Supplementary files

Supplementary Table 1. Comparison of patients with other comorbidities between the SITT and SIDT pre-treatment

Comorbidities	SITT, n = 52	SIDT, n = 49	*P*-value
Allergic rhinitis	22 (42.3)	16 (32.7)	0.4
Atopic dermatitis	2 (3.9)	1 (2.0)	1.0
Sinusitis with nasal polyps	0 (0)	1 (2.0)	0.5
ANCA-related disease	0 (0)	0 (0)	1.0
Hypertension	8 (15.4)	13 (26.5)	0.2
Hyperlipidemia	6 (11.5)	9 (18.4)	0.4
Mood disorder	4 (7.7)	3 (6.1)	1.0
Gastroesophageal reflux disease	5 (9.6)	1 (2.0)	0.2
Diabetes	3 (5.8)	1 (2.0)	0.6
Central nervous system disorder	3 (5.8)	1 (2.0)	0.6
Cardiac disease	2 (3.9)	1 (2.0)	1.0
Collagen vascular diseases	1 (1.9)	2 (4.1)	0.6
Arrhythmia	0 (0)	1 (2.0)	0.5
Chronic hepatitis	1 (1.9)	1 (2.0)	1.0
Hypothyroidism	2 (3.9)	0 (0)	0.5
Benign prostatic hyperplasia	0 (0)	1 (2.0)	0.5

Notes: No patient had malignancies or chronic kidney diseases.

Abbreviations: ANCA; anti-neutrophil cytoplasmic antibody, SIDT; single-inhaler dual therapy, SITT; single-inhaler triple therapy

Supplementary Table 2. Regimens of controllers in SITT and SIDT in this study

SITT, n = 52				
Controller via device	**ICS/LABA/LAMA**	**Daily doses**	**Administration**	**No. (%) of patients**
Enerzair® via Breezhaler®				16 (30.8)
high-dose	MF/IND/GLY	160/150/50 μg	once daily	5 (9.6)
medium-dose	MF/IND/GLY	80/150/50 μg	once daily	11 (21.2)
Trelegy® via Ellipta®				36 (69.2)
high-dose	FF/VI/UMEC	200/25/62.5 μg	once daily	10 (19.2)
medium-dose	FF/VI/UMEC	100/25/62.5 μg	once daily	26 (50.0)

SIDT, n = 49				
Controller via device	**ICS/LABA**	**Daily doses**	**Administration**	**No. (%) of patients**
Atectura® via Breezhaler®				4 (8.2)
high-dose	MF/IND	160/150 μg	once daily	0 (0)
medium-dose	MF/IND	80/150 μg	once daily	4 (8.2)
Relovair® via Ellipta®				20 (40.8)
high-dose	FF/VI	200/25 μg	once daily	19 (38.8)
medium-dose	FF/VI	100/25 μg	once daily	1 (2.0)
Flutiform125® via a pressurized metered dose inhaler				12 (24.5)
high-dose	FP/FF	>625/25 μg	twice daily	0 (0)
medium-dose	FP/FF	500/20 μg	twice daily	12 (24.5)
Symbicort® via Turbuhaler®				13 (26.5)
high-dose	BUD/FF	1280/36 μg	twice daily	1 (2.0)
medium-dose	BUD/FF	640/18 μg	twice daily	12 (24.5)

Notes: The percentage (%) of patients was estimated using the subtotal study population (SITT for n = 52 and SIDT for n = 49, respectively).

Abbreviations: BUD; budesonide, FF; fluticasone furoate, FF; formoterol fumarate, FP; fluticasone propionate, GLY; glycopyrronium bromide, IND; indacaterol acetate, MF; mometasone furoate, SIDT; single-inhaler dual therapy, SITT; single-inhaler triple therapy, UMEC; umeclidinium bromide, VI; vilanterol trifenatate.

Supplementary Table 3. Relative glucocorticoid receptor-binding affinity among ICS in our study

Corticosteroids	Relative glucocorticoid receptor-binding affinity compared to dexamethasone
Fluticasone furoate	29.9
Mometasone furoate	21.0
Fluticasone propionate	17.8
Budesonide	9.4
Dexamethasone	1

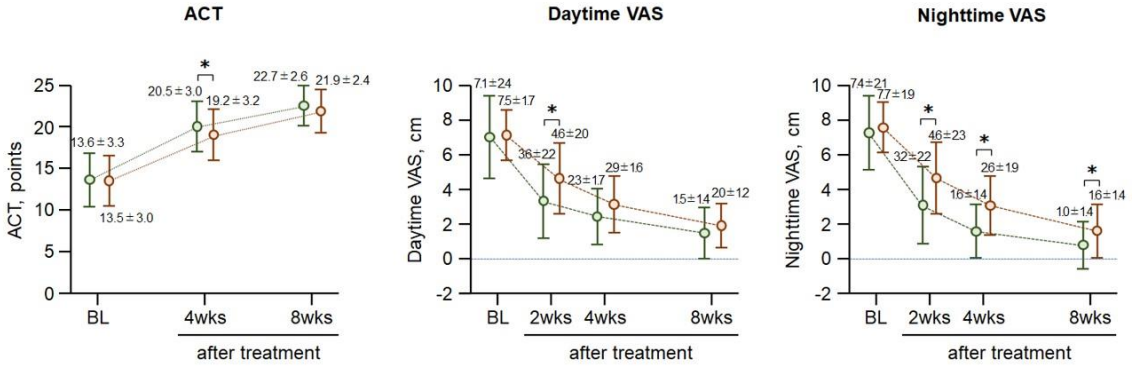
Notes: Glucocorticoid receptor-binding affinity is relative to dexamethasone, where dexamethasone affinity = 1 in accordance with a previous review reference below.

Abbreviations: ICS; inhaled corticosteroid

Reference

Daley-Yates PT. Inhaled corticosteroids: potency, dose equivalence, and therapeutic index. *Br J Clin Pharmacol* 2015; **80**: 372-80.

Supplementary Figure 1.



Notes: All data are expressed as mean ± standard deviation. The mean ACT scores with SITT were significantly higher than those with SIDT four weeks post-treatment (P = 0.0443). The mean daytime VAS scores with SITT were significantly lower than those with SIDT two weeks post-treatment (P = 0.0280). In contrast, the nighttime VAS scores with SITT were significantly lower than those with SIDT two (P = 0.0026), four (P = 0.0100), and eight weeks (P = 0.0288) post-treatment.

* P <0.05 when comparing between SITT and SIDT at each visit

Abbreviations: ACT; asthma control test, SIDT; single-inhaler dual therapy, SITT; single-inhaler triple therapy, VAS; visual analog scale, wks; weeks