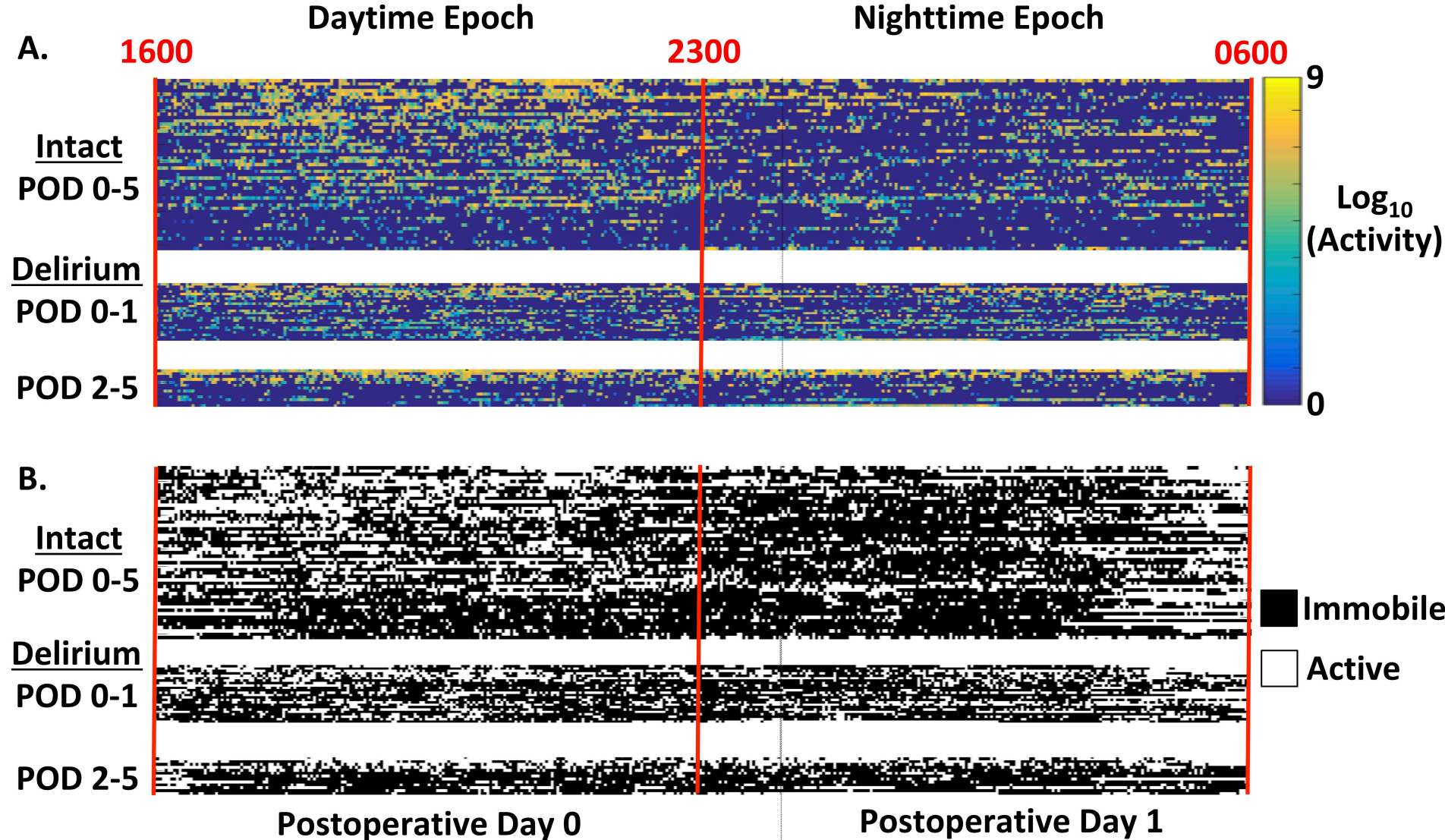


Figure S1



	Median Activity Counts (MAC) x 10 <sup>3</sup> , MAC <sub>Day-Night</sub>		Number of Immobile Minutes (NOIM) NOIM <sub>Night-Day</sub>	
	Delirium POD 0-1	Delirium POD 2-5	Delirium POD 0-1	Delirium POD 2-5
Intact POD 0-5	0.66 [0.53 0.78]*	0.71 [0.56 0.87]*	0.62 [0.49 0.75]	0.57 [0.40 0.74]
Delirium POD 0-1		0.58 [0.37 0.78]		0.57 [0.35 0.78]

**Table S1. Discriminability between groups based on Median Activity Counts (MAC) or Number of Immobile Minutes (NOIM).** C-statistic values are listed for discriminating paired groups with [95% CI]. Values only shown for LFE inactive. \*95% CI does not include 0.5.

	Odds Ratio (95% CI)	<i>P</i>
MAC <sub>Day</sub> – MAC <sub>Night</sub>	0.60 [0.35 1.1]	0.08
MAC <sub>Day</sub> – MAC <sub>Night</sub> LFE	0.60 [0.35 1.1]	0.08
MAC <sub>Day</sub>	0.86 [0.50 1.5]	0.58
MAC <sub>Day</sub> LFE	0.87 [0.51 1.5]	0.60
MAC <sub>Total</sub>	1.03 [0.63 1.7]	0.91
MAC <sub>Total</sub> LFE	1.04 [0.63 1.7]	0.88
MAC <sub>Night</sub>	1.20 [0.75 1.9]	0.45
MAC <sub>Night</sub> LFE	1.22 [0.75 2.0]	0.42
NOIM <sub>Night</sub> – NOIM <sub>Day</sub>	0.72 [0.43 1.2]	0.21
NOIM <sub>Night</sub> – NOIM <sub>Day</sub> LFE	0.68 [0.40 1.1]	0.15
NOIM <sub>Night</sub>	0.85 [0.52 1.4]	0.50
NOIM <sub>Night</sub> LFE	1.04 [0.63 1.7]	0.88
NOIM <sub>Total</sub>	0.99 [0.61 1.6]	0.98
NOIM <sub>Total</sub> LFE	0.98 [0.60 1.6]	0.95
NOIM <sub>Day</sub> LFE	1.18 [0.72 2.0]	0.51
NOIM <sub>Day</sub>	1.17 [0.71 1.9]	0.54

**Table S2.** Adjusted univariate classification ORs for one standard deviation change in the respective actigraphy variable for the presence of delirium at any point during the interval from POD 0-5. With adjustment for covariates, *P* > 0.05 for all measures, Likelihood ratio test.