

Online Figure Legends

Online Figure S1. Schematic of groups and interventions. ATP indicates atrial tachypacing; EP, electrophysiological.

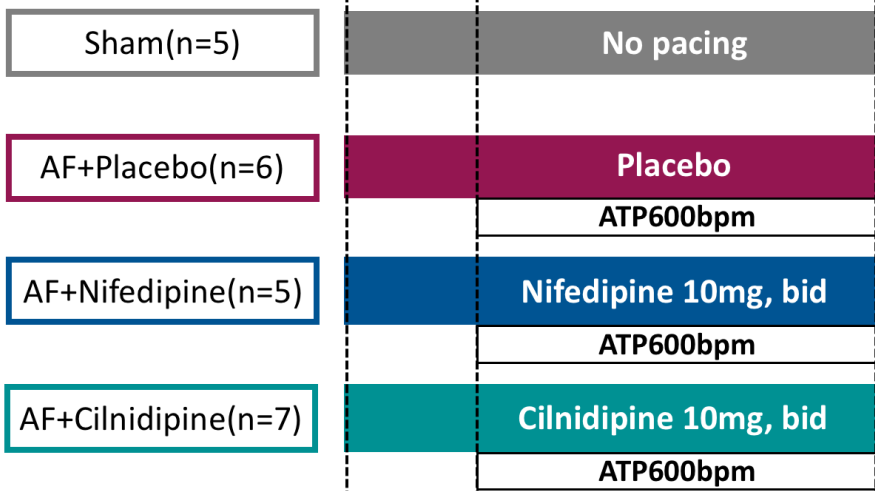
Online Figure S2. The effect of cilnidipine on heart rate variability (HRV) before and after 7-day AF. A, the average of all NN intervals (AVNN). B, the proportion of the number of pairs of NNs that differ by more than 50 ms divided by total number of NNs (pNN50). C, root mean square of the successive differences (rMSSD). The X-axis labels represent 3-hour blocks at the times of the day indicated. (n=5, 6, 5, 7 dogs for Sham, AF+Placebo, AF+Nifedipine, and AF+Cilnidipine)

* P<0.05 versus placebo and # P<0.05 versus nifedipine by 2-way ANOVA with Tukey test.

Online Figure S3. The effect of cilnidipine on expression of ion channel subunit and Ca²⁺-handling protein and ECM genes after 7 days of AF. * P<0.05, ** P<0.01, *** P<0.001 versus sham and # P<0.05 versus AF+cilnidipine by 1-way ANOVA with Tukey test. (n=5, 9, 5, 7 dogs for Sham, AF+Placebo, AF+Nifedipine, and AF+Cilnidipine)

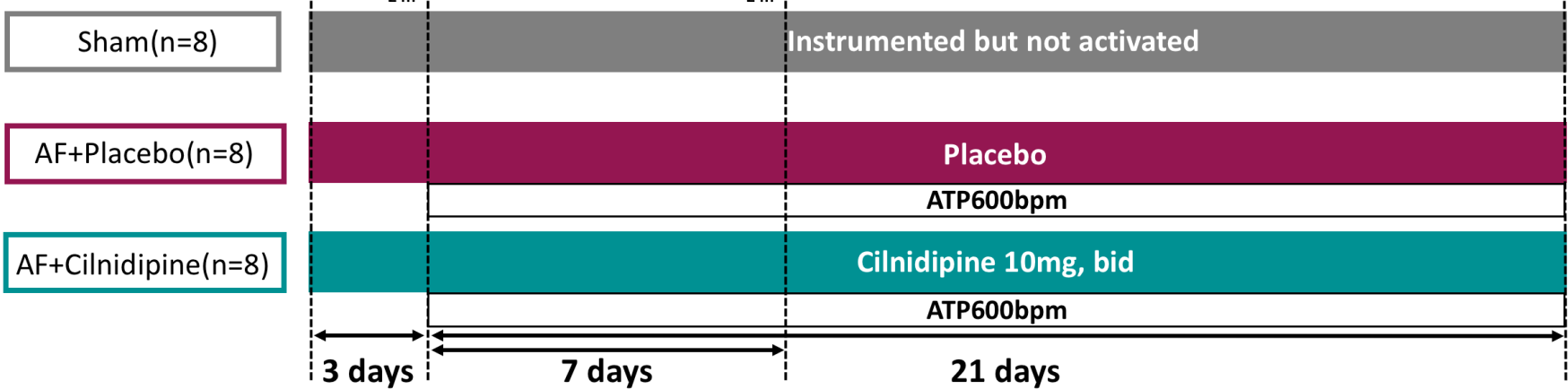
Online Figure S4. The assessment of left-ventricular ejection fraction (LVEF) after 21 days of AF. LVEF was reduced at end-study by an absolute value of about 15% in AF-dogs, to an equivalent extent in both placebo- and cilnidipine-treated groups. (n=8 dogs/group) ** P < 0.01 versus sham by 1-way ANOVA with Tukey test.

✓ 1 week – groups



Open-Chest EP Study

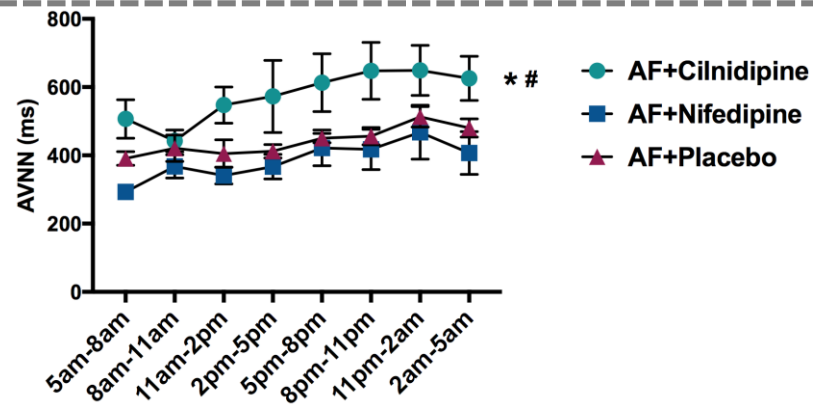
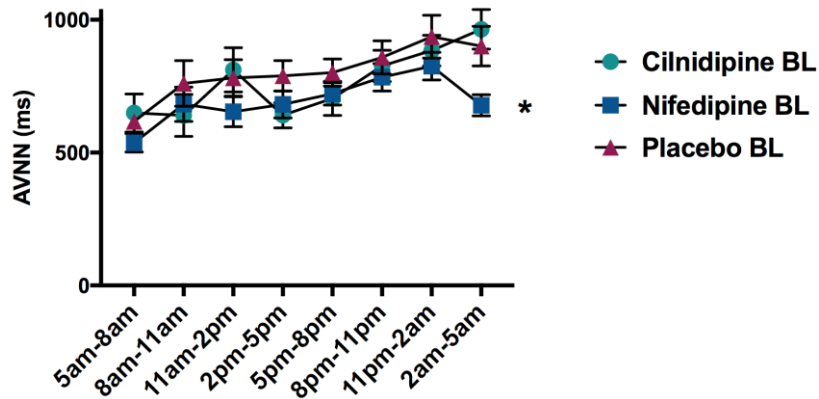
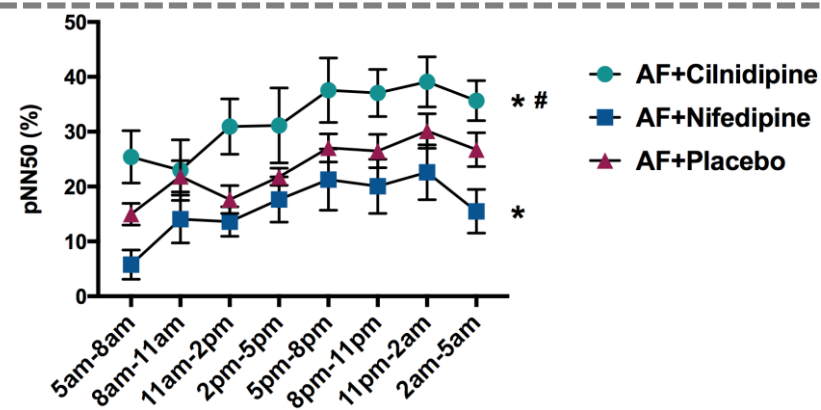
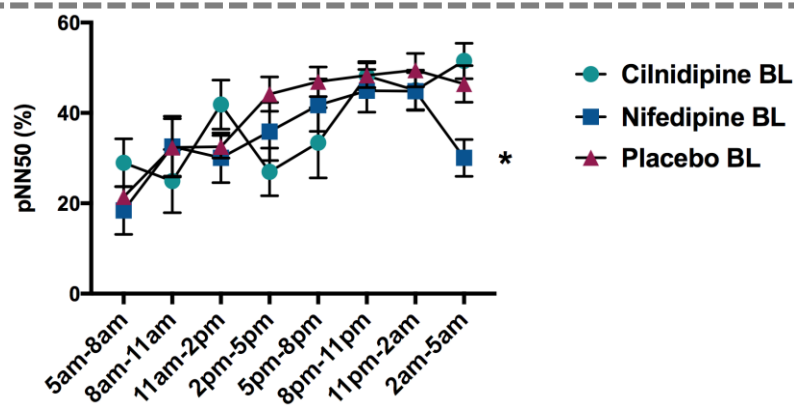
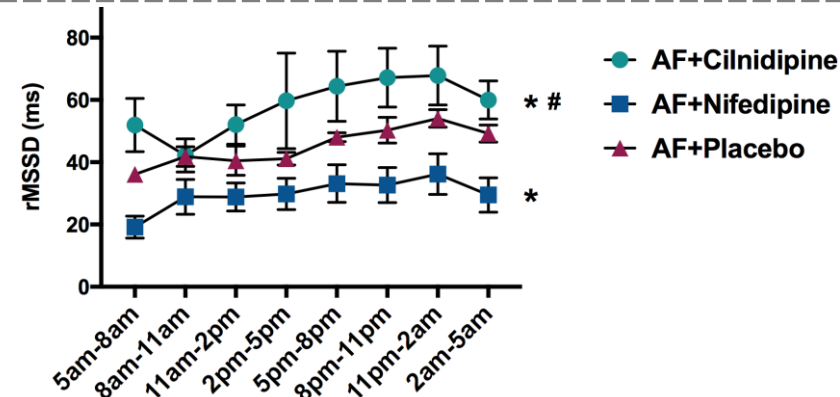
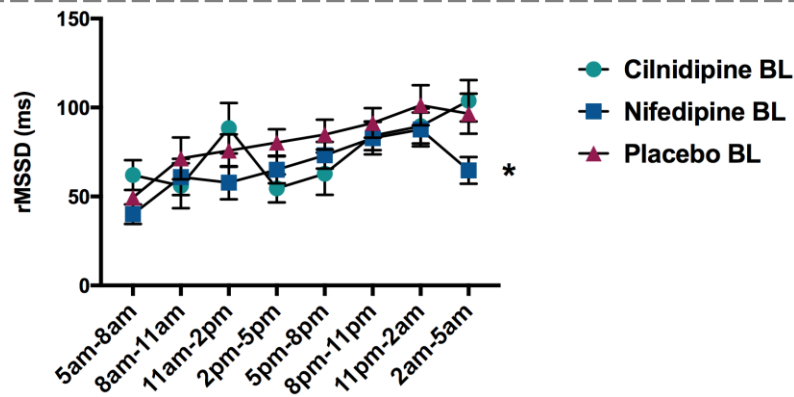
✓ 3 weeks – groups



Open-Chest EP Study

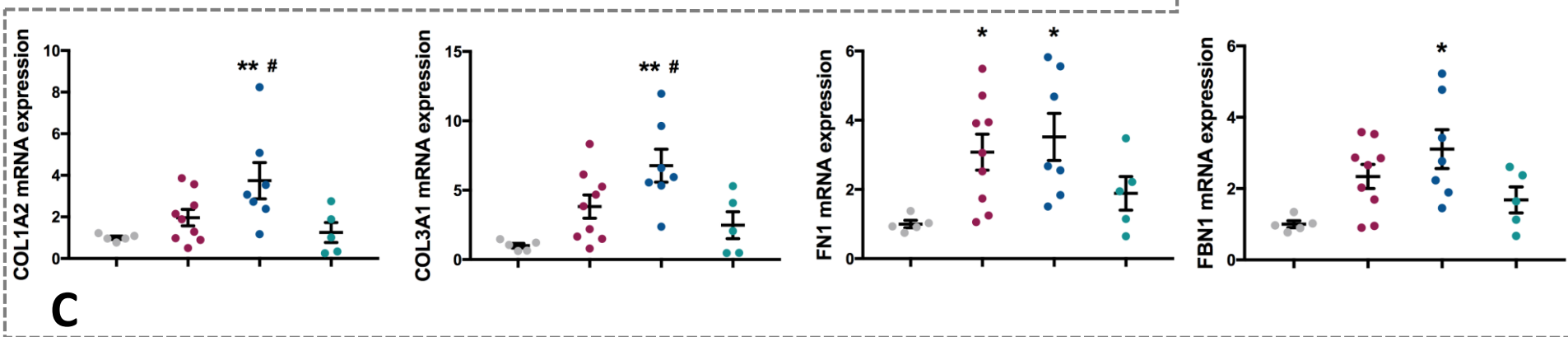
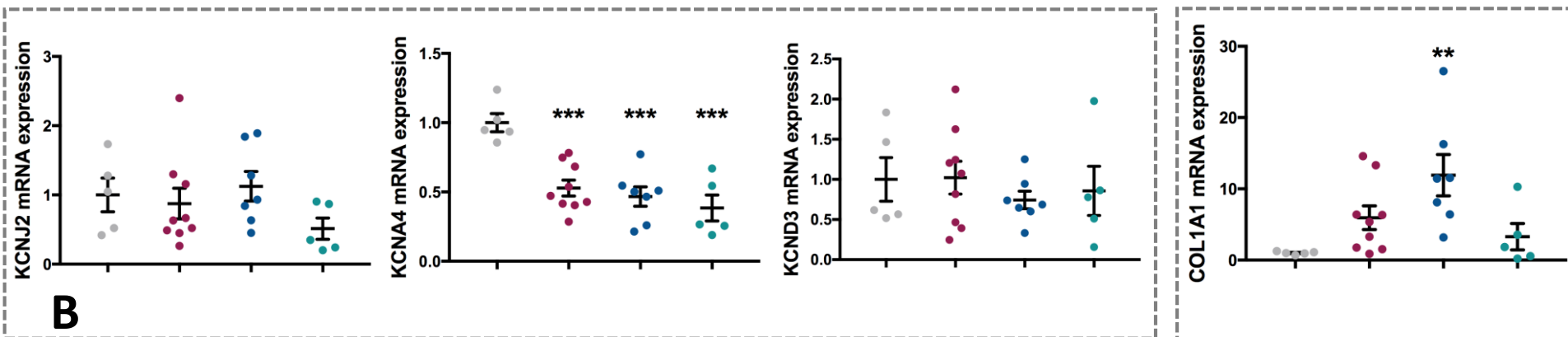
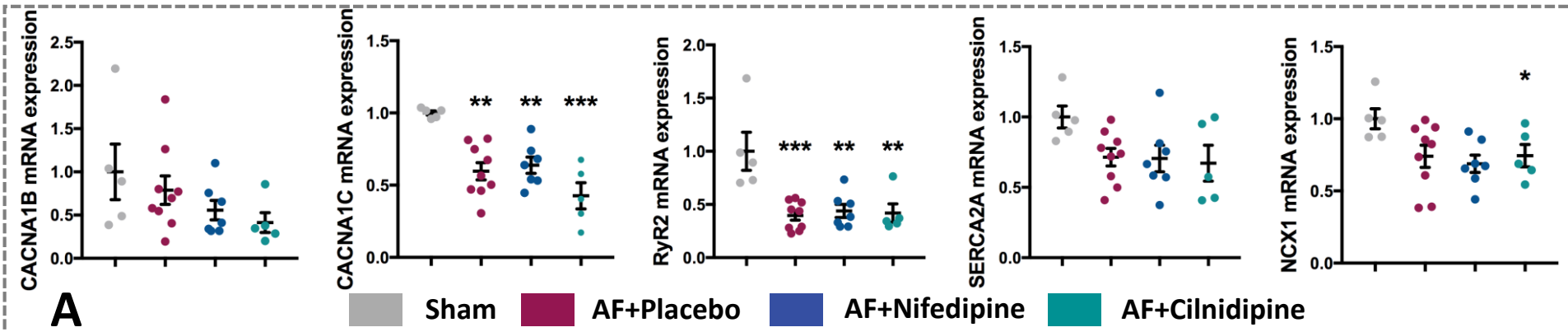
Optical Mapping

Online Figure 1

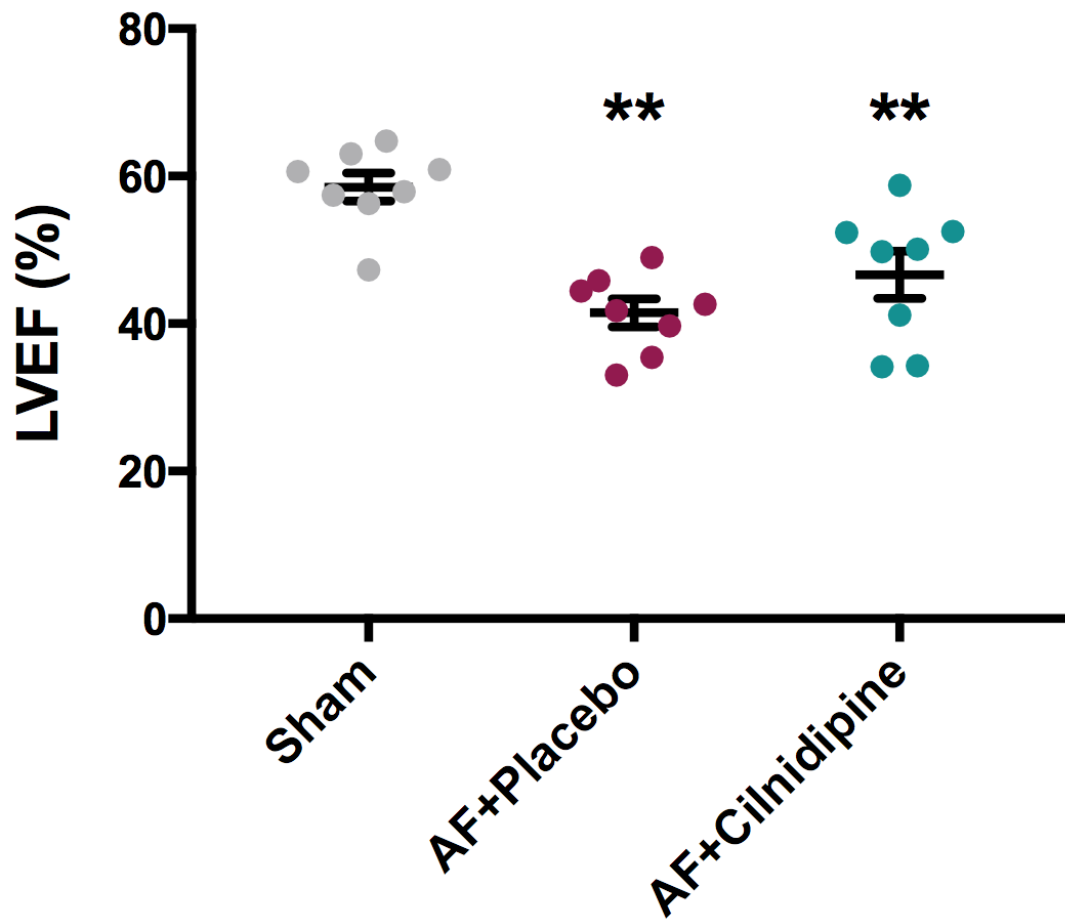
A**B****C**

* P<0.05 vs. placebo,
P<0.05 vs. nifedipine

Online Figure 2



* P<0.05, ** P<0.01, *** P<0.001 vs. Sham # P<0.05 vs. AF+Cilnidipine



** P<0.01 vs. Sham