Characteristics	Non-ICS group	ICS group	p value
	n=26	n=28	
Age, years <sup>a</sup>	9.2±2.2	10.3±2.5	0.086
Men	17 (65.4%)	14 (50.0%)	0.25
Treatment during a stable state, n (%)			
LABA	0 (0.0%)	22 (78.6%)	< 0.001*
Symptom			
Wheezes	24 (92.3%)	22 (78.6%)	0.25
Duration of URTI symptoms before			
consultation, days <sup>b</sup>	4 (2–6)	3 (2–6)	0.83
Body temperature, °C <sup>a</sup>	37.3±0.6	37.3±1.0	1.00
Laboratory findings			
CRP, mg/dL <sup>b</sup>	0.49 (0.29–1.20)	0.41 (0.04–0.99)	0.18
WBC count, /µL <sup>a</sup>	9,337±2,588	$7,603\pm 2,700$	0.02*
Eosinophil count in bloods, /µL <sup>b</sup>	66 (8–518)	312 (45–570)	0.14
Eosinophil percentage in blood, % <sup>b</sup>	0.8 (0.1-4.4)	3.6 (0.8–7.1)	0.07
Total serum IgE, IU/mL <sup>b</sup>	1,187 (742–1,891)	810 (435–1,746)	0.31
Hospitalization duration, day <sup>b</sup>	6 (5–8)	8 (7–8)	0.07
Treatment with systemic corticosteroids, n (%)	26 (100.0%)	27 (96.4%)	1.00
Systemic steroid treatment duration, days <sup>b</sup>	5 (4–7)	5 (4–7)	0.83
Viral pathogen detected	23 (88.5%)	22 (78.6%)	0.47
HRV/enterovirus <sup>C</sup>	21 (80.8%)	15 (53.6%)	0.03
HRV	21 (80.8%)	12 (42.9%)	0.004*
HRV-A	9 (34.6%)	7 (25.0%)	0.44
HRV-B	0 (0.0%)	1 (3.6%)	1.00
HRV-C	12 (46.2%)	4 (14.3%)	0.01*
non detected	0 (0%)	2 (7.1%)	0.49
enterovirus	0 (0.0%)	1 (3.6%)	1.00
Parainfluenza virus	2 (7.7%)	3 (10.7%)	1.00
Respiratory syncytial virus	0 (0.0%)	3 (10.7%)	0.24
Influenza A virus	1 (3.8%)	1 (3.6%)	1.00
Human metapneumovirus	0 (0.0%)	1 (3.6%)	1.00
Coronavirus	0 (0.0%)	1 (3.6%)	1.00
Adenovirus	0 (0.0%)	1 (3.6%)	1.00

Additional file 1. Comparison of characteristics, laboratory findings, clinical outcome, and the detection rates of viral pathogens between non-ICS group and ICS group

Data are the mean±standard deviation<sup>a</sup> and the median (interquartile range)<sup>b</sup>

<sup>C</sup>Detected by multiplex PCR. \*p < 0.05

Number of participants with missing data were as follow: 2 for CRP; 1 for WBC

count and eosinophil count and percentage in blood, 8 for total serum IgE.

Abbreviations;PFT, pulmonary function test; ICS, inhaled corticosteroids; LABA, long-acting beta2-agonist; URTI, upper respiratory tract infection; CRP, C-reactive protein; WBC, white blood cell; IgE, immunoglobulin E; FVC, forced vital capacity; FEV1, forced expiratory volume in one second; HRV, human rhinovirus.