

**Oxygen in Patients with Fibrotic Interstitial Lung Disease: An International Delphi
Survey**

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Supplementary Material

Interview guide

Preamble: Questions are to be asked in the context of a hypothetical situation without geographic funding criteria, and we are specifically not addressing patient preference for the purposes of this survey. Like all therapeutic interventions, all decisions must be made considering evidence of potential benefit and patient preference and wishes.

1. Demographics:
 - a. Age, gender, country of practice
 - b. How long have you been in independent clinical practice as a pulmonologist or nurse clinician or health professional?
 - c. What proportion of your clinical work is focused on ILD?

Part 1: Indications for oxygen

2. Thinking about your patient population with fibrotic/chronic ILD, which patients should be considered for supplemental oxygen therapy?
3. How do these specific situations influence your recommendation?
 - a. Severe resting hypoxemia (ie. SpO₂<88% or PaO₂<55mmHg)
 - b. Moderate resting hypoxemia (SpO₂ 88-92)
 - c. Isolated exertional hypoxemia based on ambulatory oximetry during formal or informal walk test. What if desaturates < 88% or < 80%
 - d. Concomitant nocturnal hypoxemia
 - e. Existing pulmonary hypertension
 - f. Dyspnea, symptomatic, impaired functional capacity
 - g. Different sub-types of fibrotic ILD. E.g. IPF vs HP vs. CTD-ILD
 - h. Those being considered or awaiting lung transplant
 - i. Palliation

Part 2: Goals of oxygen therapy

1. What are the main goals (or anticipated benefits) you aim to achieve with supplemental oxygen in those above situations?
Prompts: prevent/minimize pulmonary hypertension, HRQoL, survival, reduce exacerbations/hospitalizations, dyspnea, functional capacity, anxiety, deconditioning, cognitive function, improved sleep.
2. How do you navigate weighing the potential benefits of supplemental oxygen with patient preference re: usage?

Part 3: Practical use of oxygen

1. How should patients be assessed for supplemental oxygen? (prompts: should there be a threshold for oxygen saturation or PaO₂ on ABG? At rest or on exertion with formal 6MWT?)
2. How frequently should patients be assessed for oxygen indication? (prompts: every visit, symptom-based, times of worsening)
3. What do you think are potential toxic effects or contraindications to supplemental O₂ in ILD patients? Prompts: Falls, smoking, dementia. What general issues have you encountered with oxygen prescribing in ILD?
4. How do you recommend oxygen usage in your patients with fibrotic ILD, and how does that vary based on the indication for oxygen? (i.e. number of hours worn per day, titration with activity, baseline flow rate, wear if it improves symptoms)
5. What guides your recommendation on patient use of oxygen during sleep, (e.g in the absence of documented sleep-disordered breathing)?

6. Is there anything else you'd like to discuss? Are there items that you think are important to include in the Delphi survey?

Table S1: Items not achieving consensus for agreement or disagreement

Consensus for Unsure	Round
Supplemental oxygen may improve the survival of patients with fibrotic ILD and resting hypoxemia.	1
Supplemental oxygen may improve the survival of patients with fibrotic ILD and isolated exertional hypoxemia.	1
Supplemental oxygen prevents acute exacerbations due to fibrotic ILD.	1
Supplemental oxygen prevents hospitalizations due to fibrotic ILD.	1
Isolated exertional hypoxemia leads to the development of pulmonary hypertension in patients with fibrotic ILD.	1
Nocturnal hypoxemia leads to the development of pulmonary hypertension in patients with fibrotic ILD.	1
Supplemental oxygen use slows the progression of existing pulmonary hypertension in patients with fibrotic ILD and resting hypoxemia.	1
Supplemental oxygen use slows the progression of existing pulmonary hypertension in patients with fibrotic ILD and isolated exertional hypoxemia.	1
Supplemental oxygen use slows the progression of existing pulmonary hypertension in patients with fibrotic ILD and nocturnal hypoxemia.	1
Supplemental oxygen should be recommended for fibrotic ILD patients with isolated exertional desaturation to <89%, regardless of symptoms.	2
Non-consensus statements (after 2 rounds)	
Supplemental oxygen should be recommended for fibrotic ILD patients with isolated exertional desaturation to <89%, only if the patient reports symptoms and those symptoms improve with oxygen.	
For fibrotic ILD patients with exertional hypoxemia and symptoms, supplemental oxygen should be titrated to achieve symptom improvement.	
In patients with fibrotic ILD and exertional hypoxia, it is often difficult to titrate supplemental oxygen to maintain a specific target SpO ₂ threshold, due to technical limitations of currently available oxygen delivery devices.	
In patients prescribed supplemental oxygen for isolated exertional hypoxemia, oxygen should be continued for physiologic benefit, regardless of the impact on patient symptoms or exercise capacity.	

Abbreviations: ILD=interstitial lung disease, SpO₂=peripheral oxygen saturation