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UIC conducts phase I drug study for advanced pancreatic cancer

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Researchers at the University of Illinois at Chicago are conducting a clinical trial to evaluate a new, three-drug combination therapy for advanced pancreatic cancer.

Pancreatic ductal carcinoma has a five-year survival rate of less than 5 percent and is the fourth-leading cause of cancer death in the U.S., claiming nearly 40,000 lives each year.

Scientists have made some progress in the last decade to understand the biology of the disease at the cellular level, but advances in clinical outcomes have not kept pace.

"There is an urgent and unmet need for effective treatments for patients with advanced pancreatic cancer after first-line chemotherapy fails," said Dr. Neeta Venepalli, UIC assistant professor of hematology and principal investigator of the study.

Patients in the phase 1 study will be given three drugs that are thought to attack the cancer cells in different ways. One, gemcitabine, is an FDA-approved chemotherapy drug that works by slowing or stopping the growth of tumors. It has been the standard treatment for advanced pancreatic cancer for the past decade.

A second drug, a monoclonal antibody that recognizes a protein called mucin 1 that prevents the death of cancer cells and is overabundant in pancreatic ductal carcinoma, is given to patients to stimulate an immune

response. The antibody also attracts the third drug, Imprime PGG, which travels to the tumor site to activate an immune response and kill targeted cancer cells.

"Our phase 1 trial combines gemcitabine with two novel cancer immunotherapies – a regimen that has not been tried before," said Venepalli, a member of the UI Cancer Center.

"We are optimistic and excited about providing a new approach to treating this devastating disease."

The study will evaluate the drug combination to determine the highest dose of the monoclonal antibody that can be tolerated without unacceptable side effects.

The monoclonal antibody and Imprime PGG are investigational drugs and will be provided by Biothera, a U.S. biotechnology company.

Provided by University of Illinois at Chicago