

Online supplement

Oxygen for relief of refractory dyspnoea in people with chronic obstructive pulmonary disease who would not qualify for home oxygen: a systematic review and meta-analysis

Table S1. Clinical summary of included studies

Study	Design	Blinding	Baseline PaO ₂ (kPa)	Baseline SaO ₂ (%)	Dyspnoea measure	Baseline dyspnoea	O ₂ delivery	O ₂ dose	Exertion method	Jadad score
Moore 2009	Crossover	Double-blind	NA	94.6 (SD 3.2)	modified Borg	NA	Mouthpiece	44%	At rest	3
Eaton 2006	Parallel group	Double-blind	10.0	NA	CRQ	17.1	NC	2L/min	Domiciliary	4
Eves 2006	Crossover	Double-blind	9.1 (SD 0.9)	NA	modified Borg	NA	Mouthpiece	40%	Constant load cycle test	4
Laude 2006	Crossover	Unclear	NA	93.9 (2.3)	100mm VAS modified Borg	VAS 24.2 (19.0) Borg 1.8 (1.1)	Mask/valve	28%	Treadmill	1
Haidl 2004	Parallel group	Unblinded	8.9	NA	modified Borg	NA	NC	2L/min	Cycle ergometry	1
Emtner 2003 - Gp 1	Parallel group	Double-blind	9.8 (SD 0.8)	NA	modified Borg	NA	Mouthpiece	30%	Cycle ergometry	5
Emtner 2003 Gp 2	Parallel group	Double-blind	10.0 (SD 1.2)	NA	modified Borg	NA	Mouthpiece	30%	Cycle ergometry	5
Lewis 2003	Crossover	Single-blind	NA	94.4 (1.6)	modified Borg	0.4 (0.5)	NC	2L/min	6MWT	2
Nandi 2003	Crossover	Double-blind	NA	91.9 (5.2) (range 76 to 97)	100mm VAS	NA	Mask	4L/min	6MWT	3
Eaton 2002	Crossover	Double-blind	9.2 (SD 1.0)	NA	modified Borg	0.7 (SD 1.0)	NC	4L/min	6MWT	4
Jolly 2001 Gp 1	Crossover	Double-blind	10.5 (SE 0.4)	95.8 (0.46)	modified Borg	0.56 (SE 0.34)	NC	3L/min	6MWT	3
Jolly 2001 Gp 2	Crossover	Double-blind	9.9 (SE 0.3)	94.7 (SE 0.27)	modified Borg	1.27 (SE 0.43)	NC	3L/min	6MWT	2
Maltais 2001	Crossover	Double-blind	11.3 (SD 0.5)	NA	modified Borg	NA	Mouthpiece	75%	Incremental cycle test	2

Wadell 2001	Parallel group	Single-blind	Median 9.3 (range 7.9-11.4)	Median 94.6 (range 90.7-97.2)	modified Borg	Median 1.5 (range 0-3)	NC	5L/min	6MWT on treadmill	3
Somfay 2001	Crossover	Single-blind	NA	95.7 (0.8)	modified Borg	NA	Mouthpiece	30%	Constant load cycle test	1
Killen 2000	Crossover	Single-blind	NA	Median 94 (Quartiles 91, 95)	100mm VAS	NA	Mask	2L/min	Ascending 22 steps	3
Knebel 2000	Crossover	Double-blind	NA	97.1 (SD 1.7) (range 92-100)	100mm VAS	0.5 (SD 0.9) (range 0-4.7)	NC	4L/min	6MWT	5
Garrod 1999	Crossover	Single-blind	8.4 (SD 1.2)	NA	modified Borg	NA	NC	2L/min	Shuttle walk test	2
O'Donnell 1997	Crossover	Double-blind	9.9 (SEM 0.4)	NA	modified Borg	5.1 (SD 0.3)*	Mouthpiece	60%	Endurance cycle test	3
Rooyackers 1997 Gp 1	Parallel group	Unclear	10.2 (SD 1.2)	NA	modified Borg	NA	NC	4L/min	Cycle tests and 6MWT	1
Rooyackers 1997 Gp 2	Parallel group	Unclear	9.5 (2.0)	NA	modified Borg	NA	NC	4L/min	Cycle tests and 6MWT	1
Ishimine 1995	Crossover	Single-blind	10.1 (SD 1.1)	NA	Dyspnoea questionnaire	NA	Unknown	3L/min	6MWT	2
McDonald 1995	Crossover	Double-blind	9.2 (SD 1.1) (range 7.7-10.9)	94 (SD 2.1)	modified Borg	NA	NC	4L/min		4
Dean 1992	Crossover	Double-blind	9.5 (SE 0.3)	NA	modified Borg	NA	Mouthpiece	40%	Cycle ergometry	4
Leach 1992	Crossover	Single-blind	8.7 (SD 2.3)	NA	100mm VAS	NA	Mask	2L/min		3
Kurihara 1989	Crossover	Single-blind	9.2 (SD 1.2)	NA	modified Borg	NA	NC	3L/min		1
Davidson 1988	Crossover	Double-blind	8.6 (SE 0.3)	NA	100mm VAS	NA	NC or valve	4L/min	6MWT, cycle ergometry, and endurance walk	2
McKeon 1988a	Crossover	Double-blind	7.7 (SD 1.2) (range 5.7-10.9)	90 (SD 3) (range 84-96)	300mm VAS	NA	NC	2.5L/min	Incremental treadmill test	2
McKeon 1988b	Crossover	Double-blind	8.9 (SD 1.5)	NA	300mm VAS	NA	NC	4L/min	Incremental treadmill	5

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Swinburn 1984	Crossover	Single- blind	NA	93.2 (SD 0.8)	100mm VAS	NA	Mouthpiece	60%	Incremental cycle test	1
Woodcock 1981	Crossover	Double- blind	9.6 (SD 1.5)	NA	100mm VAS	4 (SD 0.94)**	NC	4L/min	Treadmill and 6MWT	3

Key: 6MWT = six minute walk test, NA = not available, VAS = visual analog scale, CRQ = chronic respiratory questionnaire, SD = standard deviation, SE = standard error, NC = nasal canula
 Data presented as mean (standard deviation (SD)) unless otherwise specified. The Jadad score assesses internal validity (randomisation, blinding, and description of withdrawals/dropouts) and external validity (descriptions of subjects and interventions, and adequately reported dyspnoea outcomes) on a five point scale with higher scores indicating better validity.

* As measured by dyspnoea index

** As measured by MRC dyspnoea grade

Studies in shaded rows were not included in meta-analyses.