Supplementary Fig. 1

Months after MI

Percent survival

Vehicle-treated
CPC-treated

Baseline 1 week

1 2 3 4 5 6 7 8 9 10 11 12

Supplementary Fig. 1
A Vehicle-treated \hspace{1cm} CPC-treated

B

C

Risk Region \hspace{1cm} Noninfarcted Region

Supplementary Fig. 2
**Vessel Density**

- Risk region
  - Noninfarcted region

**BrdU^{pos} Vessels**

- % of Total Vessels

**BrdU^{pos} Endothelial Cells**

- % of Total Endothelial Cells

Supplementary Fig. 3A-F
**Supplementary Fig. 3G-H**

**Risk Region**
- Vehicle-treated (1,290 vessels)
- CPC-treated (1,280 vessels)

**Noninfarcted Region**
- Vehicle-treated (329 vessels)
- CPC-treated (269 vessels)
Supplementary Fig. 3I-K
Supplementary Fig. 4

Myocyte Nuclear Density

Myocyte Density

Risk region  Noninfarcted region

Vehicle-treated (n=6)  CPC-treated (n=6)

P<0.01  P<0.01  P<0.01  P<0.01
Supplementary Fig. 5

**BrdU^{pos}/\alpha-SA^{pos} Cells**

Risk region

Month after MI during which BrdC was infused

- Vehicle-treated (n=5-6)
- CPC-treated (n=5-6)

% of Total $\alpha$-SA^{pos} Nuclei

- 3$^{rd}$
- 7$^{th}$
- 12$^{th}$

$P<0.01$
Supplemental Fig. 7B