

Supplementary Material

Table S1: Prescribing criteria for domiciliary oxygen therapy⁹

Type of oxygen therapy	Prescribing criteria
Continuous oxygen therapy	<ul style="list-style-type: none">• Resting PaO₂ ≤ 55mmHg; OR• Resting PaO₂ 56 – 59 mmHg with evidence for hypoxic organ damage (including right heart failure, pulmonary hypertension or polycythaemia)
Exertional oxygen therapy	<ul style="list-style-type: none">• Exertional desaturation to SpO₂ 88% or less during a 6MWT while breathing room air; AND• A demonstrable improvement in exercise performance or symptom on supplemental oxygen therapy during a blinded exercise test

Abbreviations: 6MWT, 6-minute walk test; PaCO₂, partial pressure of carbon dioxide in blood; PaO₂, partial pressure of oxygen in blood; SpO₂, oxyhaemoglobin saturation.

Table S2. Baseline patient demographic characteristics

Characteristics	Analysed Cohort (n = 400)	Alfred Health (n = 299)	Austin Health (n = 101)	p-value
Age (years)*	66 ± 12	65 ± 11	68 ± 12	0.002
Male (%)	61	60	64	0.41
Smoking history (%)				
Ever smoker	65	65	66	0.90
Never smoker	35	35	34	
Cardiorespiratory comorbidities (%) [‡]	47	42	63	0.04
BMI (kg/m ²)*	29.3 ± 5.8	29.1 ± 6.2	29.2 ± 5.9	0.72
Oxygen therapy (%)	27	26	28	0.79
Long-term oxygen therapy	12	12	12	
Ambulatory oxygen therapy [§]	15	14	16	
FEV1 (% predicted)*	77.5 ± 18.8	76.8 ± 18.5	79.6 ± 19.5	0.22
FVC (% predicted)*	73.5 ± 19.2	72.4 ± 19.0	76.9 ± 19.3	0.06
DLCO (% predicted)*	53.2 ± 20.7	54.0 ± 21.9	50.8 ± 16.8	0.49
Exertional desaturation (%)	54	56	45	0.07
6-minute walk distance (m) †	424 (330, 516)	444 (345, 528)	383 (302, 466)	0.001
6MWT nadir SpO ₂ (%)†	88 (82, 93)	87 (81, 92)	90 (83, 93)	0.02
MMRC Dyspnoea Scale†	2 (1, 2)	2 (1, 2)	2 (1, 3)	0.73

SGRQ				
Symptom score [†]	56.9 (37.7, 75.9)	57.1 (38.9, 75.9)	53.0 (34.3, 78.7)	0.85 0.74
Activity score [†]	66.2 (47.7, 82.2)	66.2 (47.6, 81.9)	66.2 (48.1, 85.8)	0.39 0.67
Impact score [†]	35.1 (20.4, 52.0)	35.3 (20.0, 50.6)	33.9 (21.8, 62.4)	
Total score [†]	49.1 (33.1, 64.4)	49.1 (33.4, 64.0)	49.4 (30.7, 69.5)	
UCSD-SOBQ [‡]	39 (19, 60)	38 (20, 60)	39 (16, 62)	0.89

Data expressed as: * mean \pm standard deviation; † median (interquartile range)

[‡] Cardiorespiratory comorbidities included asthma, chronic obstructive pulmonary disease, pulmonary embolism, pulmonary hypertension and any cardiac diseases

[§] Not including patients who were prescribed long-term oxygen therapy

Abbreviations: 6MWT, 6-minute walk test; BMI, body mass index; DLCO, diffusion capacity of the lung for carbon monoxide; FEV₁, forced expiratory volume in one second; FVC, forced vital capacity; MMRC, Modified Medical Research Council; SGRQ, St George's Respiratory Questionnaire; SpO₂, oxyhaemoglobin saturation; USCD-SOBQ, University of California San Diego Shortness of Breath Questionnaire.

Table S3. Frequencies of types of ILD

Diagnosis	Analysed Cohort (n = 400)	Alfred Health (n = 299)	Austin Health (n = 101)
Asbestosis	8 (2)	5 (2)	3 (3)
Chronic hypersensitivity pneumonitis	57 (14)	44 (15)	13 (13)
Combined pulmonary fibrosis and emphysema	36 (9)	28 (9)	8 (8)
Connective tissue disease-related ILD	44 (11)	28 (9)	16 (16)
Idiopathic pulmonary fibrosis	134 (33.5)	105 (35)	29 (29)
Non-specific interstitial pneumonia	22 (5.5)	16 (5)	6 (6)
Sarcoidosis	28 (7)	22 (7)	6 (6)
Unclassifiable ILD	40 (10)	26 (9)	14 (14)
Other	31 (8)	25 (8)	6 (6)

Data expressed as absolute number (percentage)