

Table 60: Booth 1996⁵⁹

Study	Booth 1996 ⁵⁹
Study type	RCT (randomised; Crossover: No formal washout period. Duration of each treatment was 15 minutes in order to allow sufficient time for previously administered gas to wash-out before assessment).
Number of studies (number of participants)	1 (n=38)
Countries and setting	Conducted in United Kingdom; Setting: Two hospices.
Line of therapy	Unclear.

Duration of study	Intervention time: <1 day.
Method of assessment of guideline condition	Adequate method of assessment/diagnosis: Mean survival time 19 days.
Stratum	Breathlessness management: A person's breathless at rest.
Subgroup analysis within study	Post-hoc subgroup analysis: History of cardiopulmonary disease.
Inclusion criteria	Hospice inpatients with advanced cancer and breathlessness at rest.
Exclusion criteria	Already receiving chronic oxygen therapy.
Recruitment/selection of patients	Unclear.
Age, gender and ethnicity	Age - Median (range): 71 (54-90). Gender (M:F): 58/42%. Ethnicity: Not stated.
Further population details	
Extra comments	20 had primary lung cancers, 2 had mesothelioma, and 16 had other primary cancers with metastases to the lung. 13 had significant COPD and 4 had significant cardiac disease. Modified Borg scale may not be appropriate in this setting.
Indirectness of population	Serious indirectness: Majority of people in last 15-30 days.

Interventions	<p>(n=38) Intervention 1: Breathing gas - Oxygen. Oxygen from camouflaged cylinders via nasal cannulae at 4 litres/minute. Duration 15 minutes. Concurrent medication/care: Morphine: 13; benzodiazepine: 6; morphine and benzodiazepine: 14 Further details: 1. Delivery system: Delivery system: nasal tube 2. Drug class: Breathing gas 3. Route of administration: Route of administration: transmucosal.</p> <p>(n=38) Intervention 2: Breathing gas - Air. Air from camouflaged cylinders via nasal cannulae at 4l/min. Duration 15 minutes. Concurrent medication/care: Morphine: 13; benzodiazepine: 6; morphine and benzodiazepine: 14 Further details: 1. Delivery system: Delivery system: nasal tube 2. Drug class: Breathing gas 3. Route of administration: Route of administration: transmucosal.</p> <p>(n=20) Intervention 3: Breathing gas - Oxygen. Oxygen followed by air from camouflaged cylinders via nasal cannulae at 4l/min. Duration 30 minutes. Concurrent medication/care: Unclear Further details: 1. Delivery system: Delivery system: nasal tube 2. Drug class: Breathing gas 3. Route of administration: Route of administration: transmucosal.</p> <p>(n=18) Intervention 4: Breathing gas - Air. Air followed by oxygen from camouflaged cylinders via nasal cannulae at 4l/min. Duration 30 minutes. Concurrent medication/care: Unclear Further details: 1. Delivery system: Delivery system: nasal tube 2. Drug class: Breathing gas 3. Route of administration: Route of administration: transmucosal.</p>
Funding	Academic or government funding.

RESULTS (NUMBERS ANALYSED) AND RISK OF BIAS FOR COMPARISON: OXYGEN versus AIR

Protocol outcome 1: Adverse events/withdrawal of the medication due to adverse events at Any

- Actual outcome for Breathlessness management: Adverse effects relating to study procedure at Unclear; Group 1: 0/38, Group 2: 0/38; Risk of bias: Very high; Indirectness of outcome: No indirectness

Protocol outcome 2: Control of breathlessness at Any

- Actual outcome for Breathlessness management: Vertical 100 mm VAS (0 - no shortness of breath; 100 - shortness of breath as bad as can be) at 15 minutes; Risk of bias: Very high; Indirectness of outcome: No indirectness

- Actual outcome for Breathlessness management: Modified Borg scale at 15 minutes; Risk of bias: Very high; Indirectness of outcome: No indirectness

Protocol outcome 3: Time to death at Any

- Actual outcome for Breathlessness management: Mean survival time at Unclear; Risk of bias: High; Indirectness of outcome: No indirectness

Protocol outcomes not reported by the study

Quality of life at Any; Sedation (GCS/AVPU) at Any; Control of anxiety at Any; Control of agitation at Any; Control of delirium at Any; Duration of symptom control at Any; Time to symptom control at Any; Duration of institutional care at Any; Carer satisfaction at Any; Pain control at Any