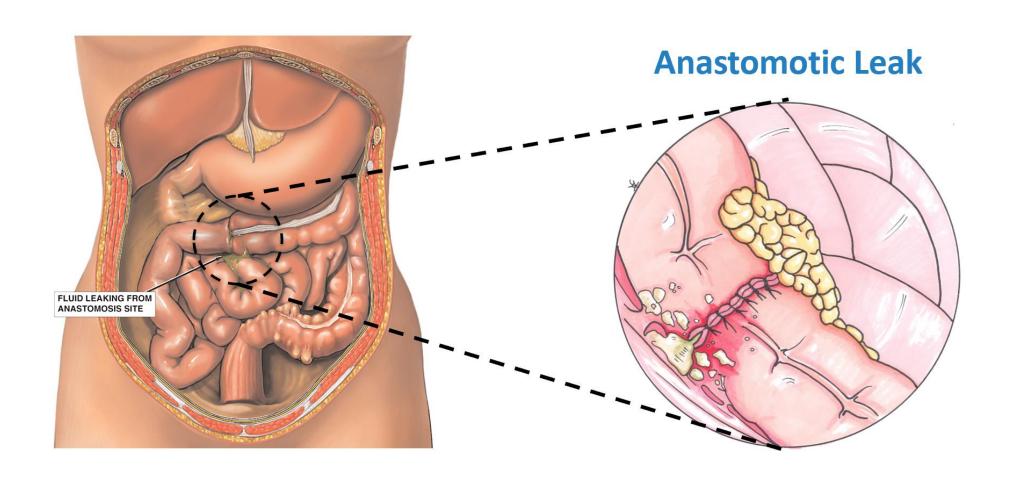


Building a Future of Safe Surgeries

Amr Abdelgawad COO and co-founder

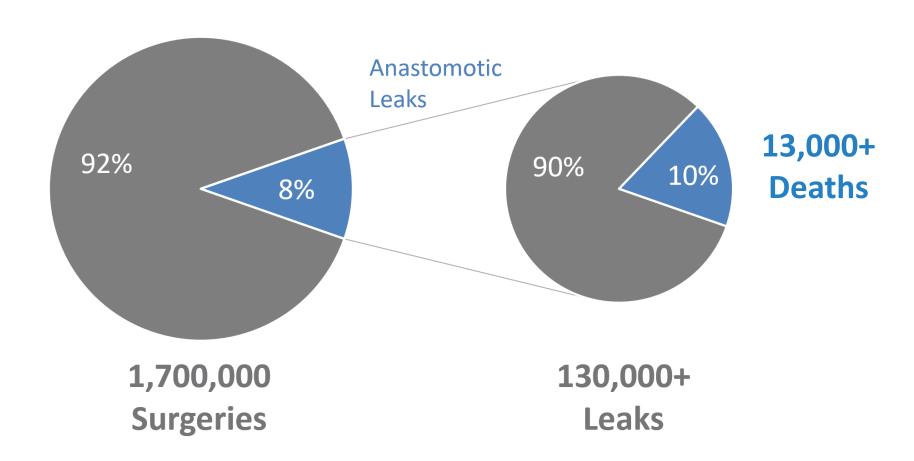
Problem

Anastomotic leaks



Problem

Anastomotic leaks in USA (yearly)



Standard of Care

Routine post-operative investigations









Follow-ups

- Bowel Movement
- Fever
- Heart rate

Lab Tests

- WBC Count
- C-reactive protein
- Amylase

Imaging

- CT Scans
- Fluoroscopy
- Radiology

Reoperation

Standard of Care

Challenges



Delayed and ineffective

25% failure rate for imaging



Painful for patient

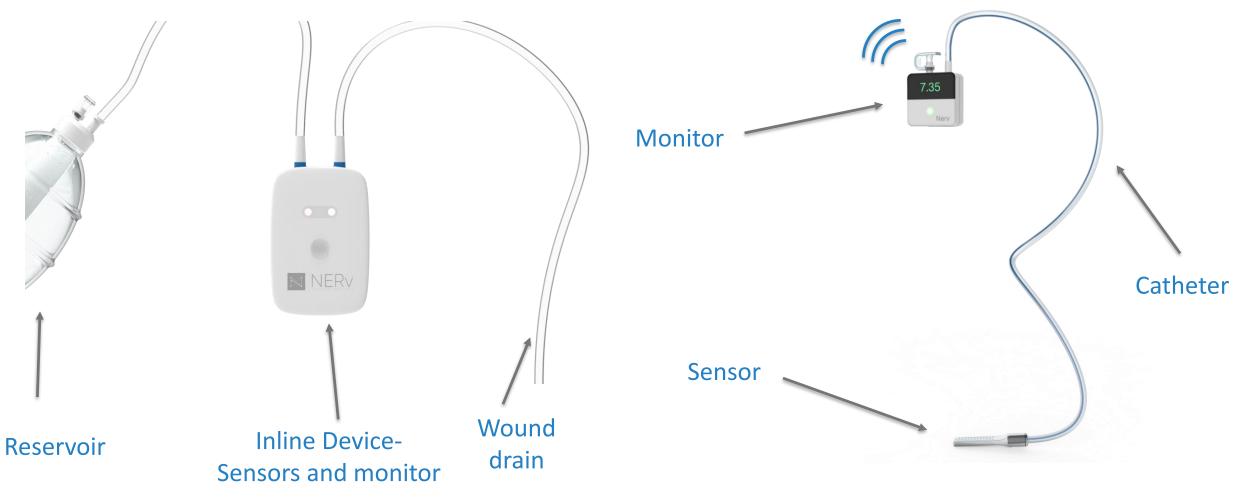


Costly diagnosis and treatment

\$30K USD per patient

Solution

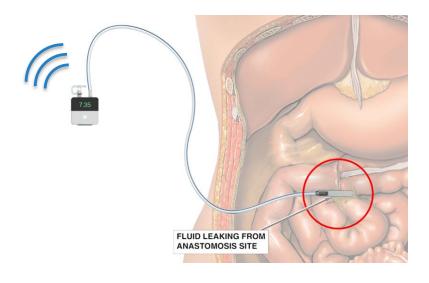
Biosensors embedded in wound drains & catheters



Removed in an outpatient setting a few weeks after surgery

Solution

Work flow



Sensor placed near surgical site



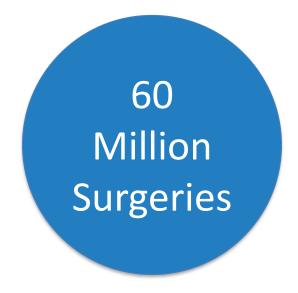
Prediction and detection platform



Doctor notified, report generated

Market Size

Target surgeries



General & Abdominal Surgeries (Global)

20 Million Surgeries

General & Abdominal Surgeries (United States)

1.7 Million Surgeries

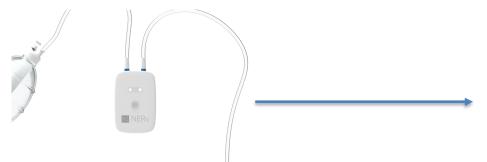
Acute trauma Surgeries
Colorectal Surgeries
Bariatric Surgeries
Hepatobiliary Surgeries

Target Market

Total Available Market

Serviceable Available Market

Business Model



Gross Revenue

\$600,000/hospital/ Year

Biosensors

1500 surgeries/ Hospital

Hospitals

*cash-flow positive with 4-5 hospitals in pipeline

\$400/unit

COGS: \$50/unit

*cost savings of \$20K-\$40K per leak incident



St. Michael's Inspired Care.

Inspiring Science.







Team Leads



Youssef Helwa
CEO, MASc Nano Eng
5+ years experience in bioMEMS
4 publications in field of biosensors
Two-time company founder



Abdallah El-Falou
CTO, MASc Elec. Eng.
5+ years experience in
Microelectronics & Systems



Amr Abdelgawad
COO, Master of Business,
Entrepreneurship and Tech
Two-time company founder
Canada Student Entrepreneur 2017
TEDxUW 2017 Speaker



Mohamed Okasha
Lead Scientist, HBSc Biochemistry
and Biomedical Sciences

4+ years experience in research labs





National Institute of Standards and Technology U.S. Department of Commerce





Traction



60 Physicians6 Physician Investors2 Champions



Letter of Intent

Johnson Johnson



Active Industry Engagement

Intellectual Property

Provisional

PCT

Patent Pending (United States)

Provisional Patent (March 2019)

of Biochip Platform

General Applications

Anastomotic Leakage Sensor

Implantable Biocompatible Biochip

Biomarker Detection Techniques

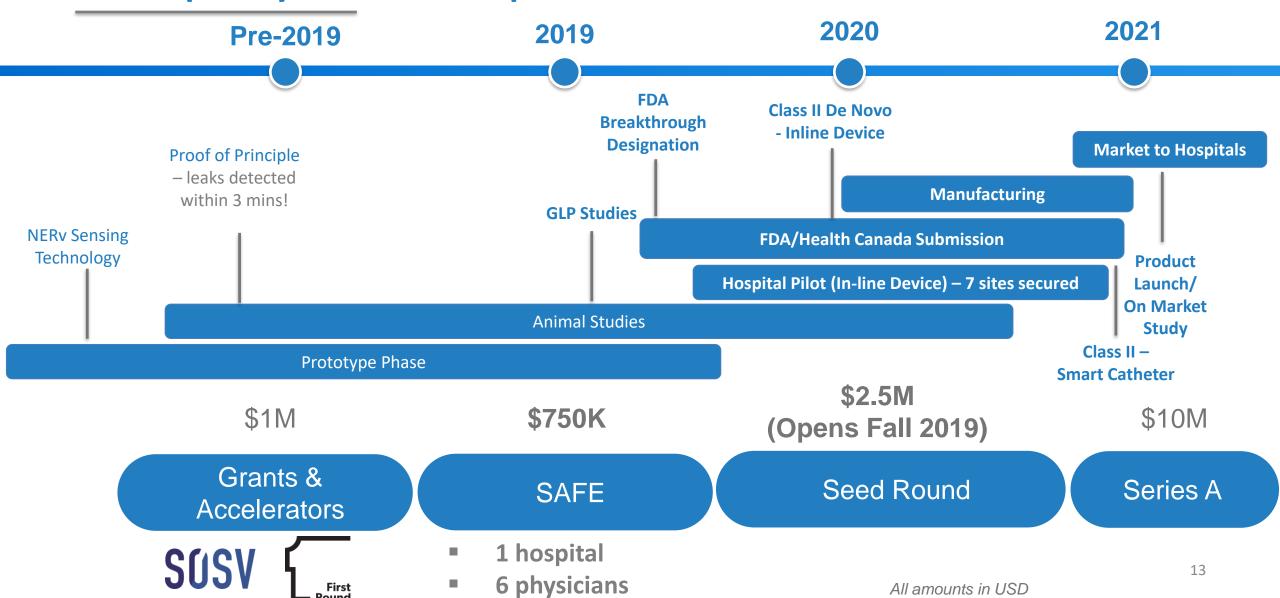
Combined 4 provisional patents into 1 PCT application

Formalized PCT into US Patent application

Realtime Prediction & Detection Platform

2015 2016 2017 2019

Company Roadmap



Why us?

Unmet Need

- Anastomotic leak after surgery
- 13,000+ patients die annually

Patent-pending Solutions

- Smart Catheter/In-line Device
- Early detection of leaks





