

THE CLINICAL CANCER LETTER

Cancer research news for clinicians

2010 Breast Cancer Symposium:

Ten-Year Breast Cancer Survival Improved In Past 60 Years, MD Anderson Study Finds

A review of patient records from a large single institution shows that breast cancer survival at 10 years after diagnosis has steadily improved over the past six decades; this improvement has been attributed to advances in early detection and more effective treatments that lower relapse risks.

The results of the study were presented at the 2010 Breast Cancer Symposium, held earlier this month in Baltimore, Md.

Some other highlights of the meeting:

- A large-scale Swedish study found that women who received breast mammography screening between ages 40 and 49 had a 26 percent lower risk of dying from breast cancer than those who did not have mammography.

- Postmenopausal patients with strongly estrogen receptor-positive
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Ovarian Cancer:

Adding Topotecan To Standard Treatment Doesn't Improve Progression-Free Survival

Adding topotecan to carboplatin plus paclitaxel, the standard treatment for ovarian cancer, does not improve progression-free survival in patients and leads to greater toxicity, according to a study published online Oct. 11 in The Journal of the National Cancer Institute.

Cisplatin plus paclitaxel, and carboplatin plus paclitaxel, are the most widely accepted first-line regimens for advanced epithelial ovarian cancer. Still, most women relapse and die from their disease. One possible solution is to add a third agent, such as topotecan, which has activity in the treatment of recurrent disease. However, combining topotecan with carboplatin plus paclitaxel as a triplet therapy is problematic because of bone marrow toxicity. So, to integrate topotecan into the standard regimen, researchers tested cisplatin plus topotecan followed by carboplatin plus paclitaxel.

The phase III randomized study included 819 women aged 28-78 with newly-diagnosed stage IIB or more advanced ovarian cancer. The study was led by Paul Hoskins, of the British Columbia Cancer Agency in Vancouver and colleagues from three other groups: the NCIC Clinical Trials Group at Queen's University in Kingston, Canada, the European Organization for Research and Treatment of Cancer's Gynecologic Cancer Group, European Union, and the Grupo Español de Investigación en Cáncer de Ovario in Spain.

The women in the study were from Canada and Europe and were
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Detection, Treatment Improved Breast Cancer Survival Rates

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breast cancers who receive preoperative treatment with an aromatase inhibitors often respond to treatment and are more likely to be candidates for breastconserving surgery (BCS): A multicenter randomized trial found that postmenopausal breast cancer patients with tumors that strongly expressed estrogen receptors who received 4 months of neoadjuvant AI therapy had high rates of response and often made patients who would have required a mastectomy eligible for BCS.

- Nearly 20 percent of women with highly aggressive, difficult-to-treat triple-negative breast cancer carry a mutation in one of the BRCA genes, most often BRCA1, yet have a significantly lower risk of relapse and better survival than TNBC patients without mutations.

“Women diagnosed with breast cancer today have a much better prognosis than they did 50 years ago,” said Jennifer Obel, American Society of Clinical Oncology Cancer Communications Committee member. “We owe these advances to early detection, greater use of improved therapies, and a deeper understanding of the molecular basis of their disease. Our approach to breast cancer continues to evolve at a rapid pace.”

The symposium was sponsored by the American Society of Breast Disease, the American Society of Breast Surgeons, the American Society of Clinical Oncology, the American Society for Radiation Oncology, the

National Consortium of Breast Centers and the Society of Surgical Oncology. Susan G. Komen for the Cure is the primary supporter of the symposium.

Improvement in Breast Cancer Survival

A review of patient records from a single-institution study showed that 10-year breast cancer survival has steadily improved over the past six decades, a trend that investigators credit to improvements in detection and earlier surgeries and therapies that lower the risk of relapse.

“If patients are appropriately managed, they have a much better chance of surviving breast cancer today than they would have had 30 or 20 or even 10 years ago, because the therapies are constantly evolving and improving,” said Aman Buzdar, professor of medicine and breast medical oncology at the University of Texas MD Anderson Cancer Center, who led the work.

Improved detection, with the advent of screening mammography, has helped find cancer at earlier stages, often resulting in better prognoses. For patients with locally advanced breast cancer, using pre-operative systemic therapies to shrink the tumor has made surgery possible for many patients deemed marginal candidates or inoperable, while adjuvant therapies can substantially change outcomes and allow many to remain disease-free.

In the study, Buzdar and his co-workers examined patient records of women with local, regional and metastatic breast cancer seen at MD Anderson Cancer Center between 1944 and 2004. They estimated the patients’ 10-year overall survival and survival by stage from the date they were initially seen. The data showed steady improvement in survival over six decades.

In the 60-year period, nearly 57,000 breast cancer patients were seen at M. D. Anderson, with 12,809 having their initial therapy there. The investigators divided the patients survival percentages into three general cancer stages: local, regional and distant (metastases), with a fourth category—overall survival—also listed for each decade. In each cancer stage, there was improvement from decade to decade, and in some cases, the overall changes were dramatic.

Between 1944 and 1954, for example, the 10-year survival from all types of breast cancer combined was 25.1 percent. From 1995 to 2004, 10-year survival was 76.5 percent. Between 1944 and 1954, breast cancer survival from distant metastases was 3.3 percent compared to 22 percent during 1995 to 2004. Regional disease survival at 10 years was 16.2 percent from 1944 to 1954 and 74.1 percent from 1994 to 2004. Ten-year

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survival from local breast cancer was 55 percent and 86.1 percent, respectively.

Swedish Study On Mammography Screening

A large, nationwide Swedish study found that women who received breast mammography screening between ages 40 and 49 had a 26 percent lower risk of dying from breast cancer than those who did not have mammography.

“The benefits from routine screening mammography for younger women have been argued since the 1980s,” said Håkan Jonsson, associate professor of cancer epidemiology at Umea University in Umea, Sweden, who led the study. “We’re hoping that large population-based studies will help provide more answers.”

Studies have shown a clear reduction in breast cancer mortality with routine mammography screening for women aged 50 and over, and more modest, but significant reduction for women aged 40 to 49. Many health organizations, including ASCO, continue to support the availability of screening for women 40 to 49 based on consultation with their doctor.

Since 1986 the Swedish government has mandated screening for all women ages 50 to 69, but left it up to individual counties to decide on offering to screen women ages 40 to 49. Roughly half of all Swedish counties chose to invite women ages 40 to 49 for mammography screening, and about half offered screening to only women who were at least 50 (current screening recommendations include women 40 to 74). In an effort to estimate the effectiveness of mammography screening on breast cancer mortality, Jonsson and his colleagues compared breast cancer deaths between counties where women 40 to 49 years of age were invited to screening (study group) and areas where women below age 50 were not invited (control group).

The researchers calculated the number of deaths related to breast cancer by looking at the national cancer register. Deaths were counted as part of the study if their diagnosis was between ages 40 to 49 and the death occurred within an average 16-year follow-up period. They found a 26 percent reduction in breast cancer mortality in the group which was invited to receive screening compared to the control group and 29 percent reduction for women who actually were screened. While there are currently 600,000 women age 40-49 in Sweden, over the course of the study—which was not randomized—more than 1 million women were involved. Among women invited for screening, there were 619 breast cancer deaths in the study group and 1,205 in the control group during the follow-up period

between 1986 and 2005.

The researchers would like to retrospectively examine subgroups of women for known breast cancer risks, such as having a first-degree relative with breast cancer or giving birth for the first time at a late age, to see if there are differences in the effectiveness of mammography screening in detecting cancer and in mortality.

Selecting Breast Cancer Patients for AI Therapy

A large, multicenter, randomized phase II trial found that selecting postmenopausal breast cancer patients for aromatase inhibitor (AI) therapy based on high estrogen receptor (ER) expression in tumors resulted in high rates of response and improvements in breast conservation surgery.

Researchers found that for postmenopausal women with ER-rich tumors who are poor candidates for breast conservation therapy and are facing mastectomy, neoadjuvant (therapy given before the main treatment) AI therapy may allow women to undergo lumpectomy in 50 percent of the cases instead.

“High tumor ER levels provide a way to select patients who will do well with this [breast conservation] treatment approach,” said lead author John Olson, associate professor of surgery and chief of the section of endocrine, breast and oncologic surgery at Duke University. “These results may raise awareness that neoadjuvant endocrine therapy can be an effective option for women who want a chance to have breast conserving surgery after being told mastectomy is the only surgical option at diagnosis.”

While AI therapy has previously been shown to be effective in reducing breast tumors and enabling postmenopausal women to undergo breast conserving surgery, many physicians lack experience in this approach in the United States and employ chemotherapy instead. In addition, there is uncertainty about which of the three FDA-approved AIs should be used for a definitive clinical trial that would compare chemotherapy and endocrine therapy.

In this American College of Surgeons Oncology Group study, researchers randomized the treatment of 374 postmenopausal women with clinical stage II/III ER-rich breast cancer to 16 weeks of therapy with one of three AIs: exemestane, letrozole, or anastrozole. All of the participants at the time of enrollment were poor candidates for breast conservation surgery because of large tumor size. Roughly half of the patients were judged to be marginal candidates while the other half of patients were ineligible and were only candidates

for mastectomy. Four women were considered inoperable.

After 16 weeks, 70.9 percent of those who received letrozole, 66.7 percent who were given anastrozole and 60.5 percent of the patients given exemestane had partial or complete clinical responses, respectively. The progression rate was 7.3 percent for those who received anastrozole, 6.5 percent for the exemestane patients, and 4.7 percent for the letrozole group. After therapy, 82 percent (163/199) of the marginal group were able to undergo breast conservation surgery. In addition, approximately half (77/152, or 51 percent) of the mastectomy group and 75 percent (3/4) of the inoperable group could have conservation surgery.

The investigators are now considering a phase III study comparing chemotherapy to AI therapy to see which is more effective in reducing tumor size prior to surgery.

TNBC Patients with BRCA Mutations Have Improved Survival, Lower Relapse Risk

A small study has found that nearly 20 percent of women with highly aggressive, difficult-to-treat, triple-negative breast cancer (TNBC) also have mutations in a BRCA gene, yet have a significantly lower risk of relapse and better survival than TNBC patients without mutations.

Triple-negative breast cancers are those that lack receptors for estrogen and progesterone, as well as HER2, or human epidermal growth factor receptor 2—all targets for effective anti-cancer therapies. The findings have implications for developing more personalized treatment strategies, and could lead to increased use of genetic testing for some of these women.

“We’ve known that women with BRCA mutations have a high rate of triple-negative breast cancer, and it’s not surprising that women with triple-negative cancer have more BRCA mutations,” said Ana Maria Gonzalez-Angulo, MD, associate professor, Breast Medical Oncology, University of Texas M. D. Anderson Cancer Center, who led the work. “But, it is surprising that there’s such a difference in survival, and it’s not clear why.”

The investigators sought to find the incidence of BRCA1 or BRCA2 mutations (both germline, or inherited, and somatic, in the tumor only) in triple-negative breast cancers and determine possible prognostic significance of the mutations for relapse-free and overall survival. They examined 77 women with triple-negative breast cancer, which included 15 (19.5 percent) who carried mutations in either BRCA1 (12,

or 15.6 percent) or BRCA2 (3, or 3.9 percent).

All patients but one received treatment with anthracycline and taxane-based adjuvant chemotherapy. Patients were followed for a median of 43 months. The estimated five-year relapse-free survival was 51.7 percent for TNBC patients without BRCA mutations compared to 86.2 for mutation carriers. Similarly, the estimated five-year overall survival was 52.8 percent for patients lacking mutations and 73.3 for mutation carriers.

The researchers called the results unexpected because previous studies failed to show any differences in survival. According to Gonzalez-Angulo, “the findings could have therapeutic implications for TNBC patients because a class of DNA repair-inhibiting drugs, PARP inhibitors, appears to be more effective in patients with BRCA mutations.”

At the same time, the findings may lead to an increase in genetic testing to identify TNBC patients with BRCA1 mutations, which could provide useful information for prognosis and therapy selection.

Racial Disparities Remain In Breast Cancer Care

Researchers at Dana-Farber Cancer Institute have found that modest racial disparities remain in breast cancer care even when socioeconomic and insurance differences are accounted for.

The findings, reported online by the journal *Cancer*, are the first to examine these factors in a large-scale, national study of a diverse patient population, said the scientists, led by Rachel Freedman, of Dana-Farber’s Breast Oncology Center. Freedman said that further study is needed to identify other explanations for the treatment gap.

“We found that there are modest racial disparities in receiving recommended treatments for early breast cancer,” said Freedman. “These disparities didn’t go away when we accounted for differences in health insurance coverage or the socioeconomic status of areas where the women live.

“This is a reminder that, even with the current movements to expand health insurance coverage, some racial disparities in care may remain.”

Using a national, hospital-based database of 662,117 white, black and Hispanic women diagnosed with early stage invasive breast cancer. The study focused on comparisons of white and black women. In general, the black women were younger, had more advanced cancer at diagnosis, and were more often

uninsured or had Medicaid coverage. They also tended to live in areas with lower high-school graduation rates and lower median incomes.

The scientists computed the percentage of women who had received care according to a set of professional guidelines. These guidelines contained four recommended elements in treating women with early-stage breast cancer:

- Appropriate local-regional treatment, a combination of surgery and radiation;
- Testing all patients for the tumor's hormone receptor status to predict whether hormone-blocking treatment would be effective.
- Administration of hormone therapy for ER-positive tumors;
- Chemotherapy for women when indicated.

As expected from previous studies, the analysis revealed significant racial differences—around 10 percent—in receipt of recommended treatments except for hormone receptor status testing, which was almost always performed and was equal across the groups.

In a subsequent analysis, the researchers asked whether blacks might be less likely to receive optimal care because of inferior insurance coverage or having lower incomes and education levels.

For both blacks and whites, SES factors were not associated with differences in any of the treatment categories. The type of insurance coverage did affect the odds of receiving recommended treatments; lower odds were associated with lack of insurance, Medicaid coverage, and younger Medicare patients compared with those privately insured.

Even when insurance differences were taken out of the equation, “the racial disparities didn't go away” and remained at about 10 percent, said Freedman. “These differences are modest, but they are important given the large number of women who are diagnosed with early stage breast cancer.”

The findings leave the researchers wondering what else might be responsible for the persistent disparities. Previous studies in the field have pointed to a number of potential contributing factors, Freedman said, including blacks' personal preferences and mistrust of the medical system; doctors' biases in recommending treatments; access to care even when insurance coverage is the same; and characteristics of the facilities in which whites and blacks tend to receive their care.

Whatever the causes, said Freeman, greater efforts are needed to ensure that all women receive the most effective breast cancer care regardless of their race or ethnicity. Dana-Farber investigators are participating

in a follow-up study that will explore some of these issues, she said.

Other authors of the paper include senior author Nancy Keating of Brigham and Women's Hospital and Harvard Medical School; Elizabeth Ward of the American Cancer Society, and Eric Winer of Dana-Farber. The research was supported by a grant from Susan G. Komen for the Cure.

DCIS With Higher Density May Increase Risk For Disease

Researchers at Kaiser Permanente have found that patients with a very early form of breast cancer (ductal carcinoma in situ or DCIS) who have higher mammographic density may be at increased risk for subsequent breast cancer, especially in the breast opposite to the one with the initial cancer.

These study results are published in *Cancer Epidemiology, Biomarkers & Prevention*, a journal of the American Association for Cancer Research.

Mammographic density refers to the proportion of the breast that appears dense on a mammogram; it is one of the strongest risk factors for primary invasive breast cancer. On a mammogram, dense tissue looks white while non-dense tissue looks dark grey. The dense area consists primarily of breast ducts and connective tissue, while the non-dense tissue is mostly fat.

Results of a previous study showed that patients with DCIS who had higher mammographic density had about two to three times increased risk for a second breast cancer.

To confirm her earlier findings, Laurel A. Habel, research scientist at Kaiser Permanente's Division of Research, and colleagues conducted a larger cohort study that consisted of 935 women diagnosed with DCIS who were treated with breast-conserving surgery (i.e., not a mastectomy) between 1990 and 1997 at Kaiser Permanente of Northern California.

After reviewing medical records, evaluating mammograms at diagnosis and then calculating the risk of subsequent breast cancer events during follow-up, the researchers found that risk of second breast cancer appeared to be elevated among the women with higher density.

“While risk was elevated for both breasts, the increase was greatest and most consistent for the breast opposite to the one with the initial cancer,” Habel said.

Of the patients, 164 had a subsequent ipsilateral breast cancer (breast cancer on the original cancer-

affected breast) and 59 had a new primary cancer in the other breast during follow-up. The researchers anticipated finding an increased risk of a subsequent cancer in the breast with the initial cancer, as well as in the opposite breast.

Habel said additional studies will be needed to confirm these risk estimates and determine whether information on density can aid in risk assessment and treatment options. "Information on mammographic density may help with treatment decisions for ductal carcinoma in situ patients," she said. "While it's not a strong enough risk factor on its own, it may be possible to combine it with other factors to improve risk assessment and inform treatment decisions."

Choice Of Reconstruction Can Depend On Who Consults

When breast cancer surgeons regularly confer with plastic surgeons prior to surgery, their patients are more likely to have reconstruction, according to a new study led by researchers at the University of Michigan Comprehensive Cancer Center.

Where a woman goes for breast cancer treatment can vary widely—ranging from small private practices to large hospital settings. That choice can impact the type of care a woman receives when it comes to reconstruction.

"Breast reconstruction is a very complex treatment issue that requires a lot of discussion. Our results suggest that discussion can be quite different depending on where a patient gets initial treatment," said lead study author Steven Katz, professor of internal medicine at the U-M Medical School and of health management and policy at the U-M School of Public Health.

"Patients with similar characteristics or preferences may get a different story from different surgeons—and this depends largely on whether a plastic surgeon is on the treatment decision team from the get-go. Plastic surgeons are the ones with the expertise to explain the increasingly complicated procedure options," Katz adds.

Results of the study appear in the October issue of the journal *Medical Care*.

Researchers from the Cancer Surveillance and Outcomes Research Team, a multidisciplinary collaboration among five centers across the country, surveyed breast cancer patients and their surgeons about treatment choices.

They found that use of mastectomy over breast-conserving lumpectomy varied little by surgeon.

Primarily, women who were not eligible for lumpectomy or who preferred mastectomy received the more aggressive surgery. This supports previous research by the CanSORT team that shows surgeons generally are consistent in their approach to mastectomy use.

Reconstruction is another story. About one-third of women who undergo mastectomy go on to have breast reconstruction. While there are multiple reasons why a woman might not have reconstruction, this study found that 31 percent of the variation could be attributed solely to how often the patient's surgeon talked to a plastic surgeon prior to initial surgery.

"This is a deeply intimate and important decision that women have to make. It should be made with the right information about reconstruction options in consultation with a plastic surgeon involved up front in the treatment planning," said Katz.

Colorectal Cancer: Only 20% of Doctors Advise CRC According To Guidelines

A study of nearly 1,300 primary care physicians in the United States found that only about 20 percent of those doctors recommend colorectal cancer (CRC) screenings tests to their patients in accordance with current practice guidelines.

About 40 percent of the doctors followed some of the practice guidelines, while the remaining 40 percent never followed the practice guidelines. NCI investigator Robin Yabroff, said survey results suggest that by not using practice guidelines, many physicians either overuse or underuse screening tests.

The underuse of CRC screenings may result in fewer earlier stage or pre-invasive cancers being detected, while overuse of screening results in expensive, unnecessary screenings and puts patients at risk for certain types of screening-related complications. The study results appeared Oct. 14, in the *Journal of General Internal Medicine*.

Guidelines for CRC screening have been developed by multiple organizations, including the U.S. Preventive Services Task Force, a group of experts convened by the U.S. Public Health Service. The guidelines recommend screening for CRC using high-sensitivity fecal occult blood testing, flexible sigmoidoscopy, double-contrast barium enema, or colonoscopy.

Initiating screening at age 50 is recommended for all modalities although the time between screenings varies by modality. Having multiple modalities available

for screening allows physicians and patients to consider the risks, benefits and other attributes of CRC screening tests and to ultimately identify the option best suited to the patient. However, multiple screening modalities may also contribute to confusion about their appropriate use by physicians and patients.

Ovarian Cancer:

Topotecan Added To Treatment Didn't Improve PFS In Phase III

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randomly assigned to one of two study groups: the first arm received cisplatin and topotecan, followed by carboplatin and paclitaxel; the second arm received only carboplatin and paclitaxel.

The researchers found that after a median follow-up of 43 months, 650 patients had disease progression and 406 had died. The progression-free survival of patients in the first arm was 14.6 months compared to 16.2 months for those in the second arm. Furthermore, although survival data were not mature, there is no evidence to date that patients receiving topotecan had improved survival (with a median overall survival of 42.3 months for patients in the first arm, compared to 42.1 months for those in the second).

Patients in the first arm also had more toxicity than those in the second. The common side effects included gastrointestinal symptoms, myelosuppression, neurological toxicity and myalgia. Patients in the first arm had more myelotoxicity, nausea and vomiting, while patients in the second had more neurosensory effects and allergic reactions.

The authors concluded that carboplatin plus paclitaxel remains the best standard of care for epithelial ovarian cancer stage IIB or greater. They write, "The most sensible explanation for this lack of additional benefit is that the topotecan does not have sufficient cytotoxic impact on cells that are truly refractory to platins or taxanes."

Furthermore, they explain that a drug such as topotecan needs to be effective in the refractory setting—when the cancer grows during treatment—and not just in the resistant setting—when it recurs shortly after the end of treatment. They write, "Further cytotoxic drugs need to be able to convincingly kill truly refractory cells before being added to the preexisting standard drug or drugs for efficacy testing."

In an accompanying editorial, William P. McGuire, of the Weinberg Cancer Institute at Franklin Square Hospital Center, Baltimore, writes that the trial provides

further confirmation of the inactivity of topotecan to treat standard ovarian cancer. He writes, "In the end, neither the dose of topotecan, sequence of drug administration, nor platinum compound used in combination made any difference."

McGuire also points to the emergence of targeted therapies to treat ovarian cancer instead of cytotoxic agents. He writes, "Clearly, the lack of any benefit from adding topotecan, gemcitabine, or pegylated liposomal doxorubicin to the platinum/taxane in the intergroup trial has signaled the need to try new approaches."

NCI Cooperative Group Clinical Trials Approved

The National Cancer Institute Cancer Therapy Evaluation Program approved the following clinical research studies last month. For further information, contact the principal investigator listed.

Phase I

8354 Phase I Study of Anti-IGF-1R Monoclonal Antibody, IMC-A12, and mTOR Inhibitor, Everolimus, in Advanced Low to Intermediate Grade Neuroendocrine Carcinoma, M D Anderson Cancer Center. Yao, James C. (713) 792-2828.

8516 Randomized Drug Interaction Study of RO4929097 for Advanced Solid Tumors, University of Wisconsin Hospital and Clinics. Wilding, George (608) 263-8610.

Phase I/II

8265 A Phase 1/2 Study of SNDX-275 in Combination with Imatinib for Relapsed/Refractory Philadelphia Chromosome Positive Acute Lymphoblastic Leukemia, Johns Hopkins University. Brown, Patrick A. (410) 955-8817.

8317 Phase I/II Trial of Cediranib Alone or Cediranib and Lenalidomide in Iodine 131-Refractory Differentiated Thyroid Cancer, University of Chicago. Brown, Rebecca L. (773) 702-9458.

8511 Phase I Study of Cetuximab with RO4929097 in Metastatic Colorectal Cancer and Phase II Study of Cetuximab with RO4929097 vs Cetuximab with Placebo in Metastatic Colorectal Cancer, Moffitt Cancer Center and Research Institute. Chan, Emily (615) 322-4967.

8543 Two Phase I Studies, Followed by a Randomized Phase 2 Study of RO4929097 Combined with CNS Radiotherapy in Patients with Brain Metastases from Breast Cancer Whose Tumors are Estrogen Receptor Negative, M D Anderson Cancer

Center. Groves, Morris Dean (713) 745-3806.

Phase II

8311 Randomized Phase II Trial of Adjuvant Combined Epigenetic Therapy with 5-Azacitidine and Entinostat in Resected Stage I Non-small Cell Lung Cancer Versus Standard Care, Sidney Kimmel Comprehensive Cancer Center at Johns Hopkins Hospital. Juergens, Rosalyn Anne (443) 287-0005.

8412 Randomized, Phase II Trial of AZD6244 Alone and AZD6244 Plus Temsirolimus for Soft-Tissue Sarcomas, City of Hope. Chow, Warren Allen (626) 256-4673 x 63712.

AMC-072 Protective Effect of Quadrivalent Vaccine in Young HIV-Positive Males who have Sex with Males, AIDS-Associated Malignancies Clinical Trials Consortium. Palefsky, Joel (415) 476-1574.

RTOG-1008 A Randomized Phase II Study of Adjuvant Concurrent Radiation and Chemotherapy versus Radiation Alone in Resected High-Risk Malignant Salivary Gland Tumors, Radiation Therapy Oncology Group. Rodriguez, Cristina P. (216) 445-8688.

Phase III

GOG-0241 A GCIG Intergroup Multicenter Phase

III Trial of Open Label Carboplatin and Paclitaxel +/- NCI-Supplied Agent: Bevacizumab Compared with Oxaliplatin and Capecitabine +/- Bevacizumab as First Line Chemotherapy in Patients with Mucinous Epithelial Ovarian or Fallopian Tube Cancer (MEOC), Gynecologic Oncology Group. Gershenson, David M. (713) 745-2565.

S1011 A Phase III Surgical Trial to Evaluate the Benefit of a Standard Versus an Extended Pelvic Lymphadenectomy Performed at Time of Radical Cystectomy for Muscle Invasive Urothelial Cancer, Southwest Oncology Group. Lerner, Seth Paul (713) 798-6841.

Other

GOG-8017 Validating the Prognostic Role of ATR Mutation in Patients with Endometrioid Endometrial Cancer, Gynecologic Oncology Group. Zigelboim, Israel (314) 362-1730.

Pilot

8531 A Pilot Trial to Evaluate the Molecular Effects of RO4929097 as Neoadjuvant Therapy for Resectable Stage IIIB, IIIC or IV Melanoma, Montefiore Medical Center. Pavlick, Anna C. (212) 731-5431.

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