 1L and ≥2L settings, further emphasizing the high unmet need for new treatment options in this aggressive indication.

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24P Somatic tumor testing informs on mismatch repair deficiency (MMR-D) phenotype in patients with endometrial cancer

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Background: The use of somatic tumor mutational profiling is growing. We envision that somatic alterations of the MMR genes can inform on the MMR-D phenotype in endometrial cancer.

Methods: We analyzed the whole-exome sequence data of 570 patients with endometrial cancer from two previously reported studies (Nature. 2013;497(7447):67−73 and Clin Cancer Res. 2018;24(23):5939−47). Another 148 patients not previously reported were included. We used the Benjamini-Hochberg procedure (q-value) for multiple hypothesis testing.

Results: A total of 706 pts were eligible for final analysis. Pts with somatic alterations in at least one of the MMR genes (MMR alt) were 16% (112/706) of pts. MMR alt group were diagnosed at an earlier median age than the non-MMR alt group (60 vs. 64 years, p = 0.005). No significant difference among pts of different races (p=0.24). The pts with MMR alt had a superior 5-year overall survival compared to the non-MMR alt pts (93.6% vs. 72.1%, Log-rank p=0.002). Pts with MMR alt were significantly enriched with mutations in cancer-related genes, such as PTEN and PIK3CA (q<0.0001). Meanwhile, TP53 mutations were enriched in the non-MMR alt group (q<0.0001). Pts with MMR alt had significantly higher MSI-high and POLE-hypermutated phenotype tumors compared to pts with non-MMR alt (52.04% vs. 23.72% and 43.88% vs. 1.47%, p< 0.001, respectively). Pts with MMR alt showed a higher MMR-D phenotype as detected by IHC compared to non-MMR alt pts (71.43% vs. 8%, p <0.001). In pts with available transcriptomic data from non-MMR alt (419 pts) and MMR alt (98 pts) subgroups, the expression of the mRNA transcripts of MSH6 was significantly higher in the non-MMR alt compared to the MMR alt group (Log ratio =0.24, q= 0.028), suggesting decreased expression in the MMR alt group. Moreover, PD-L1 expression was negatively correlated with PMS2 expression (Spearman's R=-0.28, p<0.001).

Conclusions: Somatic MMR gene alterations delineated a subgroup of pts with endometrial cancer that had better survival, younger age, and highly mutated genomic profile. There is a significant association between somatic MMR alterations and standard MSI testing, suggesting the potential use of somatic tumor testing to identify MMR-D phenotype in tissue or liquid biopsies.

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25P The impact of COVID-19 on delaying diagnostic-therapeutic pathways of endometrial cancer patients: The Italian real-world scenario

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Background: The COVID-19 outbreak has correlated with the disruption of screening activities and diagnostic assessments. Endometrial cancer is one of the most common gynecological malignancies and it is often detected at an early stage because it frequently produces symptoms. Here, we aim to investigate the impact of the COVID-19 outbreak on patterns of presentation and treatment of endometrial cancer.

Methods: This is a retrospective study involving 54 centers in Italy. We evaluated patterns of presentation and treatment of endometrial cancer patients before (period 1: March 1, 2019, to February 29, 2020) and during (period 2: April 1, 2020, to March 31, 2021) the COVID-19 outbreak.

Results: Charts of 5,164 endometrial cancer patients were retrieved from 54 Italian centers over the whole study period. Overall, 2,718 and 2,446 women with endometrial cancer received treatment in periods 1 and 2, respectively. The prevalence of patients aged > 65 years was similar between the two study periods (1,400 (51.5%) in period 1 vs. 1,248 (51.0%); p=0.726). Similarly, the prevalence of elderly patients (i.e. aged >85 years) was comparable between groups (189 (6.9%) vs. 180 (7.4%); p=0.572). Considering data on the histological characterization, the prevalence of endometrioid FIGO grade 1, 2, and 3 was consistent over the study period (p=0.855). However, the prevalence of non-endometrioid endometrial cancer was lower in period 1 than in period 2 (15.6% vs. 17.9%; p=0.032). Surgery was the mainstay of treatment before and during the COVID-19 pandemic. Overall, 2,539 and 2,286 women received surgery in period 1 and 2, respectively (93.4% vs. 93.5%; p=0.948). Primary conservative attempts was performed in 72 (2.7%) and 56 (2.3%) patients in period 1 and 2, respectively (p=0.406). Overall, 1,280 (50.4%) and 1,021 (44.7%) patients had no adjuvant therapy in period 1 and 2, respectively (p<0.001). Adjuvant therapy use has increased during the COVID-19 pandemic (p<0.001).

Conclusions: Our data suggest that the COVID-19 pandemic had a significant impact on the characteristics and patterns of care of endometrial cancer patients. These findings highlight the need to implement healthcare services during the pandemic.

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26P Uterine sarcoma: A retrospective Tunisian study of 103 cases

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Background: Uterine sarcomas (US) are rare tumors, representing less than 3% of gynecologic malignancies and between 3% and 7% of uterine malignancies. US are characterized by being aggressive with a high rate of local and metastatic recurrence. Their management is not well codified. The aim of our study was to investigate the epidemiological, clinical, therapeutic, and prognostic characteristics of US.

Methods: This was a monocentric, descriptive, retrospective study that included patients with US treated in Salah Azaiez Tunisian oncological institute between 2000 and 2020.

Results: The study included 103 patients. The average age was 50 years. Menometrorrhagia was the main circumstance of discovery (n=70). In 73.8% of cases, the diagnosis was postoperative. Histological confirmation was done on hysterectomy specimen in 82 patients. The most frequent histological type was leiomyosarcoma in 72.8% of cases. Stage I was the most represented (41.7%). Ninety-seven patients underwent surgery, 87 of them had a total hysterectomy associated with bilateral salpingo-oophorectomy and lymph node dissection. Adjuvant chemotherapy was indicated in 16.5% of cases. Adjuvant pelvic radiotherapy was performed in 35 patients. Thirty-one patients received first-line chemotherapy. The protocol used was the combination of doxorubicin and ifosfamide in 82.3% of cases. Two patients received palliative endocrine therapy after progression to first line. After a median follow-up of 56 months, the overall survival at 2 and 5 years, all stages combined, was 56% and 40%, respectively. For metastatic stages, the overall survival was 36% and 25% at 2 and 3 years, respectively. In multivariate analysis, no prognostic factors were identified. Progression-free survival at 3 and 5 years was 82% and 72%, respectively. In multivariate analysis, only the circumstance of discovery was a prognostic factor impacting progression-free survival (p=0.042).

Conclusions: US is a particular neoplasm. Prospective randomized studies are needed to better codify its management.

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