

Smart Endobronchial One-Way Valve Device Made From Shape Memory Alloy For Emphysema Treatment

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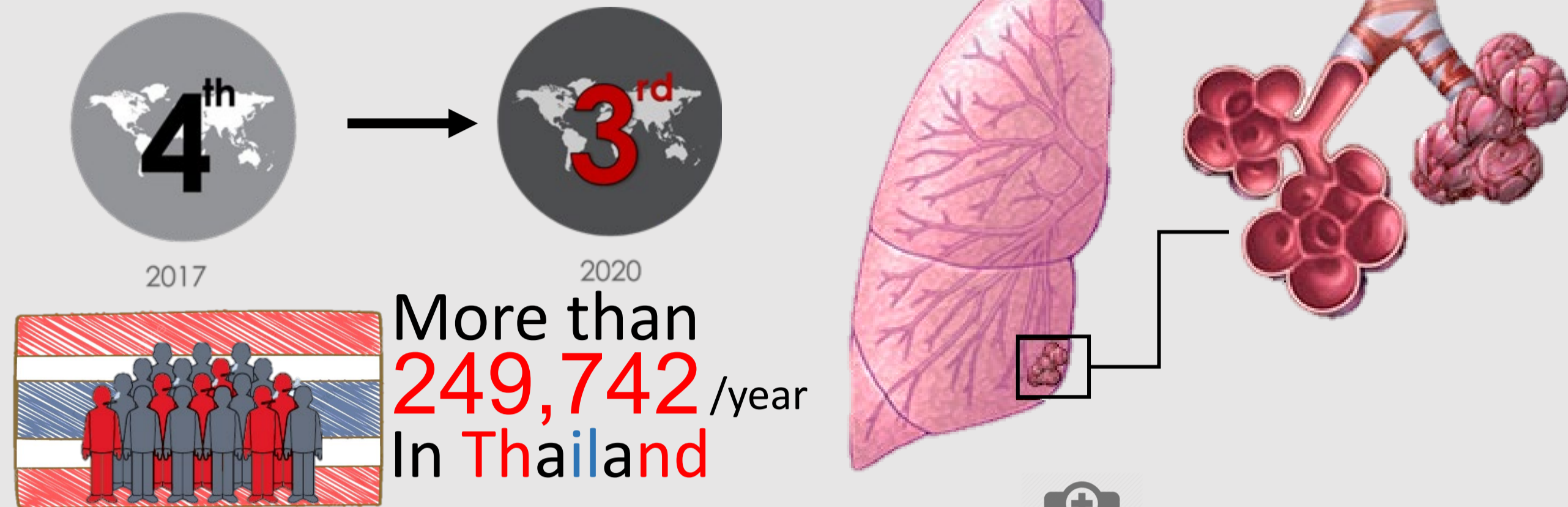
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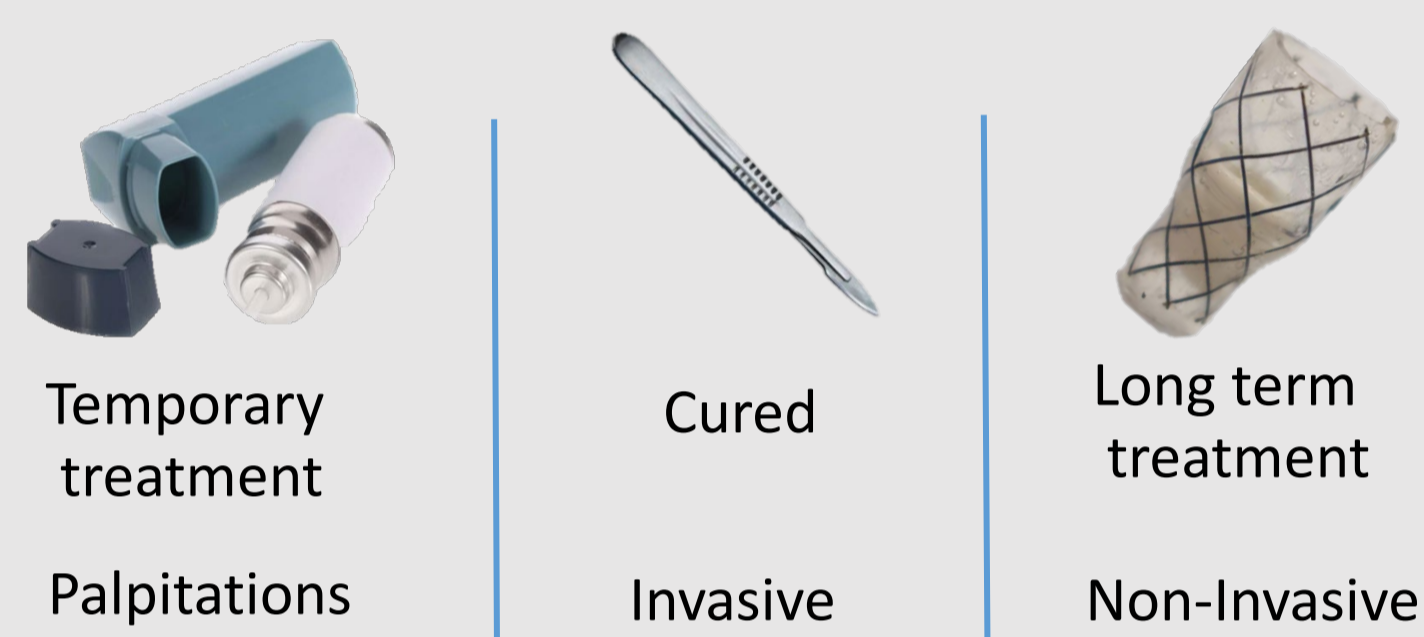
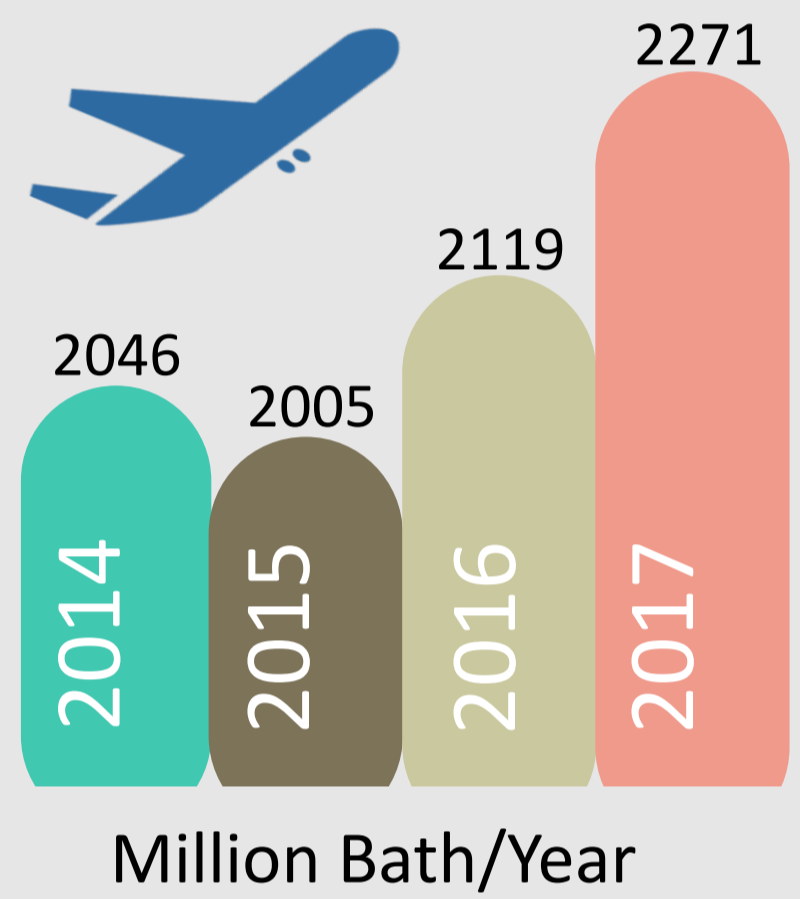
INTRODUCTION

What is Chronic Obstructive Pulmonary Disease (COPD) ?

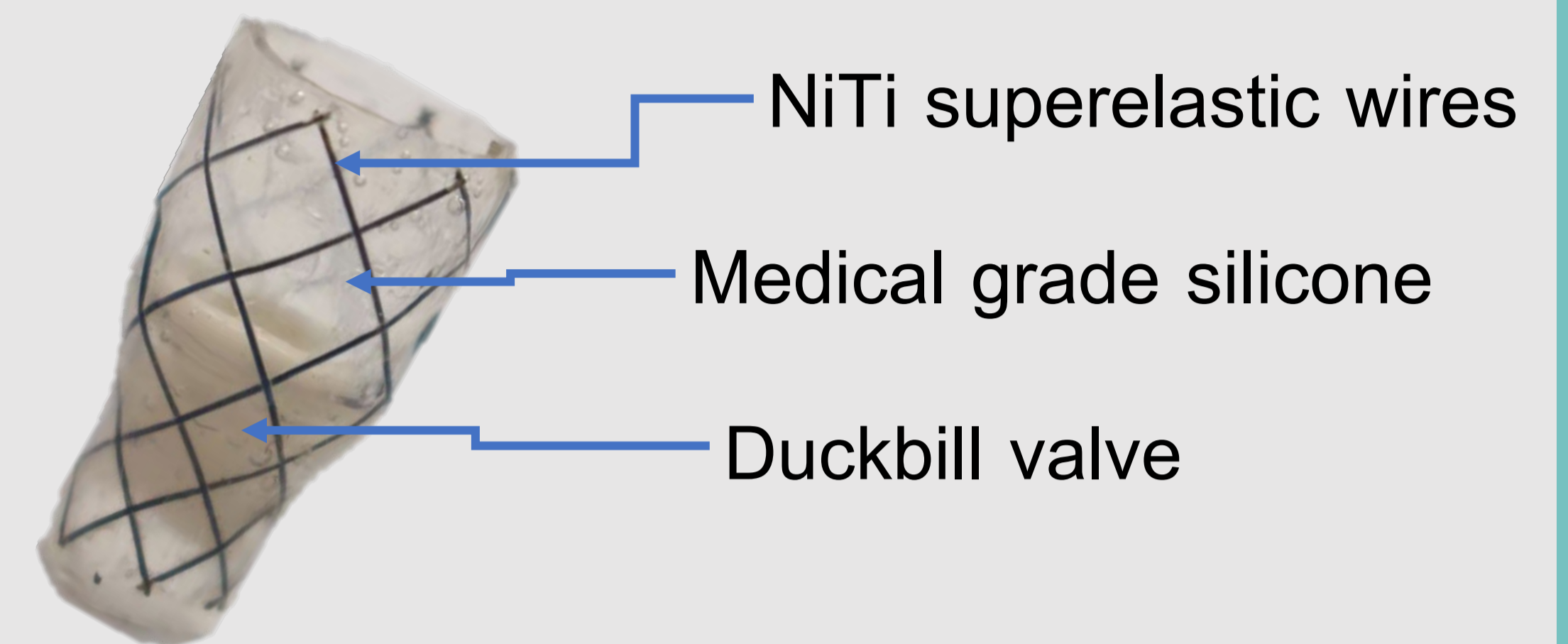
COPD is characterized by persistent symptoms and airflow



Treatment



ENDOBRONCHIAL VALVE



Scan me !

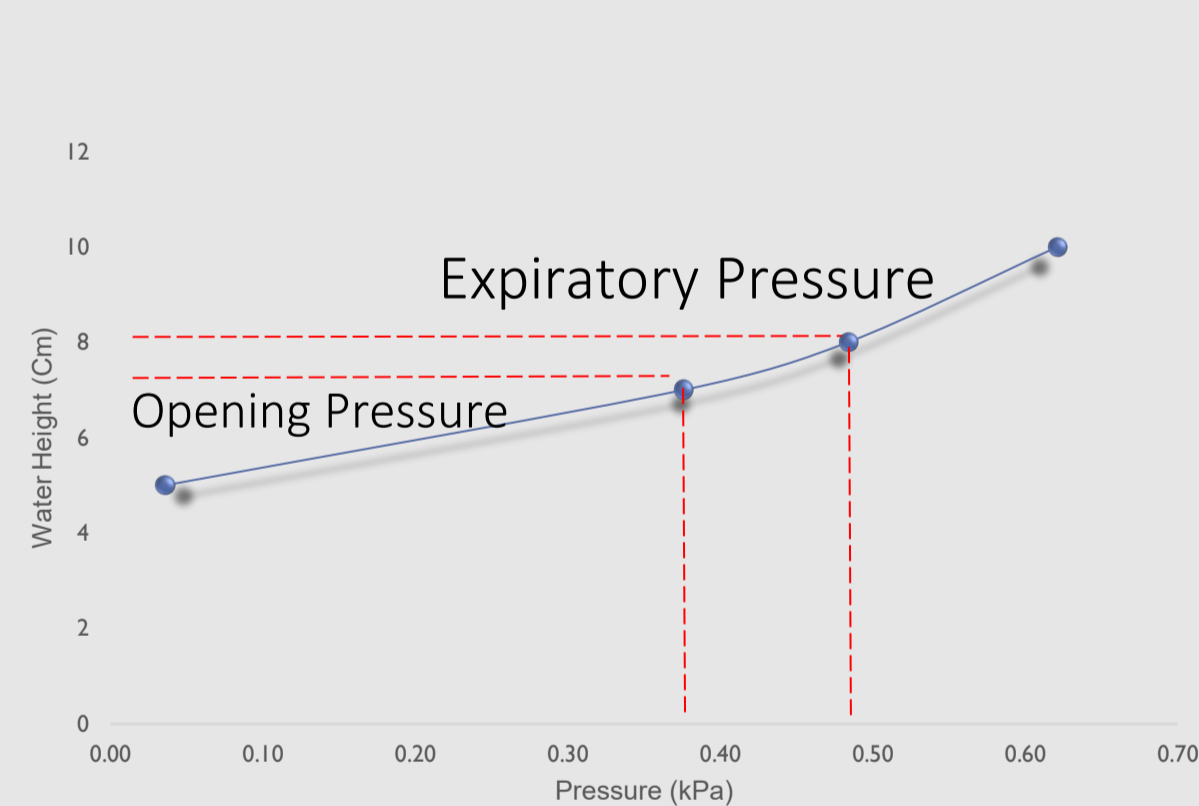
Using a flexible catheter to delivered EBV to target airways

THE IMPACT
of
CHANGE

Amazing !

- ✓ Reducing the volume of the diseased region.
- ✓ Quality of life and reduce the risk of death.

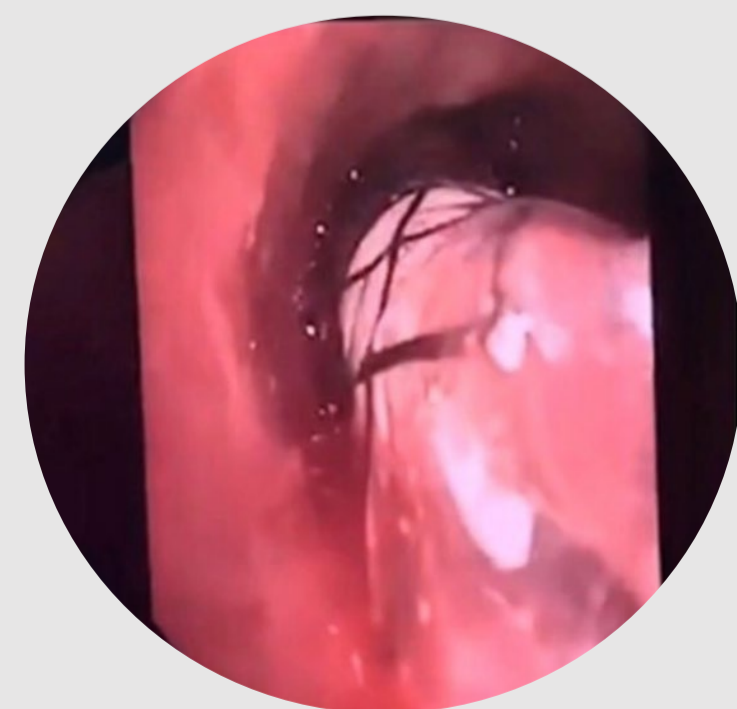
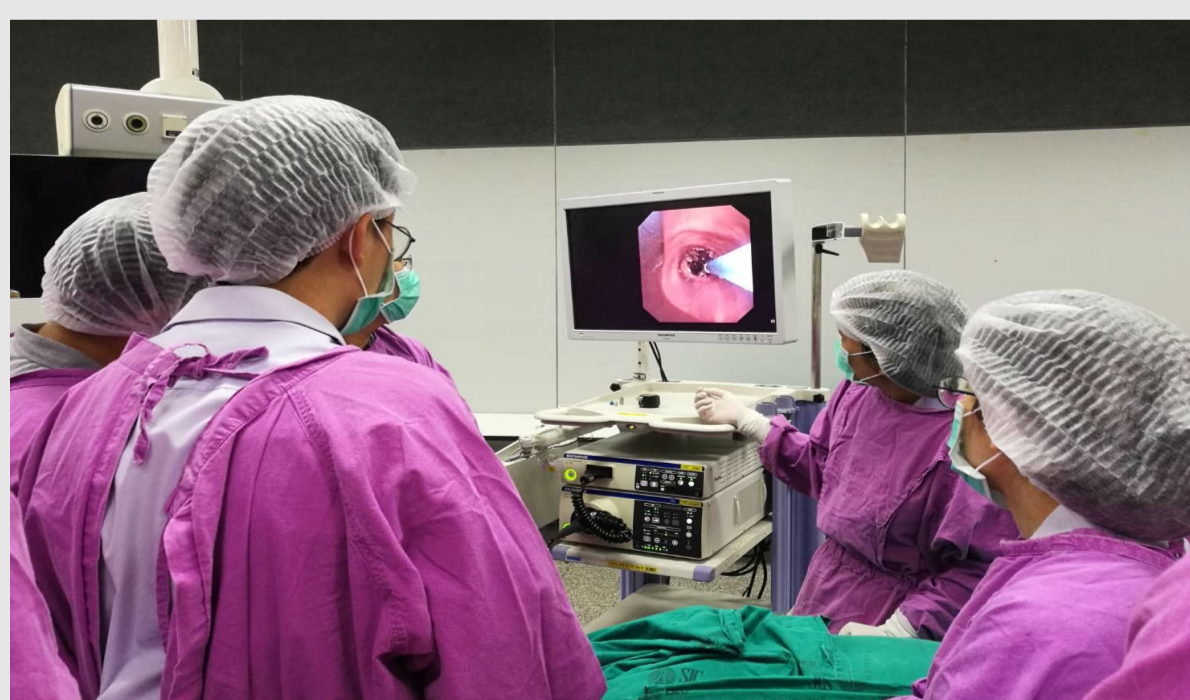
FLOW TEST



Human Expiratory Pressure = **0.49 kPa**

Opening Pressure > **0.38 kPa**

CADAVER MODEL



Good corrosion resistance In order to validate the performance of the EBV prototype. Cadaver from King Chulalongkorn Memorial Hospital was used to study in this test.

ADVANTAGES

- 👍 The EBV is highly flexible.
- 👤 Good biocompatibility
- 🧫 Good corrosion resistance
- ❤️ Migration resistance and fatigue resistance according to standard

