SUPPLEMENTARY MATERIAL

Supplemental Table

Table S1.

	Inspiratory flow rate	Particle data	ICS	LABA
Flutiform [1),2)]	30 L/min	FPF	41.2% of labeled dose	39.1% of labeled dose
		MMAD	3.52 µm	3.52 µm
		GSD	1.59 µm	1.56 µm
Symbicort [3),4)]	60 L/min	FPF	35.0 % of labeled dose	30.0 % of labeled dose
		MMAD	2.49 µm	2.53 µm
		GSD	1.91 µm	1.89 µm
Relvar [5),6),7),8)]	60 L/min	FPF	20.6% of labeled dose	30.7% of labeled dose
		MMAD	range of 3.0 - 3.9 µm with a FPF range of 18 - 28%	range of 1.8 - 2.5 µm with a FPF range of 29 - 54%
		GSD	not found (used standard polydisperse GSD of 2.0 µm)	
Spiriva [9)]	30 L/min	• FPF: Tio: 63.0 % of labeled dose • MMAD: Tio: 2.29 µm • GSD : Tio: 2.41 µm		

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Supplemental Figure Legends

Fig. S1–6 Particle deposition imaging of Flutiform, Symbicort, and Relvar in the upper, central and peripheral airways in the 1st (Fig. S1) to 6th (Fig. S6) subjects.

Fig. S7 Particle deposition imaging of Symbicort at the rate of 30L/min in the 1st subject.

Fig. S8 Particle deposition imaging of Spiriva Respimat.

Fig. S9 Drug deposition fraction of bronchodilator (LABA, Spiriva). A. In the entire lung, **B**. In the peripheral airways.