majority of patients were stage III (87.5%) with the remainder stage IV (12.5%). Median PFS was 11.1 months (0–85.9 months) for all patients, and median OS was 37.1 months (1.7–90.6). Fifty (39.1%) patients had neither a dose delay or dose reduction during therapy; 25 (19.5%) patients required both dose reduction and delay; 41 (32.0%) experienced a dose delay only, and 12 (9.4%) encountered a dose reduction only. Median PFS for patients with neither reduction nor delay was 15.2 months (range 0–75.2 months) compared to 7.2 months (range 0–47.2) for patients with both reduction and delay ($p=0.02$). Patients who experienced a dose delay alone had a median PFS of 23.1 months, but this was not statistically different compared to patients with no delay/reduction ($p=0.30$). Median OS was not significantly different between patients with no reduction/delay (38.0 months) versus patients with both reduction and delay (33.3 months) ($p=0.19$). Patients were more likely to receive G-CSF support who experienced both dose reduction and delay or dose delay alone as compared to patients with no change in chemotherapy dosing schedule ($p<0.001$).

Conclusions. Chemotherapy dose reduction and delay are associated with worse progression free survival in patients with optimally debulked advanced stage ovarian cancer. Chemotherapy dose delay alone is not associated with worse progression free survival. No difference in overall survival was observed among patients with no dose delay/reduction compared to patients with delay alone, reduction alone, or both delay and reduction.

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Advanced Ovarian Cancer: Is Cure a Reasonable Expectation?

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Objective. Modest improvements have been achieved in advanced ovarian cancer outcomes with increased emphasis on aggressive cytoreductive surgery (CRS), identification of active primary chemotherapy agents and use of sequential active salvage agents at the time of recurrence. While 5-year overall survival (OS) now approaches 50%, cure after primary therapy remains elusive. We sought to evaluate the characteristics of patients (pts) with advanced ovarian cancer (OC) who underwent CRS followed by platinum based chemotherapy who remain alive without recurrence for more than 60 months. We compared this group to pts diagnosed during the same time period who recurred in less than 60 months or those who have not recurred but have an OS <60 months.

Methods. Pts diagnosed with advanced OC (Stage III-IV) between 1994 and 2006 who were alive without recurrence at 60 or more months were identified from a single institution database. Basic demographics, tumor characteristics and treatment characteristics were abstracted and compared to pts who had recurred within 60 months. Categorical variables were compared with Chi-Square and survival analyses were performed with Kaplan–Meier and log rank test.

Results. Three hundred forty-three pts were included in this analysis. Twenty-three pts were alive without recurrence at ≥60 months; 259 pts recurred after primary therapy and 61 pts had not recurred but had not met the 60 month milestone. Median follow-up for each group was 82, 32 and 21 months, respectively. Among the 23 pts who remain disease free at 60 months, mean age at diagnosis is 58 years, 83% were Caucasian, 83% underwent CRS to <1 cm and 18% required radical procedures to do so. Stage distribution included 13% IIIA, 4% IIIB and 83% IIIC. All pts were treated with combination platinum/taxane based chemotherapy and approximately 13% received IP chemotherapy in each group. There was do difference in distribution of histologic subtypes with approximately 80% papillary serous. As compared to the other two groups, univariate analysis found residual tumor <1 cm, Stage IIIA/IIIB and younger age to be significantly associated with long term survival without recurrence. Mutivariate analysis found only residual disease <1 cm and low volume stage III remained significant with an OR for cure of 2.5 (95% CI 1.1–5.6) and 2.3 (95% CI 1.1–4.6), respectively. Performance of radical surgical procedures at the time of CRS was 18% among the long term survivors as compared to 37% among the recurred pts ($p=0.07$).

Conclusions. Outcomes for patients who present with advanced ovarian cancer have improved largely due to the development and use of multiple, active salvage regimens and better supportive care. While lengthened OS remains a laudable and feasible goal, patients hope for cure—a state achieved by very few. Patients who survive beyond 5 years without recurrence appear to be younger and have lower volume disease at presentation, and following primary surgery. Further study of this patient group from a molecular standpoint may help better delineate what features predict cure and inform future studies.

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Stage IIIC Endometrial Cancer Should be Further Stratified

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Objective. Recently data have challenged the simplified FIGO staging for stage IIIC endometrial cancer. Data suggest that high and low risk groups exist. We sought to compare IIIC node only to those with nodes and additional factors such as cytology, serosa, and or adnexa (CSA) with respect to outcome.

Methods. We performed an IRB approved retrospective chart review looking at 1218 endometrial cancers identified in the tumor registry at a single institution from the time period of 1994–2006. Of 254 surgically staged pts with advanced stage

disease, 103 were stage IIIC. Pt demographics, tumor characteristics, extent of surgery, treatment, recurrence and survival were extracted from the data base for stage IIIC nodes only compared to stage IIIC with (CSA). Statistical analyses were performed with SAS 9.1. Categorical variables were compared with chi square and Wilcox on rank sum, survival data were compared using the Kaplan–Meier method. Multivariate analysis was performed using a Cox proportional hazards model.

Results. All pts underwent a complete staging procedure to include systematic PPALND. The median age for the cohort was 63. The median follow-up was 31 months. The median PFI was 19 months and OS was 24 months. There were 64 endometrial, 25 UPSC and 14 other. The histological distributions between the comparison groups were not significant. Twenty-five patients were stage IIIC node only. Seventy-eight were stage IIIC (CSA). Of those that recurred, 18% were nodes only and 82% were IIIC (CSA). 70% of IIIC (CSA) failed distantly. There was no significant difference between the sites of recurrence. Stage IIIC with (CSA) factors was significantly more likely to have >2 nodes positive when compared to IIIC node only ($p=.05$). There was no significant difference noted in treatment. The median PFI for III C nodes only and IIIC with (CSA) factors was 40 months and 15 months respectively ($p=.05$). The median OS for IIIC and IIIC (CSA) was 51 and 21 months ($p<.0001$). In a model using age, serosa, adnexa, cytology and nodes to predict survival; only age ($p=.01$) multiple nodes ($p=.007$) and serosa involvement ($p=.009$) were significant in multivariate analysis.

Conclusion. Pts with node positive endometrial cancer have a bimodal outcome. We have noted a significant decrease in the progression free interval and overall survival in those with (CSA) plus nodes. Nodal disease combined with (CSA) versus nodal disease only should be further stratified to recognize the survival differences between these stage IIIC subgroups.

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Multiple Factor IIIA Endometrial Cancer is a Marker of Poor Prognosis

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Objective. FIGO staging defines IIIA endometrial cancer as involvement of the uterus with extension to the serosa, adnexa and or positive cytology. The literature suggests good and poor prognostic factors exist within those pts with stage III A disease. We sought to compare outcomes between single factor IIIA (SF) and multi-factor IIIA (MF) endometrial cancer.

Methods. We performed an IRB approved retrospective chart review looking at 1218 endometrial cancers identified in the tumor registry at a single institution from the time period of 1994–2006. Of 254 surgically staged pts with advanced stage disease, 49 were stage IIIA. Basic demographics, tumor characteristics, extent of surgery, treatment, recurrence and survival were extracted from the data base. Pts were categorized as having single factor IIIA(only serosa, only adnexa or only washings) or multiple factor IIIA(combination). Statistical analyses were performed with SAS 9.1. Categorical variables were compared with chi square and survival estimates were compared using the Kaplan–Meier method and log rank test. Multivariate analysis was performed with Cox proportional hazards model.

Results. The median age for this cohort was 68 yrs. The median follow-up for surviving pts was 30 mo. 37% received adjuvant RT, 29% CT, 20% CT/RT and 14% received no adjuvant therapy. Thirty-four pts had (MF) IIIA endometrial cancer and 15 had (SF). 69%were endometroid, 31% were non-endometrial $p=$ns. In (MF) IIIA endometrial cancer, 21% had (+) cytology and adnexa or serosa, 68% (+) adnexa, and cytology or serosa, 6% with (+) serosa and cytology or adnexa. In SF IIIA endometrial cancer, 40% (+) cytology, 60% (+) adnexa. There was no isolated serosal involvement. Of those that recurred, 69% were (MF) and 31% were (SF). The median PFI for stage IIIA is 25 mo. The median OS 31 mo. We observed a 50% increase in PFI between (SF) and (MF) IIIA (38 mo. vs. 19 mo.) and a 46% increase in OS between (SF) and (MF) IIIA (52 mo. vs. 24 mo.($p=.08$). In a model with age, serosa, cytology, adnexa and cervix using multivariate analysis, only serosa remained significant predictor of survival ($p=.008$).

Conclusion. We identified the subgroup of (MF) IIIA that had a poor prognosis. Serosa is a surrogate for survival. (MF) IIIA failed recurred more often. The ideal treatment for this subgroup remains to be seen.

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Nodal Distribution in Node Positive Endometrial Cancer

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Objective. In pts with endometrial cancer, numerous studies have documented the need for complete lymph node dissection. Para-aortic positive lymph nodes may be thought of as a marker for systemic disease. We sought to identify surrogates for para-aortic (PA) involvement. Additionally we sought to define the relationship between clinical and pathologic factors for this centrally occurring tumor?

Methods. We performed an IRB approved retrospective chart review looking at 1218 endometrial cancers identified in the institutional data base from the time period of 1994–2006. Two hundred fifty-four pt with advanced stage disease were identified. Only those undergoing complete surgical staging with pelvic and para-aortic lymphadnectomy were included. Individual nodal basins were defined as common, pelvic and para-aortic. One hundred thirty-six patients were identified with lymph node metastasis. Pt demographics and tumor char-