**Supplemental Tables and Legends:**

**Supplementary Table:**

**Clinical outcomes of non-EoE subjects presenting with initial indication dysphagia**

|  |  |  |  |
| --- | --- | --- | --- |
| Age (Years) | Other Symptoms | Outcome | Outcome Details |
| 6 | Abdominal pain | Resolved | Symptoms resolved. PPI discontinued |
| 8 |  | Resolved | Symptoms resolved. (Manometry scheduled but cancelled given patient improvement.) |
| 9 | Abdominal pain, constipation, weight loss | Resolved | Treated with cyproheptadine. Symptoms resolved. Medications discontinued. |
| 10 |  | Resolved | Symptoms resolved. PPI discontinued. Likely functional globus |
| 15 |  | No GI follow-up | Recommended 12 weeks PPI with plan to discontinue. |
| 16 |  | Resolved | Symptoms resolved. PPI discontinued |
| 17 | Globus | No GI follow-up | No follow up since EGD |
| 17 | Reflux | Non-Erosive GERD | Symptoms resolved. PPI discontinued |
| 18 |  | Resolved | Symptoms resolved. PPI discontinued |
| 18 | Heartburn | No GI follow-up | pH probe normal. No further follow up. |

**S1:** Regression and prediction intervals for distensibility of the esophageal lumen across age, height and weight in A-C) non-EoE controls and D-F) EoE subjects.