

CR/PR,  $p < 0.01$ ). Factors that did not affect prognosis include stage, lymphovascular space invasion, depth of invasion, mismatch repair status, performance status after recurrence, or adjuvant chemotherapy with initial radiation therapy.

**Conclusions:** Four prognostic factors may have utility in clinical practice to identify women who are less likely to respond to systemic chemotherapy. External validation of this predictive model is needed. Receipt of a prior radiosensitizer does not adversely affect response to subsequent chemotherapy following recurrence and should not be an exclusion factor for clinical trials evaluating systemic therapies.

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#### Poster #23

##### High prevalence of BRCA deleterious mutations in African-American women with ovarian and/or breast cancer

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**Objectives:** To determine the frequency of genetic mutations predisposing to breast and ovarian cancer (BRCA) in an African-American population of great genetic diversity, and to determine possible barriers to testing in that community.

**Methods:** As part of an ongoing Quality Improvement study, the records of women self-identified as African-American and diagnosed with and treated for breast and/or ovarian cancer from 2014–17 were examined to determine: 1) whether BRCA 1/2 testing was offered and/or accepted, 2) presence of deleterious mutations, 3) presence of variants of undetermined significance, 3) the timing of and reasons for testing in relation to treatment, 4) demographics.

**Results:** 56 women (42-Breast, 14-ovary) were identified as being diagnosed with breast and/or ovarian cancer in the study period, and had testing performed. 10/56 (17.8%) including 8 with breast cancer and 2 with ovarian cancer, had deleterious mutations. 4/56 (7.1%) (all breast) had variants of undetermined significance. No subjects who were offered testing declined. 27/56 subjects were diagnosed in 2014–2015, and of these, 3/27(11%) underwent testing prior to/during initial treatment. 29 subjects were diagnosed in 2016–17, and 27/29(93%) underwent testing prior to/during initial treatment. Reasons for deferring testing included lack of awareness and inability to pay for testing.

**Conclusions:** Hereditary predisposition to breast/ovarian cancer, as determined by BRCA 1–2 genetic testing, is more common than anticipated in this African-American population of high genetic diversity. The use of genetic testing in this population has been limited by lack of awareness and/or inability to pay for the test. Standard screening for and counseling regarding genetic cancer risk and testing should be performed in this population.

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#### Poster #24

##### Assessing disease-related outcomes in morbidly obese endometrial cancer patients

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**Objectives:** To evaluate the impact of morbid obesity on disease outcomes in women with low risk and high risk endometrial cancer (EC).

**Methods:** Patients diagnosed with EC from 1/1/2005–12/30/2015 were evaluated. Patients were stratified by body mass index (BMI) ( $<$  or  $\geq 40$  kg/m<sup>2</sup>) and risk of recurrence (low risk (LR): stage 1–2, low or moderate grade,  $< 50\%$  myometrial invasion and endometrioid type; high risk (HR): stage 3–4, high grade,  $> 50\%$  myometrial invasion, or non-endometrioid). Patient demographics, tumor characteristics, and treatment-related outcomes were reviewed. Exclusion criteria included patients with benign disease, unknown characteristics needed for risk stratification, or BMI not available. Pearson chi-square test was used for categorical variable and ANOVA and Kruskal-Wallis for continuous factors. Analysis was performed using SAS.

**Results:** Out of 1775 patients included in the study, 1327 (74.8%) had a BMI  $< 40$  and 448 (25.2%) were  $\geq 40$ . Patients with a BMI  $\geq 40$  were significantly younger (58.9 vs 64.2 yrs), more likely to have endometrioid histology (77.5% vs 67%), lower grade (52.5% vs 37.9%), earlier stage (78.5% vs 68.8% stage 1), myometrial invasion  $< 50\%$  (65.8% vs 50.3%), and lower LVSI (23.0% vs 35.5%). Stratified by risk, LR patients with BMI  $\geq 40$  comprised 39% of the entire study population and were more likely to be younger, of black race, uninsured. Overall, 40% of LR patients underwent lymphadenectomy. Compared with patients with BMI  $< 40$ , those with BMI  $\geq 40$  in the LR group were significantly less likely to undergo lymphadenectomy ( $p < 0.0005$ ). Within the HR group, lymphadenectomy was performed in 72% of patients. Those with BMI  $\geq 40$  were significantly less likely to undergo lymphadenectomy ( $p < 0.004$ ). There was no significant difference in risk of recurrence, patterns of recurrence, or disease specific survival between BMI  $\geq 40$  and BMI  $< 40$  patients when stratified by risk group.

**Conclusions:** Morbid obesity is associated with favorable prognostic factors in patients with EC. When stratified by risk group, clinical and pathologic prognostic factors appeared to be equivalent among patients with BMI  $< 40$  and those who are morbidly obese. Morbidly obese patients are less likely to undergo lymphadenectomy regardless of risk group. However, this does not appear to impact risk of recurrence or disease specific survival. Further evaluation of long term outcomes in this group of patients is warranted.

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#### Poster #25

##### Multiple concurrent malignancies commonly seen in Immunocompetent Human Immunodeficiency Virus-infected women

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**Objectives:** To determine optimal surveillance strategies for Human Immunodeficiency Virus (HIV)-infected women with Human Papilloma Virus (HPV)-associated invasive and in situ malignancies.

**Methods:** All HIV-infected women diagnosed with an HPV-associated malignancy between 2011–2016 were identified and followed as part of an ongoing quality improvement project. The following data were collected: demographics, HIV treatment and response, malignancy treatment and response, and mortality. The data were summarized and compared using standard statistical tests.

**Results:** 17 HIV-infected women were identified with 2 or more HPV-related malignancy. The median age at time of diagnosis of initial malignancy was 31 years. 94% of the patients studied were African American. Invasive malignancies included cervix (9), vulva (7), anal (4), vagina (3), urethra/bladder (2), and oropharyngeal (3). In situ lesions included cervix (4), vulva (3), and oropharyngeal (1). Only 2 of the 17 patients had CD4 counts of less than 200 at time of initial diagnosis. Five of the 17 patients died, of whom all had a CD4 count