## **Supplementary Material**

**Supplementary Table 1** Characteristics of chronic obstructive pulmonary disease patients in the validation cohort

Variables	Validation cohort
	(N = 178)
Age, y	74±10
≥65	150 (84)
Male gender	161 (90)
Current smoker	24 (14)
BMI, kg/m²	23.8±3.9
<18.5	14 (7.9)
18.5~24.9	94 (53)
>24.9	70 (39)
mMRC dyspnea scale	
≥2	99 (56)
Comorbidities	
Hypertension	42 (24)
Coronary artery disease	13 (7.3)
Diabetes mellitus	10 (5.6)
Exacerbations in prior 1 y	27 (15)
FEV <sub>1</sub> , % predicted	
≥50	142 (80)
<50	36 (20)

## Notes:

**Abbreviations:** BMI, body mass index; FEV1, force expiratory volume at 1 s; mMRC, modified Medical Research Council.

**Supplementary Figure 1** Kaplan–Meier curves for the composite adverse outcome of chronic obstructive pulmonary disease patients in the validation cohort, stratified by the established cutoff of (A) 6-minute walk distance (6MWD), % predicted, (B) pace variability, and (C) both 6MWD, % predicted and pace variability.

