**Supplemental Figures**

**Differential effects of anesthetics and sex on supraventricular electrophysiology and atrial fibrillation substrate in rats**

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**Supplementary Figure 1. AV 2:1 block is prolonged by both ISO and PEN in both sexes. A**: Comparison of AV 2:1 block under UAS, ISO, and PEN, stratified by sex. Note the prolongation by both ISO and PEN relative to UAS in both males and females. **B**: Comparison between males and females. The D change in AV 2:1 block relative to UAS under ISO and PEN conditions. Statistical analysis: A: Friedman’s and Dunn’s multiple comparisons. B: Mann–Whitney test.

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**Supplementary Figure 2. AERP analysis for various basic CLs. A**: Comparison of AERP obtained with 100-ms basic CL under UAS, ISO, and PEN, stratified by sex. **B**: Comparison between males and females. The D change in AERP obtained with 100-ms basic CL relative to UAS under ISO and PEN conditions. **C-D**: Similar representations as in A-B but for 70-ms basic CL. Similar data for 120-ms basic CL are presented in Figure 3 E-F in the main paper.

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**Supplementary Figure 3. AVERP analysis for various basic CLs. A**: Comparison of AVERP obtained with 100-ms basic CL under UAS, ISO, and PEN, stratified by sex. **B**: Comparison between males and females. The D change in AVERP obtained with 100-ms basic CL relative to UAS under ISO and PEN conditions. **C-D**: Similar representations as in A-B but for 110-ms basic CL. **E-F**: Similar representations as in A-B but for 130-ms basic CL. Similar data for 120-ms basic CL are presented in Figure 4 C-D in the main paper.



**Supplementary Figure 4. ISO increases the induction of regular atrial arrhythmias in males only. A**: Comparison of regular atrial arrhythmia induction (%) under UAS, ISO, and PEN, stratified by sex. **B**: Comparison between males and females. The D change in regular atrial arrhythmia induction (%) relative to UAS under ISO and PEN conditions. **C-D**: Similar representations as in A-B but for AF duration. Statistical analysis: A, C: Friedman’s and Dunn’s multiple comparisons. B, D: Mann–Whitney test. For clarity, two data points in C and two in D were out of scale and are not represented.