PANCREATIC CANCER

60,430 New Cases

48,220 Deaths

American Cancer Society, Cancer Facts and Figures 2021.
The 5-year survival rate for pancreatic cancer is 10%. Survival measured in months instead of years.
WHY IS PANCREATIC CANCER SO DEADLY?

- Detected late
  - Located deep in the body
  - Symptoms are vague and common
    - Back ache
    - Indigestion
- Metastasizes early

Only 15% are diagnosed with early-stage disease and eligible for surgery

Percent incidence

- Localized: 15%
- Regional: 27%
- Distant: 46%

SEER 21, diagnosis 2014, accessed April 2021
EARLIER DETECTION IN PANCREATIC CANCER DRAMATICALLY IMPROVES SURVIVAL

5-year relative survival (%)

- Stage 1A: 83.7%
- Localized: 41.4%
- Regional: 14.3%
- Distant: 3.2%

Stage 1A JNCI 112: 1162, 2020; localized, regional, distant SEER 18, diagnosis 2013, accessed April 2021
SCIENTIFIC PROGRESS TOWARD AN EARLY DETECTION TEST FOR PANCREATIC CANCER

Publications on pancreatic cancer early detection

Biomarkers that distinguish pancreatic cancer vs. no pancreatic cancer

PubMed, accessed April 2021
BOTTLENECK FOR PANCREATIC CANCER SCREENING

Challenge for Validation and Implementation

13.1 pancreatic cancer cases in 100,000 Americans

.01% = screen 10,000 to find 1 case

Lung 55.4
Liver 9.2
Esophagus 4.3
Stomach 7.5
Brain cancer 6.5
Ovarian cancer 11.6
etc.

Age
Genetic predisposition
New-onset diabetes

‘Deadliest’ or ‘Recalcitrant’ Cancers

1% = screen 100 to find 1 case

High-risk individuals

1% = screen 10,000 to find 100 cases

Multi-cancer Early Detection

SEER 21, diagnosed 2014, accessed April 2021
“I dream of a day ... when a pancreatic cancer patient is diagnosed early, and it’s not based on lucky timing but rather, an early detection tool that brings about survival...”

MATT WILSON
9-year pancreatic cancer survivor