**Table S2. Chicago Classification v4.0 (CCv4.0) diagnoses among FLIP Panometry findings.** The FLIP Panometry classification of esophagogastric junction (EGJ) opening is displayed in **A** and the contractile response patterns are displayed in **B.** HRM – high resolution manometry. EGJOO – esophagogastric junction outflow obstruction. DES – distal esophageal spasm. IEM – ineffective esophageal motility.

|  |  |
| --- | --- |
| **A** | **FLIP Panometry EGJ opening classification** |
|  | **Normal EGJ opening** | **Borderline normal EGJ opening** | **Borderline reduced EGJ opening** | **Reduced EGJ opening** |
| **n (%)** | 187 (35%) | 57 (11) | 54 (10) | 241 (45%) |
|  | **n (%)** | **n (%)** | **n (%)** | **n (%)** |
| **HRM - CCv4.0****Type I achalasia****Type II achalasia****Type III achalasia****EGJOO****Hypercontractile****DES****Absent contractility****IEM****Normal motility** | 1 (1)0001 (1)4 (2)7 (4)21 (11)153 (82) | 03 (5)5 (9)04 (7)2 (4)3 (5)10 (18)30 (53) | 11 (20)13 (24)3 (6)02 (4)2 (4)07 (13)16 (30) | 43 (18)113 (47)32 (13)19 (8)6 (3)4 (2)06 (3)18 (8) |

|  |  |
| --- | --- |
| **B** | **FLIP Panometry Contractile Response Pattern** |
|  | **Normal** | **Borderline** | **Impaired/ disordered** | **Absent** | **Spastic-reactive** |
| **n (%)** | 94 (17) | 97 (18) | 119 (22) | 172 (32) | 57 (11) |
|  | **n (%)** | **n (%)** | **n (%)** | **n (%)** | **n (%)** |
| **HRM - CCv4.0****Type I achalasia****Type II achalasia****Type III achalasia****EGJOO****Hypercontractile** **DES****Absent contractility****IEM****Normal motility** | 00002 (2)3 (3)06 (6)83 (88) | 1 (1)1 (1)3 (3)1 (1)3 (3)2 (2)2 (2)11 (11)73 (75) | 5 (4)37 (31)21 (18)6 (5)1 (1)3 (3)3 (3)12 (10)31 (26) | 48 (28)79 (46)5 (3)10 (6)1 (1)1 (1)5 (3)10 (6)13 (8) | 1 (2)12 (21)11 (19)2 (4)6 (11)3 (5)05 (9)17 (30) |