|                      | WHOLE POPULATION |                      | WHOLE LUNG               | HYPO/NON-INFLATED LUNG | WHOLE LUNG               | HYPO/NON-INFLATED LUNG | Wilcoxon rank sum test. Whole vs Hypoinflated |
|----------------------|------------------|----------------------|--------------------------|------------------------|--------------------------|------------------------|-----------------------------------------------|
| **Gas Volume**       |                  |                      |                          |                        |                          |                        | p (α = 0.05)                                |
|                      | MEAN              | SD                   | MEAN                     | SD                     | MEAN                     | SD                     |                                |
| Hyperinflated area (cm²) | 994              | 756                  | x                        | x                      |                          |                        |                                |
| Normoinflated area (cm²) | 1305             | 496                  | x                        | x                      |                          |                        |                                |
| Poorly inflated area (cm²) | 889              | 398                  | 889                      | 398                    |                          |                        |                                |
| Non-inflated area (cm²)  | 372              | 321                  | 372                      | 321                    |                          |                        |                                |
| Hyperinflated area %    | 27               | 17                   | x                        | x                      |                          |                        |                                |
| Normoinflated area %    | 37               | 11                   | x                        | x                      |                          |                        |                                |
| Poorly inflated area %   | 26               | 11                   | 74                       | 15                     |                          |                        |                                |
| Non-inflated area %     | 11               | 10                   | 26                       | 15                     |                          |                        |                                |
| **Blood Volume**       |                  |                      |                          |                        |                          |                        |                                |
|                      | MEAN              | SD                   | MEAN                     | SD                     | MEAN                     | SD                     |                                |
| Non-perfused area (cm²) | 461              | 286                  | 176                      | 150                    |                          |                        |                                |
| Perfused area (cm²)     | 3005             | 913                  | 1030                     | 479                    |                          |                        |                                |
| Non-Perfused area %     | 14               | 8                    | 15                       | 11                     |                          |                        |                                |
| Perfused area %         | 86               | 8                    | 85                       | 11                     |                          |                        |                                |
| Kurtosis               | 2.99             | 0.81                 | 2.47                     | 1.11                   |                          |                        |                                |

Table E1
|                   | WHOLE LUNG | Hypo/NON-INFLATED LUNG | Wilcoxon rank sum test. Whole vs Hypoinflated | p (α = 0.05) |
|-------------------|-----------|------------------------|----------------------------------------------|-------------|
| Blood Volume Maps | MEAN SD   | MEAN SD                |                                              |             |
| Non-perfused area (cm$^3$) | 568 346  | 261 144               |                                              | 0.01 *      |
| Perfused area (cm$^3$)       | 3380 1148| 1125 418              |                                              | 0.01 *      |
| Non-Perfused area %          | 15 7     | 19 8                  |                                              | < 0.01 *    |
| Perfused area %              | 85 7     | 81 8                  |                                              | < 0.01 *    |
| Kurtosis                     | 2.43 0.50| 1.91 0.35             |                                              | < 0.01 *    |

|                   | WHOLE LUNG | Hypo/NON-INFLATED LUNG | Wilcoxon rank sum test. Whole vs Hypoinflated | p (α = 0.05) |
|-------------------|-----------|------------------------|----------------------------------------------|-------------|
| Blood Volume Maps | MEAN SD   | MEAN SD                |                                              |             |
| Non-perfused area (cm$^3$) |        |                        |                                              |             |
| Perfused area (cm$^3$)       |        |                        |                                              |             |
| Non-Perfused area %          |        |                        |                                              |             |
| Perfused area %              |        |                        |                                              |             |
| Kurtosis                     |        |                        |                                              |             |

|                   | WHOLE LUNG | Hypo/NON-INFLATED LUNG | Wilcoxon rank sum test. Whole vs Hypoinflated | p (α = 0.05) |
|-------------------|-----------|------------------------|----------------------------------------------|-------------|
| Blood Volume Maps | MEAN SD   | MEAN SD                |                                              |             |
| Non-perfused area (cm$^3$) |        |                        |                                              |             |
| Perfused area (cm$^3$)       |        |                        |                                              |             |
| Non-Perfused area %          |        |                        |                                              |             |
| Perfused area %              |        |                        |                                              |             |
| Kurtosis                     |        |                        |                                              |             |

Table E2
Figure E1
