5 million ICU admissions
2.5 million on ventilators
750K develop pneumonia due to stomach reflux/year due to ventilator (VAP)
187,500 die due to VAP every year
Cost of pneumonia (VAP)

48 K per patient

7 days of extended hospital stay
Problem (VAP)

Hospital Acquired Infections (HAI):
- Eat into Hospital margin
- Not covered by payers
- Monitored by Medicare
Problem (VAP)

- Lying flat
- Sedation - breathing tube
- Muscle relaxant - help breathe with ventilator
- Reflux of acid in esophagus and then into lungs to trigger pneumonia
- Current feeding tubes don’t restore normal emptying of esophagus and stomach
Solution
SmartFeedT

Every intubated patient needs a feeding tube
Restores esophageal and stomach motion: bioelectric stimulation
Detects & Clears saliva that pools at the back of throat that enters the lungs
Using resonant EM distribution
FDA Approval Process

- 510K process
- Class II device
- Plastic & single use
- Approval 3-6 months
Savings

- 750 K cases of pneumonia
- 36 billion USD/year
- 5.25 million hospital days saved
Hospital (Market size)

- 1 million feeding tubes in ICU patients
- 1.5 Million in hospitalized patients
- 2.5 to 5.0 million feeding tubes used (1-2 tubes per patient) (unit)/year
Community (Market size)

- 0.5 million long-term feeding tubes
- Tube changed every 6 weeks
- 10 tubes/year per patient
- 5 million feeding tubes (unit)
Reimbursement

- In hospital: Medicare part A
- Community: Medicare part B
- Existing billing code(s)
Revenue (ICU only)

- 1 million get feeding tube
- Unit cost: $50
- 50 million per year (100% penetration)
- 25 million per year (50% penetration)
- 5 million per year (10% penetration)
Founder & CEO

• Entrepreneur, physician and scientist
• Business & investment advisor: JSimple LLC
• Team: Greg Semenza: Nobel prize, 2019
• NIH: excellence award
Founder

- Thoracic surgeon-25 years
- Expert in reflux injury
- Pioneer in resonant EM transmission
- Bonde Innovations LLC (CoRISMA): 27 million for 22.2% stake
- FDA panel
Team (Engineering and R/D)

Jin Park
VP, Research and development

Daniel Olsen
Director, Quality assurance & production

Egemen Tuzun
Preclinical FDA Regulatory affairs
More than 20 years experience in pre-FDA GLP studies.
Investment and legal

John Visconti,
*Visconti and Associates*

Corporate legal team:

Khanna LLP
Regulatory experts

Jennifer Tomassello: Senior policy advisor, FDA and congressional contact
CardioMed device consultants, Edgewater, MD
MCRA: reimbursement experts, Manchester, CT
Science

This groundbreaking work: link between reflux and damage to lungs & esophagus

This work led to the invitation from Johns Hopkins for Dr. Bonde to continue his work.

Validation in extensive animal studies

Worlds first esophageal cancer vaccine developed by Dr Bonde based on this work
Resonant EM transfer

loosely coupled coils: $Z$ similar to $D$
IP portfolio (six identified and four in works)

- Foundational patents X 3
- Patent on design
- Patent on unclogging component
- Patent on AI backed monitoring
- Design of smart controller
- Telemetry unit design
Market (expansion)

- Dysphagia (Impaired Swallowing) with frequent aspiration
- Narrowing in the esophagus or digestive tract (stricture)
- Inability to take oral feedings due to head or neck trauma
- Gastrointestinal cancer
- Gastrointestinal complications due to trauma
- Intestinal failure
- Bowel Obstruction
- Crohn’s Disease (in severe cases)
- Microscopic Colitis
- Short bowel syndrome
- Ulcerative Colitis
- Prolonged anorexia
- Bulimia
- Severe protein-energy malnutrition
- Coma or depressed sensorium
- Liver failure
- Critical illnesses (e.g., burns) causing metabolic stress
- Dementia
- Neuro-Muscular Disorders
- Pediatric Indications
KOL (over 100 from top 15 institutions)

- Gastroenterology specialist
- Thoracic surgeons - esophagus, stomach & lung specialists
- ICU specialists - Intensivists
- Pulmonologists - lung specialists
- ICU nurse managers
- ICU nurses
- Hospital administrators
- Billing and coding specialist
- Reimbursement specialists
Current therapy for prevention of VAP

<table>
<thead>
<tr>
<th>Elevate head of bed-</th>
<th>Motility drugs-</th>
<th>Anti-acid drugs</th>
<th>Suction saliva-</th>
</tr>
</thead>
<tbody>
<tr>
<td>• doesn’t happen 24/7: procedures, change of sheets, turning</td>
<td>• takes days to work</td>
<td>• Not effective in reducing volume</td>
<td>• only done when nurse hears “gurgling” --- patient drowning in own secretions!</td>
</tr>
</tbody>
</table>
KOL- pressure points

**Administrators:**
- Hospital acquired infections - major drain on hospital margin

**Intensive care specialists:**
- Mortality and extended ICU stay clogs system

**ICU nurses:**
- Not easy to timely suction, assess and avoid reflux

**Surgeons/physicians:**
- Disappointing to see successful procedure only to have patients succumb to pneumonia
KOL- major ask

- Restore natural motility
- Help empty stomach
- Prevent reflux
  - Time to intervene
- Self propelled tube
- Help position tube within body
- Help with identifying and de-clogging tube
- Measure reflux
- Automatic suction of saliva and throat
<table>
<thead>
<tr>
<th>No.</th>
<th>Issue Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Passive conduit for carrying liquid food</td>
</tr>
<tr>
<td>02</td>
<td>Positioning within wrong structure a problem</td>
</tr>
<tr>
<td>03</td>
<td>De-clogging a problem-often needing change out</td>
</tr>
<tr>
<td>04</td>
<td>Actually exacerbates reflux due to mechanical presence across the valve</td>
</tr>
</tbody>
</table>
Comparison

**Current feeding tubes**
- Passive tubes to feed
- Does not restore function
- Does not prevent reflex of acid
- Does not prevent pooling of saliva
- Takes >24 -48hrs for accurate positioning
  - USD 30

**Smart FeedT**
- Active: able to feed
- Restores normal function
- No reflux of acid
- No saliva pooling
- Accurate positioning
  - Self propulsion
  - USD 50
### Silicon Valley Bank Exit Data

**Smart FeedT is FDA Class II Device**

<table>
<thead>
<tr>
<th></th>
<th>FDA Class II Devices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median Exit</td>
<td>$350 Million</td>
</tr>
<tr>
<td>Median Time to Exit</td>
<td>3.5 Years</td>
</tr>
<tr>
<td>Stage at Exit</td>
<td>41% Development Stage</td>
</tr>
<tr>
<td></td>
<td>50% CE Mark only</td>
</tr>
<tr>
<td></td>
<td>9% FDA Approved</td>
</tr>
</tbody>
</table>

*Source: Silicon Valley Bank mid-year Report Healthcare Exits 2015-2018*
Disrupt Existing Market
Expand Existing Market:
Expand Indications
Expand Patient Eligibility
Access Expanded Infrastructure

Reflux a common problem afflicting >2.5 million hospitalized patients

Nursing homes, post chemo patients, stroke patients account for 1.5 million

Patients after gut operation or major operation who need nutrition

Hasten normal functioning of the esophagus and stomach with motility problems, “not just feed but treat”

Skills, expertise already exists which can be leveraged
Opportunity

Major Market Opportunity

Multiple Disruptive Features

Proven & Experienced Management

Strong Investment Fundamentals

“What you have is truly transformative”
Leading Thoracic Surgeon, Johns Hopkins School of Medicine

“HAI market is ripe for disruption”
Former VP Clinical Affairs Abbott Labs

“Major effect on hospital margin”
Leading Administrator, New York Presbyterian Hospital

“This transformative device market is a fertile ground”
Former Chief Medical Officer Medtronic

“Everybody will want to buy this company”
Former Chief Editor, MDDI
Funding and Milestones

Current Status

Seeking Seed Funding
- $1M
- $300k raised/pledged
- System Testing/IP
- 12 Months

Anticipated Future Funding

Series A
- $10M
- Verification
- 510 (K) application
- 20 Months

Series B
- $15M
- Clinical introduction
- Revenue neutral
- 38 months

Seed Terms (Convertible Debt):
- Conversion Cap: $5M
- Interest: 8%
- Series A Discount: 20%

Target Exit Window
Current Device Market Size

Projected market growth

2021-2028:
$450 Billion - $650 Billion

CAGR: 5.4%
Don’t just feed but treat!