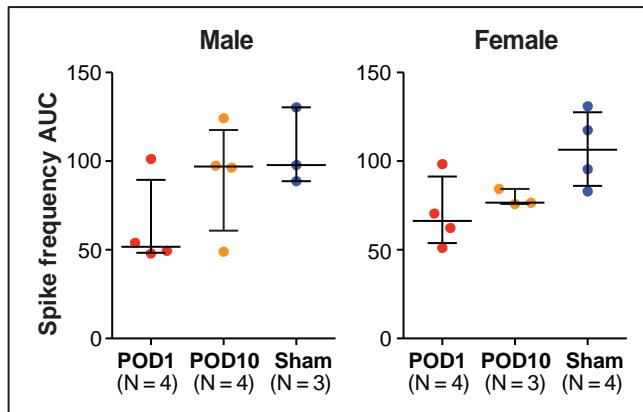
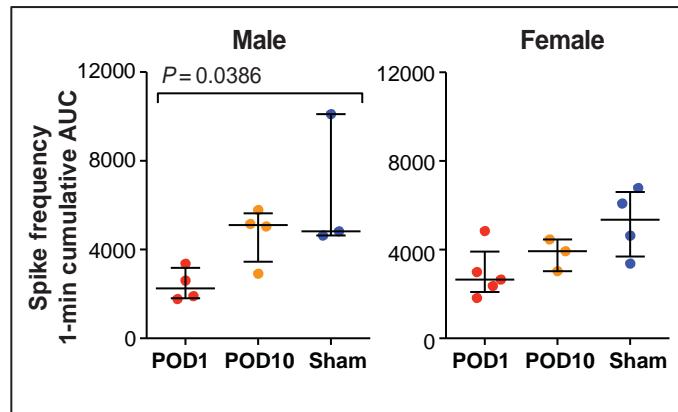


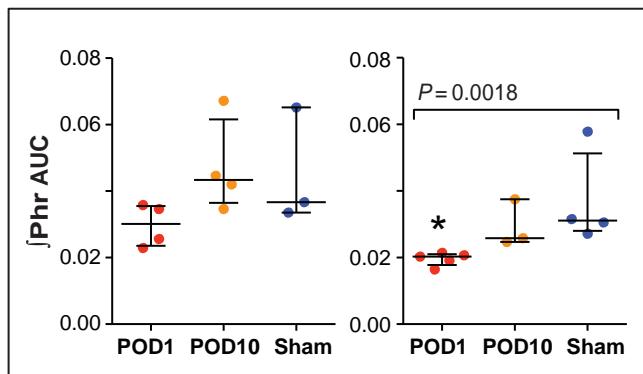
A. Spike frequency AUC/respiratory cycle



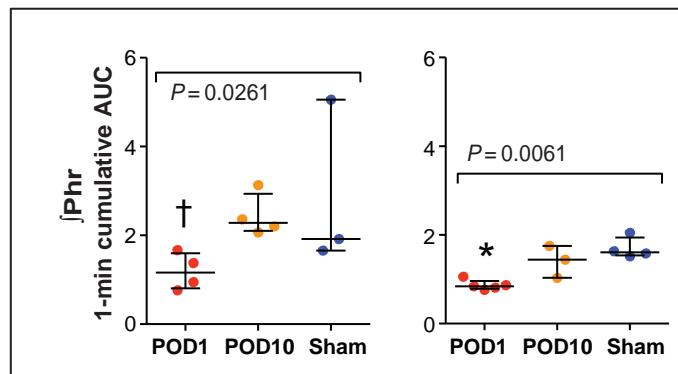
B. Spike frequency AUC/minute



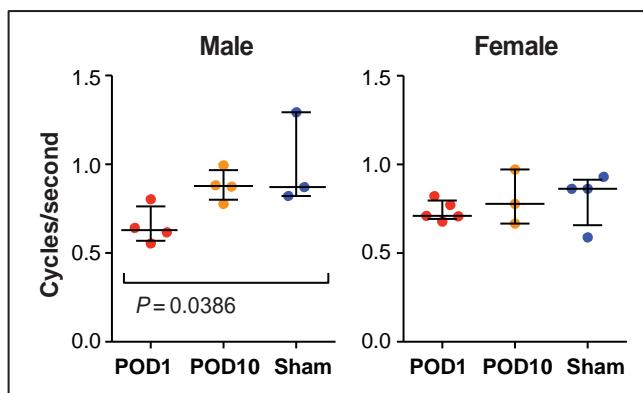
C. $\int \text{Phr}$ AUC/respiratory cycle



D. $\int \text{Phr}$ AUC/minute



E. Central respiratory rate



F. Ti:TE

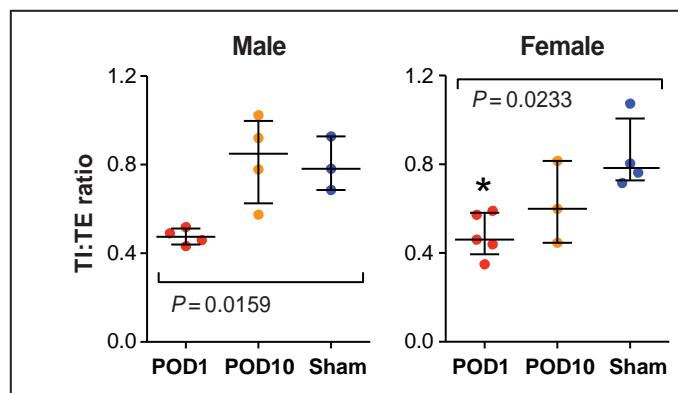


Figure S8. Subgroup analysis by sex: the efferent phrenic nerve activity measured 1 day or 10 days after the upper abdominal incision (Protocol B). **(A-F)**: Spike frequency area-under-the-curve (AUC)/respiratory cycle (A), spike frequency AUC/minute (B), integrated phrenic neurogram ($\int \text{Phr}$) AUC/respiratory cycle (C), $\int \text{Phr}$ AUC/minute (D), central respiratory rate (E), and inspiratory-to-expiratory duration ratio (Ti:TE; F) was compared between the groups. The colored dots represent the individual data points, horizontal lines represent median, and error bars represent interquartile range. Sample sizes are given in (A). * $P < 0.05$ vs. Sham, and † $P < 0.05$ vs. POD 10 by Kruskal-Wallis test followed by post hoc Dunn's multiple comparison tests. POD = postoperative day.