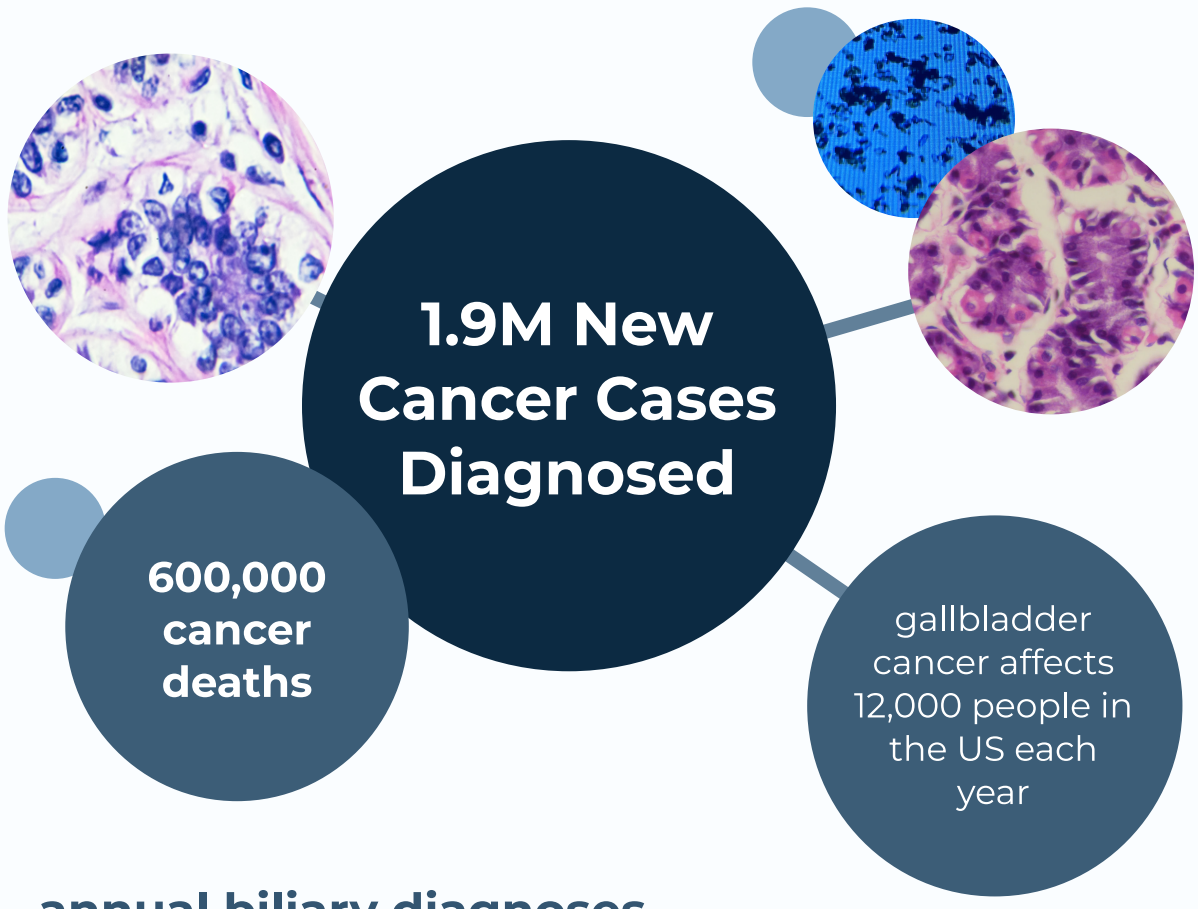
BOSTON SCIENTIFIC

the general goal:

improving the current state of cytology and diagnosis of cholangiocarcinoma



annual biliary diagnoses

8,000

in the united states

survival dependent on time of diagnoses

- can go onto affect the liver
- can be caused by inflammation or blockage of the bile ducts over time
- typically does not cause symptoms in the early stages
- often is metastatic at the time of diagnosis, which means the cancer has already spread to other parts of the body

current primary diagnosis method

ERCP

endoscopic retrograde cholangiopancreatography

- minimally invasive
- use of endoscope & x-ray to guide a brush to the bile duct
- brush swabs the hypothesized cancerous stricture region for a pathologist's diagnosis

Failures of ERCP

- high level of false negatives
- failure for specificity
- unable to collect enough cells for a thorough diagnosis

The Ideal Sample

- sensitive and specific while being relatively simple technically and cost effective.

Olin SCOPE

our goal

- centered around repeatability and validity
- enhance the diagnostic yield of cytology brushes
- improve the method in which cytology brushes are tested and yield is quantified

our strategy

- explore the current state of ERCP and cytology
- interview cytologists and physicians to understand the sampling and diagnosis process
- establish a consistent quantification protocol that is:
  - easy, accessible, inexpensive, reliable
- explore brush characteristics that could impact sample collection

our findings

- established a test protocol and created a device that reliably collects repeatable data
- compared brush characteristics that impact sample quantification
- initiated future pathways for BSC cytology

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