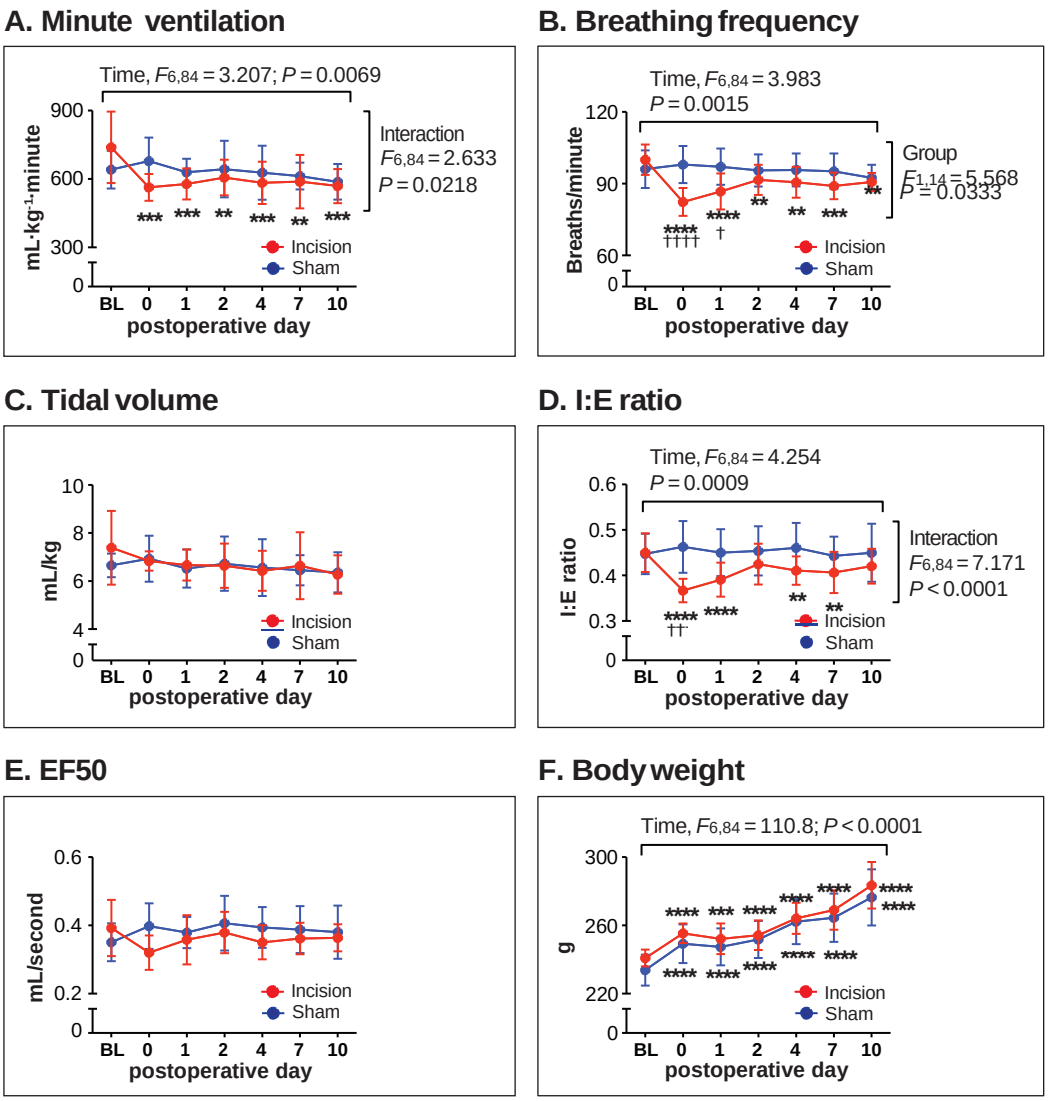

Figure S2. Raw (non- normalized) data for the Protocol C, the effect of upper abdominal incision *vs*. sham incision on the ventilatory parameters. (**A**) Minute ventilation of the Incision group after the surgery, on POD 0 through POD 10, was significantly lower compared with baseline (POD 0: $P = 0.0001$; POD 1: $P = 0.0006$; POD 2: $P = 0.0070$; POD 4: $P = 0.0010$; POD 7: $P = 0.0015$; POD 10: $P = 0.0003$). On the other hand, there was no statistical difference in minute ventilation of the Sham group throughout the testing period. (**B**) Breathing frequency of the Incision group on POD 0 though POD 10 was significantly lower compared to baseline (POD 0: $P < 0.0001$; POD 1: $P < 0.0001$; POD 2: $P = 0.0072$; POD 4: $P = 0.0019$; POD 7: $P = 0.0002$; POD 10: $P = 0.0022$). The mean breathing frequency values of the Sham group were not different throughout the testing period. (**C**) For tidal volume, there was no significant main effect or interaction. (**D**) Inspiratory-to-expiratory time ratio (I:E ratio) of the Incision group was lower compared with baseline on POD 0 through POD 7 (POD 0: $P < 0.0001$; POD 1: $P < 0.0001$; POD 4: $P = 0.0054$; POD 7: $P = 0.0017$); I:E ratio of the Sham group was not significantly different throughout the testing period. (**E**) For expiratory flow at 50% expired volume (EF50), there was no significant main effect or interaction. (**F**) Body weight on POD 0 through POD 10 were significantly greater compared with baseline in both the Incision and the Sham groups. Data are presented as mean ± SD. N = 8 per group. $^{**}P < 0.01$; $^{***}P < 0.001$; $^{****}P < 0.0001$ *vs*. Baseline, and $\dagger P < 0.05$; $\dagger\dagger\dagger P < 0.001$; $\dagger\dagger\dagger\dagger P < 0.0001$ *vs*. Sham by two-way ANOVA with repeated measured in one factor, followed by Sidak's multiple comparison tests. BL = baseline.