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Cancer research news for clinicians

Soft Tissue Sarcoma:

PET/CT Imaging During Treatment Shows Whether Chemo Is Working, Study Finds

Oncologists often have to wait months before they can determine whether a treatment is working. Using a non-invasive method, researchers at UCLA's Jonsson Comprehensive Cancer Center have shown that they can determine after a single cycle of chemotherapy whether the toxic drugs are killing the cancer or not.

Using a combination positron emission tomography and computed tomography scanner, researchers monitored 50 patients undergoing treatment for high-grade soft tissue sarcomas. The patients were receiving

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Biliary Cancer:

Small Phase II Study Finds New Oral Agent May Slow Progression Of Difficult Cancer

An experimental agent has shown promising results in people with advanced biliary cancer, according to a multi-institutional clinical trial led by cancer researchers at the Ohio State University.

The agent, known as AZD6244 (ARRY-142886), blocks certain enzymes that cancer cells need to proliferate and survive.

The findings of the 28-patient, phase II study were reported at the annual meeting of the American Association for Cancer Research in Denver earlier this month.

"This is a malignancy for which there is no standard of care," said the study's principal investigator Tanios Bekaii-Saab, assistant professor of medicine and pharmacology, and a medical oncologist who specializes in gastrointestinal cancers at Ohio State's Comprehensive Cancer Center-James Cancer Hospital and Solove Research Institute.

"And while it is a small study, it provides a strong rationale for developing this agent further in larger trials either alone or in combination with other drugs, with the hope that we can establish a new standard of care for biliary cancers in the near future."

Bekaii-Saab noted that the average progression-free survival achieved by patients in the study was one of the highest reported in the literature for this malignancy with many patients gaining weight in a disease that is typically associated with significant weight loss. The drug, which is administered orally, seems to be well tolerated with mild toxicities.

The agent belongs to a class of drugs called protein kinase inhibitors.

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

Study Found Response Visible After First Dose Of Chemo

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neoadjuvant chemotherapy treatments to shrink their tumors prior to surgery. The study found that response could be determined about a week after the first dose of chemotherapy drugs. Typically, patients are scanned at about three months into chemotherapy to determine whether the treatment is working.

"The question was, how early could we pick up a response? We wanted to see if we could determine response after a single administration of chemotherapy," said Fritz Eilber, an assistant professor of surgical oncology, director of the Sarcoma Program at UCLA's Jonsson Cancer Center and senior author of the study. "There's no point in giving a patient a treatment that isn't working. These treatments make patients very sick and have long-term serious side effects."

The study appears in the April 15 issue of the journal Clinical Cancer Research.

PET scanning shows biochemical functions in real time, acting as a sort of molecular camera. For this study, Eilber and his team monitored the tumor's metabolic function, or how much sugar was being consumed by the cancer cells.

Because they're growing out of control, cancer cells use much more sugar than do normal cells, making them light up under PET scanning using a glucose uptake probe called FDG. In order to identify an effective response to treatment, researchers needed to see a 35 percent decrease in the tumor's metabolic activity.

Of the 50 patients in the study, 28 did not respond and Eilber and his team knew within a week of their initial treatment. This allows the treatment course to be discontinued or changed to another more effective treatment, getting the patient to surgery more quickly.

"The significance of this study was that it identified people—more than half of those in the study—who were not going to benefit from the treatment early in the course of their therapy," Eilber said. "This information significantly helps guide patient care. Although this study was performed in patients scheduled for surgery, I think these findings will have an even greater impact on patients with inoperable tumors or metastatic disease as you get a much quicker evaluation of treatment effectiveness and can make decisions that will hugely impact quality of life."

Eilber said he was surprised how soon response to therapy could be determined. "We had an idea that patients either respond or do not respond to treatment, but we weren't sure how early you could see that," he said. "I really was not sure we would be able to see effectiveness this early."

Eilber and his team will continue to follow the patients and a clinical trial currently is underway based on the results of this study. Eilber believes it will help personalize treatment for each patient and may one day become the standard of care.

Researchers also may use the non-invasive imaging method to gauge response to novel and targeted therapies. Eilber said that they are clinically testing new tracers as well. Instead of measuring glucose uptake, these probes look at cell growth. Response to therapy also may be tested using PET in other cancer types, he said.

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Publisher: Kirsten Boyd Goldberg
Editorial Assistant: Shelley Whitmore Wolfe

Editorial: 202-362-1809 Fax: 202-379-1787
PO Box 9905, Washington DC 20016
Customer Service FAQ at www.cancerletter.com

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Imaging:

Rapid Non-Invasive Imaging Of Biochemical Composition In Breast Tumor Margins

A novel optical imaging technique using the molecular specificity of visible light is showing promise in rapidly determining tumor margin status in patients undergoing breast-conserving cancer surgeries.

Researchers believe that in the future, the technique will assist surgeons in optimizing breast tissue excision to minimize the need for second surgeries for re-excision of additional diseased tissue, while maximizing cosmetic results. Researchers presented their findings at the

American Society of Breast Surgeons annual meeting earlier this month.

The primary objective of breast conservation therapy is to achieve complete excision of a tumor surrounded by a margin of healthy tissue. Currently, margin status is determined post-operatively by pathology reports and is corrected if residual disease is found by a second surgery. The re-excision rate for breast cancer can vary between 20% and 70%.

Taking advantage of the unique way visible light interacts with different biochemical substances, the new optical imaging technique captures images of varying colors and intensities and uses novel mathematical models to characterize the underlying tissue composition in the margins of freshly excised breast tumors.

"When light hits a biological sample such as tissue, it is absorbed and scattered, and these two interactions can capture information about molecular constituents in tissue," said researcher Nimmi Ramanujam, associate professor of biomedical engineering at Duke University. "We can quantify the concentration of beta carotene, which is contained in fat, scattering which reflects cell density and total hemoglobin content which reflects tissue vascularity."

The researchers have developed automated image analysis methods to detect margin positivity based on these tissue compositional features and have shown in a 50-patient study that these predictors are effective in detecting positive tumor margins.

"Essentially, we have developed an algorithm that leverages the actual tumor margin morphological composition to classify tumor margin. For example, areas of high cell density and low fat content are suspicious of disease, while areas with low cell density and high fat content are expected to be negative for disease. The advantage of deconstructing the underlying tissue composition as opposed to looking at a library of patterns and comparing that to a specific tissue type is that we have insight into the sources of contrast that contribute to the prediction of positive margins and can understand when the technology works and when it may not be as effective."

The new optical imaging technique is implemented using a hand-held fiber optic imaging probe connected to a computer console. The technology is simple and fast enough be used intraoperatively, potentially enabling surgeons to correct margins if needed during the initial procedure.

Presented at the meeting were findings from of the first year of a two-year study involving 48 patients and 55 margins. Tumor margins were evaluated using the new imaging technique post specimen mammography and compared with pathology results. Of the 34 pathologically confirmed positive margins, 13 were positive and 21 were close (less than 2mm) to the margin.

The technology was able to correctly identify 80% of the pathologically positive/close margins and 67% of the pathologically negative margins in this pilot study. In addition, the technology was able to correctly capture 8 out of the 9 margins with ductal carcinoma in situ, a pre-invasive cancer which is often the reason for margin positivity.

Ramanujam stresses that these tests were post-operative and did not affect clinical decision-making. Eventually the new non-invasive imaging device is expected to undergo clinical trials with the goal of commercialization for surgical applications.

Non-Small Cell Lung Cancer:
Phase II Study Of Pfizer Drug Meets Primary Endpoint

A phase II study of Pfizer's investigational anti-insulin growth factor type 1 receptor antibody, figitumumab, met its primary endpoint of objective response rate in patients with non-small cell lung cancer.

Exploratory analyses of ORR and progression-free survival, a secondary endpoint, by dose and histology suggest a dose-response relationship in patients with differentiated histologies (squamous cell carcinoma and adenocarcinoma) but not in patients with undifferentiated, not otherwise specified tumors. Figitumumab was generally well-tolerated in the study.

These data were published online April 20 in the Journal of Clinical Oncology.

"This is the first formal report of phase II data for an IGF-1R inhibitor in the treatment of lung cancer patients," said lead investigator Daniel Karp, director of M.D. Anderson Cancer Center Clinical and Translational Research Center. "Despite improvements in treatment, NSCLC remains a difficult-to-treat disease. We are encouraged by these data, which provide further rationale for exploring IGF-1R as one of the key signaling pathways implicated in uncontrolled growth and survival of cancer cells."

In this randomized, non-comparative study, 54 percent of the Stage III/IV treatment-naïve NSCLC patients (53 of the 98) who received the combination of figitumumab plus carboplatin and paclitaxel experienced

an ORR (defined as complete responses + partial responses). Of the 53 patients taking carboplatin and paclitaxel alone, 42 percent (22 patients) experienced an ORR.

Patients with tumors of squamous cell histology appeared to benefit the most from the combined treatment. Seven of the nine patients receiving the combination of figitumumab 20 mg/kg and chemotherapy had objective responses, despite presenting with bulky (>5cm) squamous tumors when entering the study.

Furthermore, squamous cell tumors regressed further in two patients receiving figitumumab alone as maintenance, post chemotherapy. The study has been extended to further characterize the activity of figitumumab in patients with these tumors.

These data will be presented at the 2009 American Society Of Clinical Oncology annual meeting in Orlando May 29-June 2.

Although the study was not powered to compare across treatments, exploratory analyses of PFS (defined as either the length of time before the cancer progressed or death) were also conducted. PFS was longer for patients with tumors of differentiated histologies who received the combination of figitumumab 20 mg/kg and chemotherapy (HR=0.46 [95% CI, 0.18 to 0.75, p=0.0058, n=68]), but not in patients with NOS tumors.

In this phase II, multi-center, open-label, non-comparative trial, 156 patients were randomized, 151 of whom were evaluable for safety and efficacy. Ninety-eight patients were randomized to figitumumab plus paclitaxel and carboplatin (10–20 mg/kg) and 53 patients were randomized to paclitaxel and carboplatin alone.

Forty-eight and 50 figitumumab plus carboplatin and paclitaxel patients received 10 and 20 mg/kg of figitumumab, respectively, in two sequential stages. The median number of chemotherapy cycles was four in both treatment arms. Twenty of 53 patients received figitumumab upon progression on chemotherapy alone.

An additional 30 patients with non-adenocarcinoma were enrolled in a single-arm cohort extension. Because the study was open-label and non-comparative, all safety and efficacy analyses across treatment arms were exploratory.

Figitumumab was generally well-tolerated in the study. In the figitumumab plus carboplatin and paclitaxel arm, the most frequent grade three or four side effects reported were hyperglycemia (15 percent), fatigue (10 percent) and neutropenia (26 percent). Three patients discontinued the study due to hyperglycemia, but it was generally manageable with insulin or oral anti-diabetic agents. No hypersensitivity reactions were seen in patients receiving figitumumab.

There were eight deaths while on study treatments, three in patients receiving carboplatin and paclitaxel alone, three in those receiving 10 mg/kg of figitumumab plus carboplatin and paclitaxel, and two in those receiving 20mg/kg of figitumumab plus carboplatin and paclitaxel.

Prostate Cancer:
Minimally Invasive Radiation Said To Preserve Functions

The so-called "male lumpectomy"—a minimally invasive interventional radiology treatment for prostate cancer—is as effective as surgery in destroying diseased tumors and can be considered a first-line treatment for patients of all risk levels and particularly those who have failed radiation, according to studies released at the Society of Interventional Radiology's 34th Annual Scientific Meeting.

In addition, the use of 3-D transperineal mapping biopsy for determining the extent of prostate cancer, when compared with the commonly used transrectal ultrasound biopsy, heavily impacted how patients' disease was managed in 70 percent of the cases.

"Our data show that focal cryoablation is as good for prostate cancer control as any other treatment—including surgery, radiation and hormone therapy—but it is less invasive and traumatic for patients, preserves sexual and urinary function and has no major complications. Interventional radiologists tailor treatment to each patient's disease. Instead of removing the entire prostate, or freezing the entire prostate or using radiation on the entire prostate, interventional radiologists can find out where the cancer is and just destroy the cancer," said study author Gary Onik, interventional radiologist and director of the Center for Safer Prostate Cancer Therapy in Orlando, Fla. "We've reached a tipping point: treating only the tumor instead of the whole prostate gland is a major and profound departure from the current thinking about prostate cancer."

With cryoablation, interventional radiologists insert a probe through the skin, using imaging to guide the needle to the tumor; the probe then circulates extremely cold gas to freeze and destroy the cancerous tissue. This minimally invasive treatment targets only the cancer itself, sparing healthy tissue in and around the prostate gland rather than destroying it, as traditional approaches do, Onik said.

"You can go home on the same day of the procedure, and you can repeat the treatment, if needed, in later years," said Onik. He presented results of a 3-D biopsy method that provides superior information on the extent and grade of prostate cancer as opposed to the current standard TRUS biopsy.

Calling focal cryoablation a "male lumpectomy" reflects the origins of this approach in the breast-sparing surgery that replaced radical mastectomy as the preferred treatment for breast cancer, said Onik. Unlike breast lumpectomy, a surgical lumpectomy for prostate cancer is not technically feasible; so to treat just a portion of the prostate, minimally invasive cryoablation is needed. Cryoablation spares as much as possible of the prostate gland and its neurovascular bundles, limiting the side effects of bladder control problems and erectile dysfunction that result from more radical prostate cancer treatments. It also represents an advantage over "watchful waiting," because all treatment options are preserved.

He studied 120 men who had focal cryoablation over the past 12 years, including testing the levels of prostate-specific antigen in the blood. Of those patients, 112 (93 percent) had no evidence of cancer, in spite of 72 being labeled medium to high risk for cancer recurrence. He reported that 85 percent of the men retained sexual function. Of those who did not have previous prostate surgery, all remained continent.

According to Onik, the 3-D transperineal biopsy complements the focal cryoablation approach because earlier detection of smaller tumors increases the likelihood that a small tumor can be treated using cryoablation. In his study, Onik restaged 180 patients who had previously undergone TRUS mapping biopsies who were considering conservative management for their cancer.

The results showed that 70 percent of the men would have their management changed by the new information provided by mapping. Through mapping, more than 50 percent of men who were diagnosed with cancer on one side of the prostate gland with traditional TRUS biopsy had undetected cancer on the other side as well, he said. Management of prostate cancer is in great part determined by the Gleason score, a cancer ranking method indicating tumor grade and stage and the extent and location of a patient's disease.

"When we restaged the men, we found that 22 percent of them experienced an increase in their Gleason score—meaning that they had a more aggressive cancer than was originally thought from their original biopsy," said Onik.

Childhood Cancer:
Drug Approved in Europe For Pediatric Cancer Patients

The European Commission has approved a therapy for pediatric patients with non-metastatic, resectable osteosarcoma, a type of bone cancer.

MEPACT (mifamurtide, L-MTP-PE) is an immune-based therapy, that when combined with chemotherapy, resulted in approximately a 30 percent decrease in the risk of death with 78 percent of patients surviving more than six years following treatment. This therapy is the first in more than 20 years to improve the long-term survival of osteosarcoma patients.

Eugenie Kleinerman, head of the Children's Cancer Hospital at M. D. Anderson Cancer Center, was the first investigator to translate the drug from preclinical testing to a phase I clinical trial in humans. She also led the phase II clinical trial for pediatric patients with relapsed osteosarcoma, which was followed by a Children's Oncology Group phase III trial for newly diagnosed patients.

Kleinerman originally proposed the use of this immune therapy for osteosarcoma after Isaiah Fidler, professor in M. D. Anderson's Department of Cancer Biology and director of the Center for Metastasis Research, demonstrated that MEPACT induced the regression of melanoma lung metastases in mice.

"When he showed that MEPACT caused the macrophages in the lung to kill tumor cells, I decided that the drug may have therapeutic potential in patients with osteosarcoma, which most often metastasizes to the lungs," said Kleinerman. "From my own preclinical research, we were able to show how MEPACT stimulated human immune cells to react against osteosarcoma cells."

MEPACT works by stimulating certain white blood cells, called macrophages, to kill tumor cells. The drug is shaped in a sphere, also known as a vesical, made up of lipids. Inside the vesical is muramyl tripeptide (MTP). The lipids trigger the macrophages to consume MEPACT. Once consumed, the MTP stimulates macrophages, particularly in the liver, spleen and lungs, to find tumor cells and kill them.

Patients undergo pre-operative chemotherapy followed by surgery to resect the bone tumor and then receive post-operative chemotherapy. While receiving post-operative chemotherapy, patients also are given the immune therapy intravenously twice a week for three months and then once a week for six months. The chemotherapy acts like a bomb sent in to destroy the

tumor, while MEPACT acts as a special forces unit sent in to clean out any remaining pockets of microscopic disease.

"Relapsed osteosarcoma is often resistant to chemotherapy," said Kleinerman. "By giving MEPACT to newly diagnosed patients, we hope to prevent relapse by taking care of any remaining tumor cells after chemotherapy."

Currently, only relapsed pediatric patients with osteosarcoma are able to receive treatment with MEPACT through compassionate use in the United States.

MEPACT was granted orphan drug status in the United States in 2001 but has not been approved by the Food and Drug Administration for use in newly diagnosed patients. Orphan drug status is given to therapeutic agents that target rare diseases as an incentive for pharmaceutical companies to manufacture these agents.

"We have been working with this therapy for more than two decades, so getting approval in Europe is a huge milestone for those of us fighting pediatric cancer," says Kleinerman. "This drug has made significant strides for long-term survival of children with osteosarcoma."

Supportive Care:

Acupuncture Eases Radiation-Induced Dry Mouth In Patients

Twice weekly acupuncture treatments relieve debilitating symptoms of xerostomia—severe dry mouth—among patients treated with radiation for head and neck cancer, researchers from the University of Texas M. D. Anderson Cancer Center report in the current online issue of Head & Neck.

Xerostomia develops after the salivary glands have been exposed to repeated doses of therapeutic radiation. People who have cancers of the head and neck typically receive large cumulative doses, rendering the salivary glands incapable of producing adequate saliva, said Mark Chambers, professor in the Department of Dental Oncology.

Saliva substitutes, lozenges and chewing gum bring only temporary relief, and the commonly prescribed medication, pilocarpine, has short-lived benefits and bothersome side effects of its own.

"The quality of life in patients with radiation-induced xerostomia is profoundly impaired," said Chambers, the study's senior author. "Symptoms can include altered taste acuity, dental decay, infections of the tissues of the mouth, and difficulty with speaking, eating and swallowing. Conventional treatments have been less than optimal, providing short-term response at best."

M. Kay Garcia, a clinical nurse specialist and acupuncturist in M. D. Anderson's Integrative Medicine Program and the study's first author, noted that patients with xerostomia may also develop nutritional deficits that can become irreversible.

Garcia, Chambers, and their team of researchers conducted a pilot study to determine whether acupuncture could reverse xerostomia.

Acupuncture therapy is based on the ancient Chinese practice of inserting and manipulating very thin needles at precise points on the body to relieve pain or otherwise restore health. In traditional Chinese medicine, stimulating these points is believed to improve the flow of vital energy through the body.

Contemporary theories about acupuncture's benefits include the suggestion that needle manipulation stimulates natural substances that dilate blood vessels and increase blood flow to different areas of the body.

The M. D. Anderson study included 19 patients with xerostomia who had completed radiation therapy at least four weeks earlier. The patients were given two acupuncture treatments each week for four weeks. The acupuncture points used in the treatment were located on the ears, chin, index finger, forearm and lateral surface of the leg.

All patients were tested for saliva flow and asked to complete self-assessments and questionnaires related to their symptoms and quality of life before the first treatment, after completion of four weeks of acupuncture, and again four weeks later.

The twice weekly acupuncture treatments produced highly statistically significant improvements in symptoms.

Measurement tools included: the Xerostomia Inventory, asking patients to rate the dryness of their mouth and other related symptoms; and the Patient Benefit Questionnaire, inquiring about issues such as mouth and tongue discomfort; difficulties in speaking, eating and sleeping; and use of oral comfort aids.

A quality-of-life assessment conducted at weeks five and eight showed significant improvements over quality-of-life scores recorded at the outset of the study.

"In this pilot study, patients with severe xerostomia who underwent acupuncture showed improvements in physical well-being and in subjective symptoms," Chambers said. "Although the patient population was small, the positive results are encouraging and warrant

a larger trial to assess patients over a longer period of time."

Garcia said that a phase III, placebo-controlled trial is planned and is currently under review. She also noted that in other studies, the M. D. Anderson researchers are examining whether acupuncture can prevent xerostomia in patients treated for head and neck cancer, not just treat it.

"Recently, we completed a study at Fudan University Cancer Hospital in Shanghai, China that compared acupuncture to usual care to prevent xerostomia. We have now started a two-arm placebo-controlled pilot trial in Shanghai. In the prevention trials, acupuncture is performed on the same day as the radiation treatments," Garcia said.

Biliary Cancer:

One CR, Two PRs, 17 Stable In Phase II Trial Of New Agent

(Continued from page 1)

This particular drug targets a protein kinase called MEK 1/2, which is part of a chemical pathway that is often damaged in many biliary cancer cases, Bekaii-Saab says.

In addition to Ohio State, study sites included the University of North Carolina, Vanderbilt University and Emory University.

The patients, with an average age of 56 years, had advanced (metastatic) biliary cancer.

By the trial's end, one patient had a complete response to the treatment (the tumor shrunk until it was undetectable), two patients had partial tumor shrinkage and 17 patients showed no further growth in tumor size; that is, they had stable disease which often was durable.

A preliminary analysis of the study shows that patients experienced no cancer progression for 5.4 months on average, a time almost double what would typically be expected with therapy in biliary cancer. This is despite the fact that 40 percent of patients had one prior therapy before receiving AZD6244. A more final analysis of the study is underway.

Patients who lacked a target protein called pERK did not seem to respond to the drug, suggesting that the drug may not work if the protein is missing in the cancer cells.

"This is an important finding, as it suggests that we may be able to identify patients who may not respond to the drug in the future," he adds.

Early Clinical Research:

First Phase 0 Oncology Trial Demonstrates Effectiveness Of New Drug On Its Target

The first phase 0 clinical trial of a drug in cancer treatment, involving 13 patients with advanced cancers, showed that the drug, ABT-888, affected its target and was well tolerated.

Most importantly, this trial showed that it is possible to enroll a small number of patients, treat them with a low dose of a new drug, identify whether the desired target of the drug was affected, and obtain all of this critical information relatively quickly. The study was conducted by scientists at the National Cancer Institute, and appeared online April 13 in the Journal of Clinical Oncology.

ABT-888 inhibits an enzyme that plays a critical role in the repair of damaged DNA, and giving it along with chemotherapy drugs that damage DNA could improve the effectiveness of those drugs. Instead of being tested in a traditional phase I clinical trial, which explores both drug safety and tolerance, this drug was tested in a newer, earlier type of clinical trial, part of the pioneering NCI Experimental Therapeutics (NExT) program, called a Phase 0 trial that focuses primarily on tolerance and the ability of the drug to hit a target.

The drug, ABT-888, provided by Abbott Laboratories, Abbott Park, Ill., was administered in a single oral dose of 10, 25, or 50 milligrams. The goals of the trial were to determine the range and time course for the target enzyme inhibition in tumor samples and blood cells collected after the drug was administered and to evaluate how the body handles ABT-888.

Within five months of beginning the study, the investigators obtained essential biochemical and pharmacologic data that are now guiding the design of subsequent phase I trials of ABT-888 in combination with other drugs.

"For the past several decades there has been a low success rate of new therapies for the treatment of cancer. This has necessitated reevaluation of the standard anticancer drug development paradigm, of which phase 0 trials will be a key part of a new approach," said Shivaani Kummar, of the NCI Center for Cancer Research, who led the trial.

The lack of preclinical models that can predict outcomes for a majority of human cancers, lengthy timelines for the clinical evaluation of new therapies, and high costs have hampered drug discovery. This ultimately led the U.S. Food and Drug Administration

to develop the Exploratory Investigational New Drug (IND) Guidance in January 2006 to help identify and evaluate promising candidate drugs in patients more quickly.

Because phase 0 trials conducted under an exploratory IND involve nontoxic drug doses that are administered for short periods of time to small numbers of patients, the preclinical toxicology data required to support a phase 0 trials are less than those required to support a phase I trial; thus, these first-in-human trials can be initiated earlier in the drug development process than traditional phase I studies.

The trial also employed a novel statistical evaluation scheme developed specifically for phase 0 trials, in which the end points are pharmacodynamic measurements rather than toxicity (the end point in phase I trials). Pharmacodynamics is the study of mechanisms of drug action and of the relationship between drug concentration and effectiveness.

Using the novel statistical evaluation method, the researchers demonstrated statistically significant inhibition of enzyme activity in the patient tumor samples and blood cells after a single dose of ABT-888. The statistical correlation observed between the effects of ABT-888 in blood samples versus tumor samples raises the possibility of using blood cells as tumor surrogates, potentially obviating the need for biopsies.

"The successful and expeditious conduct of this trial, and the impact it has had on the development timeline of ABT-888 at Abbott, provide an initial example of a new paradigm for early therapeutics development in oncology," said James Doroshow, director of NCI's Division of Cancer Treatment and Diagnosis, who spearheads the NExT program.

More phase 0 trials will need to be completed and their long-term impact on improving drug development timelines and success rates assessed before such trials will be considered to have an established role in the anticancer drug development process.

The study was conducted by a team of scientists from NCI's Division of Cancer Treatment and Diagnosis and Center for Cancer Research, and SAIC-NCI-Frederick, Md.

NCI Cooperative Group Clinical Trials Listed

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

AMC-061 A Phase 1/Pharmacokinetic Study of Sunitinib in Patients with Cancer Who Also Have HIV and are on HAART Therapy, AIDS-Associated Malignancies Clinical Trials Consortium. Deeken, John Frederick, (202) 444-3958.

Phase I/II

N0877 Phase I/Randomized Phase II Trial of Either Dasatinib or Placebo Combined with Standard Chemo-Radiotherapy for Newly Diagnosed Glioblastoma Multiforme, North Central Cancer Treatment Group. Laack, Nadia Nicole, (507) 284-3559.

Phase II

8252 Phase II Trial of Hyd-sulfate AZD6244 in Patients with V600E BRAF Mutated Melanomas, Memorial Sloan Kettering Cancer Center. Chapman, Paul B., (648) 888-2378.

AALL07P1 A Phase II Pilot Trial of Bortezomib in Combination with Intensive Re-Induction Therapy for Children with Relapsed Acute Lymphoblastic Leukemia and Lymphoblastic Lymphoma, Children's Oncology Group. Horton, Terzah M., 832-824-4269.

S0904 Randomized Phase II Study of Docetaxel Followed by Vandetanib vs. Docetaxel Plus Vandetanib in Patients with Persistent or Recurrent Epithelial Ovarian, Fallopian Tube, or Primary Peritoneal Carcinoma, Southwest Oncology Group. Coleman, Robert L., (713) 745-3357.

Phase III

CALGB-70604 A Randomized, Phase III Study of Standard Dosing Versus Longer Dosing Interval of Zoledronic Acid in Metastatic Cancer, Cancer and Leukemia Group B, Khatcheressian, James L., (804) 828-0180.

Other

ECOG-E2501T1 Molecular Characterization of Refractory Non-Small Cell Lung Cancer Patients with Differential Response to Sorafenib Monotherapy, Eastern Cooperative Oncology Group, Chung, Christine Hwayong, (615) 322-4967.

Pilot

8333 A Pilot Study of 18F Fluorothymidine (FLT) PET/CT in Lymphoma, National Cancer Institute Molecular Imaging Program, Kurdziel, Karen A., (301) 402-3817.