**Evidence Table 3f. Change in pulmonary function: yoga breathing techniques versus control**

| **Study** | **FEV1 outcome (unit)** | **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)** | **Additional pulmonary function outcomes** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Khare 199160 | FEV1 (L) | 26w | IG (yoga breathing) | 17 | 17 | 2.16 (0.37) | **0.4 (0.23)\*** | NR | **1.05****(0.33, 1.77)\*** | Larger changes observed in IG at 26w in end-tidal volume, inspiratory reserve volume, inspiratory capacity, maximal voluntary ventilation, FVC, PEFR, and FEV1/VC ratio. |
| CG | 17 | 17 | 1.73 (0.32) | 0.16 (0.21) |
| Kligler 201161 | FEV1 (NR) | 26w | IG (yoga) | 77 | 67 | NR | NR | 0.46 | Insufficient data to calculate | NSD between groups in FVC (data NR). PFTs did not show a significant change over time in either group (FVC, FEV1, FEF25-75, MEF). |
| CG | 77 | 62 | NR | NR |
| Sabina 200562 | FEV1 (NR) | 4w | IG (yoga breathing) | 29 | 23 | 2.05 (0.65) | NR (NR) | NR | Insufficient data to calculate | Follow-up data NR. NSD between groups at 4 and 16w in FEV1. FEV25-75, FVC, PEFR (evening and morning), and FEV1/FVC ratio. |
| CG | 33 | 22 | 2.69 (0.92) | NR (NR) |
| 16w | IG | 29 | 23 | 2.05 (0.65) | NR (NR) | NR | Insufficient data to calculate |
| CG | 33 | 22 | 2.69 (0.92) | NR (NR) |
| Saxena 200963 | FEV1, predicted (%) | 12w | IG (yoga breathing) | 25 | NR | 72 (1.7) | 12 (1.38) | **<0.001\*** | **6.73****(5.25, 8.21)\*** | **Groups differed in PEFR at 12w, p<0.001.\*** |
| CG | 25 | NR | 73 (2.07) | 2 (1.54) |
| Vempati 200964,74,83-87 | FEV1, predicted (%) | 2w | IG (yoga breathing) | 30 | 28 | 70.2 (17.4) | 3.7 (11.89) | NR | 0.25(-0.27, 0.77) | **At 8w, groups differed in PEFR (p<0.001), predicted FEV1/FVC ratio (p=0.011), and FEF25-75 (p=0.035).\*** NSD between groups at 8w in serum ECP level, EIB, and predicted FVC. |
| CG | 30 | 29 | 62.5 (19.2) | 0.6 (12.61) |
| 4w | IG | 30 | 28 | 70.2 (17.4) | 5.9 (12.13) | NR | **0.62****(0.09, 1.15)\*** |
| CG | 30 | 29 | 62.5 (19.2) | -2 (13.1) |
| 8w | IG | 30 | 28 | 70.2 (17.4) | **7.7 (10.94)\*** | **0.009\*** | **0.88****(0.34, 1.43)\*** |
| CG | 30 | 29 | 62.5 (19.2) | -2.6 (12.11) |

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

Abbreviations: CG: control group; CI: confidence interval; ECP: eosinophilic cationic protein; EIB: exercise-induced bronchoconstriction; ECP: eosinophilic cationic protein; FEF: forced expiratory flow; FEV1: forced expiratory volume in 1 second; FEV25-75: forced expiratory volume between 25 and 75 percent; FVC: forced vital capacity; IG: intervention group; L: liter(s); MEF: maximum expiratory flow; NR: not reported; NSD: no significant difference; PEF: peak expiratory flow; PEFR: peak expiratory flow rate; PFT: pulmonary function test; SD: standard deviation; VC: vital capacity; w: week(s)