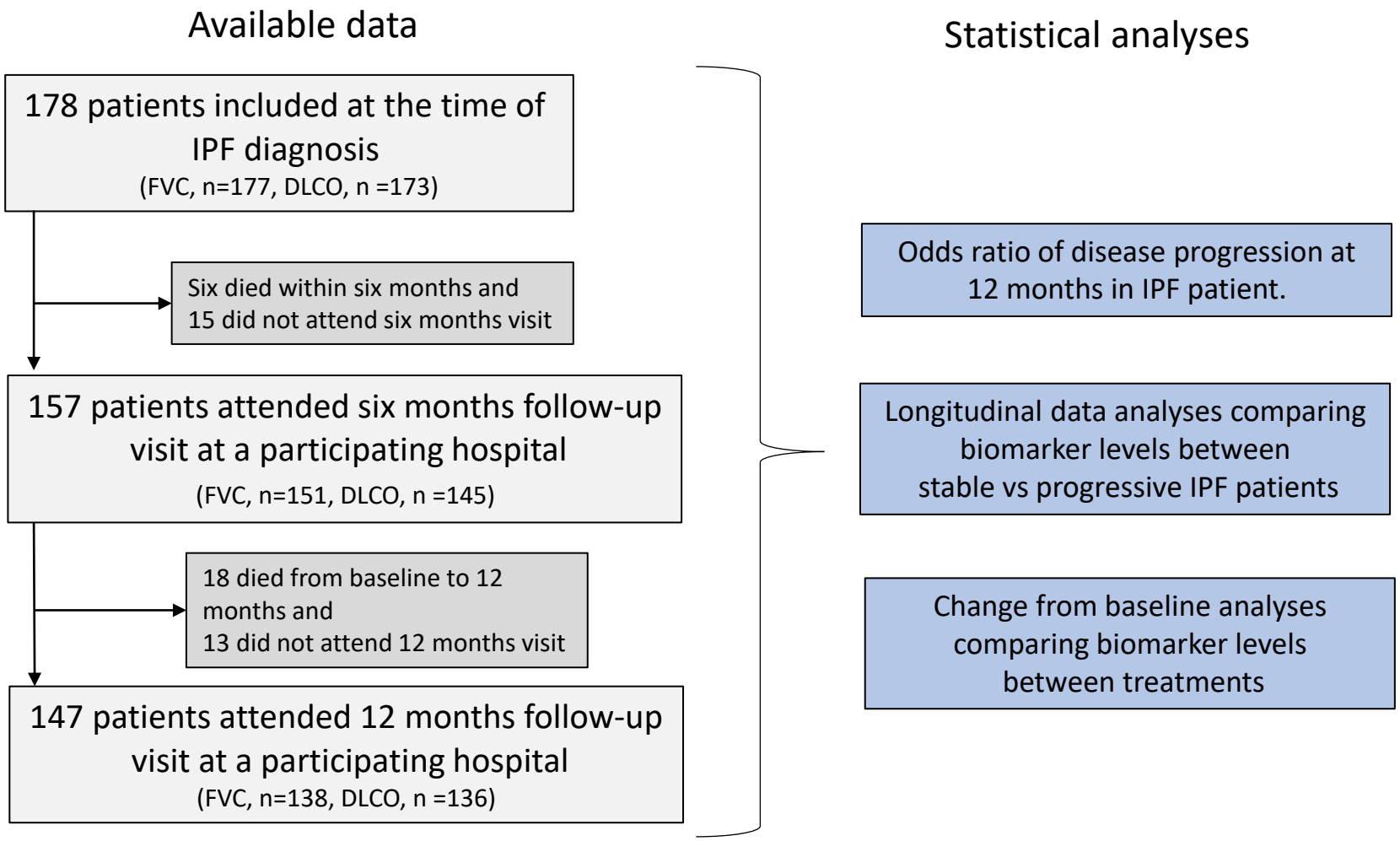
Supplementary Table 1

Parameter	All patients	Progressive	Stable	P-values
N	178	84	94	
Age, mean (SD)	73.80 (7.53)	73.31 (7.55)	74.23 (7.53)	0.415
Men, n (%)	136 (76.4%)	69 (82.1%)	67 (71.3%)	0.126
BMI, mean (SD)	27.31 (4.51)	27.19 (4.53)	27.41 (4.51)	0.744
FVC (L), mean (SD)	3.04 (0.86)	3.13 (0.88)	2.96 (0.85)	0.17
FVC (% pred), mean (SD)	89.51 (19.52)	88.74 (20.51)	90.20 (18.67)	0.448
DLCO (% pred), mean (SD)	52.85 (13.25)	52.73 (13.31)	52.96 (13.27)	0.645
Change in FVC % pred. from baseline to 12 months, mean (SD)	0.13 (10.16)	-6.98 (7.61)	5.60 (8.34)	<0.0001
Change in DLCO % pred. from baseline to 12 months, mean (SD)	-5.03 (7.98)	-11.25 (6.90)	-0.26 (4.85)	<0.0001
6MWT (meters), mean (SD)	442.61 (105.58)	441.63 (104.92)	443.50 (106.74)	0.394
Smoking status, n (%)				0.262
Never	46 (25.8%)	17 (20.2%)	29 (30.9%)	
Active	11 (6.2%)	6 (7.1%)	5 (5.3%)	
Former	121 (68.0%)	61 (72.6%)	60 (63.8%)	
GAP index, n (%)				0.117
I	88 (49.7%)	40 (47.6%)	48 (51.6%)	
II	82 (46.3%)	38 (45.2%)	44 (47.3%)	
III	7 (4.0%)	6 (7.1%)	1 (1.1%)	

Supplementary Table 1: Baseline characteristics

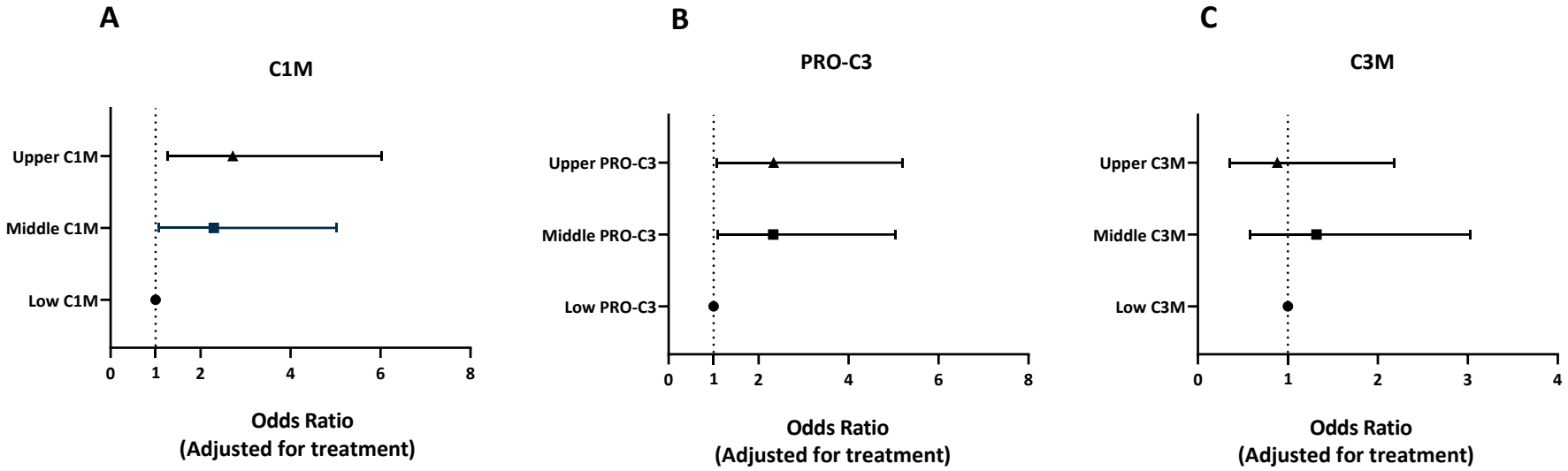
SD standard deviation, BMI Body Mass Index, FVC forced vital capacity, DLCO diffusion capacity for carbon monoxide, 6MWT six-minute walk test, GAP index Gender-Age-Physiology index, Disease progression was defined as an absolute decline in the percentage of predicted FVC ≥ 5% points and/or an absolute decline in the percentage of predicted DLCO ≥ 10% points and/or all-cause mortality within 12 months.

Supplementary Fig. 1



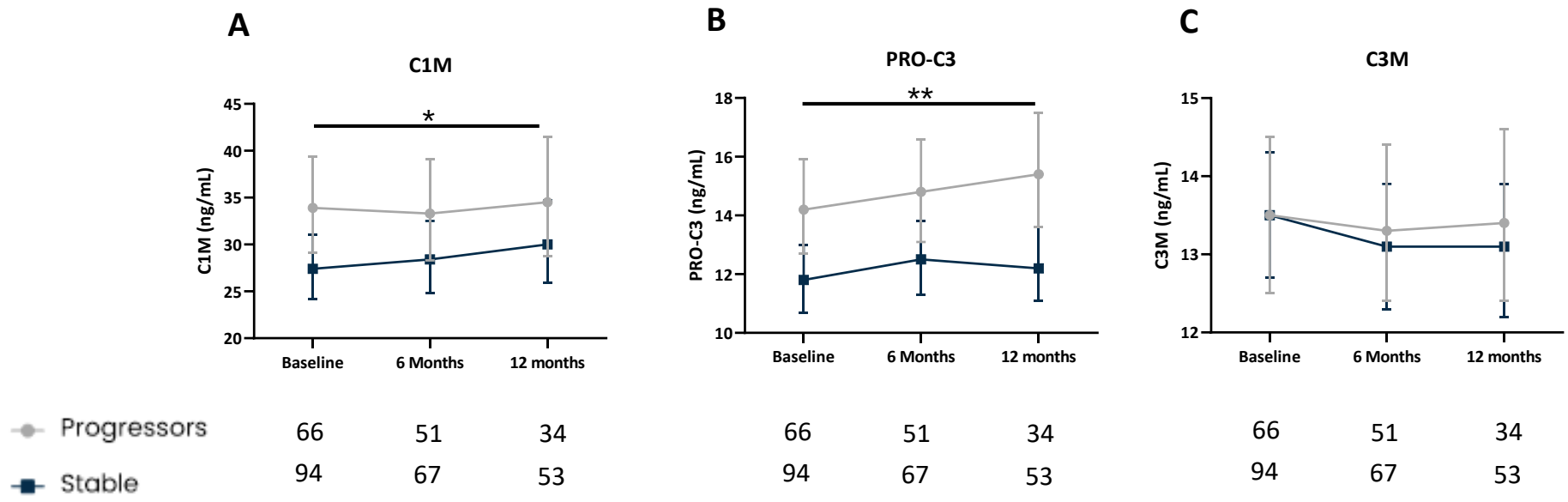
Supplementary Figure 1: Flow diagram
Follow-up of patients included in the presented study.

Supplementary Fig. 2



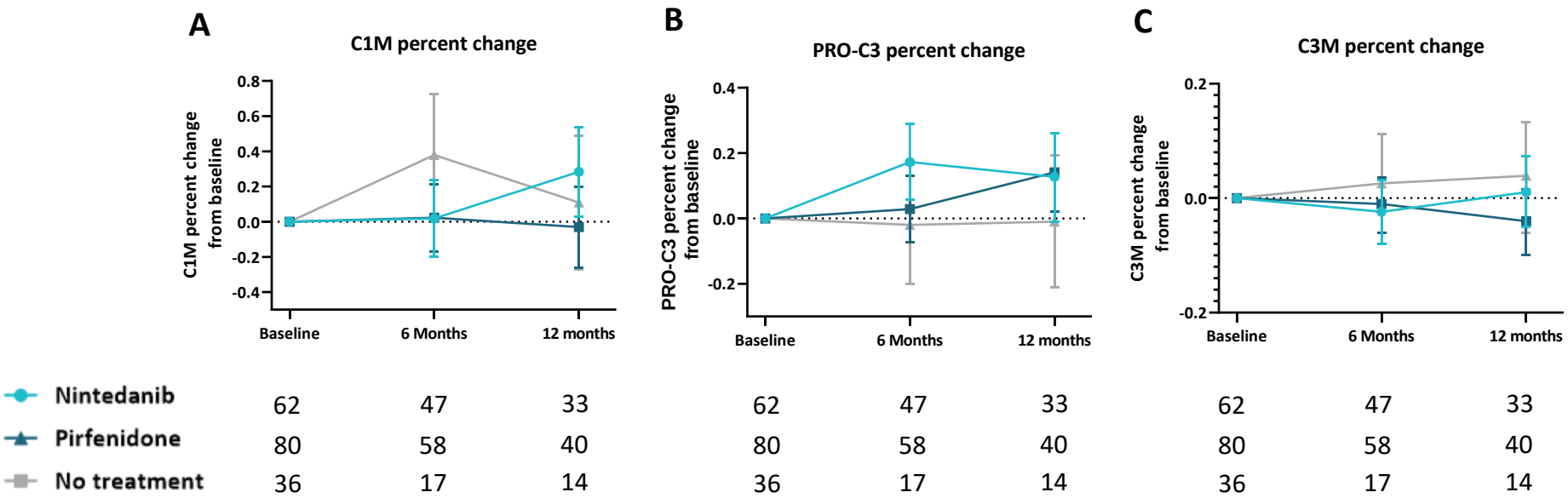
Supplementary Figure 2: Risk of disease progression at 12 months for IPF patients (Adjusted for treatment).
Odds ratio from IPF patients divided into tertiles from baseline biomarker of C1M (A), PRO-C3 (B) and C3M (C) are shown for the middle and upper tertile compared to the lowest tertile. Disease progression was defined as ≥ 5% decline in FVC and/or ≥ 10% decline in DLco or all-cause mortality at 12 months. Data are presented as mean and 95% CI (error bars) adjusted for age, sex, baseline levels of FVC and Dlco, and treatment. Each tertile had n=59-60.

Supplementary Fig. 3



Supplementary Figure 3: Longitudinal biomarker levels are elevated in progressive IPF patients (without death).
*Serum levels of C1M (A), PRO-C3 (B) and C3M (C) are shown at baseline, six months and 12 months for stable (dark blue) and progressive (grey) patients with IPF. Disease progression was defined as ≥ 5% decline in FVC and/or ≥ 10% decline in DLco within 12 months. Data are presented as mean and 95% CI (error bars) adjusted for age and sex. The number of evaluable samples available for analysis at each time point is provided in the graph. The P-values for the interaction between visit and progression status for C1M (P=0.75), PRO-C3 (P=0.52) and for C3M (P=0.73). Significant differences between progressive and stable patients over one year are shown as ** (P<0.01) and * (P<0.05).*

Supplementary Fig. 4



Supplementary Figure 4: Change from baseline of type I and III collagen biomarkers in nintedanib, pirfenidone and untreated patients of IPF patients. *Percent change from baseline of C1M (A), PRO-C3 (B) and C3M (C) are shown at six months and 12 months for pirfenidone (dark turquoise), nintedanib (turquoise) and non-treated (grey) patients with IPF. Data are presented as mean and 95% CI (error bars) adjusted for age, sex and baseline levels of C1M, PRO-C3 or C3M. The number of evaluable samples available for analysis at each time point is provided in the graph. The P-values for the interaction between visit and treatment status for C1M (P=0.12), PRO-C3 (P=0.29) and for C3M (P=0.30).*