Results of new drug for pancreatic cancer patients published

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Patients at Virginia G. Piper Cancer Center Clinical Trials at Scottsdale Healthcare were the first in the nation to participate in a clinical trial to determine the safety, tolerability and effectiveness for usage of a new drug combination consisting of a standard drug called gemcitabine and a drug called nab-paclitaxel for patients with advanced pancreatic cancer.

The results of this study, headed by renowned pancreatic cancer expert Dr. Daniel Von Hoff, were published online Oct. 3, 2011, in the prestigious Journal of Clinical Oncology.

Nab-paclitaxel (Abraxane), an albumin-bound formulation of paclitaxel, is a drug manufactured by Abraxis BioScience a wholly-owned subsidiary of Celgene and is approved for the treatment of patients with advanced breast cancer. The use of this agent in patients with pancreatic cancer is investigational.

Virginia G. Piper Cancer Center Clinical Trials is a partnership between Scottsdale Healthcare and the Translational Genomics Research Institute (TGen) to rapidly bring new discoveries in the laboratory to patients.

"This is a great example of rapid bench to bedside development," said Dr. Von Hoff, TGen's Physician-In-Chief and Chief Scientific Officer for the Scottsdale Healthcare Research Institute.

Scientists at TGen and the International Genomics Consortium, in collaboration with Abraxis scientists, found that in pancreatic cancer an

albumin-binding protein called SPARC was present at high levels in cells within the pancreatic tumor microenvironment. It was hypothesized that the albumin formulation of nab-paclitaxel may be taken up by tumor cells with high SPARC expression. Based on these findings, Dr. Von Hoff -- joined by colleagues from Johns Hopkins University Hospital, Baltimore; University of Alabama, Birmingham; and South Texas Oncology-Hematology, San Antonio -- conducted a clinical trial in patients with advanced pancreatic cancer.

The results of this pilot study in which 67 patients were treated showed impressive results. Following completion of a safety and dose finding phase, 44 patients were treated in the phase II group. About half the patients showed reductions in tumor size measured by CT scans, and about 50 percent lived at least a year.

"Compared to the average survival of 6 months seen typically in this group of patients, this is very encouraging," said Dr. Ramesh Ramanathan, medical director, Virginia G. Piper Cancer Center Clinical Trials. He added that the results of this study need to be confirmed. A large worldwide study of 842 patients comparing the standard treatment of gemcitabine to the new regimen of gemcitabine and nab paclitaxel is underway, led by Dr. Von Hoff and Dr. Ramanathan.

According to Dr. Ron Korn, the lead radiologist and a co-author on this paper, the study also provided important information on the role of PET scans. "If we can find early in the course of treatment if a patient will respond to treatment or not, then we can change course quickly, this study showed that patients who had a decrease in intensity of 'hot spots' on a PET scan after 6 weeks of treatment were more likely to have a good outcome." Dr. Korn added that this approach is being further investigated in clinical trials with targeted agents in collaboration with the Virginia G. Piper Cancer Center.

More information: Individuals seeking information about eligibility to participate in clinical trials at the Virginia G. Piper Cancer Center at Scottsdale Healthcare may contact the cancer care coordinator at 480-323-1339; toll free at 1-877-273-3713 or via email at clinicaltrials@shc.org.

Provided by The Translational Genomics Research Institute