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THE CLINICAL CANCER LETTER

Cancer research news for clinicians

In the Cancer Centers:

Mayo Clinic Study Finds Samarium May Expand Options For Osteosarcoma

A Mayo Clinic study indicates the radioactive drug samarium may expand treatment options for osteosarcoma, offering patients with bone cancer further hope of a treatment that specifically targets and kills tumors in the bone.

In the study, 24 of the 30 patients enrolled experienced a good to excellent response to the samarium treatment. Two of the patients have been in complete remission for more than two years.

(Continued to page 2)

Technology Assessment:

NIH Panel Finds Older GI Imaging Tool Still Useful In Treating Pancreatic Diseases

An independent, non-Federal panel convened by the National Institutes of Health has concluded that in light of rapid advances in medical imaging technologies, Endoscopic Retrograde Cholangiopancreatography is evolving into a therapeutic, rather than diagnostic tool.

The panel predicted that less invasive imaging techniques will soon eclipse ERCP's value as a tool for diagnosing pancreaticobiliary diseases, but the procedure continues to hold great utility in treatment of both benign and malignant diseases of the pancreas and biliary tract.

First used about 30 years ago, ERCP is currently used by physicians to diagnose and treat problems in the liver, gallbladder, bile ducts, and pancreas. ERCP requires conscious sedation, and combines the use of x-rays and an endoscope which is inserted in a patient's mouth and guided through the esophagus, stomach, and small intestine. The procedure allows the physician to look inside these organs and to inject dye into the bile and pancreatic ducts, making them visible on an x-ray.

"As we move toward a higher-risk, therapeutic procedure, it is important that we conduct high-quality studies to determine the safety, efficacy, and effectiveness of ERCP as compared to other surgical and non-surgical interventions," said panel chairman Sidney Cohen, professor of medicine and director of research programs in the Division of Gastroenterology and Hepatology at Jefferson Medical College, Thomas Jefferson University in Philadelphia.

The panel found that the available evidence supports ERCP's merit in treating several conditions including symptomatic gallstone disease,

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Radioactive Drug In Testing For Osteosarcoma Treatment

(Continued from page 1)

The Mayo Clinic study is the first known American research study to be completed on the use of samarium for treatment of osteosarcoma. The findings are published in the current edition of the Journal of Clinical Oncology.

"Samarium is an interesting radioactive drug that's similar to isotopes that have been used for years by radiology physicians to perform bone scans for detecting bone cancer and for determining the spread of cancer from a primary site, such as a breast, to the bone," said Peter Anderson, a Mayo Clinic pediatric oncologist and lead researcher on the study. "Now our study confirms research done in Norway and Germany that for some patients, samarium also is an effective treatment for osteosarcoma.

"The beauty of samarium is that it targets the tumors in the bone and kills off the cancer cells," said Anderson. "Because it is bone-specific, samarium does not have many of the side effects often associated with chemotherapy—nausea, vomiting and fatigue. We see samarium as advancement in treatment of osteosarcoma because patients with this cancer still have a poor prognosis if the cancer cannot be adequately controlled through surgery and chemotherapy."

Osteosarcoma belongs to the sarcoma group of cancers, uncommon malignant tumors that begin in bone and form bony tumors. The majority of these patients are teenagers. The usual treatment for osteosarcoma 20 years ago was amputation of the affected arm or leg. Today, surgery remains the mainstay treatment, but in a majority of patients, the affected limb can be saved with limb-sparing surgery. Patients typically also receive eight to 12 months of chemotherapy as part of their treatment plan.

In about 10 percent of patients, surgery or chemotherapy cannot adequately control osteosarcoma. For these patients, samarium may be an option for achieving remission from the cancer. In the Mayo Clinic study, 21 patients had osteosarcoma. All of the patients in the study had failed two or more previous therapies and had multiple sites of bone cancer. The patients ranged in age from 18 to 57, with 24 being the average age.

The samarium treatment process begins with the collection of stem cells from the patient's blood. These cells are frozen and stored and then infused back into the patient two weeks after the samarium treatment is given. Patients are hospitalized an average of two days during the entire treatment.

The samarium is administered intravenously. The actual time of giving the treatment is about 30 minutes.

"The drug has a half-life of only two days, so in two weeks the drug has done its job and bones have very little radioactivity" said Anderson. "Then, the patient receives the stem cells to enable the return of blood counts."

The Food and Drug Administration approved samarium in 1997 for relieving pain in patients with cancer involving bone.

In Europe, Oyvind Bruland, of the Norwegian Radium Hospital in Oslo, Norway, has led research on the use of the drug for treatment of osteosarcoma. Anderson worked with Bruland on the use of samarium for several of his patients who had relapsed after standard treatment for osteosarcoma before initiating the study at Mayo Clinic. Other studies are now being developed at Mayo Clinic to test samarium in patients with other types of cancer inside the bones, including multiple myeloma.

* * *

Women with advanced breast cancer are being sought to participate in an early phase study at UCLA's Jonsson Cancer Center that will test two biologically targeted compounds that seek to block the signals that cause cancers to grow.

The study of the drug Herceptin, approved in

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1998 by FDA for use against advanced breast cancer, combined with the experimental compound OSI-774 (Tarceva) does not use standard treatments such as chemotherapy and radiation.

A pill taken once daily, OSI-774 is designed to block a growth receptor that prompts the excess cell proliferation associated with cancer. Herceptin is administered in weekly infusions and works in a similar way, but targets a different growth receptor, said Carolyn Britten, a UCLA Jonsson Cancer Center researcher and co-principal investigator in the study.

"This is a total biologic approach, and we hope it will be easier to tolerate than traditional therapies," said Britten, an assistant professor of hematology/oncology at UCLA.

Chemotherapy and radiation cause side effects such as fatigue, nausea, hair loss and low blood counts. Drugs that attack only cancer cells, called biologic or molecularly targeted therapies, often result in fewer side effects than conventional therapies, which kill all fast-growing cells.

The study seeks women with newly diagnosed breast cancer that has spread to other organs. Volunteers must have an overabundance in their tumor cells of a gene called HER-2/neu. About 30 percent of women with breast cancer fall into that category.

"This is a first-of-its-kind study," said Mark Pegram, director of the Women's Cancer Program at UCLA Jonsson Cancer Center and co-investigator of the study. "The scientific rationale is sound—this boxes in cancers with a multi-pronged approach."

For more information or to volunteer for the study, patients should call the clinical trials hotline at 888-798-0719.

* * *

OncoLink, the University of Pennsylvania Cancer Center's Web site, and EmergingMed have begun the Clinical Trial Match & Referral Service.

Available free to visitors of OncoLink.com, this service is the first phase of a three-year exclusive collaboration between Penn's Cancer Center and EmergingMed.com. It enables visitors to learn about clinical trials available through the University of Pennsylvania Cancer Center and to easily identify trials for which they or a loved one might be eligible.

Patients access the Clinical Trial Match & Referral Service at http://www.oncolink.com under "Treatment Options" and "Clinical Trials." From there, visitors can either view a listing of available trials by cancer type or they can fill out a simple on-line questionnaire to determine their eligibility. All submitted information is kept strictly confidential. A response will show if a patient's profile matches the enrollment criteria for any clinical trials at the University of Pennsylvania Cancer Center. If a match is made with one or more clinical trials, an EmergingMed customer service specialist, upon request, will help facilitate contact with the team conducting the trials.

The service strives to respond to requests by phone the same day an application is submitted and within 48 hours for e-mail requests.

Additional support for the Clinical Trials Match and Referral Service has been provided by Aventis Pharmaceuticals.

OncoLink was founded in 1994 by Penn cancer specialists. EmergingMed was founded in January 2000. The company's clients include Aventis Pharmaceuticals, Genentech, SuperGen, Clinical Research Group, ILEX Oncology, Protein Design Labs, Antigenics, and the University of Arizona Cancer Center.

Clinical Trials:

Femara Better Suppressor Of Estrogen, Study Finds

Data from a randomized study examining the ability of Femara to inhibit total body aromatization and suppress plasma estrogen levels in 12 postmenopausal women with metastatic breast cancer compared to Arimidex (anastrozole) have been published in the February 2002 issue of the Journal of Clinical Oncology.

The data show that Femara (2.5 mg o.d.) more effectively inhibits total body aromatization and suppresses plasma estrogen levels compared to anastrozole (1 mg o.d.). The differences between the two drugs in inhibiting total body aromatization (ovaries excepted) were statistically significant as was the suppression of two of the three major estrogens.

"We know that hormone sensitive breast cancers rely on estrogen for growth, and in this study, Femara was shown to be a more effective inhibitor of total body aromatization and suppressor of plasma estrogen levels as compared to anastrozole," said Per Eystein Lonning, professor of oncology, Haukeland University Hospital, Norway.

The primary objective of the study was to compare the effects of the non-steroidal aromatase inhibitors Femara and anastrozole on total body aromatization (the capacity of the whole body to

produce estrogens) and plasma estrogen levels.

The trial was a randomized, crossover study of 12 postmenopausal women with metastatic breast cancer whose disease was suitable for treatment with an aromatase inhibitor. Patients were treated sequentially with anastrozole 1 mg followed by Femara 2.5 mg once daily (and vice-versa), each given for six weeks in sequence. Total body aromatization was determined prior to treatment and at the end of each treatment period as were plasma levels of estrone (E1), estradiol (E2) and estrone sulfate (E1S).

The study revealed that whereas on-treatment levels of aromatization were detectable in 11 of 12 patients during treatment with anastrozole (mean percentage inhibition in the whole group 97.3%), they were undetectable in all of the 12 patients during treatment with Femara (> 99.1% suppression in all patients; Wilcoxon, P = .0022, comparing the two drug regimens).

Treatment with Femara as compared to anastrozole suppressed mean plasma estrogen levels as follows: E1 (84.3% vs. 81.0%), E1S (98.0% vs. 93.5%) and E2 (87.8% vs. 84.9%) respectively. The suppression of plasma levels of E1 and E1S also was found to be better during treatment with Femara compared to anastrozole (P= .019 and P= .0037, respectively). Since the levels of E2 are already very low in postmenopausal women, it was not possible to measure a statistically significant difference for this parameter.

Based on these findings, the authors concluded that Femara is a more effective inhibitor of total body aromatization and suppressor of plasma estrogen levels compared to anastrozole in postmenopausal women with metastatic breast cancer. The clinical relevance of this finding is yet to be determined.

Femara an aromatase inhibitor, is an oral once-a-day first-line treatment for postmenopausal women with hormone receptor positive or hormone receptor unknown locally advanced or metastatic breast cancer.

At the 2001 San Antonio Breast Cancer Symposium, phase III data were presented demonstrating that Femara may improve survival of postmenopausal women with locally advanced or metastatic breast cancer who are appropriate for hormone therapy, when compared to tamoxifen. The data stemmed from the largest single study ever to evaluate a hormonal therapy in advanced breast cancer. FDA approved Femara in the first-line indication in January 2001.

* * *

The oral chemotherapy Xeloda (capecitabine) provides significant clinical benefit for patients with previously untreated advanced or metastatic pancreatic cancer, according to a study.

The data, from a phase II trial involving 42 patients, with Thomas Cartwright, of Ocola (Fla.) Oncology and US Oncology Inc. as the principal investigator, shows clinical benefit response of 24 percent and an overall tumor response rate of 9.5 percent for patients treated with Xeloda.

The median time to objective response was 85 days (range 47-91 days).

The study was published in a January issue of the Journal of Clinical Oncology.

Last year, FDA approved Xeloda in combination with Taxotere (docetaxel) for the treatment of metastatic breast cancer after failure of anthracyline therapy. Xeloda also is indicated as first-line treatment of patients with metastatic colorectal cancer when treatment with fluoropyrimidine therapy alone is preferred, as well as for the treatment of patients with metastatic breast cancer resistant to both paclitaxel and an anthracycline-containing regimen or resistant to paclitaxel and for whom further anthracycline therapy is not indicated.

"Identifying new therapy options to treat pancreatic cancer is critical as current options are very limited and success is generally poor," said Cartwright. "Patients respond differently to different therapies; therefore, physicians need multiple options to consider. Our research suggests that Xeloda deserves more consideration and advanced study in pancreatic cancer."

Currently, the only product approved by the FDA for the treatment of pancreatic cancer is Gemzar® (gemcitabine).

Of the 41 patients with measurable disease, three had a partial response, for an objective response rate of 7.3 percent. One patient with nonmeasurable disease showed improved residual disease, with a positive clinical benefit response. Thus there were a total of four responders among the 42 patients treated, for an overall response rate of 9.5 percent (90 percent CI). The median survival was 182 days (6 months) (95 percent CI, 85-274 days) and duration of response ranged from 208–566 days. All patients (22 men and 20 women) were treated with Xeloda 1250mg/m^2/BID days 1-14 followed by a one week rest period.

Xeloda was generally well tolerated in this study. The most common treatment-related adverse events were hand-foot syndrome and nausea, each occurring

in approximately 50 percent of patients. The majority of adverse events were grade 1 or 2. The predominant grade 3 toxicities were hand-foot syndrome (17 percent), diarrhea (12 percent), and nausea (10 percent). Two patients (5%) experienced grade 4 diarrhea. There was no other grade 4 toxicity and there were no toxicity-related deaths.

Xeloda is manufactured by Roche.

Supportive Care:

Recombinant Protein C Cuts Risk Of Sepsis Death

By Lawrence M. Prescott

Administration of drotreogin alfa (activated), a recombinant form of human activated protein C approved by FDA for adult patients with severe sepsis, has been shown to significantly reduce the risk of all-cause mortality in these individuals, according to Gary Garber, head of the division of infectious diseases, department of medicine, University of Ottawa and Ottawa Hospital, Ottawa, Ontario.

Garber presented study results at the 41st Interscience Conference on Antimicrobial Agents and Chemotherapy.

"Results from the PROWESS (Recombinant Human Activated Protein C Worldwide Evaluation in Severe Sepsis) trial point out that, at 28 days, all-cause mortality in the activated protein C arm had a six percent decline in absolute mortality compared to placebo and that's a relative reduction of 20%, making this the first sepsis study to actually show a difference," said Garber.

Earlier investigations had determined that activated protein C is an important modulator of the coagulation and inflammation associated with severe sepsis, but sepsis may impair the conversion of protein C to its active form, leading to tissue damage, organ failure, and death, Garber said. These findings led to development of the genetically-engineered recombinant form of human activated protein C known as drotreogin alfa (activated). Initial positive results in animals and humans led to the initiation of the PROWESS trial.

In the phase III trial, a total of 1690 patients with severe sepsis, having three or more signs of systemic inflammation and at least one organ dysfunction, were randomized to placebo (840 pts) or drotreogin alfa (activated) (850 pts) intravenously at a constant rate for 96 hours. Patients were followed for 28 days or until death, the primary endpoint being 28-day all-cause mortality. Patients also were monitored for adverse events, changes in vital signs, laboratory variables and results of microbiologic cultures.

At 28 days followup, 30.8 percent of patients on placebo died compared to 24.7 percent of those treated with drotreogin alfa (activated) had died, for an absolute reduction in all-cause mortality of 6.0 percent favoring treatment with drotreogin alfa (activated), Garber said. This represented a relative reduction in the risk of all-cause mortality of 19.4 percent in favor of drotreogin alfa (activated) compared to placebo. In addition, a secondary analysis of microbiological data showed that this beneficial treatment affect was completely independent of bacterial pathogen classification.

It should be pointed out that in the midst of the study in June 2000, enrollment in the trial was stopped early by an independent data and safety monitoring board when an interim analysis indicated that the trial results met prespecified FDA criteria for reduced mortality, which demonstrated the test drug efficacy, said Garber.

Also, the morbidity results were of interest, Garber said. Patients in the drotreogin alfa (activated) arm of the trial did far better in resolving both cardiovascular and respiratory function, with more vasopressor-free days and more ventilator-free days. At 28 days, it appears that of people who were going to die, more survived (59 people surviving); of people who would of perhaps survived, more left the intensive care unit; and of people who perhaps would have been on the wards, more patients actually went home. This demonstrated an effect of treatment with drotreogin alfa (activated) that went right through all the different aspects of hospital care.

A key concern of the study was drug-related side effects, as this was a very sick group of patients (75 percent with two or more organ failures and APACHE scores over 25) sensitive to small imbalances and drug interactions, Garber said. Overall, however, the administration of drotreogin alfa (activated) was not associated with an increased rate of complications, other than bleeding. There were no hematologic problems or difficulties with liver or renal impairment. Looking at the incidence of serious bleeding events, there was no statistical significance between serious bleeding in the placebo group (2.0 percent) or the active treatment group (3.5 percent), and these events occurred mainly among a small percentage of patients with a predisposition to bleeding.

Antidepressant Provides Cool Choice For Hot Flashes

Long-term use of the antidepressant drug venlafaxine provides women treated for breast cancer with safe and effective relief from hot flashes, according to a new study.

This antidepressant also can be an alternative to estrogen for women who want a nonhormonal treatment for their hot flashes.

The study by Mayo Clinic researchers found that women receiving venlafaxine over eight weeks maintained approximately a 60 percent reduction in their hot flashes. A total of 102 postmenopausal women participated in the study. The findings of the eight-week evaluation mirrored the results of the first phase of this study—a four-week double-blinded, randomized study that involved more than 200 women.

The results were published in the February edition of Oncology Nursing Forum.

"The clear message is that now many women with breast cancer do not have to suffer with their hot flashes and that women who want a non-estrogenic choice of treatment now have one," said Charles Loprinzi, a Mayo oncologist. "The study also further reassures physicians and other health care providers that venlafaxine is a safe and effective nonhormonal treatment they can consider for their postmenopausal patients."

Loprinzi co-authored the study with Debra Barton, a Mayo Clinic oncology nurse researcher.

"We know from our previous study that venlafaxine works in the short term to control hot flashes," said Barton. "This follow-up study provides evidence that venlafaxine continues to be effective and well tolerated over a longer period of time."

Hot flashes are a major problem for many postmenopausal women. In women without breast cancer, hormone replacement therapy involving estrogen is the typical treatment prescribed to relieve the problem. That is not the case for women with breast cancer. Frequently, the chemotherapy used to treat the cancer causes the woman to go into early menopause and experience severe hot flashes. Because of the concern that estrogen may lead to the growth of breast cancer cells, these women are often denied estrogen for hot flashes.

The newer antidepressants, of which venlafaxine is one, offer more hope for nonhormonal management of hot flashes. These newer antidepressants work to control various neurotransmitters in the brain. Some of those neurotransmitters are thought to trigger hot flashes.

"In a dose of 75 mg per day, extended-release venlafaxine offered an average 60 percent reduction in the frequency of hot flashes," said Loprinzi. "Women in both studies also noted that venlafaxine seemed to reduce the severity of their hot flashes."

The side effects of venlafaxine include mild appetite loss, dry mouth and, in some women, nausea. Of the minority of women in this study experiencing nausea from venlafaxine, most rated their nausea as relatively mild and transitory. In about 10 percent of the women, nausea was a more prominent problem.

Increased Lung Cancer Risk After Hodgkin's Treatment

People with Hodgkin's disease who receive chemotherapy, radiotherapy, or a combination of the two treatments, are at higher risk of developing lung cancer, according to a report in the Feb. 6 issue of the Journal of the National Cancer Institute.

The study also finds a higher risk for lung cancer among smokers treated with both radiotherapy and chemotherapy.

"It was the combined effect of smoking and treatment that accounted for the bulk of lung cancers in this study, underscoring the importance of smoking cessation in the management of patients with Hodgkin's disease," the authors conclude.

"It is clear that the tremendous improvement in the treatment of HD far outweighs any therapy-related risks of lung cancers, especially when compared with the enormous burden imposed by tobacco," said Lois Travis, of the National Cancer Institute's Division of Cancer Epidemiology and Genetics in Bethesda, Md., and first author of the study.

While 7,000 people a year are diagnosed with HD in the U.S., it is among the more treatable and curable types of cancer. Second cancers, which can arise after a patient is diagnosed with HD, constitute the No. 1 cause of death in these patients. Lung cancer is the most frequent solid tumor seen in this group. However, data on the reasons behind the increased risk have been sparse and inconsistent.

For this study, the researchers looked at many different factors, but focused on three main measures: the type and cumulative amount of chemotherapy drugs, the radiation dose, and tobacco use. All three exposures contributed significantly to elevated lung cancer risks. Tobacco use, chemotherapy, and

radiotherapy doses of five Gray (Gy) or more were reported in 96 percent, 63 percent, and 53 percent of case subjects (those who developed lung cancer), respectively, and in 70 percent, 52 percent, and 41 percent of patients who did not develop lung cancer.

Subjects who received either radiotherapy alone or chemotherapy with alkylating agents experienced a significantly increased risk of lung cancer. And when researchers looked at the group of patients who received both alkylating agents and radiotherapy, the numbers showed risks that were additive.

"We found that chemotherapy for Hodgkin's disease—specifically treatment with alkylating agents—increases risk four-fold and radiation treatment (radiotherapy) increases the risk of lung cancer almost six-fold," said Travis. "When the number of cycles and dose of either type of treatment increased, risk increased again. When we examined the combined effects of chemotherapy and radiotherapy, the risk was approximately eight-fold, suggesting that combination therapy may increase lung cancer risk in an additive fashion."

Researchers also demonstrated that lung cancer risk increased with increasing total amounts of either alkylating agents or radiotherapy dose.

In order to conduct the study, researchers from several countries collaborated to assemble over 19,000 patients diagnosed with HD between 1965 and 1994. This large group of patients represents a unique cohort, comprising information from seven cancer registries: two in the United States, one in Canada, three in Scandinavia and one in the Netherlands.

Within this group, scientists identified 222 case subjects who developed lung cancer and 444 control subjects who did not develop lung cancer. In order to better examine the risk factors for lung cancer in HD patients, the researchers compared these two groups to each other, in what is called a case-control study. Researchers also wanted to quantify the role of smoking and tobacco use in the development of lung cancer in this group.

Of the lung cancers that were diagnosed, researchers estimated that approximately 10 percent were due to treatment alone, 63 percent were due to treatment and smoking combination, 24 percent were due to smoking alone, and 3 percent were cases in which neither smoking nor therapy played a role.

Smoking appeared to multiply the risk of lung cancer. The largest risks for lung cancer were seen in individuals who were heavy smokers and received both radiotherapy and alkylating agents.

ERCP Best For Diagnosing Some Types Of Cancers

(Continued from page 1)

common bile duct stones, recurrent pancreatitis, and pancreatic pseudocysts. In addition, ERCP with endoscopic sphincterotomy and stone removal is valuable for patients with jaundice due to stones in the common bile duct, dilated common bile duct, cholangitis, or acute pancreatitis. The panel also noted, however, that the role of ERCP is unclear in the evaluation or management of abdominal pain without specific anatomic or biochemical abnormalities referable to the common bile duct or pancreas.

Panelists concluded that ERCP remains the best means for diagnosing suspected ampullary cancers and for patients with pancreatic or biliary cancer who are not candidates for surgery. In these cases, ERCP confers the advantage of palliation of biliary obstruction.

Though enthusiastic about ERCP's therapeutic potential, the panel was careful to note substantial risks involved in the procedure as well. The panel stressed that appropriate training and expertise are necessary, especially for advanced ERCP, and that avoiding unnecessary ERCP is the best way to reduce complications such as post-procedure pancreatitis. Because the highest rate of complications may occur in the group of patients that least needs ERCP, physicians must be particularly cautious with regard to patient selection, and avoid ERCP when, for example, there is a low likelihood of stone or stricture, especially in women with recurrent pain, a normal bilirubin, and no other sign of biliary disease.

The panel emphasized a critical need to improve the quality of clinical investigation in pancreaticobiliary diseases in general, and specifically ERCP, and to that end recommended formation of a cooperative group to foster multicenter involvement in the design and conduct of large clinical trials. The panel advocated randomized, prospective trials to assess both benefits and risks of ERCP compared to other diagnostic and therapeutic interventions for biliary and pancreatic problems.

The 13-member panel included representation from gastroenterology, hepatology, clinical epidemiology, oncology, biostatistics, surgery, health services research, radiology, internal medicine, and the public. The panel issued its statement at the conclusion of an NIH State-of-the-Science Conference. The conference brought together experts

to present the latest research on the procedure. The panel also reviewed an extensive collection of literature related to ERCP, including a systematic review of the available evidence prepared by the Blue Cross Blue Shield Technology Evaluation Center, an Evidence-based Practice Center under the auspices of Agency for Healthcare Research and Quality.

The National Institute of Diabetes and Digestive and Kidney Diseases and the NIH Office of Medical Applications of Research sponsored the conference. Co-sponsors included the National Cancer Institute and the U.S. Food and Drug Administration.

The full text of the panel's statement is available at http://consensus.nih.gov. A summary of the evidence report prepared by BCBS Technology Evaluation Center is available at http://www.ahrq.gov/clinic/epcsums/ercpsum.htm.

Print copies are also available by calling 1-800-358-9295.

Clinical Trials Approved By NCI Last Month Listed

The National Cancer Institute's Cancer Therapy Evaluation Program Approved the following clinical research studies last month.

For further information about a study, contact the principal investigator listed.

Phase I

Phase I Study of Tirapazamine, Paclitaxel and Carboplatin with Concurrent Radiation Followed by Tirapazamine/Paclitaxel/Carboplatin Consolidation for Stage III Non-Small Cell Lung Cancer. City of Hope Medical Center, protocol 571, Lau, Derick, phone 916-734-3771.

Phase I Trial to Evaluate Repetitive Intravenous Doses of Gadolinium-Texaphyrin as a Radiosensitizer in Patients with Glioblastoma Multi Forme. NABTT Brain Tumor Consortium, protocol NABTT-2116, Pearlman, James, phone 813-972-4673.

Phase I Study of ZD 1839 in Combination with Radiation and Chemotherapy in Locally Advanced Squamous Cell Carcinoma of the Head and Neck. University of Colorado, protocol 4551, Raben, David, phone 720-848-0116.

Phase I/II

Open-label Study of MDX-CTLA4 in Combination with gp100 Peptides Emulsified with Montanide ISA 51 in the Treatment of Patients with Stage IV Melanoma. NCI Surgery Branch, protocol 5743, Rosenberg, Steven, phone 301-496-4164.

Trial of Neoadjuvant Androgen Suppression and Dose Escalation Transperineal Ultrasound-Guided Brachytherapy for Locally Recurrent Prostate Adenocarcinoma Following External Beam Radiotherapy. North Central Cancer Treatment Group, protocol N0052, Pisansky, Thomas, phone 507-284-4655.

Phase II Study of OSI-774 in Metastatic Colorectal Cancer. Princess Margaret Hospital Phase II Consortium, protocol 5378, Oza, Amit, phone 416-946-2818.

Phase II Evaluation of OSI-774 in the Treatment of Persistent or Recurrent Squamous Cell Carcinoma of the Cervix. Gynecologic Oncology Group, protocol GOG-0227-D, Schilder, Russell, phone 215-728-3545.

Phase II Study of CCI-779 in Previously Treated Patients with Mantle Cell Non-Hodgkin's Lymphoma. North Central Cancer Treatment Group, protocol N0186, Witzig, Thomas, phone 507-284-0527.

Phase II Trial of Pre-Irradiation and Concurrent Temozolmide in Patients with Newly Diagnosed Anaplastic Oligodendrogliomas and Mixed Anaplastic Oligoastrocytomas. Radiation Therapy Oncology Group, protocol RTOG-BR-0131, Vogelbaum, Michael, phone 216-444-8564.

Phase II Study of OSI-774 in Unresectable or Metastatic Adenocarcinoma of the Stomach and Gastroesophageal Junction. Southwest Oncology Group, protocol S0127, Dragovich, Tomislav, phone 520-626-7725.

Phase III

Use of Intravenous Gammaglobulin Therapy for Patients with Neuroblastoma Associated with Opsoclonus-Myoclonus. Children's Oncology Group, protocol ANBL00P3, De Alarcon, Pedro, phone 804-924-5105.

Phase III Study of Conventional Radiation Therapy Plus Thalidomide Versus Conventional Radiation Therapy for Multiple Brain Metastases. Radiation Therapy Oncology Group, protocol RTOG-BR-0118, Knisely, Jonathan, phone 203-785-2960.

Other

Molecular Markers as Predictors of Relapse and Survival in Patients with Intermediate and High Risk, Early Stage Cervical Cancer. Gynecologic Oncology Group, protocol GOG-9911, Monk, Bradley, phone 714-456-6570.