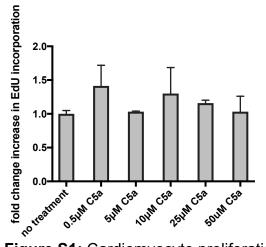
## SUPPLEMENTARY MATERIAL

## Supplemental figures:



**Figure S1:** Cardiomyocyte proliferation in C5aR1 knock-out and wild-type neonatal cardiomyocytes, effect of C5a agonist and C5aR1 inhibitor PMX205 on cardiomyocyte proliferation, quantified using EdU incorporation.

A: sham	B: resected
V C V V V V V V V V V V V V V V V V V V	
C5aR1/cTnT/DAPI	
mī <sup>02</sup>	2 <u>0.u</u> m

**Figure S2: C5aR1 antibody validation:** C5aR1 staining is absent in hearts of neonatal C5aR1 knock-out mice, 48 hours post resection, resected (A), sham (B); C5aR1 (red), cardiac troponin T (green), nuclei (blue); scale bar - 20µm

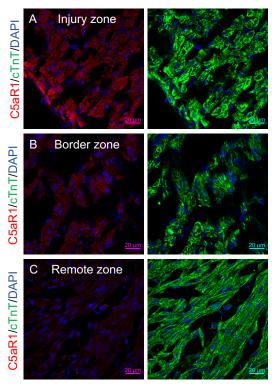
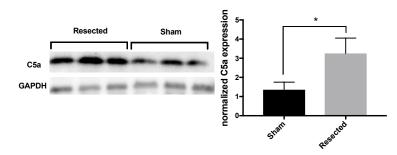
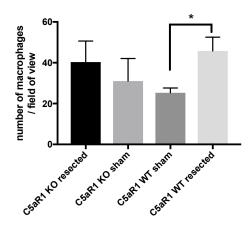


Figure S3: C5aR1 expression (red) in injured zone (A), border zone (B) and remote zone (C). Expression of C5aR1 is observed in the injured zone of neonatal mouse heart, 48 hours post-resection (A), but not in the border zone (B) and the remote zone (C).

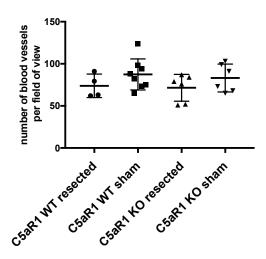


**Figure S4:** C5a levels are significantly higher in the neonatal murine heart 48 hours post – resection. n=3, all groups; \*p<0.05.

macrophage infiltration - 48 hours post injury



**Figure S5:** Quantification of macrophage infiltration of injured zone in C5aR1 knock-out and wild-type mice. N=3, all groups; \*p<0.05. Quantification was performed by immunostaining of heart sections.



**Figure S6:** Quantification of CD31 positive blood vessels in C5aR1 wild-type and knock-out mice, 7 days post-resection.  $n \ge 3$  (all groups).