Vol. 28 No. 2
February 2005

THE
CLINICAL CANCER LETTER

Cancer research news for clinicians

Tarceva Added To Gemcitabine Improves Pancreatic Cancer Survival, Study Finds

A randomized phase III clinical study of Tarceva (erlotinib) plus gemcitabine chemotherapy in patients with locally advanced or metastatic pancreatic cancer met its primary endpoint by demonstrating a statistically significant 23.5 percent improvement in overall survival when compared to patients receiving gemcitabine plus placebo, according to the three companies involved, OSI Pharmaceuticals Inc., Genentech Inc., and Roche.

"The results of this trial underscore the importance and potential utility of Tarceva in combination with gemcitabine in the treatment of patients with pancreatic cancer," said Malcolm Moore, study chair and medical oncologist at

(Continued to page 2)

Cancer Prevention:

Finasteride Could Save Many Years Of Life If Widely Used For Prostate Cancer Prevention

A follow-up analysis of data from the Southwest Oncology Group's Prostate Cancer Prevention Trial shows that if finasteride were prescribed as a preventive therapy to older men, an estimated 316,760 years of life over 10 years would be saved through the prevention of prostate cancer, the researchers said.

The primary results of the PCPT were published in 2004 and showed a 24.8 percent reduction in prostate cancer due to finasteride. However, the study also found a potential increase in the rate of high-grade prostate cancers, leading to debate about whether older men should take finasteride.

In this new follow-up analysis entitled "Estimated Impact of the Prostate Cancer Prevention Trial on Population Mortality," researchers used a statistical model and found that the benefits of finasteride would far outweigh the possible risks.

The analysis was published in the Feb. 28 online version of the journal CANCER and will appear in the print edition of the journal in April.

"We consider this to be a real breakthrough in analysis," said Charles Coltman Jr., chairman of the Southwest Oncology Group and an author on the study. "Clearly, finasteride would benefit older men by preventing prostate cancer."

Finasteride is already widely prescribed for other purposes, including reducing the size of the prostate gland.

The analysis extends the reporting of the main results, said Joseph Unger, lead author. "We now have actually shown that 'person years' would be saved," said Unger, a biostatistician at the SWOG Statistical Center in Seattle.

(Continued to page 2)

PO Box 9905
Washington DC 20016
Telephone 202-362-1809

Tarceva Extends Survival In Pancreatic Cancer

(Continued from page 1)

Princess Margaret Hospital in Toronto, and chairman of the Gastrointestinal Disease Site, NCIC Clinical Trials Group. "These Tarceva results represent an important medical advance in the treatment of patients with pancreatic cancer and we hope will open the door to a completely new approach to treating the disease."

The data were presented at the Gastrointestinal Cancers Symposium in Hollywood, Fla. Tarceva is the first drug shown in a phase III trial to prolong survival when added to the standard of care (gemcitabine) in the treatment of patients with previously untreated advanced pancreatic cancer.

The study data demonstrated an improvement in overall survival for patients receiving Tarceva plus gemcitabine compared to patients receiving gemcitabine plus placebo (hazard ratio = 0.81, p-value = 0.025; a hazard ratio of less than one indicates a decreased risk of death and a p-value of less than 0.05 indicates statistical significance).

Twenty-four percent of patients receiving Tarceva plus gemcitabine were alive after one year compared to 17 percent of patients receiving gemcitabine plus placebo. Median survival in the Tarceva plus gemcitabine arm was 6.4 months compared to 5.9 months in the gemcitabine plus placebo arm.

An exploratory analysis of survival by pre-treatment characteristics also showed that patients with metastatic disease and patients with poor performance status derived a survival benefit.

Progression-free survival in the Tarceva plus gemcitabine arm also was significantly improved (hazard ratio = 0.76, p-value = 0.003), although there was virtually no difference in tumor response (9 percent in patients receiving Tarceva plus gemcitabine versus 8 percent in the gemcitabine plus placebo arm).

The international study was a multi-center, randomized, double-blind, placebo-controlled phase III trial evaluating Tarceva at 100 mg/day or 150 mg/day in patients with locally advanced or metastatic pancreatic cancer.

The study randomized patients to receive either gemcitabine plus concurrent Tarceva or gemcitabine plus placebo. Gemcitabine was dosed at 1,000 mg/m2 IV once weekly. A total of 569 patients were randomized in the study, 521 patients were randomized to receive 100 mg/day of Tarceva plus gemcitabine or gemcitabine plus placebo, and 48 patients received 150 mg/day of Tarceva plus gemcitabine or gemcitabine plus placebo. Approximately 75 percent of the patients in the study had metastatic disease and 25 percent had locally advanced disease. The study had sites in the United States, Asia, Canada, Europe, Australia and South America.

The study was conducted by the National Cancer Institute of Canada Clinical Trials Group based at Queen's University, Ontario in collaboration with OSI Pharmaceuticals.

A preliminary analysis of the safety data did not reveal any unexpected safety signals beyond that seen in previous studies of Tarceva in both monotherapy and combination settings.

As expected, rash and diarrhea were the principal Tarceva related side effects seen in the study. Rash was reported by 72 percent of patients who received Tarceva plus gemcitabine and by 28 percent of patients who received gemcitabine plus placebo. Diarrhea was reported by 51 percent of patients who received Tarceva plus gemcitabine and by 36 percent of patients who received gemcitabine plus placebo.

The Clinical Cancer Letter

Member, Newsletter and Electronic Publishers Association

World Wide Web: http://www.cancerletter.com

Publisher: Kirsten Boyd Goldberg
Editorial Assistant: Shelley Whitmore Wolfe

Editorial: 202-362-1809 Fax: 202-318-4030
PO Box 9905, Washington DC 20016
Customer Service FAQ at www.cancerletter.com

Customer Service: 800-513-7042
PO Box 40724, Nashville TN 37204-0724

THE CLINICAL CANCER LETTER (ISSN 164-985X). Published monthly, subscription $119 per year, by The Cancer Letter Inc.

Cancer Prevention:

Finasteride Could Save Years Preventing Prostate Cancer

(Continued from page 1)

"While we feel this analysis clearly shows the benefit of taking finasteride to prevent prostate cancer, we are continuing to study why some of the men who took finasteride while on the study developed high-grade

cancers," said Ian Thompson, lead study coordinator for PCPT and another author on the analysis, and chairman of the Department of Urology at the University of Texas Health Science Center at San Antonio.

While it was being conducted, the NCI-funded PCPT was the largest-ever prostate cancer prevention study in the U.S. Since then, the SWOG Selenium and Vitamin E Cancer Prevention Trial has enrolled more than 35,000 men.

Center Studies Prevention For Endometrial Cancer

Researchers at The Cancer Institute of New Jersey are currently studying a new method of prevention for endometrial cancer. The study is testing whether Mirena, a medicated intrauterine device, can prevent endometrial cancer and precancer in heavy women, who are at an increased risk for the disease.

Women over 40 who are very heavy are considered at high risk for developing endometrial cancer.

Mirena is an intrauterine system that contains the medication levonorgestrel and is usually used to prevent pregnancy. Mirena has been used for more than 12 years in Europe and has minimal side effects, when used for birth control.

"Women who are very heavy have an increased risk of getting endometrial cancer and dying of the disease," said Allison Wagreich, principal investigator for the study. "It is our hope that through participation in this study, women can help reduce this statistic."

To be eligible for the study, women must be between the ages of 40 and 50 and be very heavy. For example, a woman who is 5 feet 5 inches must weigh at least 240 pounds. Participants will have Mirena inserted and be asked to keep a record of vaginal bleeding for one year. They will be seen at CINJ about seven times during the study and will have regular pelvic exams and endometrial biopsies.

Fruit, Vegetables Don't Prevent Protect Against Breast Cancer

The consumption of vegetables and fruits does not protect against breast cancer, a large European study has concluded.

In the study, which included almost 300,000 participants from eight European countries, more than 3,500 women developed breast cancer.

In the large European Prospective Investigation into Cancer and Nutrition (EPIC) no protective effect could be established. This investigation is coordinated by the International Agency for Research on Cancer, and co-financed by the European Commission and several national cancer charities.

"This investigation is the largest until now and spanning a wide range of vegetables and fruit consumption by participants from the North to the South of Europe," said Carla van Gils and Petra Peeters from the University Medical Center Utrecht (the Netherlands) that took the lead in this analysis, with Elio Riboli from IARC. "It provides evidence that the consumption of vegetables and fruits during adulthood or midlife does not lower breast cancer risk."

"Although these findings may be disappointing, there are indications that consumption of fruits and vegetables may be protective for cancers of the mouth, pharynx, larynx, stomach and possibly colorectum and lung," Riboli said. "Furthermore, fruit and vegetable consumption has been shown to lower blood pressure and the risk of cardiovascular disease, therefore there are good reasons to recommend eating plenty of fruit and vegetables."

Cancer Screening:

Men With PSA Of 7 Or Higher More Likely To Have Biopsy

Men who receive a reproducible prostate specific antigen test result of 7 ng/ml (nanograms per milliliter) or greater are more likely to have a subsequent prostate biopsy compared to men with lower but still abnormal test results, according to researchers at the U.S. National Cancer Institute.

Men with a positive digital rectal exam without a positive PSA test were less likely to receive biopsy than men with a positive PSA test. This research appears in the March 2005 Journal of Urology.

National data on prostate biopsy rates following PSA or DRE screening are currently limited. These new findings are one of the initial results from the prostate component of NCI's ongoing multicenter Prostate, Lung, Colorectal and Ovarian Cancer Screening Trial.

PLCO is testing whether screening with PSA and DRE decreases prostate cancer mortality in men age 55 to 74.

Men in the screening arm of this randomized trial undergo PSA testing and DRE upon entry. They then have these tests annually for the next three years, and then have a PSA test without a DRE in years 4 and 5. This study looked at all men who had a positive PSA or DRE upon entry and men with positive post-entry

results occurring by December 2000.

A total of 4,801 out of close to 40,000 men who were originally randomized to the screening arm of the PLCO had one abnormal prostate screening test upon entry, of whom 2,717 had abnormal PSAs. Diagnostic procedures, including biopsy, were looked at for a 3-year period following the first positive screening.

Diagnostic follow-up in the U.S. was done at many sites across the country and thus occurred beyond the control of the PLCO. However, the entry screening PSA test was done by one central laboratory at the University of California Los Angeles.

The pattern of biopsies in PLCO men is thought to be representative of current clinical practice in response to a positive PSA or DRE in the years 1993 to 2001.

The results of a PSA test or DRE had a substantial impact on biopsy rates:

--Men with PSAs greater than 4 ng/ml (considered positive in this study) upon entry into the PLCO had a biopsy rate over a 3-year period of 64 percent, while those with a positive DRE and PSA of 4ng/ml or less had a 27 percent biopsy rate.

--Men with a baseline PSA greater than 10 ng/ml had a greater biopsy rate (85 percent) after 3 years than did men with baseline PSAs of 4 to 7 ng/ml (58 percent).

--Among men first becoming PSA positive (greater than 4 ng/ml) after the study entry screen, those with PSA levels greater than 10 ng/ml were not more likely to receive a biopsy than men with PSAs of 4 to 7 ng/ml.

The study authors were able to identify various factors that affected biopsy rates:

--Prior prostate biopsy, prior PSA tests, and a history of prostate problems were significantly associated with a lower biopsy rate only in men whose PSA was positive at entry.

--In men with a positive DRE and negative PSA, a PSA value of 2.5 to 4.0 was associated with an increased biopsy rate compared to a result lower than 2.5.

--Among men with a PSA test greater than 4, men with a positive DRE were about twice as likely to receive biopsy as men with a negative DRE.

--Men often got repeat PSAs after the screening PSA. Those with repeat PSAs below 4 ng/ml had much lower biopsy rates than men with repeat PSAs greater than 4.

The men in this study and their physicians were aware that they were participating in a clinical trial and this fact may have affected their behavior in terms of diagnostic follow-up and biopsy. Nevertheless, the results of this study should be useful for calculating the cost of screening and for modeling how DRE and PSA tests are used in the general population.

According to lead author Paul Pinsky, of NCI, "We can not yet answer the question of whether PSA tests and DRE have an effect on overall prostate cancer mortality, but these interim results give us a good indication that biopsy is more likely following a screening PSA of 7 ng/ml or greater that is reproducible in a large, geographically diverse sample of American men. These results suggest that PLCO is evaluating the effects of screening in a current and vigorous manner."

Northwestern To Test Method To Detect Colon Cancer

Researchers at Evanston Northwestern Healthcare and Northwestern University have received a $1.8 million grant from the National Cancer Institute to test a new light technology that provides information about objects 20 to 50 times smaller than what conventional microscopy can provide—and allows researchers to detect the beginning stages of colon cancer.

"This study will enable us to detect subtle changes in the microarchitecture of precancerous colon cells at far earlier stages than current technology allows," said Hemant Roy, gastroenterologist and associate professor at Northwestern University's Feinberg School of Medicine. "The findings may have major clinical applications because they could lead to the introduction of a reliable screening tool that allows doctors to identify individuals at increased risk for colorectal cancer and to reduce their risk with regular colonoscopic screening."

This technology also may enable doctors to identify individuals at low risk who may not require regular colorectal cancer screening, he said.

In this study, "Spectral Markers for Early Detection of Colon Neoplasia," Roy and Vadim Backman, of Northwestern University, will use a new generation of advanced optical technology called Four-Dimensional Elastic Light-scattering Fingerprinting (4D-ELF). Backman, who also holds a joint appointment with the Evanston Northwestern Healthcare Division of Gastroenterology, developed the technology at the Biomedical Engineering Department of Northwestern University.

This instrument is a major advance in optical technology and the study is one of 50 collaborative initiatives currently taking place between the physician scientists at Evanston Northwestern Healthcare and researchers at Northwestern University. The technology

also is under study as a potential screening method for pancreatic and cervical cancers.

In a previous study published in the April 2004 issue of the journal Gastroenterology, Roy, Backman and others analyzed the colon cells of rats with colon cancer and found profound cellular abnormalities in the earliest stages of the disease.

"Our research with patients at Evanston and Glenbrook Hospitals who are undergoing colonoscopies will validate whether light-scattering technology could be a sensitive screening test to identify high-risk individuals with precancerous changes in the earliest stages of the disease so they can be referred for regular screening," said Roy.

Brain Tumors:
Treatment Doesn't Always Follow Recommendations

An examination of how the most common type of primary brain tumor is treated found that care does not always follow established practice guidelines, according to a study in the February 2 issue of JAMA.

Malignant gliomas (brain tumors, grade III or IV) are the most common primary brain tumor, and their incidence is increasing over time, according to background information in the article. These tumors are the second-most common cause of cancer-related death in the young-adult age group and are associated with extensive illness.

Despite intensive research, the prognosis for patients with malignant glioma remains poor. Typical survival for patients with grade III glioma is 3 to 5 years and is less than 1 year for patients with glioblastoma multiforme (grade IV glioma). Current treatment for patients with malignant glioma includes maximum safe resection (surgical removal), radiation therapy, and chemotherapy.

Susan Chang, of the University of California, San Francisco, and colleagues conducted a study to provide data to enable comparison of individual practice patterns and outcomes for adults with malignant glioma.

The Glioma Outcomes (GO) Project enrolled 788 patients at 52 clinical sites, both academic and community practices, between December 1997 and July 2000. The enrollment criteria included adult patients with primary grade III or IV glioma undergoing a first or second operation for diagnosis or treatment.

The data collection instruments included questionnaire forms given at enrollment, during the perioperative period, and at follow-up intervals of 3 months until death or a maximum of 24 months. Of the patients recorded in the GO database, 565 patients with newly diagnosed tumors were used for this analysis.

The researchers found that most patients underwent magnetic resonance imaging (n = 518; 92 percent) and an attempt at tumor resection (n = 425; 75 percent). Most received perioperative corticosteroids (n = 535; 99 percent) and antiepileptic medications (n = 497; 88 percent), but few received antidepressants (n = 38; 8 percent) or prophylactic heparin (n=42; 7 percent). Most received radiation therapy (n = 479; 87 percent) in addition to other therapy, but fewer received chemotherapy (n = 300; 54 percent).

Practice patterns varied significantly between academic and community settings.

"We present patterns of care for a large group of patients with newly diagnosed malignant glioma treated in the modern era. Some common practice patterns are in keeping with published literature (e.g., use of radiation therapy), some contradict published guidelines (e.g., frequent prophylactic antiepileptic drug administration) or may conflict with published literature (e.g., relatively infrequent use of chemotherapy), and still others point out areas for further investigation in this population, including heparin prophylaxis for venous thromboembolism, antidepressant medication, corticosteroid dosing, and use of surgical adjuncts. Variations in patterns of care were associated with differences in survival; establishing further practice guidelines may help reduce this variability. One of the major benefits of the GO Project is that it provides a broad historical cohort that can be used as a comparison for future prospective studies," the authors conclude.

In an accompanying editorial, Paul Graham Fisher, of Stanford University, and Patricia Buffler, of the University of California, Berkeley, discuss the findings by Chang et al.

"Where should treatment of gliomas go from here? Neuro-oncology requires a major paradigm shift and substantial changes in treatment and research involving malignant gliomas. Wider availability of novel approaches and increased cooperation between academic institutions and community centers must occur to improve care patterns for patients with malignant glioma. In addition, for any clinical trial, correlative biological studies of tumor specimens need to be wedded to the trial, particularly when end points may be biological change rather than tumor reduction demonstrated on MRI. As oncology takes on increasingly specific, targeted approaches, it is inappropriate to continue rolling out new therapies indiscriminately and

often conclude that they are not effective in 'malignant gliomas,' a molecularly heterogeneous group of tumors lumped together based on light microscopy. Some treatments may be highly beneficial to a select few patients, yet ineffective in many others. At the same time, phase 1 trials in oncology that have traditionally excluded patients with brain tumors should be made more widely available to those with malignant glioma," the editorialists write.

"There are few proven risk factors for the development of brain tumors. It is difficult to imagine advancing cures unless the genetic, environmental, dietary, other risk factors, and their interactions that cause brain tumors are more clearly established. Biological studies need to be incorporated into these epidemiologic investigations to enhance the informativeness of these studies. Increased funding via governmental grant mechanisms or philanthropic foundations will be paramount for the progress needed to achieve this progress. Advancements for patients with malignant glioma have been negligible, and there is a real risk of going nowhere by simply continuing to travel the same path," they conclude.

Lymphoma:

Transplant Is Viable Option For HIV+ Patients, Study Finds

Stem cell transplants have become the standard of care for patients with relapsed lymphoma, but not for patients who suffer from this disease and have HIV. A new study shows that this treatment is a viable option for selected patients with HIV-associated lymphoma.

Researchers from the City of Hope Comprehensive Cancer Center treated 20 patients (aged 11 to 68) who had HIV and lymphoma, either Hodgkin's (HD) or non-Hodgkin's (NHL), according to the study published in the Jan. 15 issue of Blood, the journal of the American Society of Hematology.

The selected patients had had previous standard dose frontline chemotherapy for their lymphoma, the majority either failed to achieve a complete remission or had relapsed after an initial remission. The median length of study follow-up was approximately two and a half years, with a range of about six months to six years.

Because of the immunodeficiency associated with HIV, HIV-positive patients are more likely to develop lymphoma than HIV-negative individuals and the treatment for their cancer is far less likely to be successful.

All study patients were to undergo autologous stem cell transplantation. In an autologous transplant, stem cells are removed from the patient and frozen for later use. The patient then receives high-dose chemotherapy to kill any lymphoma in the body. The autologous stem cells are then reinfused to repopulate the bone marrow, which has been wiped out by the high doses of chemotherapy.

Before the transplant, patients were given one of two conditioning regimens, either high dose chemotherapy alone or in combination with radiation therapy to destroy the cancerous cells. Most (17 patients versus three) received the chemotherapy only option. Radiation therapy was selected for patients younger than 55 who had poorer prognostic factors: either the cancer had spread to multiple lymph nodes or the patient had bulky disease (indicated by a cancerous mass greater than 5-10 cm).

Reversible abnormalities in liver function, a side effect of the intensive treatment, were experienced in a majority of the patients. One patient, the oldest in the study, developed cardiomyopathy (a weakening of the heart) and kidney failure due to treatment toxicities and died a few weeks after the transplant. Opportunistic infections, such as herpes zoster and cytomegalovirus infection, also occurred in a few patients after the transplant, but were managed with appropriate therapy.

Throughout the study, all patients were to receive highly active antiretroviral therapy (HAART) to help reduce these opportunistic infections and improve immunodeficiency. However, only nine patients were able to tolerate this treatment for the entire study due to side effects such as nausea and inflammation of the mouth lining. The majority of patients did resume the HAART therapy soon after discharge from the hospital

Although two patients died of relapsed lymphoma a few months after transplant, 17 of the 20 patients (85 percent) are currently alive and in remission.

In addition, the underlying HIV infection did not worsen as a result of the transplant and associated treatments.

"The results of this study are significant because despite the use of effective antiviral drugs such as HAART, lymphoma is still a major cause of suffering and death in HIV infected individuals. It's important to know that stem cell transplant is an available and highly successful treatment option for these patients," said Amrita Krishnan, a staff physician at the City of Hope Cancer Center and lead author of the study.

Cancer Survivorship:

QOL Of Young Survivors Equal To Other Children

New research indicates that the quality of life among young cancer survivors is as good as that of children of the same age who have never had cancer. The study is published in the February issue of the journal *Pediatrics*.

"Improving survival rates for children with cancer have placed increasing emphasis on the health status and health-related quality of life of survivors," said study lead author Smita Bhatia, staff physician and director, Epidemiology and Outcomes Research, Division of Pediatrics, City of Hope Cancer Center. "Our results were reassuring, suggesting that children may have been too young to have encountered some of the negative psychosocial effects of cancer and its treatment."

A child diagnosed with cancer today has an 80 percent chance of survival, according to the U.S. National Cancer Institute's Surveillance Epidemiology and End Results Program, which monitors and analyzes cancer data. The World Health Organization defines quality of life as "a multidimensional, self-perceived construct including social, physical and emotional functioning of the individual."

Bhatia said earlier studies of pediatic cancer survivors tended to focus on issues such as treatment-related complications and secondary cancers, and previous quality-of-life studies examined these issues in adult survivors of childhood cancer.

This multi-institutional Children's Oncology Group study, "Health-Related Quality of Life in Young Survivors of Childhood Cancer Using the Minneapolis-Manchester Quality of Life-Youth Form," examined three groups of 8- to 12-year-olds—90 post-therapy cancer survivors, 72 in cancer treatment and 481 healthy children with no history of cancer or other chronic diseases.

A series of 32 questions was asked in interviews with the children. Researchers studied their responses to subjects ranging from physical and psychological functioning, physical symptoms and outlook on life.

Bhatia said the study confirms that young pediatric cancer survivors report quality of life results that are comparable to children with no history of cancer. The study's authors suggest that as treatments and outcomes improve, equal attention be given to the long-term well being of survivors to ensure their quality of life remains as positive as possible.

"As more research is completed on the many factors that affect quality of life for those surviving cancer and our knowledge increases, we hope to be able to help even more survivors to cope with their cancer experience and to grow in positive ways from it," Bhatia said.

Rare Tumors:

High-Dose Chemo Can Cure Rare Pediatric Brain Tumor

Some children with a rare brain tumor that is considered almost universally fatal can be saved if they receive radiation therapy followed by tandem cycles of high-dose chemotherapy.

This finding, from researchers at St. Jude Children's Research Hospital, is published in the March 1 issue of the Journal of Clinical Oncology.

The tumor, called atypical teratoid/rhabdoid tumor (ATRT), is a rare aggressive cancer that arises either in the cerebellum or cerebral cortex and often spreads through the central nervous system. The cerebellum is the lower, back part of the brain that controls balance.

The St. Jude team showed that, while children with ATRT under three years of age have a dismal prognosis, children older than 3 can be cured by upfront treatment with radiation followed by chemotherapy using so-called alkylating agents (cyclophosphamide, cisplatin, vincristine and etoposide), according to Amar Gajjar, director of St. Jude Neuro-oncology. In this case, physicians first surgically removed as much of the tumor as possible before treating children with radiation followed by chemotherapy.

The success in raising the survival rate among these children reflects the long-standing leadership of St. Jude in addressing the needs of children who suffer from rare cancers, as well as more common malignancies, according to Gajjar.

"Effective therapy for patients with ATRT has remained elusive until now, at least for children older than 3 years," said Gajjar, senior author of the JCO report. "The fact that we found that upfront radiation is so effective, especially in older children, suggests that this should become a standard approach to ATRT therapy."

Gajjar's team studied the medical records of 31 patients, 22 of whom were younger than 3 years old. All patients had surgery, and 30 received subsequent chemotherapy. Most patients who were 3 years old or older received postoperative radiation to their brains and spines.

The rates of two-year event-free survival (EFS, 78

percent) and overall survival (OS, 89 percent) among children aged three and older were significantly better than those for younger patients (EFS, 11 percent; OS, 17 percent). Event-free survival is the time after treatment that a person remains free of severe treatment side effects, recurrence or progression of cancer, or death from treatment side effects or the cancer itself.

The study also demonstrated that older children who experienced relapse of ATRT could be saved using ICE chemotherapy (ifosfamide, carboplatin- and etoposide).

Breast Cancer:

MRI Predicts If Chemo Working In Preoperative Therapy

More breast cancer patients with large palpable tumors are undergoing chemotherapy before surgery in an effort to reduce the size of their tumor, and MRI is the best way to predict if the chemotherapy is working, preliminary results of a study show.

If the chemotherapy is successful, then the woman may be able to undergo breast-conservation surgery rather than a mastectomy.

Currently, it is standard practice for the physician to do a breast examination to non-invasively assess whether the chemotherapy was effective, said Eren Yeh, an instructor of radiology at Massachusetts General Hospital in Boston, and the lead author of the study. "Before we began the study, we weren't sure if breast tumors would enhance with the MR contrast agent gadolinium and therefore be visible after chemotherapy. Our study found that MRI is not perfect, but it's better than what's been used as the gold standard in the past," she said.

For the study, 31 patients prospectively underwent clinical examination, mammography, sonography and an MRI examination before, then following, chemotherapy. The results of these tests were then compared to the pathology results following surgery. MRI was right 71% of the time. The study appears in the March issue of the American Journal of Roentgenology.

Clinical Trials Approved By NCI's CTEP Listed

The National Cancer Institute's Cancer Therapy Program approved the following clinical research studies last month. For further information about a study, contact the principal investigator listed.

Phase I

Preliminary Investigation of the Biodistribution of [F-18]-EF5 in Patients with Brain Tumors. Abramson Cancer Center of The University of Pennsylvania, protocol 5999, Maity, Amit, phone 215-662-7147.

Phase I Study of Valproic Acid in Children with Recurrent/Progressive Solid Tumors Including CNS Tumors. COG Phase I Consortium, protocol ADVL0419, Su, Meng-Fen, phone 832-824-4306.

Open-Label, Dose Confirmation and Dosimetry Study of Interstitial 131 I-chTNT-1/B MAb (COTARA) for the Treatment of Glioblastoma Multiforme at 1st or 2nd Relapse. New Approaches to Brain Tumor Therapy Consortium, protocol NABTT-0404, Lustig, Robert, phone 215-349-8429.

Phase I/II

Phase I/II Study of Topotecan with G-CSF and Radiation Therapy in Children with Malignant Intrinsic Pontine Brainstem Gliomas of Childhood. Children's Oncology Group, protocol ACNS0224, Robertson, Patrici, phone 734-936-4179.

Phase II

Phase II Trial to Assess the Activity of 17-allylamino, 17-demethoxygeldanamycin in Patients with Metastatic (M1a, M1b & M1c) Malignant Melanoma. Royal Marsden Hospital, protocol 6500, Eisen, Timothy, (+44) phone 208-661-3979.

Phase II Evaluation of EMD121974 in patients with Non-Metastatic Androgen Independent Prostate Cancer. University of Michigan Medical Center, protocol 6735, Hussain, Maha, phone 734-936-89.

Evaluation of Hypoxia by EF5 Binding in Gynecologic Cancer. Abramson Cancer Center, University of Pennsylvania, protocol 7034, Chu, Christina, phone 215-662-3318.

Phase II Trial of Liposome Encapsulated SN38 (LE-SN38) in the Treatment of Small Cell Lung Cancer. North Central Cancer Treatment Group, protocol NO322, Jett, James, phone 507-38-1079.

Phase II Study of Temozolomide-Based Chemoradiotherapy Regimens for High Risk Low-Grade Gliomas. Radiation Therapy Oncology Group, protocol RTOG 0424, Fisher, Barbara, phone 519-685-8600.

Phase II Study of Bevacizumab with Concurrent Capecitabine and Radiation Followed by Maintenance Gemcitabine and Bevacizumab for Locally Advanced Pancreatic Cancer. RTOG-0411, Crane, Christopher, phone 713-563-2340.

Phase II Trial of Pemetrexed for Advanced Chondrosarcomas. Southwest Oncology Group, protocol SO423, Chow, Warren, phone 626-359-8111 ext. 2307.

Iodine-131-Labeled Monoclonal Anti-B1 Antibody (I-131Tositumomab) in Combination with Cyclophosphamide, Doxorubicin, Vincristine, Prednisone and Rituximab Therapy for Patients >/= Age 60 with Advanced Stage Diffuse Large B-Cell NHL: A Phase II Study. SWOG protocol SO433, Friedberg, Jonathan, phone 585-273-4150.