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BIOMARKERS FOR EARLY-STAGE PANCREATIC CANCER

DIAGNOSTICS

Blood-borne biomarkers for screening, diagnosis, and prognosis of early stage, asymptomatic pancreatic ductal adenocarcinoma.

TECHNOLOGY TYPE

Biomarkers
Assay
Oncology
Pancreatic Cancer

STAGE OF DEVELOPMENT

- Panel verified with over 300 patient samples.
- External panel verification in progress.

IP PROTECTION

Nationalized PCT Issued in the United States

Biomarkers and Methods for Diagnosis of Early Stage Pancreatic Ductal Adenocarcinoma
US10451628B2

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Reference Number: U-5736

Aaron Duffy

Technology Manager
aaron.duffy@tvc.utah.edu
801-585-1377

TECHNOLOGY SUMMARY

Pancreatic ductal adenocarcinoma (PDAC) is diagnosed too late for treatments to be effective in approximately 80 percent of patients. Screening programs to detect early stage PDAC demonstrate low accuracy, limiting their use for diagnostics and disease monitoring. This leaves patients with only palliative care options and a less than five year prognosis.

University of Utah researchers have developed a biomarker panel supported by extensive studies across clinical samples to provide early screening for PDACs so that patients can receive early clinical intervention. The panel includes a key protein in the blood, basigin, which was found to be elevated in early stage pancreatic cancer patients, but not in late stage or healthy patients. A panel of biomarkers, including basigin, can discriminate between healthy subjects and patients with early stage cancer, with high sensitivity at 95 percent specificity thresholds.

FEATURES AND BENEFITS

- Enables early-stage detection of PDAC.
- Differentiates between early and late-stage disease.
- Improves accuracy of diagnosis – particularly in asymptomatic patients.
- Detection of basigin can provide prognosis of poor patient outcomes.

RECENT PUBLICATIONS

Kamal, S., Firpo, M.A., Scaife, C.L., Douglas, A.G., Boucher, K.M., Mulvihill, S.J. (2015). Abstract B23: Plasma basigin as an early detection biomarker for pancreatic adenocarcinoma. AACR: *Cancer Research*. 75(13 Supplement): Abstract nr B53. doi: [10.1158/1538-7445.panca2014-b23](https://doi.org/10.1158/1538-7445.panca2014-b23)

INVENTOR PROFILE

Matthew Firpo, Ph.D., [Research Associate Professor - Surgery](#)
Sean Mulvihill, M.D., [Chief Executive Officer – University of Utah Medical Group & Health Sciences, Professor - Surgery](#)

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