

## Supplemental Data

**Table.** Schedule of evaluations

Evaluation	Run-in	Double-Blind Treatment						
	Visit 1 Screening	Visit 2 Day 1	Visit 3 Day 4	Visit 4 Week 4	Visit 5 Week 12	Visit 6 Week 18	Visit 7 Week 24	ET Visit
Predose PFT <sup>a</sup>		X	X	X	X	X	X	X
Postdose PFT <sup>b</sup>		X	X	X	X		X	X
BDI/TDI <sup>a</sup>		X		X	X		X	
SGRQ		X		X	X		X	X
EXACT <sup>c</sup>	X	X	X	X	X	X	X	X
EMSCI <sup>c</sup>	X	X	X	X	X	X	X	X
NiSCI <sup>c</sup>	X	X	X	X	X	X	X	X
12-hour PFT (spirometry substudy) <sup>d</sup>		X			X		X	
Rescue medication use <sup>e</sup>	X	X	X	X	X	X	X	X
Adverse events	X	X	X	X	X	X	X	X
Vital signs <sup>c</sup>	X	X	X	X	X	X	X	X
12-lead ECG <sup>d</sup>	X	X	X	X	X		X	X
Laboratory tests (fasting)	X				X		X	X

<sup>a</sup>IC conducted before forced maneuvers. FEV<sub>1</sub> and FVC performed at 1 hour and 10 minutes predose except at ET (only once if patient was able to complete the tests).

<sup>b</sup>FEV<sub>1</sub> and FVC performed at 30 minutes, 1 hour, and 2.25 hours postdose. At Visit 2, an additional evaluation was taken at 5 minutes post-dose.

<sup>a</sup>BDI/TDI was always completed before the SGRQ. BDI was performed at Visit 2 (predose); TDI was performed at subsequent visits.

<sup>b</sup>Recorded twice-daily (morning and evening) in the patient electronic diary.

<sup>c</sup>Blood pressure and heart rate readings taken after patient had been sitting for 10 minutes. Body weight was evaluated at Visit 1 and Visit 7/ET.

<sup>d</sup>Performed in approximately 20% of patients at selected sites. FEV<sub>1</sub> and FVC evaluated at 4, 6, 8, 10, and 12 hours post- morning dose. IC only performed at 12 hours post-morning dose.

<sup>d</sup>ECG performed pre-dose and 2 hours post-dose except at Visit 1 (once for eligibility only) and at ET Visit (once).

BDI, Baseline Dyspnea Index; ECG, electrocardiogram; ET, early termination; EMSCI, Early Morning Symptoms of COPD Instrument; EXACT, Exacerbation of Chronic Pulmonary Disease Tool; FEV, forced expiratory volume in 1 second; FVC, forced vital capacity; NiSCI, Nighttime Symptoms of COPD Instrument; PFT, pulmonary function test; SGRQ, St. George's Respiratory Questionnaire; TDI, Transition Dyspnea Index.

**Figure.** Change from baseline in FEV<sub>1</sub> by timepoint at week 24. This analysis was conducted in a subset of patients from the ITT population who participated in the 12-hour serial spirometry substudy. ACL400/FOR12 FDC, fixed-dose combination of acclidinium 400 µg and formoterol 12 µg; ACL400/FOR6 FDC, fixed-dose combination of 400 µg and formoterol 6 µg; FEV<sub>1</sub>, forced expiratory volume in 1 second; ITT, intention-to-treat; LS, least square

