

Development of a Novel Therapeutic Device for Adhesive Small Bowel Obstruction

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Hironori Sunakawa M.D., Ph.D.
Chief, Endoscopic Device Innovation Office,
National Cancer Center Hospital East



Vision

"Treat Adhesive Small Bowel Obstruction Without Surgery"

- Establish a new standard treatment that avoids unnecessary surgery and prolonged hospitalization.
- Develop and commercialize the world's first electrically stimulated self-propelling decompression device (GESTiC System) to provide highly reproducible bowel-preserving treatment that does not depend on operator skill.

Marketability

- Adhesive small bowel obstruction affects approximately 80,000 patients annually in Japan and 200,000 in the United States.
- Current treatment often requires prolonged hospitalization and surgery, resulting in substantial healthcare costs.
- A non-surgical, bowel-preserving treatment could improve patient outcomes while reducing medical resource utilization.
- No commercially available device currently provides autonomous advancement and decompression using electrical stimulation, creating a potential first-in-class market opportunity.

Innovation

World's First Technology

Smooth-muscle electrical stimulation-driven self-propulsion mechanism

Enhanced Safety

Feedback mechanism that automatically stops stimulation when excessive movement is detected.

Strong Differentiation

No predicate device exists; FDA De Novo pathway anticipated.

Partnering

【 Expected partners 】

Medical/Diagnosis/Research Devices · Venture capitals

【 Expectation 】

- CRO partners for large-animal studies and safety evaluations
- Business partners and investors to support startup formation and commercialization

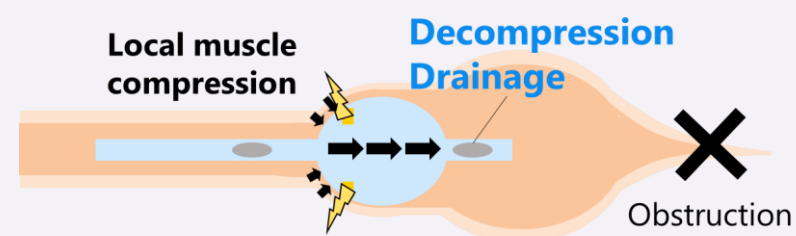
Research Outline

Key Words: # Medical Devices #Therapeutic Devices # Gastroenterology

➤ Commercialization of the Electrically Stimulated Decompression Tube System "GESTiC System" for Adhesive Small Bowel Obstruction

Components

- Reusable electrical stimulation controller(GESTiC GI-Stim Controller)
- Single-use decompression tube with stimulation balloon and decompression lumen (300 cm)(GESTiC Stim Catheter)



Future patient flow



SBO crisis

GESTiC

Detainment at the duodenum

Stay for 2-5 days

Recovery 90%

Surgery 10%

- Short insertion time : 5-10 min
- Reliable and effective insertion

Higher recovery rate

