**Evidence Table 2e. Change in quality of life: hyperventilation reduction breathing techniques versus nonhyperventilation reduction breathing techniques**

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| **Study** | **Quality of life outcomes** | **Follow-up** | **Group** | **N random-ized** | **Follow-up N** | **Baseline mean (SD)** | **Mean change (SD) from baseline** | **p-value for difference between groups at followup** | **Standardized Effect Size Hedges’ d (95% CI)**  **(coded higher= better)** | **Functioning or additional quality of life outcomes** |
| Bowler 199850,73,88 | AQLQ-Marks, median  (lower= better) | 13w | IG1 (BBT) | 19 | 18 | 3.0 (NR) | -1.2 (NR)† | 0.09 | Insufficient data to calculate |  |
| IG2 (abdom. breathing) | 20 | 19 | 3.0 (NR) | -0.4 (NR)† |
| Cooper 200352 | AQLQ-Juniper, total score  (higher= better) | 13w | IG1 (BBT) | 30 | 26 | 5.1 (1.0) | 0.45  (0.11, 1.47)† | 0.4 (for difference across all three groups) | Insufficient data to calculate | **BBT improved more in SF-36 role limitations due to physical problems at 13w.\* BBT improved more in SF-36 role limitations due to physical problems and social functioning at 26w.\*** NSD between groups on other components of the SF-36 at 13 and 26w. |
| IG2 (yoga breathing device) | 30 | 25 | 4.9 (0.8) | 0.45  (-0.13, 1.11)† |
| 26w | IG1 | 30 | 23 | 5.1 (1.0) | 1.03  (0.19, 1.69)† | 0.2 (for difference across all three groups) | Insufficient data to calculate |
| IG2 | 30 | 24 | 4.9 (0.8) | 0.57  (0.07, 1.10)† |
| Cowie 200853 | Mini-AQLQ, total score  (higher= better) | 26w | IG1 (BBT) | 65 | 56 | 4.6 (NR) | **0.96 (1.04)\*** | 1.0 | Insufficient data to calculate |  |
| IG2 (physio-therapy) | 64 | 63 | 4.7 (NR) | **0.95 (1.15)\*** |
| Slader 200658 | AQLQ-Marks, total score  (lower= better) | 12w | IG1 (BBT) | 28 | 25 | 0.77 (0.50) | 0.03 (0.42) | 0.29 | -0.14  (-0.68, 0.41) |  |
| IG2 (controlled breathing) | 29 | 27 | 0.54 (0.30) | -0.02 (0.30) |
| 28w | IG1 | 28 | 23 | 0.77 (0.50) | -0.17 (0.32) | 0.27 | 0.23  (-0.34, 0.80) |
| IG2 | 29 | 25 | 0.54 (0.30) | -0.1 (0.28) |

\*Statistically significant change from baseline or between groups (p<0.05)

†Median or median change from baseline (IQR)

Abbreviations: abdom: abdominal; AQLQ: Asthma Quality of Life Questionnaire; BBT: Buteyko breathing technique; CG: control group; CI: confidence interval; IG: intervention group; IQR: inter-quartile range; NR: not reported; NSD: no significant difference; SD: standard deviation; SF: social functioning (e.g., SF-36 Health Survey); w: week(s)