Why early detection?

- SEER 18 2009-2015, All Races, Both Sexes by SEER Summary Stage 2000

Survival dependent upon stage

- Early = better

- Metastatic
  - Median Survival = 11.1 mo
  - 3 yr OS = 2%

- Locally Advanced
  - Median Survival = 12.8 mo
  - 3 yr OS = 10%

- Resectable
  - Median Survival = 54.4 mo
  - 3 yr OS = 63.4%
Challenges in the Early Detection of Pancreatic Cancer

- Low Prevalence
  - ~40 per 100,000 adults over age 50
- No true “high risk” population
- Early PDAC symptoms non-specific
  - Median time from presentation to dx < 2 months
- Early cancer not reliably detected by routine imaging
- Curative treatment is highly morbid
  - No de-escalated options for early disease
“Perfect” biomarker

- 99% Sensitive
- 99% Specific
- 2,500 false positive screens for each 1 case detected

NEED TO ENRICH THE POPULATION

PRECEDE Mission

- The Pancreatic Cancer Early Detection Consortium (PRECEDE) Consortium is an international multi-institutional collaborative effort to improve survival for pancreatic cancer by improving early detection, screening, risk modeling and prevention for those with a heritable risk for pancreatic cancer. It is the largest effort of its kind, and utilizes a novel model of collaboration and data sharing.

- The mission for the PRECEDE is to transform the landscape of pancreatic cancer risk assessment, early detection, and prevention and to increase the 5-year survival rate from 10% to 50% within the next 10 years.
Study Design

- The PRECEDE Consortium is an observational longitudinal prospective cohort study, with serial biosample collection (every 12 months) and acquisition of standardized clinical and imaging data in defined high-risk groups.

- Current Requirements for Membership:
  - ≥75 patients with increased risk in surveillance
  - Multidisciplinary team, incl. GI, advanced endoscopy, surgery and genetics
  - Infrastructure for biosample collection and storage
  - Staff to manage patient consent, data collection, and data entry, Biosample collection
Specific Aims

• To standardize the collection of demographic, clinical, imaging data, and biosamples for a large high-risk familial PDAC cohort at consortium centers worldwide.

• To generate proof of the importance of high-risk surveillance programs for PDAC for both clinicians and health authorities through longitudinal follow-up of clinical outcomes.

• To establish evidence-based practice standards for genetic testing and surveillance in individuals with family history of PDAC and/or carriers of PGVs in genes linked to PDAC risk.

Specific Aims

• To study modifiers of risk, including genetic and environmental factors, evaluate disease penetrance, and quantify cancer risk in families with PDAC and/or carriers of PGVs in genes linked to PDAC risk. Identify new pancreatic cancer susceptibility genes.

• To develop comprehensive risk models to estimate PDAC risk and guide clinical decision making.

• To develop and/or validate biomarker assays (blood test/imaging) that detect early stage PDAC.

• To enhance communication tools for patients and health care providers.

Study Design
Cohorts

Cohort 1
- 2+ relatives with PDAC on same side of family; ≥1 is first degree relative; age 50+
- 2+ affected first degree relatives with PDAC; age 50+
- BRCA1, BRCA2, PALB2, ATM, MLH1, MSH2, MSH6, PMS2, EPCAM mut AND first or second-degree relative with PDAC; age 50+
- Familial Atypical Moles and Malignant Melanoma w/ CDKN2A mutation; age 40+
- Peutz-Jegher w/ STK11 mutation; age 30+
- Hereditary pancreatitis w/ PRSS1 mutation; age 40+

Cohort 2
- ATM, BRCA1, BRCA2, or PALB2 pathogenic variant +/- family history, age 50+
- 2+ relatives with PDAC on the same side of family, any degree of relation; age 50+
- 1 FDR with PDAC ≤ age 45; age ≤ 10 years younger than PDAC dx in family member

Cohort 3
- Individual meeting criteria for Cohorts 1 or 2 EXCEPT age

Cohort 4
- Individuals without history of PDAC presenting for evaluation who do not meet any criteria above after collection of full family history and/or germline testing

Contacts
- Study Coordinators:
  - Claire Dorfman and Niko Millington
  - PRECED@ohsu.edu
  - 971-413-9244
- Principal Investigator:
  - Aaron Grossberg, MD, PhD
Thank You