Online Supplement

The Macrophage and Cardiac Disease

Part 4 of a 4-part review series: The Macrophage in Cardiovascular Disease

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Online Table 1. Perturbation of monocytes/macrophages in experimental models of cardiac injury and key results/findings.

Reference	Experimental model/study details	Key results/findings
Nahrendorf et al. (1)	• clodronate liposome (phase 1 or phase 2 after injury) • MI	• reduced macrophages (either phase 1 or 2 depleted) • reduced fibrosis (either phase 1 or 2 depleted) • reduced inflammation • reduced vascularization
Kaikita et al. (2)	• Ccr2$^{-/-}$ • MI	• reduced macrophages • improved cardiac function • reduced proteolytic activity • reduced inflammation
Hayashidani et al. (3)	• anti-Ccl2 gene therapy • MI	• increased survival • reduced macrophages • improved cardiac function • reduced fibrosis • reduced inflammation
Dewald et al. (4)	• Ccl2$^{-/-}$ • MI	• reduced macrophages • reduced fibrosis • reduced vascularization • altered inflammation • improved cardiac function
Hilgendorf et al. (5)	• Nr4a1$^{-/-}$ • MI	• reduced fibrosis • larger scar • reduced cardiac function • increased inflammation
Leuschner et al. (6)	• Splenectomy • MI	• reduced cardiac function • smaller scar • reduced fibrosis • reduced macrophages
Gao et al. (7)	• MIF$^{-/-}$ • I/R MI	• reduced inflammation • reduced macrophages • reduced myocyte apoptosis • reduced infarct size
van Amerongen et al. (8)	• clodronate liposome • cryoinjury	• reduced survival • reduced vascularization • larger scar • reduced fibrosis
Frantz et al. (9)	• clodronate liposome	• reduced survival • increase LV thromboembolic events • reduced fibrosis • increased inflammation
Zhao et al. (10)	• Cxcr6$^{-/-}$ • I/R MI	• improved cardiac function • reduced infarct size

DeBerge et al. (11)	• MerTK$^{-/-}$ • I/R MI	• increased infarct size • increased inflammation • reduced cardiac function
Meyer et al. (12)	• Wif1$^{-/-}$ • MI	• larger scar • reduced cardiac function • reduced macrophages
Howangyin et al. (13)	• Mertk$^{-/-}$Mfge8$^{-/-}$ • MI	• reduced cardiac function • reduced fibrosis
Leblond et al. (14)	• GW2580 treatment • MI	• increased inflammation • reduced cardiac function
Lorchner et al. (15)	• Oxmr$^{-/-}$ and Reg3b$^{-/-}$ • MI	• reduced macrophages • reduced survival • reduced fibrosis
Hayasaki et al. (16)	• Ccr2$^{-/-}$ • I/R MI	• reduced infarct size • reduced macrophages • reduced fibrosis
Leuschner et al. (17)	• Ccr2-siRNA nano-particles • I/R MI	• reduced infarct size • reduced macrophages
Majmudar et al. (18)	• Ccr2-siRNA nano-particles • ApoE$^{-/-}$ • MI	• reduced macrophages • reduced inflammation • improved cardiac function
Liehn et al. (19)	• Ccl2 competitor treatment • I/R MI	• improved cardiac function • reduced fibrosis • reduced macrophages
He et al. (20)	• Lp-PLA2 BM chimeras • MI	• improved cardiac function • reduced inflammation • reduced fibrosis • increased vascularization
Panizzi et al. (21)	• ApoE$^{-/-}$ • MI	• increased macrophages • increased inflammation • increased vascularization • reduced cardiac function

Supplemental References

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