

**E-table 1.** Central apnea index and sleep architecture.

	<b>DS</b>	<b>Control</b>	<b>p value</b>
<b>CAI</b>	0 (0;2.5)	0 (0;1.8)	0.70
<b>Micro-arousals index</b>	12.5 [7;17.8]	8 [5;17]	0.79
<b>Sleep efficiency (%)</b>	81 [73.88]	82 [78;91]	0.20
<b>REM sleep (%)</b>	18 [14;21]	19 [14;23]	0.25

Data are presented as median [IQR] or (range). DS: Down syndrome; CAI: central apnea index; REM: rapid eye movement.

**E-table 2.** Results of gas exchange in DS subjects and controls grouped by OSA severity.

	Mean PtcCO <sub>2</sub> (mmHg)			% of TST with a PtcCO <sub>2</sub> > 50 mmHg		
	<i>DS</i>	<i>Control</i>	<i>p value</i>	<i>DS</i>	<i>Control</i>	<i>p value</i>
<b>No OSA</b> (n=4, 14%)	45 [43.3;46.3]	43 [41.8;44]	> 0.05	1.5 (0;5)	0 (0;0)	> 0.05
<b>Mild OSA</b> (n=10, 36%)	45.5 [44.3;46.8]	42 [39.5;44.5]	< <b>0.01</b>	0 (0;65)	0 (0;0)	> 0.05
<b>Moderate OSA</b> (n=6, 21%)	42.5 [39.8;43.8]	42 [40;44]	> 0.05	0 (0;23)	0 (0;0)	> 0.05
<b>Severe OSA</b> (n=8, 29%)	44 [43;47]	41 [40;48]	> 0.05	0 (0;58)	0 (0;28)	> 0.05

Data are presented as median [IQR] or (range). DS: Down syndrome; TST: total sleep time; PtcCO<sub>2</sub>: Transcutaneous partial pressure of carbon dioxide; OSA: obstructive sleep apnea.