

**Supplementary Table 1.** Comparison of ventilator parameters during periods of low and high vibration in extremely preterm infants born at less than 29 weeks of gestation (n=15). For each minute, the median vibration and the mean of the ventilator parameters were calculated. For each recording, the 1-minute period with lowest and highest vibration was chosen. Group means and standard deviations of these data are shown in table.

Abbreviations: VTemand: expired tidal volume of ventilator inflations; MV: minute ventilation; PIP: peak inflating pressure; FiO<sub>2</sub>: fraction of inspired oxygen; SD: standard deviation.

	<b>Minute with lowest vibration</b>	<b>Minute with largest vibration</b>	
	<b>Group mean (SD)</b>	<b>Group mean (SD)</b>	<b>P value *</b>
Vibration (m/sec <sup>2</sup> ) &	0.4 (0.06)	1.1 (0.24)	<0.0001
VTemand (mL/kg)	5.63 (1.46)	5.81 (1.45)	0.14
MV (mL/kg/min)	0.29 (0.09)	0.30 (0.09)	0.12
PIP (cmH <sub>2</sub> O)	20.8 (6.6)	20.1 (6.8)	0.29
FiO <sub>2</sub> (%)	30.9 (11.1)	34.6 (13.8)	0.20

\*: Two-tailed paired Student T-test; &: Euclidean length of acceleration vector (see Methods).