Online supplemental material

Clinical course and risk factors for severe COVID-19 among Italian patients with cystic fibrosis: a study within the Italian Cystic Fibrosis Society

Supplemental table S1. Characteristics of the four patients who reported COVID-19 related symptoms lasting 90 days and more.

	No.
Male sex	2
Age category (years)	
0-19	1
20-39	1
≥40	2
Pancreatic insufficiency	3
FEVp<40%	0
Oxygen therapy at baseline	0
Chronic Pa infection	1
Underweight	0
Organ transplantation	0
Diabetes	1
Liver disease	0
Hospitalization due to COVID-19	1
Admission to intensive care unit due to COVID-19	0

Abbreviations: FEVp - Forced expiratory volume in one second, expressed as percentage of predicted value; Pa - *Pseudomonas aeruginosa*.

Supplemental table S2. Odds ratios (ORs) for severe COVID-19 obtained from logistic regression models adjusted for age and pancreatic insufficiency in patients with cystic fibrosis infected by SARS-CoV-2 between March 2020 and June 2021 in Italy, according to selected clinical characteristics. Analysis restricted to patients aged ≥ 18 years.

	OR [95% CI]	*P**
FEV1p (<40% vs >=40%)	3.28 [1.03-10.42]	0.044
Oxygen (Yes vs No)	5.23 [1.12-24.37]	0.035
Chronic Pa infection (Yes vs No)	1.29 [0.56-2.96]	0.544
Underweight (Yes vs No)	1.80 [0.55-5.91]	0.329
Organ transplant (Yes vs No)	5.58 [1.85-16.81]	0.002
Diabetes (Yes vs No)	1.76 [0.75-4.15]	0.197
Liver disease (Yes vs No)	4.42 [1.87-10.45]	0.001
CFTR modulators (HE vs None)	0.43 [0.09-2.09]	0.502
CFTR modulators (OM vs None)	0.77 [0.25-2.36]	
Inhaled steroids (Yes vs No)	1.08 [0.48-2.40]	0.859
Dornase alfa (Yes vs No)	0.27 [0.09-0.86]	0.026
Azithromycin (Yes vs No)	2.95 [1.28-6.79]	0.011

Abbreviations: HE - Highly effective CFTR modulators; OM – Other CFTR modulators; Pa – *Pseudomonas aeruginosa*.

**P* values were obtained using the likelihood ratio test between two nested models (i.e. the null model and the model including the variable of interest).

Supplemental table S3. Characteristics of the 17 patients who lost more than 10 points of FEVp from baseline to follow-up (i.e. first visit after end of symptoms for symptomatic patients or after testing positive for SARS-CoV-2 for asymptomatic patients).

	No. (%)
Male sex	7 (41.2)
Age category	
0-19	8 (47.1)
20-39	5 (29.4)
≥40	4 (23.5)
Pancreatic insufficiency	13 (76.5)
FEVp<40%	0
Oxygen therapy at baseline	0
Chronic Pa infection	7 (41.2)
Underweight	3 (17.6)
Organ transplantation	1 (5.9)
Diabetes	5 (29.4)
Liver disease	4 (23.5)
Hospitalization due to COVID-19	4 (23.5)
Admission to intensive care unit due to COVID-19	0

Abbreviations: FEVp - Forced expiratory volume in one second, expressed as percentage of predicted value; Pa - *Pseudomonas aeruginosa*.