Characteristics of patients with idiopathic pulmonary fibrosis admitted to hospital: data from the IPF-PRO Registry



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INTRODUCTION

- Hospitalizations are common among patients with idiopathic pulmonary fibrosis (IPF) and are associated with high mortality. 1-3
- The Idiopathic Pulmonary Fibrosis Prospective Outcomes (IPF-PRO) Registry (NCT01915511) is a prospective observational US registry of patients with IPF.⁴

To evaluate the risk of hospitalization and the characteristics of patients who were hospitalized in the IPF-PRO Registry.

METHODS

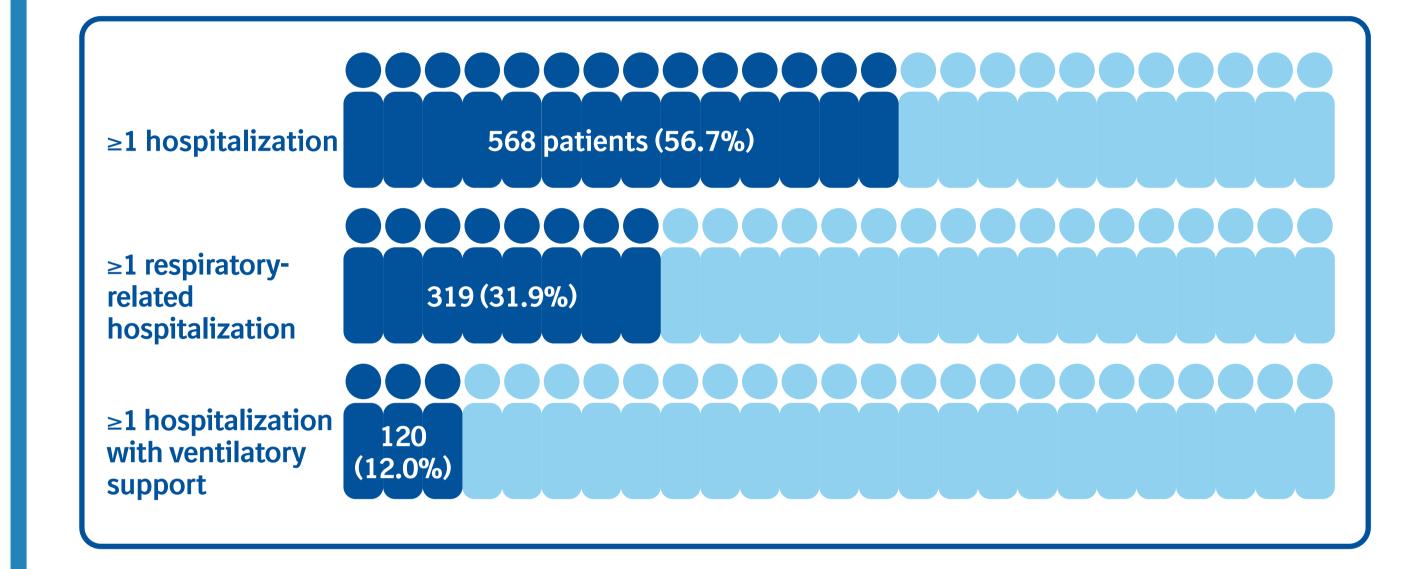
- We compared the characteristics at enrollment into the registry of patients who were and were not hospitalized during follow-up.
- Hospitalizations were categorized by the investigator as having a respiratory or a non-respiratory cause and as with or without ventilatory support.
- Associations between patient characteristics at enrollment and the time to first respiratory-related hospitalization were analyzed using a Cox regression model.

CONCLUSIONS

- Hospitalizations were common in patients in the IPF-PRO Registry.
- Younger age, lower BMI, lower FVC, oxygen use at rest, and a history of pulmonary hypertension at enrollment were associated with an increased risk of respiratory hospitalization during follow-up.

Hospitalizations

• The analysis cohort included 1001 patients enrolled at 46 sites. Median (Q1, Q3) follow-up time in the registry was 23.7 (15.4, 36.0) months.



Baseline characteristics of patients who were and were not hospitalized during follow-up

Compared with those who were not hospitalized, a greater proportion of the patients who were hospitalized during follow-up were current or former smokers, used oxygen at rest and used oxygen with activity at enrollment.

Hospitalized during follow-up (n=568)		Not hospitalized during follow-up (n=433)
73.8	Male	75.8
71 (66, 75)	Age, years	70 (66, 76)
93.0	White	92.4
29.0 (25.9, 32.6)	Body mass index, kg/m²	28.8 (26.0, 31.8)
70.6	Current or former smoker	61.9
69.2 (58.5, 79.3)	FVC % predicted	71.4 (60.8, 84.7)
40.8 (30.9, 49.8)	DLco % predicted	44.5 (35.5, 54.3)
38.9	Oxygen use with activity	28.4
22.9	Oxygen use at rest	15.9

RESULTS

First hospitalizations during follow-up

9.9 (4.2, 17.0) months

Median (Q1, Q3) time from enrollment to first hospitalization



36.6% of first hospitalizations took place at the enrolling center

6 (3, 12)

Median (Q1, Q3) duration of respiratory-related hospitalization

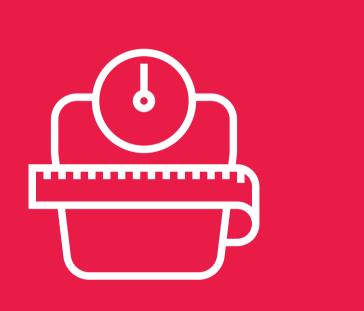
Median (Q1, Q3) duration of hospitalization with ventilatory support

Factors assessed at enrollment that were associated with increased risk of respiratory-related hospitalization during follow-up



Younger age

- HR 0.68 (95% CI: 0.55, 0.84) per 5-year increase for patients <62 years
- HR 0.92 (95% CI: 0.83, 1.01) per 5-year increase for patients ≥62 years



Lower body mass index • HR 0.96 (95% CI: 0.93, 0.98) per 1-point



Lower FVC % predicted • HR 0.90 (95% CI: 0.83, 0.97) per absolute 10% increase



Oxygen use at rest • HR 2.85 (95% CI: 2.18,



History of pulmonary hypertension

• HR 2.02 (95% CI: 1.37,

Based on time to first respiratory-related hospitalization.

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IPF-PRO™ Registry enrolling centers: Albany Medical Center, Albany, NY; Baylor College of Medicine, Houston, TX; Baylor University Medical Center & The Medical Center & The Medical Center & The Medical Center of Medical Center & The Medica College of Wisconsin Community Physicians, Milwaukee, WI; Houston Methodist Lung Center, Houston, TX; Lahey Clinic, Burlington, MA; Loyola University of South Carolina, Charleston, SC; National Jewish Health, Denver, CO; NYU Medical Center, New York, NY; Piedmont Healthcare, Austell, GA; Pulmonary Associates of Stamford, CT; PulmonIx LLC, Greensboro, NC; Renovatio Clinical, The Woodlands, TX; Salem Chest and Southeastern Philadelphia, PA; The Oregon Clinic, Portland, OR; Tulane University of California, Davis, Sacramento, CA; University of Chicago, Chicago, IL; University of Cincinnati Medical Center, Cincinnati, OH; University of Louisville, Louisville, Louisville, KY; University of Miami, FL; University of Minnesota, Minneapolis, MN; University of Minnesota, Min Nashville, TN; Vermont Lung Center, Colchester, VT; Wake Forest University, Winston Salem, NC; Washington Health and PMG Research, Wilmington, NC; Yale School of Medicine, New Haven, CT.