**Functional Asymmetry of Cardiac Macrophages in Left and Right Atria**

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**METHODS**

Animal

Single nucleus and single cell profiling

Spatial transcriptomics profiling

**Pacing induced atrial fibrillation**

Programmed intracardiac stimulation was performed to test AF incidence (1-3). Mice were performed to the same atrial burst-pacing protocols three times. If AF episode lasting more than 1 second was evoked by burst pacing in at least two out of three attempts, the mouse was identified as AF positive. The incidence of inducible AF was measured as the percentage of AF-positive mice divided by the total number of mice tested. Atrial fibrillation duration was capped at 5 min for any episodes lasting longer. The operator was blinded to the group information (different genotype or treatment, up to your experiment design) of mice.

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