

## Supplementary Material

### Eligibility Criteria

#### Inclusion Criteria

1. Age between 18–65 years
2. BMI between 28 to 34.9 kg/m<sup>2</sup>
3. Apnea-hypopnea index  $\geq 30$  events/hour
4. Must comply with all study requirements for the duration of the study, as outlined in the protocol. This includes complying with the visit schedule and study-specific procedures such as clinical assessment, endoscopy, radiography, and laboratory investigations.
5. Must be able to understand and be willing to provide written informed consent;
6. Had followed the multidisciplinary bariatric workup (blood analyses, dietician, psychologist and doctor appointments)

#### Exclusion Criteria

1. Achalasia and any other esophageal motility disorders
2. Current severe esophagitis (grade C and D based on Los Angeles Classification)
3. Current gastro-duodenal ulcer
4. Heart disease: unstable angina, myocardial infarction within the past year, or heart disease classified within the New York Heart Association's Class III or IV functional capacity
5. Hypertension: uncontrolled hypertension during the last three months
6. Diabetes: uncontrolled diabetes (on insulin therapy or oral therapy with HbA1c >10%)
7. Total body weight loss >5% over the previous six months
8. Current severe renal, hepatic, pulmonary disease, or cancer
9. Current gastrointestinal stenosis or obstruction
10. Pregnancy, breastfeeding, or willing to become pregnant in the coming 18 months
11. Bariatric surgery, balloon or other endoscopic obesity-related therapy within six months of enrollment in this study
12. Anticoagulant therapy
13. Impending gastric surgery 60 days post-intervention
14. Psychiatric disorder refuted after psychological evaluation
15. Currently participating in another study that has not reached its primary endpoint