

**Conclusions:** Preliminary data suggest safety of RA IDS compared to OA IDS with no difference in time to recurrence or in time to initiation of chemotherapy. Future research should explore whether minimally invasive surgery could be used to shorten time to re-initiation of chemotherapy which could improve oncologic outcomes.

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#### Poster #23

##### Independent radiologic review in ovarian cancer research

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**Objectives:** Independent radiologic review (IRR) has been increasingly utilized in ovarian cancer clinical trials to minimize potential bias when evaluating for progression. Though there is potential for bias in non-blinded trials given the inherent subjective nature of progression-free survival (PFS) evaluation, an IRR has the potential to introduce new biases, and is associated with significant added study cost and logistical burden. The aim of our study is to evaluate the concordance in PFS and HR between investigator (INV) and (IRR) among key trials in ovarian cancer.

**Methods:** PubMed was systematically queried for randomized controlled trials involving ovarian cancer, utilizing the terms “ovarian cancer” plus “independent radiologic review”, “independent central review”, and “independent review committee”. All landmark randomized phase II-III, registration, and GOG ovarian cancer trials in addition to their supplemental data, if available, were reviewed. Studies were excluded if patients were not randomized, if they reported IRR data only and if they did not utilize IRR in the study. Studies with a separate IRR analysis were included.

**Results:** Eight studies met study criteria out of 29 evaluated. Differences in PFS medians and HR's were analyzed between INV and IRR for each study and associations were calculated utilizing logistic regression analysis. The PFS between INV and IRR was found to have a mean difference of -1.76 months (INV-IRR), median -0.4 (95% CI -3.44 - -0.08). The degree of association between INV and IRR HR was high by logistic regression analysis, with  $R^2 = 0.957$  (Correlation coefficient 0.97; 95% CI 0.91-0.99;  $P < 0.0001$ ). This illustrates in the majority of cases the INV HR and IRR HR are highly concordant. The HR ratio was determined for each study (HR IRR/HR INV) (Table 1) with a mean HR ratio of 1.03 (95% CI, 0.94-1.12,  $p = 0.82$ ) and an estimated HR difference illustrating a 10% average absolute difference between the evaluations.

**Conclusions:** Concordance was noted between both INV and IRR reported PFS and HR data in ovarian cancer. Since IRR adds significant cost, logistical burden, and potential bias while not altering the primary endpoint conclusion in any of these trials, the need for IRR is questionable and these data support use of primary investigator assessed PFS.

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#### Poster #24

##### Clinical trial participation and measures of aggressive care at the end of life in patients with ovarian cancer

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**Objectives:** Many patients with advanced ovarian cancer seek investigational therapy as a therapeutic option. In non-gynecologic cancers, clinical trial participation has been associated with measures of aggressive care at the end of life. The objective of this investigation was to examine the association between participation in clinical trials and measures of aggressive care as well as hospice care at the end of life among ovarian cancer patients.

**Methods:** With institutional approval, we conducted a retrospective review of all women treated for ovarian cancer at our institution from 2010 through 2016. We examined several clinical variables which have been identified by the National Quality Forum as measures of aggressive end of life (EOL) care including chemotherapy in the last 14 days of life, ICU admission in the last 30 days of life, and death in the acute care setting. Data were analyzed with univariable and multivariable parametric and non-parametric testing, and survivals were calculated using the Kaplan-Meier method and cox-proportional hazard models.

**Results:** We identified 175 women treated for ovarian cancer that died of disease, 19% of whom were enrolled in at least 1 clinical trial. Patients who enrolled in clinical trials experienced a higher overall survival and were found to live a median of one year after a trial. Interestingly, patients who enrolled in clinical trials were more likely to have undergone primary debulking surgery (PDS, OR .42,  $p < 0.009$ ). A cox proportional hazard model incorporating PDS and clinical trial enrollment found both to be independently associated with improved survival estimates (HR 0.63 and HR 0.53 respectively, both  $p < 0.002$ ). While clinical trial participants were more likely to start a new line of chemotherapy within 30 days of death ( $p < 0.03$ ), no association with other metrics of aggressive care at the end of life including administration of chemotherapy in the last 14 days of life, ICU admissions and death in an acute care setting was observed.

**Conclusions:** Women with ovarian cancer who are enrolled in clinical trials appear to present with an increased overall survival. While they also have a higher rate of starting a new line of chemotherapy within 30 days of death, they do not undergo more measures of aggressive care at the end of life when compared with ovarian cancer patients who are not enrolled. Further study to understand drivers of patient selection and quality of life will be crucial to understanding how clinical trial participation interacts with outcome for women with ovarian cancer.

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#### Poster #25

##### Age-related risk of postoperative mortality after cytoreductive surgery for advanced ovarian cancer

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**Objectives:** Surgical cytoreduction is a critical component of primary therapy for advanced ovarian cancer. However, patients who die within 90 days of cytoreductive surgery do not benefit from the operation and may experience significant harm. We investigate the association between age and 90-day postoperative mortality after cytoreductive surgery, and how neoadjuvant chemotherapy (NACT) modulates this association.

**Methods:** Using the National Cancer Database, we conducted an analysis of age-related trends in 90-day postoperative mortality after cytoreductive surgery among women with stage IIIC or IV epithelial