

hysterectomy type on prognosis and the pattern of relapse in patients with stage II endometrial cancer.

**Methods** The study was approved by the Institutional Review Board; patient charts from the outpatient department of a tertiary hospital Section of Gynecologic Oncology of endometrial cancer patients with stage II disease from January 1, 2011 to December 31, 2020 were reviewed.

**Results** The recurrence-free survival was higher among patients who underwent intrafascial and extrafascial hysterectomies at 12- and 24 months. However, at 36 months, those in the radical hysterectomy group have better recurrence-free survival (66%). For patients who underwent intrafascial hysterectomy, the overall survival at 12 and 24 months were 100%. For the extrafascial hysterectomy group, at 12 and 24 months, 100% overall survival; 88.89% (CI 43.3–98.36) at 36 months. For the radical hysterectomy group, at 12, 24, and 36 months, 100% overall survival, respectively. At 36 months, the radical hysterectomy group has better overall survival.

**Conclusion/Implications** The result of the retrospective study proposes that patients with stage II endometrial cancer who underwent radical hysterectomy had fewer recurrences. The radical hysterectomy group has also better overall survival as compared to the extrafascial hysterectomy group.

EP182/#276

#### MOLECULAR CHARACTERIZATION OF STAGE I, GRADE 3 ENDOMETRIOID ENDOMETRIAL CANCER

<sup>1</sup>Bill Zamarrelli\*, <sup>2</sup>Arnaud Da Cruz Paula, <sup>1</sup>Beryl Manning-Geist, <sup>1</sup>Sarah Kim, <sup>1</sup>Mario Leitao, <sup>1</sup>Nadeem Abu-Rustum, <sup>3</sup>Vicky Makker, <sup>2</sup>Lora Ellenson, <sup>1</sup>Jennifer Mueller, <sup>2</sup>Britta Weigelt. <sup>1</sup>Memorial Sloan Kettering Cancer Center, Gynecology Service, Department of Surgery, New York, USA; <sup>2</sup>Memorial Sloan Kettering Cancer Center, Department of Pathology, New York, USA; <sup>3</sup>Memorial Sloan Kettering Cancer Center, Department of Medicine, New York, USA

10.1136/ijgc-2023-IGCS.269

**Introduction** Endometrioid endometrial cancers (EECs) are clinically and molecularly heterogeneous. We sought to investigate the molecular landscape of stage I, grade 3 EECs.

**Methods** Patients with stage I, grade 3 EECs who underwent surgical staging from 1/2014–1/2020 were identified. Clinicopathologic data were curated from electronic medical records. All EECs underwent tumor-normal targeted panel sequencing of up to 505 cancer-related genes and were classified by molecular subtype. POLE-mutated ECCs were excluded from mutational analyses, as they are ultramutated tumors.

**Results** Seventy-five patients were identified. Unlike stage I, grade 1 EECs, which are mostly of copy number (CN)-low molecular subtype, most of our stage I, grade 3 EECs were of POLE (25/75, 33%) or microsatellite instability (MSI)-high (24/75, 32%) molecular subtypes; 20% (15/75) were CN-high and 15% (11/75) CN-low. Patients with MSI-high EECs, compared to other subtypes, were more likely to have deep myometrial invasion ( $p=0.02$ ) and to have received chemotherapy ( $p=0.01$ ). After exclusion of POLE EECs, 50 patients met criteria for mutational analyses. The most common alterations affected PTEN (68%), ARID1A (46%), PIK3CA (42%), and PIK3R1 (38%). Stage I, grade 3 EECs with positive lymphovascular space invasion, compared to those without, more frequently harbored PTEN (86% vs 56%,  $p=0.03$ ), PIK3R1 (57% vs 28%,  $p=0.04$ ), and MAP2K4 (19% vs 0%,  $p=0.03$ ) mutations. Stage IB cases, compared to stage IA cases, were

more likely to harbor FBXW7 (29% vs 6%,  $p=0.04$ ) and KMT2D (64% vs 25%,  $p=0.02$ ) mutations.

**Conclusion/Implications** Stage I, grade 3 EECs are a heterogeneous group of tumors with varying mutational profiles and molecular subtypes.

EP183/#1565

#### META-ANALYSIS OF THE APPLICATION VALUE OF SENTINEL LYMPH NODE MAPPING IN EARLY STAGE HIGH-RISK ENDOMETRIAL CANCER

Lirong Zhai\*, Jianliu Wang. Peking University People's Hospital, Gynecology and Obstetrics, Beijing, China

10.1136/ijgc-2023-IGCS.270

**Introduction** Endometrial cancer is a common gynecological malignancy. Lymph node information is important for evaluating the prognosis. Current studies have shown that sentinel lymph node mapping (SLNM) in early stage low-risk endometrial cancer has satisfactory SLN detection rate, sensitivity without affecting PFS and OS. However, the feasibility of SLNM in early stage high-risk endometrial cancer is still under hot debate.

**Methods** The PubMed, Embase, Cochrane Library, Web of science, and Scopus were retrieved. The search deadline is November 1, 2022. Inclusion criteria was, over 10 patients, only high-risk endometrial cancer, detection rate, sensitivity and PFS, OS, recurrence rate were reported.

**Results** A total of 17 articles met the inclusion criteria, of which 12 were diagnostic studies, 7 were therapeutic studies. The total SLN detection rate is 85%. The bilateral detection rate of SLN is 62.5%. The detection rate of para-aortic SLN is 11.1%. The detection rate of isolated para-aortic SLN detection rate is 0.3%. The sensitivity is 91%. The SLNM group has a lower recurrence rate than that in the LAD group (OR: 0.504;  $p = 0.0001$ ); SLNM group reduces the risk of death compared to LAD group, 36-month OS is better (HR = 0.30;  $p = 0.02$ ).

**Conclusion/Implications** The application of SLNM in early stage high-risk EC patients is feasible with good SLN detection rate and sensitivity. Compared with traditional LAD, SLNM has similar positive lymph node detection rate and adjuvant therapy rate, not affecting PFS and OS. It may even reduce the risk of recurrence by identifying the lymph nodes which are most relevant to metastasis.

## AS05. Fertility/Pregnancy

EP184/#803

#### ONCOFERTILITY IN OVARIAN TUMOURS AT A TERTIARY REFERRAL CENTRE IN SINGAPORE

<sup>1</sup>Felicia Chin\*, <sup>2</sup>Tat Xin Ee, <sup>2</sup>Charissa Goh, <sup>1</sup>Qiu Ju Ng, <sup>1</sup>Jasmine Low, <sup>3</sup>Jack Chan, <sup>3</sup>Wen Yee Chay, <sup>1</sup>Weng Yan Ho, <sup>1</sup>Junjie Wang, <sup>1</sup>Teera Aggarwal, <sup>2</sup>Jessie Phoon. <sup>1</sup>KK Women's and Children's Hospital, Gynaecological Oncology, Singapore, Singapore; <sup>2</sup>KK Women's and Children's Hospital, Reproductive Medicine, Singapore, Singapore; <sup>3</sup>National Cancer Centre Singapore, Medical Oncology, Singapore, Singapore

10.1136/ijgc-2023-IGCS.271

**Introduction** The gynaecological oncofertility service was set up with the aim to provide holistic counselling to young women with gynaecological cancers, to optimize their fertility

potential in survivorship. We report our experience in fertility sparing management in ovarian tumours.

**Methods** Over a period of 30 months, 69 young women with suspicious ovarian masses were reviewed at the oncofertility clinic. Patients were jointly counselled by gynaecological oncologists and fertility specialists, elaborating fertility-sparing staging surgery (FSS) and fertility preservation (FP) options. FP was offered prior to completion surgery or adjuvant chemotherapy, and when the ovarian reserve was deemed diminished and at risk. Dedicated counselling and psychosocial support was provided by a specialty nurse.

**Results** The median age was 28 years. 88.4% of patients were nulliparous. Of 64 patients who underwent surgery, there were 23 borderline, 32 malignant, 1 Krukenberg and 9 benign ovarian tumours. FSS was performed in 90.6% of ovarian cancer (OC) cases. Among patients with borderline ovarian tumours (BOT), ovarian cystectomies and unilateral salpingo-oophorectomies were performed in 77.3% and 22.7% of cases respectively. The median stage was IC1 for OC and IB for BOT. 50% of patients had adjuvant chemotherapy. There were 6 suspected recurrences, 5 of whom underwent surgery with benign histology. Twenty-two patients were offered FP and 4 patients underwent oocyte or embryo cryopreservation. There were 4 spontaneous pregnancies with 2 livebirths, and 3 patients currently undergoing assisted reproductive therapy.

**Conclusion/Implications** Through multidisciplinary oncofertility care, young females with ovarian tumours can achieve favourable oncologic and reproductive outcomes with FSS and early FP counselling.

EP185/#904

#### KNOWLEDGE OF YOUNG WOMEN REGARDING THEIR REPRODUCTIVE HEALTH AT THE TIME OF BREAST CANCER SURGERY

Ons Kaabia\*. *Service de Gynécologie Obstétrique, Hôpital Farhat Hached, Université De Sousse, Faculté De Médecine De Sousse, Lr 12es04, Sousse, Tunisia*

10.1136/ijgc-2023-IGCS.272

**Introduction** We aim to identify patients' knowledge about their future fertility and reproductive health at the time of breast cancer surgery in order to adapt the preoperative patients' counselling.

**Methods** This is a single-institution cross-sectional observational study based on in person interview with an Arabic questionnaire to collect quantitative and qualitative data from a cohort of young women diagnosed with breast cancer before the age of 40 between January 2022 and February 2023. All interviews took place within a month prior to the breast cancer surgery in patients that had no neoadjuvant treatment.

**Results** A total of 48 women took part in the study. The mean age of the patients was 35 [24–40]. Of the 18 married participants, 10 were childless. Fertility was not a spontaneous concern reported by women when asked about their greatest fears before breast surgery. Among the single participants, 80% think that their cancer will be an obstacle to and/or delay their marital project. Among the participants, 31.2% fear a negative impact on their fertility due to a delay to conceive related to the prescription of contraception. 20.8% were aware of the possibility of fertility preservation but had no information about the availability of such options for them. The main concerns raised by the possibility of fertility preservation were the delay of cancer treatment (93.7%), the safety

regarding the recurrence and/or flare up of their cancer (95.8%).

**Conclusion/Implications** Before breast cancer surgery, reproductive health and potential fertility issues are not spontaneously expressed by patients but are present in their minds.

EP187/#658

#### CHEMOTHERAPY-INDUCED AMENORRHEA IN PATIENTS WITH OVARIAN CANCER

Ayumi Shikama\*, Kaoru Fujieda, Yuri Tenjinbayashi, Nobutaka Tsaka, Azusa Akiyama, Sari Nakao, Takeo Minaguchi, Toyomi Satoh. *Institute of Medicine, University of Tsukuba, Obstetrics and Gynecology, Tsukuba, Japan*

10.1136/ijgc-2023-IGCS.273

**Introduction** For young cancer patients, the possible impact on their fertility after treatment is important concern. If ovarian function is expected to decrease after chemotherapy, fertility preservation may be an option prior to treatment. We aimed to clarify the proportion of amenorrhea after platinum- and taxane-based chemotherapy.

**Methods** Twenty-eight patients who underwent fertility-sparing surgery for ovarian malignancies from 2000–2022 were included. Clinical information were collected retrospectively from medical records.

**Results** The median follow-up duration was 81 (6–252) months. Median age was 27 (range: 19–38) years. 15 patients had epithelial ovarian tumors, and 13 had germ cell tumors. Treatment details: no chemotherapy in 9 patients, BEP (bleomycin, etoposide, cisplatin) in 10, TC (Paclitaxel, carboplatin) in 7, DC (Docetaxel, carboplatin) in 1, PVB (Cisplatin, Vinblastine, Bleomycin) in 1. The median time to the resumption of regular menstrual cycle was 1 (1–4) M in the no-chemotherapy group, 4.1 (3–4) M in the BEP group, and 2.7 (1–5) M in the TC/DC group. While the proportion of amenorrhea at 3 months was 20% in the no-chemotherapy group, it was 68% in the chemotherapy group (80% in the BEP group and 50% in the TC/DC group). The amenorrhea at 6 months was found in only 1 patient in the PVB group.

**Conclusion/Implications** After TC/DC therapy, amenorrhea at 3 months was found in about half of the patients, but regular menstruation had resumed by 6 months. The impact on ovarian function after platinum- and taxane-based chemotherapy is considered to remain short-term.

## AS06. Genetics and epidemiology

EP190/#845

#### IMPACT OF OBESITY AND MENOPAUSAL STATUS ON DEVELOPMENT OF GYNECOLOGIC CANCERS IN KOREAN WOMEN

<sup>1</sup>Dong Won Hwang\*, <sup>2</sup>Se Il Kim, <sup>2</sup>Maria Lee, <sup>2</sup>Hee Seung Kim, <sup>2</sup>Hyun Hoon Chung, <sup>2</sup>Jae-Weon Kim, <sup>2</sup>Noh Hyun Park, <sup>2</sup>Yong-Sang Song. *<sup>1</sup>Seoul National University Hospital, Obstetrics and Gynecology, Seoul, Korea, Republic of, <sup>2</sup>Seoul National University Hospital, Department of Obstetrics and Gynecology, Seoul, Korea, Republic of*

10.1136/ijgc-2023-IGCS.274

**Introduction** To investigate the risk of gynecologic cancers according to obesity and menopausal status using a nationwide cohort in Korea.

**Methods** We identified 2,708,938 women from the National Health Insurance Service cohort, and obtained baseline body