**Supplement 3** – Sensitivity analyses according to the correlation coefficient of 0.3 and 0.7 to calculate the standard deviation of the mean difference.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Outcome** | **Main results (correlation coefficient of 0.5)** | | | | **Correlation coefficient of 0.3** | | **Correlation coefficient of 0.7** | |
| **k, n** | **Number of studies with CC\*** | **I2,P value** | **SMD (95% CI)** | **I2,P value** | **SMD (95% CI)** | **I2,P value** | **SMD (95% CI)** |
| 6MWD | 5, 6506 | 1 out of 5 | 99.6%, p<0.001 | 0.91 (-1.63 to 3.44) | 99.6%, p<0.001 | 0.90 (-1.64 to 3.44) | 99.6%, p<0.001 | 0.91 (-1.62 to 3.44) |
| SGRQ Total | 5, 382 | 3 out of 5 | 69.5%, p=0.01 | **-0.73 (-1.29 to -0.18)** | 71.3%, p=0.01 | **-0.69 (-1.27 to -0.12)** | 67.3%, p=0.02 | **-0.81 (-1.35 to -0.26)** |
| SGRQ Symptoms | 4, 268 | 2 out of 5 | 42.9%, p=0.15 | -0.08 (-0.82 to 0.65) | 32.9%, p=0.21 | -0.10 (-0.76 to 0.56) | 56.6%, p=0.07 | -0.06 (-0.93 to 0.82) |
| SGRQ Activity | 4, 268 | 2 out of 5 | 0.0%, p=0.68 | **-0.40 (-0.72 to -0.08)** | 0.0%, p=0.81 | **-0.37 (-0.61 to -0.13)** | 0.0%, p=0.40 | -0.46 (-0.96 to 0.03) |
| SGRQ Impacts | 4, 268 | 2 out of 5 | 68.0%, p=0.02 | -0.81 (-1.69 to 0.07) | 65.4%, p=0.03 | -0.76 (-1.63 to 0.12) | 73.6%, p=0.01 | -0.90 (-1.83 to 0.03) |
| CRQ Dyspnoea | 6, 550 | 3 out of 5 | 14.1%, p=0.32 | **0.36 (0.03 to 0.69)** | 0.0%, p=0.48 | **0.31 (0.05 to 0.58)** | 43.2%, p=0.12 | 0.45 (-0.01 to 0.90) |
| CRQ Fatigue | 6, 550 | 3 out of 5 | 25.0%, p=0.25 | 0.22 (-0.15 to 0.59) | 4.5%, p=0.39 | 0.19 (-0.12 to 0.50) | 47.1%, p=0.09 | 0.27 (-0.20 to 0.73) |
| CRQ Emotional | 6, 550 | 3 out of 5 | 24.5%, p=0.25 | 0.22 (-0.11 to 0.54) | 5.2%, p=0.38 | 0.18 (-0.10 to 0.47) | 47.6%, p=0.09 | 0.28 (-0.14 to 0.70) |
| CRQ Mastery | 6, 550 | 3 out of 5 | 39.9%, p=0.14 | 0.23 (-0.21 to 0.68) | 20.0%, p=0.28 | 0.20 (-0.17 to 0.56) | 60.3%, p=0.03 | 0.30 (-0.30 to 0.89) |
| mMRC | 5, 6569 | 2 out of 5 | 99.6%, p<0.001 | -0.05 (-2.24 to 2.14) | 99.6%, p<0.001 | -0.04 (-2.23 to 2.15) | 99.6%, p<0.001 | -0.08 (-2.27 to 2.12) |

**Legend:** k – number of studies; n – sample size; CC – correkation coefficient; I2 – I-square (heterogeneity); SMD – standardized mean difference; CI – confidence interval; 6MWD – 6-minute walking distance; SGRQ - Saint George’s respiratory questionnaire; CRQ - Chronic respiratory disease questionnaire; mMRC - Modified Medical Research Council Dyspnea Scale.

\* Number of studies that the standard deviation was calculated with correlation coefficient.

**Note:** The FEV1% (forced expiratory volume in 1 s in percentage of the predicted value) was not analyzed as all data were calculated without the correlation coeficient.

**Boldface** values indicate statistical significance