### Supplementary Table 1. Demographic data for COPD and control participants (mean and SD).

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Subject** | **SEX** | **Age (Years)** | **Weight (Kg)** | **Height (cm)** | **BMI (Kg/m2)** | **MIP at RV** | **MIP (%pred)** | **FEV1(l)** | **FEV1 %pred** | **FVC (l)** | **FVC %pred** | **PEF (L/s)** | **FEV1/FVC (%)** | **IR Reflex**  **Yes (+) No (-)** |
| C1 | M | 71 | 76 | 177 | 24.26 | 79 | 80 | 1.75 | 56 | 3.95 | 95 | 205 | 44 | + |
| C2 | F | 79 | 70 | 153 | 29.90 | 44 | 61 | 1 | 58 | 1.9 | 85 | 155 | 53 | + |
| C3 | F | 90 | 50 | 163 | 18.82 | 82 | 124 | 1.4 | 82 | 2.75 | 120 | 190 | 51 | - |
| C4 | M | 87 | 70 | 168 | 24.80 | 52 | 61 | 1.15 | 49 | 2.5 | 78 | 160 | 46 | + |
| C5 | F | 70 | 54 | 165 | 19.83 | 40 | 53 | 0.5 | 22 | 2.2 | 75 | 70 | 23 | + |
| C6 | F | 64 | 43 | 147 | 19.90 | 64 | 81 | 0.85 | 44 | 2.05 | 85 | 105 | 41 | + |
| C7 | F | 81 | 68 | 168 | 24.09 | 105 | 148 | 1.6 | 78 | 2.7 | 100 | 250 | 59 | + |
| C8 | M | 77 | 81 | 167 | 29.04 | 62 | 66 | 1.35 | 52 | 2.5 | 73 | 205 | 54 | + |
| C9 | F | 62 | 58 | 173 | 19.38 | 45 | 56 | 1.6 | 57 | 2.2 | 61 | 215 | 73\* | - |
| C10 | M | 60 | 70 | 181 | 21.37 | 51 | 48 | 0.75 | 20 | 2.35 | 48 | 91 | 32 | + |
| C11 | M | 83 | 70 | 172.7 | 23.47 | 93 | 105 | 1.35 | 52 | 3.65 | 103 | 215 | 37 | + |
| C12 | M | 69 | 60 | 163 | 22.58 | 89 | 89 | 0.75 | 97 | 2 | 57 | 150 | 38 | + |
| C13 | F | 68 | 52 | 152 | 22.51 | 50 | 65 | 1.05 | 53 | 2.2 | 88 | 125 | 48 | + |
| C14 | F | 47 | 54 | 164 | 20.08 | 84 | 96 | 1.95 | 67 | 3.35 | 93 | 270 | 58 | + |
| C15 | F | 67 | 61 | 155 | 25.39 | 17 | 22 | 1.15 | 55 | 1.3 | 49 | 110 | 88\* | + |
| C16 | F | 75 | 79 | 148 | 36.07 | 28 | 38 | 0.85 | 50 | 1.6 | 73 | 145 | 53 | + |
| C17 | M | 83 | 54 | 155 | 22.48 | 68 | 76 | 1.2 | 58 | 2.9 | 106 | 145 | 41 | - |
| C18 | F | 79 | 54 | 150 | 24.00 | 38 | 53 | 0.85 | 52 | 1.25 | 58 | 140 | 68 | + |
| **Mean** |  | **72.89** | **62.44** | **162.32** | **23.78** | **60.61** | **73.44** | **1.17** | **55.70** | **2.41** | **80.41** | **163.7** | **50.41** |  |
| **SD** |  | **10.79** | **10.89** | **10.22** | **4.33** | **24.18** | **30.83** | **0.39** | **18.36** | **0.73** | **20.38** | **55.06** | **15.53** |  |
| A1 | M | 71 | 87 | 178 | 27.46 | 87 | 88 | 2.85 | 89 | 3.6 | 85 | 360 | 79 | - |
| A2 | M | 68 | 82 | 170 | 28.37 | 54 | 54 | 2.8 | 94 | 3.5 | 90 | 245 | 80 | + |
| A3 | M | 71 | 87 | 182 | 26.26 | 59 | 60 | 3.1 | 93 | 4.45 | 100 | 535 | 70 | + |
| A5 | F | 63 | 78 | 166 | 28.31 | 63 | 79 | 2.1 | 83 | 2.4 | 75 | 260 | 88 | - |
| A6 | M | 64 | 87 | 168 | 30.82 | 109 | 105 | 2.35 | 78 | 3.2 | 82 | 390 | 73 | - |
| A7 | F | 72 | 74 | 167 | 26.53 | 44 | 59 | 2.6 | 114 | 2.85 | 96 | 350 | 91 | + |
| A8 | M | 74 | 96 | 171 | 32.83 | 85 | 88 | 1.7 | 60 | 2.25 | 60 | 200 | 76 | - |
| A9 | M | 77 | 95 | 170 | 32.87 | 81 | 86 | 2.4 | 89 | 3.15 | 88 | 225 | 76 | - |
| A11 | F | 63 | 66 | 173 | 22.05 | 57 | 72 | 2.95 | 107 | 3.6 | 102 | 330 | 82 | - |
| A12 | F | 65 | 48.5 | 160 | 18.95 | 44 | 56 | 1.95 | 86 | 2.5 | 86 | 290 | 78 | + |
| A13 | F | 68 | 78 | 160 | 30.47 | 62 | 80 | 2.1 | 96 | 2.45 | 87 | 210 | 86 | + |
| A14 | M | 79 | 90 | 177 | 28.73 | 81 | 88 | 2.5 | 87 | 3.35 | 86 | 355 | 75 | - |
| A16 | F | 77 | 62.5 | 175 | 20.41 | 64 | 88 | 2.4 | 102 | 2.8 | 90 | 190 | 86 | + |
| A17 | F | 79 | 56 | 157 | 22.72 | 44 | 61 | 1.55 | 85 | 1.85 | 78 | 175 | 84 | + |
| A18 | F | 80 | 68 | 161.5 | 26.07 | 29 | 41 | 1.4 | 73 | 1.75 | 70 | 280 | 80 | - |
| A19 | M | 66 | 59 | 170 | 20.42 | 56 | 72 | 2.75 | 90 | 3.2 | 81 | 265 | 86 | - |
| A20 | F | 82 | 75 | 162.5 | 28.40 | 54 | 77 | 1.5 | 80 | 1.85 | 74 | 275 | 81 | - |
| **Mean** |  | **71.71** | **75.82** | **168.7** | **26.57** | **63.12** | **73.77** | **2.29** | **88.62** | **2.87** | **84.15** | **290.3** | **80.56** |  |
| **SD** |  | **6.42** | **14.05** | **7.03** | **4.31** | **19.89** | **16.65** | **0.53** | **12.67** | **0.74** | **10.69** | **90.20** | **5.67** |  |

\* Participant C9 and C16 spirometry did not meet the GOLD criteria of FEV1/FVC < 70% but meets the Lung Foundation Australia COPD-X criteria as being below lower limit of normal for FEV1 % predicted (47). Body mass index (BMI), Maximal inspiratory pressure (MIP), Inhibitory Response (IR).