

Appendix

This appendix was part of the submitted manuscript and has been peer reviewed. It is posted as supplied by the authors.

Table 1. Baseline characteristics of enrolled patients

Characteristic	Number (%)
Gender F:M	8:12 (40)
Mean age (years)	55.1
Endotracheal intubation	13 of 20 (65)
Mean days intubated prior to enrolment	2.1
Mean GCS at enrollment	11.3
Mean GCS motor Score	5.6
Wrist restraints applied	12 of 20 (60)
Mean enrolment RASS	-0.7, 95% C.I. (-1.5 -0)
CAM-ICU positive at enrollment	9/20 (45)
Nurse reported agitation at enrollment	12/20 (60)
Traumatic brain injury	13/20 (65)
Propofol based sedation	15/20 (75)
Adjunctive sedation - α_2 agonist	3/20 (15)
Mean APACHE III score	49, 95% CI.. (40-59)

Table 2. Average magnitude of acceleration and its variance. Moving window mean and variance are calculated from the mean or variance of the recording in the preceding 2 minutes at a given time point reflecting temporal variation in accelerometry trends. The values are then averaged across the data for a given RASS

RASS	Population mean and variance (m/s ²)	Average moving window mean (m/s ²)	Average moving window variance (m/s ²) ²
-5	0.9517 ± 0.0012	0.9517 ± 0.0005	0.0007± 0.00003
-4	0.9630 ± 0.0021	0.9630 ± 0.0009	0.0012 ± 0.0002
-3	0.9650 ± 0.0017	0.9650 ± 0.001	0.0008±0.00001
-2	0.9609±0.0014	0.9609±0.0007	0.0007 ± 0.000003
-1	0.9672±0.0016	0.9672±0.0007	0.0009±0.000004
0	0.9711±0.0040	0.9711±0.0008	0.0032±0.0001
1	0.9693±0.0048	0.9693±0.0011	0.0038±0.0001
2	0.9713±0.0061	0.9713±0.0011	0.0051±0.0003
3	0.9725±0.0052	0.9725±0.0008	0.0044±0.0008
4	0.9776±0.0146	0.9776±0.0008	0.0139±0.0026

Figure 1. Accelerometer devices after application



Figure 2. Typical patient set up with accelerometers on the dorsum each wrist

