mass index (BMI), waist circumference (WC), and other healthcare data, measured and collected during a health examinations and cancer-screening survey. By setting a normal weight/WC group (BMI, 18.5–22.9 kg/m2 or WC, 80.0–84.9 cm) as the reference, we conducted multivariate analyses.

**Results** The total follow-up duration was 22389854.63 person-years. In post-menopausal women, as the BMI classification level increased from normal to class II obesity, the risk of endometrial cancer (aHR, 2.11; 95% CI, 1.81–2.46) and ovarian cancer (aHR, 1.38; 95% CI, 1.20–1.58) significantly increased. The risk of endometrial cancer also increased as the WC classification increased from <75.0 to ≥95.0 cm. With a WC of 80.0–84.9 cm as the reference, the lowest risk of endometrial cancer was observed in WC <75.0 cm (aHR, 0.75; 95% CI, 0.67–0.84) while the highest risk was observed in WC ≥95.0 cm (aHR, 1.56; 95% CI, 1.33–1.82). In pre-menopausal women, the trends of endometrial and ovarian cancer incidence in pre-menopausal women were similar to those observed in post-menopausal women. For cervical cancer, only class II obesity was significantly associated with increased risks in both post-menopausal women (aHR, 1.18; 95% CI, 1.01–1.39) and pre-menopausal women (aHR, 1.27; 95% CI, 1.02–1.57).

**Conclusion/Implications** In Korean women, the impact of obesity on the development of gynecologic cancers differs according to the malignancy type and menopausal status.

**EP192/#809**

**CLINICAL FEATURES OF CANCERS DIAGNOSED IN PATIENTS WITH LYNCH SYNDROME-ASSOCIATED GENE GERMLINE MUTATIONS**

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**Introduction** The purpose of this study is to determine the clinical features of comorbid cancers by gene (MLH1, MSH2, MSH6, PMS2, EPCAM) in patients diagnosed with Lynch syndrome (LS).
Methods A multipanel NGS (oncorisk®) test for 56 cancer predisposition genes was performed in patients diagnosed with cancer at an early age or suspected of having an inherited cancer syndrome based on family history. Lynch syndrome associated genes were found in 112 patients. A medical record review was performed to examine the clinical features of the various cancers diagnosed in the patients.

Results Among a total of 112 patients diagnosed with Lynch syndrome, 36 (32.14%) patients were MLH1 variants, 38 (33.92%) patients had mutation in the MSH2 gene. And 16 (14.28%) patients had mutation in the MSH6 gene, 15 (13.39%) patients were PMS2. Pathogenic MLH1 and MSH2 variants caused high penetrance dominant cancer syndromes sharing similar colorectal, endometrial cancer risks, but pathogenic MSH6, PMS2 variants caused high penetrance endometrial, ovary cancers. Older MSH2 variant carriers had higher risk of cancers of the urinary tract.

Conclusion/Implications MLH1 and MSH2 are the genes with the highest number of mutations among the patients, with MLH1 being associated with a higher incidence of colorectal cancer, while MSH6, PMS2, and EPCAM are associated with a higher incidence of gynecologic cancer.

Abstract EP196/#369

Gynaecologic Oncology Surgical Cancellations in Zambia Secondary to the Lack of Blood

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Introduction Cancellations of elective surgery in low-and middle-income countries (LMIC) are common and a major hindrance for patients who are in need of this therapeutic modality. There is a knowledge gap in the literature related to cancellation of gynecologic oncology surgeries due specifically to lack of blood products. Herein we report our experience at the University Teaching Hospital (UTH) and Cancer Diseases Hospital (CDH) in Lusaka, Zambia.

Methods From January 1 through December 31, 2021, we retrospectively evaluated the surgical registry for gynecologic oncology at UTH and (CDH) to assess the number and causes of surgical cancellations with focus on lack of blood availability and/or low hemoglobin. A hemoglobin value of 10 mg/dL or more, coupled with availability of blood for possible peri-operatively transfusion were considered minimum requirements for performing major gynaecologic oncology surgeries.

Results There were a total of 24 (16.4%) surgical cancellations out of 146 scheduled gynecologic oncology cases. Table 1

![Table 1](http://ijgc.bmj.com/)

<table>
<thead>
<tr>
<th>Cause of Surgical Cancellation</th>
<th>Number of Cancellations</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Blood Availability and/or Low Hemoglobin</td>
<td>11</td>
<td>45.83%</td>
</tr>
<tr>
<td>Reason Undetermined</td>
<td>3</td>
<td>12.50%</td>
</tr>
<tr>
<td>Failed Intubation</td>
<td>2</td>
<td>8.33%</td>
</tr>
<tr>
<td>Deep Venous</td>
<td>2</td>
<td>8.33%</td>
</tr>
<tr>
<td>Unavailable Anesthesiologist</td>
<td>2</td>
<td>8.33%</td>
</tr>
<tr>
<td>Unavailable Surgeon</td>
<td>1</td>
<td>4.17%</td>
</tr>
<tr>
<td>No Longer Operable</td>
<td>1</td>
<td>4.17%</td>
</tr>
<tr>
<td>Uncontrolled Hypertension</td>
<td>1</td>
<td>4.17%</td>
</tr>
<tr>
<td>Unavailable Anesthetic Agents</td>
<td>1</td>
<td>4.17%</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>100%</td>
</tr>
</tbody>
</table>