



PANCREATIC CANCER THERAPEUTIC

Targeting Runx3 for the Treatment of Pancreatic Cancer

Brief Description of Technology

Novel therapeutic target to prevent metastasis of pancreatic cancer.

BUSINESS OPPORTUNITY

Exclusive license
Sponsored research

TECHNOLOGY TYPE

Therapeutic
Oncology

STAGE OF DEVELOPMENT

Target identification

PATENT INFORMATION

US 20150368646

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Tech ID: 12-037
partnering@fredhutch.org
206-667-4304

Technology Overview

Dr. Hingorani and colleagues have discovered that RUNX3 controls the balance between local growth and metastasis in pancreatic ductal adenocarcinoma. By varying RUNX3 expression levels *in vitro* they found that RUNX3 functions to promote metastatic programs, and by silencing RUNX3 they observed decreased metastasis. *In vivo* experiments demonstrated that RUNX3 depletion significantly impairs the ability of tumor cells to seed and support secondary liver metastases. Importantly, Kaplan Meier survival curves revealed that human patients bearing tumors expressing high levels of RUNX3 had a significantly shorter [~50%] survival time than patients with low RUNX3 expressing tumors. This work identifies RUNX3 as a critical target for preventing pancreatic cancer metastasis.

Applications

- Pancreatic tumor therapy

Advantages

- Novel target for treatment of pancreatic cancer

Market Overview

About 53,000 individuals per year are diagnosed with pancreatic ductal adenocarcinoma (PDA). It is the fourth leading cause of cancer-related death in the United States with a dismal 5-year survival rate of 6%.

Investigator Overview

Dr. Sunil Hingorani is a medical oncologist and directs the Center of Accelerated Translation in Pancreas Cancer (CATPAC). He is also a member of the Clinical Research and Public Health Divisions at Fred Hutch.