

A NEW WAY OF Understanding and Attacking Pancreatic Cancer

About IPI-926

IPI-926 is a potent, oral small molecule being developed by Infinity Pharmaceuticals. IPI-926 targets the Hedgehog pathway and inhibits a key component of that pathway known as Smoothed (or Smo). Inhibition of Smo disrupts the malignant activation of the Hedgehog pathway that occurs in several difficult-to-treat cancers, including pancreatic, lung (small cell and non-small cell), prostate, ovarian and head and neck cancer, as well as hematologic malignancies, basal cell carcinoma and medulloblastoma. In preclinical and clinical studies to date, IPI-926 has shown potential in treating a broad range of cancers and has been generally well-tolerated.

IPI-926 is currently being evaluated in the Phase 2 portion of an ongoing study in combination with gemcitabine (a chemotherapy) in previously untreated patients with metastatic pancreatic cancer. In a Phase 1 trial of IPI-926 in advanced solid tumors, which includes a group of patients with basal cell carcinoma, IPI-926 has been generally well-tolerated and showed evidence of clinical activity.

Targeting the Hedgehog pathway is a fundamentally new approach to treating pancreatic cancer. As there are no therapies currently approved that target the Hedgehog pathway, IPI-926 has the potential to be first-in-class for the treatment of pancreatic cancer.

About Infinity Pharmaceuticals

Infinity is an innovative drug discovery and development company based in Cambridge, Massachusetts. Infinity's goal is to discover, develop, and deliver to patients best-in-class medicines for difficult-to-treat diseases. Infinity combines proven scientific expertise with a passion for developing novel small molecule drugs that target emerging disease pathways.

For more information on Infinity, please visit www.infi.com.

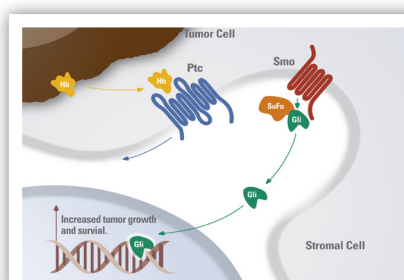


About Pancreatic Cancer

The pancreas is a dual-function organ in the digestive and endocrine system. It is located deep within the abdomen, under the stomach, producing several important hormones, including insulin, and secreting pancreatic fluids that send digestive enzymes into the small intestine.

Pancreatic cancer is one of the most aggressive forms of cancer. More than 43,000 people in the U.S. are diagnosed with pancreatic cancer each year. The lifetime risk of having pancreatic cancer is about 1 in 71 and is the same for both men and women. There are several risk factors that can increase a person's chances of having pancreatic cancer, including smoking, obesity, age (most diagnosed patients are over 55) and Type 2 diabetes¹.

Because pancreatic cancer is often diagnosed in the late stages of the disease, effectively treating it is extremely difficult. Gemcitabine, a chemotherapy, is the current standard treatment for pancreatic cancer, but it still has one of the lowest survival rates of all major cancers. With a one-year relative survival rate of 25% and a five-year rate of only 6%¹, there is a critical need for safe and more effective treatments for patients with pancreatic cancer.



In pancreatic cancer, tumor cells signal to surrounding stromal cells that support tumor growth and survival. In preclinical models, inhibiting the Hedgehog pathway with IPI-926 depletes the stroma and increases the density of the blood vessels supporting the tumor, making it easier for chemotherapy to reach the tumor cells. A Phase 2 study with IPI-926 and gemcitabine, a chemotherapy, is now underway to test these preclinical findings.

The Role of the "Hedgehog Pathway" in Pancreatic Cancer

The Hedgehog pathway is one that is normally active in embryonic development and regulates tissue and organ formation. Research has shown that in some cancers, the Hedgehog pathway is re-activated to support tumor growth and development. Malignant activation of this pathway has been shown to occur across a broad range of cancers, including pancreatic cancer. Recent studies have shown that inhibiting the Hedgehog pathway may slow the progression and recurrence of cancer cell growth in certain cancers.

Specifically, in pancreatic cancer, research suggests chemotherapy is unable to reach pancreatic cancer tumors because they are protected by a stromal microenvironment, which is dense and fibrous. In addition, the blood vessels within the tumor are sparse and function poorly. Importantly, preclinical data published in *Science*² show that inhibiting the Hedgehog pathway may change the tumor microenvironment – decreasing the thickness of the stroma and allowing chemotherapy to reach the tumor more easily. This finding is an important step forward that could help lead to new therapies for pancreatic cancer.

¹American Cancer Society, www.cancer.org

²Olive, Kenneth P., et al. Inhibition of Hedgehog Signaling Enhances Delivery of Chemotherapy in a Mouse Model of Pancreatic Cancer. *Science* 2009.

For more information about the clinical trial of IPI-926 in pancreatic cancer, please visit www.clinicaltrials.gov