Methods: Using the prospectively collected National Surgical Quality Improvement Program (NSQIP) database, we reviewed all cases of radical vulvectomy from 2006 to 2012. Demographics, comorbidities, functional status, preoperative laboratory values, lymph node dissection (LND), operative time, and postoperative wound complications (infection and dehiscence) were evaluated. Wound classification was defined as clean, clean/contaminated, contaminated, and dirty/infected. Surgical complexity was characterized by concurrent non-gynecologic surgery. Descriptive analysis using univariate and bivariate tests and multivariate logistic regression models were used.
Results: We identified 387 patients who underwent radical vulvar surgery. Wound complications developed in 8% (31/387) of cases (2% developed wound dehiscence and 6% developed wound infection). In those who had LND (n = 131), the wound infection rate was 9% and dehiscence rate was 4%. In contrast, those who did not have LND had a wound infection rate of 8% and dehiscence rate of 1% ($P = 0.7$ and $P = 0.09$, respectively). Flap procedures were performed in five patients, and only one patient developed wound infection. Thirteen patients had reoperations (4%). Eighteen patients (8%) were discharged to skilled facilities. Those who were >66 years were 4 times more likely to be discharged to skilled facilities (95% CI 1.2–12.8, $P = 0.025$). In univariate analysis, risk factors for wound complications were longer operative time, lower serum albumin, and higher wound classification. Age, body mass index, and American Society of Anesthesiologists class were not associated with wound complications. In multivariate analysis, longer operative time (odds ratio 1.43, 95% CI 1.1–1.9, $P = 0.014$) was associated with wound complications controlling for surgical complexity.
Conclusions: Standard metrics such as age and body mass index were not associated with increased wound complications following radical vulvectomy and should not prohibit proceeding with surgery. Instead, factors such as nutritional status (albumin) and extent of resection should be considered and optimized. Prolonged operative time should be minimized, particularly where it is not attributed to more complex resections and closures.

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250 — Poster Session
Therapeutic dilemma: Prognostic factors and outcome for patients with neuroendocrine tumors of the cervix

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Objectives: We reviewed treatment and outcomes for neuroendocrine tumors (NET) of the cervix at a National Cancer Institute-designated Comprehensive Cancer Center.
Methods: After institutional review board approval, data on women with NET of the cervix treated at our institution between January 1, 1999 and June 30, 2014 were abstracted for analysis. Demographic, clinical, radiological, pathological, and progression-free and overall survival (PFS, OS) data were collected. T-test was used for univariate and multivariate analyses.
Results: Of 1469 women with cervical cancer, 21 (1.4%) had NET histology. The median age of those with NET was 47 years and average tumor size was 5.2 cm. Tumors >4 cm and small cell subtypes were seen in 48% and 52%, respectively. Stage IA–IB1 was noted in nine (43%), IB2–IVA in sic (29%), and IVB in sic cases. Six patients underwent primary radical hysterectomy with lymph node (LN) dissection (29%) and four (19%) received neoadjuvant treatment with external pelvic radiation (RT) or chemotherapy (CT) (2) followed by hysterectomy. Adjuvant therapy was administered in five cases (24%), with two receiving CT alone and three receiving combined CT and RT (CCR). Three patients received definitive CCR (14%), four definitive RT (19%), and one palliative CT alone. Three never followed-up after diagnosis. CT consisted of etoposide/cisplatin (n = 5), etoposide/carboplatin (n = 5), and carboplatin/paclitaxel (n = 1). Patients who received RT had significantly shorter OS ($P = 0.02$). Median PFS of 26.9 months and median OS of 35.7 months were noted, with seven recurrences in 18 patients available for follow-up (39%). Although patients with stage IA–IB1 disease had improved outcomes compared to stage IB2–IVA and IVB (PFS: 35.7 vs. 8 vs. 7.8 months; OS: 39.8 vs. 13.7 vs. 7.8 months) and lower recurrence rate (RR) (20% vs. 60% vs. 66%), this did not reach statistical significance. Other variables, including tumor size, type of treatment, age, LN status, and tobacco use, were not associated with survival or RR.
Conclusions: NET of the cervix is a rare malignancy that presents at a relatively young age with bulky tumors and advanced-stage disease. No prognostic factors were identified, although early-stage disease seems to be associated with improved survival. Optimal management is yet to be determined, and multimodality treatment is often advocated.

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251 — Poster Session
Comprehensive genetic testing: The next generation in an ovarian cancer risk assessment clinic

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Objectives: In the era of personalized medicine, identifying specific genetic mutations other than *BRCA1* and *BRAC2* that confer increased risk of heritable breast and ovarian cancer susceptibility is increasingly important. In an effort to meet these demands, we have employed several multigene next-generation genetic screening panels. The purpose of this study was to describe our experience with panel testing in an ovarian cancer risk assessment clinic.
Methods: We reviewed an institutional review-board approved, prospectively gathered database of patients evaluated in an ovarian cancer risk assessment clinic since 2013. Data evaluated included general demographics, family and personal history of cancer, frequency of genetic testing, type of test performed, frequency and types of deleterious mutations, and performance of prophylactic surgery.
Results: Since 2013, 76 women were evaluated in our clinic; 60 (79%) were Caucasian and 12 (16%) were African American. Thirty-four patients (45%) had a personal history of breast or ovarian cancer with or without a significant family history, while the remaining 42 (55%) patients had a family history of breast or ovarian cancer. Thirty-eight had *BRCA* testing, site-specific or comprehensive, and 25 underwent multigene panel testing. Panels varied from small, clinically actionable to larger. Seven of the patients who underwent panel testing had negative *BRCA* testing first. Twenty-two patients had *BRCA1/2* mutations or variants, seven had Lynch syndrome mutations, and one had an *MUTHY +* mutation. Nine patients have panels pending. Seven patients with noted mutations have undergone risk-reducing surgery, none with malignancy.
Conclusions: These data demonstrate that after appropriate pretest counseling on the benefits and challenges of multigene panel testing, patients are interested in expanded genetic testing. The use of multigene panels may allow for the identification of rarer genetic causes of personal/family histories of cancer as well as genetic causes in individuals and families with atypical presentations of well-known cancer syndromes and may be more cost-effective in cases where multiple cancer syndromes are suspected. Multigene panels