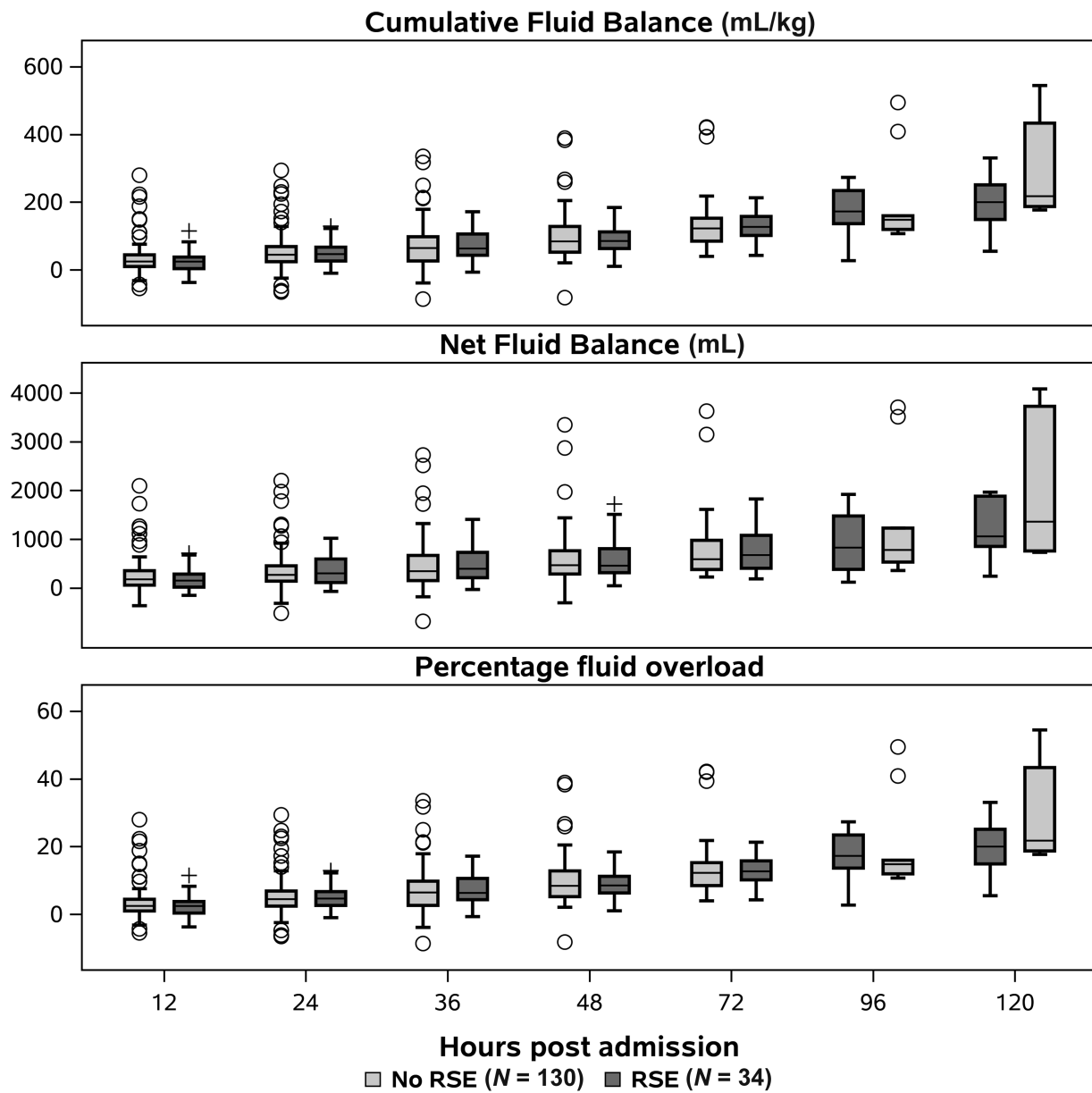


**Supplementary Table S1** Epidemiologic and clinical characteristics of all bronchiolitis patients admitted to the PICU

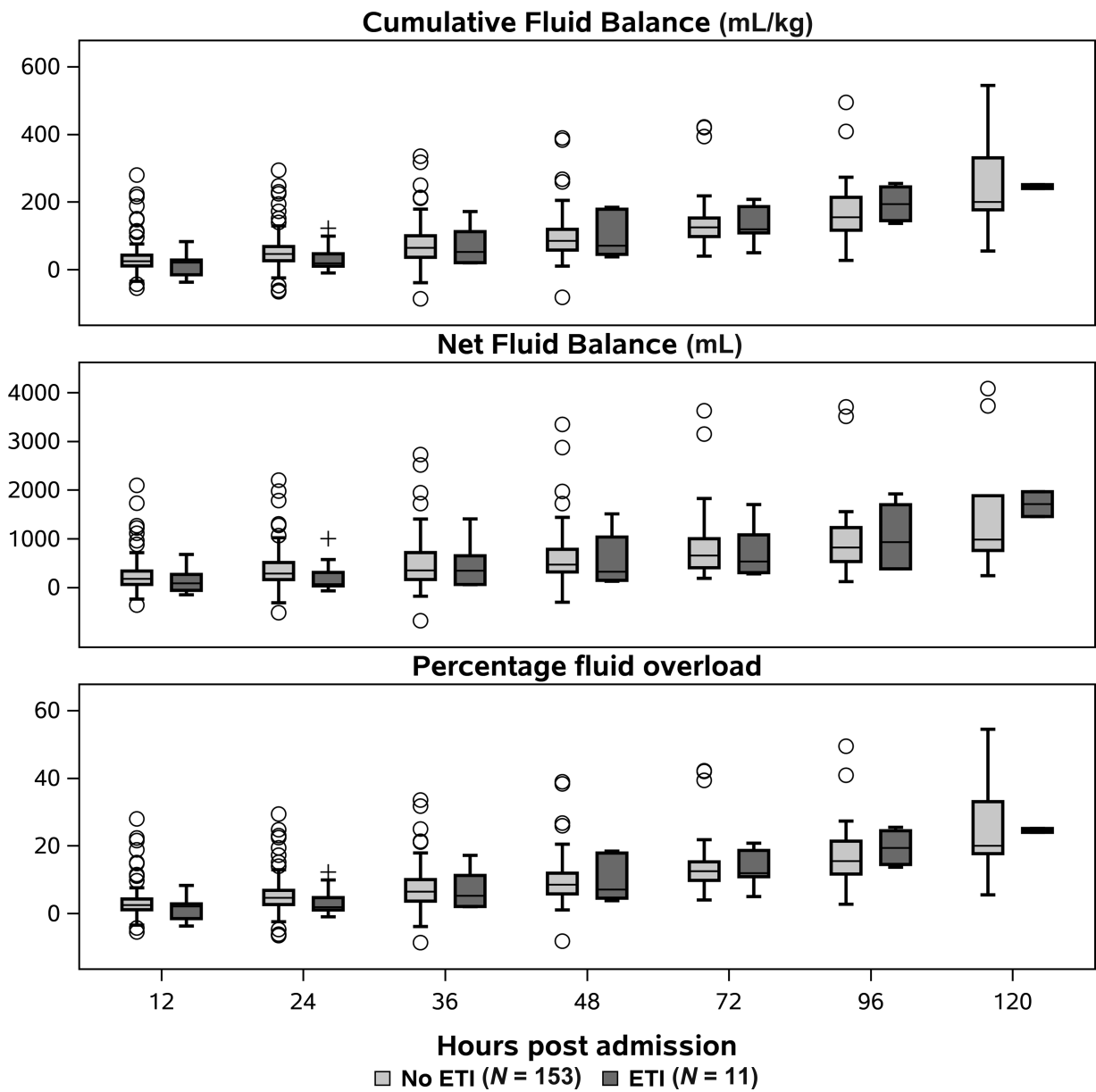
Variable	Patients included in study	Patients with incomplete fluid balance	p-Value
Number of patients	164	52	
Demographics:			
Age (months), median [IQR]	4.8 [2.1, 10.9]	2.8 [1.3,9.8]	0.10 <sup>a</sup>
Gender (male/female), n (%)	97/67 (59/41)	31/20 (61/39)	0.84 <sup>b</sup>
Weight (kg), median [IQR]	7.0 [4.7, 8.7]	6.2 [4.8,9.0]	0.89 <sup>a</sup>
Gestational age, median [IQR]	33.5 [32, 35.6]	35.0 [34.0,36.0]	0.17 <sup>a</sup>
Respiratory support upon PICU admission, n (%)			
RA	24 (15)	8 (16)	0.25 <sup>b</sup>
NC	63 (38)	25 (48)	
HFNC	71 (43)	17 (33)	
NIPPV	6 (4)	2 (4)	
Escalation of respiratory support, n (%)	34 (21)	6 (12)	0.14 <sup>b</sup>
Need for endotracheal intubation, n (%)	11 (6.7)	3 (5.7)	0.83 <sup>b</sup>
Hours spent in RA, median [IQR]	0 [0, 8]	0 [0,3]	0.32 <sup>a</sup>
Hours spent on NC, median [IQR]	14 [5, 24]	17 [4,28]	0.5 <sup>a</sup>
Hours spent on HFNC, median [IQR]	8 [0, 36]	0 [0,30]	0.35 <sup>a</sup>
Hours spent on NIPPV median [IQR]	0 [0, 0]	0 [0,0]	0.24 <sup>a</sup>
Fluid balance:			
Net fluid balance at PICU admission (mL), median [IQR]	101 [10, 497]	27 [-48,208]	0.34 <sup>a</sup>
CFB at PICU admission (mL/kg), median [IQR]	14.5 [1.3, 88]	6.1 [-9.4,25.9]	0.24 <sup>a</sup>
FO % at PICU admission, median [IQR]	1.4 [0.13, 8.8]	0.61 [-0.94,2.6]	0.24 <sup>a</sup>
Medications			
Albuterol	70 (43)	17 (33)	0.2 <sup>b</sup>
3% Hypertonic saline	8 (5)	1 (2)	0.35 <sup>b</sup>
Racemic epinephrine	45 (27)	16 (31)	0.64 <sup>b</sup>
Steroids	42 (25.6)	7 (14)	0.07 <sup>b</sup>
Antibiotics	61 (37)	24 (46)	0.25 <sup>b</sup>
• Rule out sepsis (48 h duration)	22 (13.4)	4 (7.7)	0.27 <sup>b</sup>
• Secondary pneumonia	22 (13.4)	10 (19.2)	0.3 <sup>b</sup>
• Bacteremia	1 (0)	0 (0)	0.99 <sup>b</sup>
• Acute otitis media	14 (8.5)	5 (9.6)	0.81 <sup>b</sup>
PICU length of stay in days, median [IQR]	1.8 [0.97, 3.0]	2.7 [1.9,5.2]	0.07 <sup>a</sup>
PRISM score, median [IQR]	0 [0,0]	0.00 [0.0,1.0]	0.3 <sup>a</sup>
PIM 2 score, median [IQR]	-6.3 [-6.4, -6.1]	-6.3 [-6.4, -6.1]	0.55 <sup>a</sup>

Abbreviations: %, percentage; %FO, percentage fluid overload; CFB, cumulative fluid balance; HFNC, high flow nasal cannula; IQR, inter-quartile range; n, number of patients; NC, nasal cannula oxygen therapy; NIPPV, noninvasive positive pressure ventilation; PICU, pediatric intensive care unit; RA, room air.

Note: p-Values: a, Kruskal-Wallis test; b, Pearson's Chi-square test.



**Supplementary Fig. 1** Comparison of fluid balances of patients with bronchiolitis admitted to the PICU requiring and not requiring respiratory support escalation (RSE). PICU, pediatric intensive care unit.



**Supplementary Fig. 2** Comparison of fluid balances of patients with bronchiolitis admitted to the PICU requiring and not requiring endotracheal intubation (ETI). PICU, pediatric intensive care unit.