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WVU Cancer Institute achieves global milestone with first-in-human clinical trial to treat pancreatic cancer

May 20, 2026

MORGANTOWN, W.Va. — The West Virginia University (WVU) Cancer Institute is now offering a first-in-human Phase I clinical trial to evaluate a small implant that uses electric pulses to more precisely deliver and target therapeutics to pancreatic tumors — a global first for use of this innovative treatment.

Pancreatic cancer remains one of the most challenging cancers to treat, especially in those with advanced stages of the disease. Continuity Biosciences, LLC, a clinical-stage biotechnology company, recently initiated the trial, which is now enrolling patients at leading academic medical centers and cancer centers, including the WVU Cancer Institute and Michigan Medicine, the University of Michigan's academic medical center in Ann Arbor. The clinical trial is a critical step in identifying and implementing safe, effective therapies for patients.

A first-in-human clinical trial at the WVU Cancer Institute, led by Brian Boone, M.D., uses a small implant to deliver a common chemotherapy drug directly to pancreatic tumor by sending low-voltage electric pulses to diffuse the therapy directly into the tissue.

Enrolled patients will receive gemcitabine, a commonly used chemotherapy agent for pancreatic cancer, that is delivered directly to the tumor site using a small implant inserted laparoscopically into the pancreas. Using a therapy technique called iontophoresis, the device sends low-voltage electric pulses to diffuse gemcitabine across a permeable membrane directly into the pancreatic tissue.

"At the WVU Cancer Institute, our job is to take care of patients using cutting-edge technology and treatment that changes lives," Brian Boone, M.D., associate professor of surgical oncology in the WVU Department of Surgery and the trial's principal investigator, said.

"This trial provides patients who historically have had limited options, with access to new treatments that may be effective and less harmful while under the care of our Oncology Team. We are excited to be able to offer and evaluate these new therapies, which offer new hope for patients with pancreatic cancer."

The Phase I study includes two cohorts of 12 patients who have been diagnosed with non-metastatic, locally advanced, unresectable pancreatic cancer. All patient care will be coordinated and administered by a nationally recognized oncology team.

If successful, the trial could offer more effective treatments for pancreatic cancer and significantly improve overall outcomes for patients.

The WVU Cancer Institute is currently accepting trial participant referrals for the study. Learn more about this clinical trial (NCT07481383).

For more information on the WVU Cancer Institute, visit WVUMedicine.org/Cancer.