**Figure S10.** Subgroup analysis by sex: the effect of epidural bupivacaine ("Bupi" group) vs. PBS ("PBS" group) on efferent phrenic nerve activity before and after the upper abdominal incision (Protocol D). (A-F): Spike frequency area-under-the-curve (AUC)/respiratory cycle (A), spike frequency AUC/minute (B), integrated phrenic neurogram (∫Phr) AUC/respiratory cycle (C), ∫Phr AUC/minute (D), central respiratory rate (E), and inspiratory-to-expiratory duration ratio (T₁:Tₑ; F) were evaluated after epidural injection (Post-Epid) and the abdominal incision (Postop). Data are presented as median with interquartile range. Sample sizes are given in (A). *P < 0.05; **P < 0.01 vs. Baseline by Friedman test followed by post hoc Dunn’s multiple comparison tests.