Society of Gynecologic Oncology Annual Meeting 2015 Research Highlights

In the next few weeks, research advocates and staff from the Ovarian Cancer National Alliance will create a detailed report of the important research presented at this year's annual meeting of the Society of Gynecologic Oncology. In the meantime, here a few research highlights related to ovarian cancer.

Preliminary results from the FANG tumor cell vaccine clinical trial: Dr. John Oh from the Mary Crowley Cancer Research Center in Dallas presented some early data from the phase II clinical trial of the FANG tumor cell vaccine trial. Women who enter this trial will have their tumor tissue analyzed and researchers will create a personalized cancer vaccine for them based on that analysis. The vaccine, called FANG, should help their immune systems fight the tumor. In early results, Dr. Oh and his team observed that women who received the vaccine went longer before cancer recurrence than women who did not get the vaccine. These results, while promising, are still preliminary and work will continue to replicate the results. For more, please click here.

Final results from a Phase III clinical trial of combination carboplatin, paclitaxel and Avastin following a second surgery in women with recurrent ovarian cancer: Dr. Robert Coleman presented the final data from this clinical trial run by the Gynecologic Oncology Group (trial no: GOG-213). In the trial, women whose tumors were platinum sensitive but who had disease recurrence were sent for a second debulking surgery, then given either 1) carboplatin and paclitaxel or 2) carboplatin, paclitaxel and maintenance Avastin. The researcher's data suggest that addition of Avastin might improve survival for women, but these results were not statistically significant. Following the presentation, there has been debate in the community about whether the results were "good enough" for physicians to change standard care protocols. For more, please click here.

Hereditary Cancer Panel sequencing for women with ovarian cancer: Several research groups presented data on women who had undergone hereditary cancer gene panel sequencing following a diagnosis with ovarian cancer. As we know, between 15 and 20% of women with ovarian cancer have an inherited genetic mutation that has predisposed them to the disease. Yet, when researchers examined *which* genetic mutations women had, the results were somewhat surprising: nearly 20-30% of women (depending on the study) had mutations in genes other than *BRCA1*/2 and the Lynch syndrome genes, such as *BRIP1, RAD51C/D, BARD1* and *PALB2*. These results have led to discussions around medical management of such patients. For example, while there are guidelines for preventive measures for woman with a *BRCA* mutation, it's not always clear what steps should be taken for women with one of

these less common and less penetrant mutations. The Alliance will continue to follow this field as it develops.

PARP inhibitor clinical trial results: Preliminary and intermediate results from several clinical trials of PARP inhibitors were presented at the meeting.

- Dr. Ursula Matulonis presented data that suggest there might be an overall survival benefit for women who have a *BRCA* mutation and are treated with olaparib maintenance therapy for recurrent, platinum sensitive, serous ovarian cancer. However, these conclusions were based on a small study population and will need to be further investigated.
- Dr. Matulonis also presented very early work suggesting that olaparib as a single therapy may be beneficial for women with recurrent ovarian cancer who also have a *BRCA* mutation.
- Dr. Elizabeth Swisher presented data from the ARIEL2 study of rucaparib in women who have high grade serous or endometriod ovarian cancer, regardless of *BRCA* status. As part of the study, the researchers divided patients into those with *BRCA* mutations, those who had "*BRCA*-like tumors" and all others. Rucaparib appears to work well in women with *BRCA* and "*BRCA*-like" tumors and the trial will be expanded to a Phase III clinical trial.

Preliminary results from the UK study of CA-125 as an early detection test: Dr. Ian Jacobs presented data on the long awaited study using CA-125 in combination with the ROCA algorithm to screen all women for ovarian cancer. The study involves screening 50,000 women with yearly CA-125 testing and then following them longitudinally. This group of women is then compared to a group of 100,000 women who are given normal care. The early results of the study show that CA-125 in combination with the ROCA algorithm has a sensitivity of 85.8% and specificity of 99.8%, meaning it has a positive predictive value of 20% (or will detect 1 case of ovarian cancer in every 5 that it flags as suspicious). Women who received the CA-125 and ROCA screening were more likely than the control group to have their ovarian cancer caught in early stages (II and III) vs. later stages (III and IV). However, it's not yet clear if using the CA-125 test with ROCA actually saves women's lives. The full results of this study, including any data on mortality, will be available later this year.

Impact of treatment site on survival: Using California state cancer registry data, Dr. Robert Bristow examined if the hospital where women were treated for ovarian cancer had an impact on their outcomes. He found that women treated at NCI-designated cancer centers or "high-volume" cancer centers (defined as treating nearly the same number of cases as an NCI-designated cancer center) had dramatically better outcomes than women treated at "low-volume" centers (defined as treating few women for ovarian cancer). For example, women treated at an NCI-designated cancer center typically lived 27 months longer than the average patient, and 33 months longer than those treated at "low-volume" hospitals. Survival rates for women treated at "high-volume" centers were about average.