

**Supplemental Table S1.** Outcomes and Resource Utilization (Frail vs. Non-Frail)

Abbreviations: SD = Standard Deviation, AECOPD = Acute Exacerbation of Chronic Obstructive Pulmonary Disease, ICU = Intensive Care Unit, IQR = Interquartile Range

| Characteristic                                                 | Frail<br>( <i>n</i> = 147) | Non-Frail<br>( <i>n</i> = 243) | Odds Ratio<br>(95% CI) | <i>P</i> Value |
|----------------------------------------------------------------|----------------------------|--------------------------------|------------------------|----------------|
| Age, years, mean (SD)                                          | 68.9 (10.3)                | 67.8 (11.5)                    |                        | 0.34           |
| Male sex, <i>n</i> (%)                                         | 73 (49.7)                  | 111 (45.7)                     |                        | 0.44           |
| Home Oxygen Prior to Admission, <i>n</i> (%)                   | 68 (46.3)                  | 44 (18.1)                      |                        | <0.001         |
| First AECOPD, <i>n</i> (%)                                     | 8 (5.4)                    | 37 (15.2)                      |                        | <0.01          |
| Previous AECOPD Within 12 months, <i>n</i> (%)                 |                            |                                |                        | <0.01          |
| 0                                                              | 77 (52.4)                  | 171 (70.4)                     |                        |                |
| 1-2                                                            | 50 (34.0)                  | 49 (20.2)                      |                        |                |
| 3-5                                                            | 19 (12.9)                  | 17 (7.0)                       |                        |                |
| 6-8                                                            | 1 (0.7)                    | 4 (1.6)                        |                        |                |
| ≥ 8                                                            | 0 (0)                      | 2 (0.8)                        |                        |                |
| In-Hospital Mortality, <i>n</i> (%)                            | 57 (38.5)                  | 49 (20.2)                      | 2.51 (1.59-3.90)       | <0.001         |
| Disposition of Survivors, <i>n</i> (%)                         |                            |                                |                        | 0.55           |
| Home                                                           | 50 (55.5)                  | 115 (59.3)                     |                        |                |
| Long-Term Care Centre                                          | 40 (44.4)                  | 79 (40.7)                      |                        |                |
| ICU Length of Stay, days, median (IQR)                         | 5 (3-8)                    | 5 (3-9)                        |                        | 0.23           |
| ICU Readmission Prior to Hospital Discharge, <i>n</i> (%)      | 17 (11.6)                  | 18 (7.4)                       |                        | 0.16           |
| Hospital Length of Stay, days, median (IQR)                    | 8 (4-15)                   | 10 (5-18.3)                    |                        | 0.05           |
| Hospital Readmission within 30 Days of Discharge, <i>n</i> (%) | 21 (23.3)                  | 42 (21.6)                      |                        | 0.75           |
| Resource Utilization, <i>n</i> (%)                             |                            |                                |                        |                |
| Invasive Mechanical Ventilation                                | 85 (57.8)                  | 130 (53.5)                     |                        | 0.41           |
| Non-Invasive Mechanical Ventilation                            | 45 (30.6)                  | 81 (33.3)                      |                        | 0.58           |
| Central Venous Line                                            | 60 (40.8)                  | 96 (39.5)                      |                        | 0.80           |
| Arterial Line                                                  | 76 (51.7)                  | 117 (48.1)                     |                        | 0.50           |
| Renal Replacement Therapy                                      | 10 (6.8)                   | 15 (6.2)                       |                        | 0.81           |
| Duration of Resource Utilization, days, median (IQR)           |                            |                                |                        |                |
| Invasive Mechanical Ventilation                                | 2 (0-5)                    | 2.5 (0-6)                      |                        | 0.82           |
| Non-Invasive Mechanical Ventilation                            | 0 (0-1)                    | 0 (0-1)                        |                        | 0.71           |
| Central Venous Line                                            | 0 (0-4.3)                  | 0 (0-5)                        |                        | 0.86           |
| Arterial Line                                                  | 2 (0-5)                    | 2 (0-6)                        |                        | 0.86           |
| Renal Replacement Therapy                                      | 0 (0-0)                    | 0 (0-0)                        |                        | 0.92           |