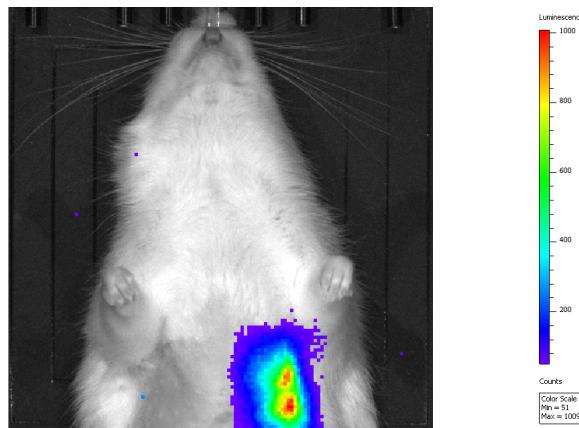


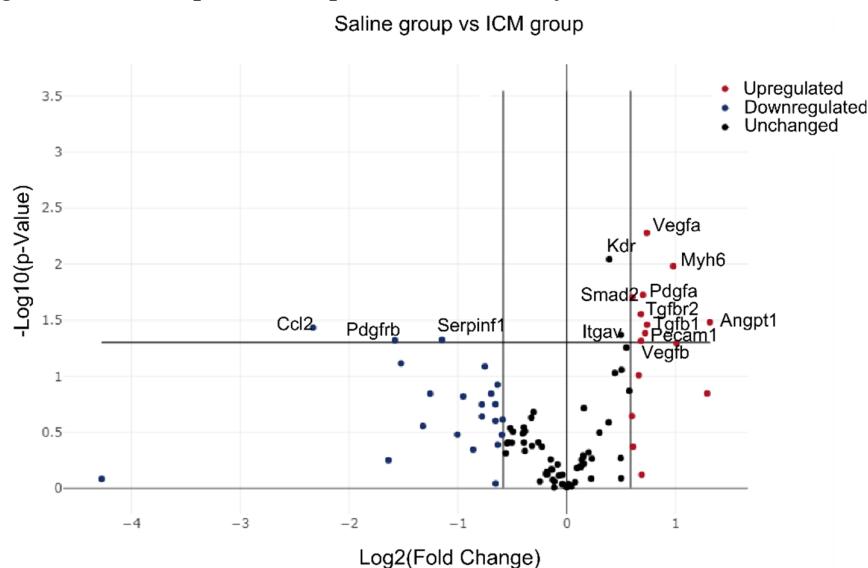
## Supplementary Material

**Figure S1. Verification of injection method**



Bioluminescent image of thoracic located ASCs 24 hours after echo-guided trans-thoracic intra-myocardial injection

**Figure S2. Transcriptional comparison of saline day 7 and ICM.**



Volcano plot for comparison between saline group day 7 and ICM ( $n = 3$  and 5, respectively).

**Table S1. List of genes and controls in the RT<sup>2</sup> Profiler PCR Arrays.**

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| Gene symbol | Description                                 |
|-------------|---|
| Acta2       | Smooth muscle alpha-actin                   |
| Actb        | Actin, beta                                 |
| Ang         | Angiogenin, ribonuclease A family, member 1 |
| Angpt1      | Angiopoietin 1                              |
| Angpt2      | Angiopoietin 2                              |
| Ccl2        | Chemokine (C-C motif) ligand 2              |

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Ccl3 Chemokine (C-C motif) ligand 3  
Ccl5 Chemokine (C-C motif) ligand 5  
Ccl7 Chemokine (C-C motif) ligand 7  
Ccl9 Chemokine (C-C motif) ligand 9  
Ccr1 Chemokine (C-C motif) receptor 1  
Ccr2 Chemokine (C-C motif) receptor 2  
Cd40lg CD40 ligand  
Cebpb CCAAT enhancer binding protein beta  
Mmp1 Matrix metallopeptidase 1a (interstitial collagenase)  
Col1a2 Collagen, type I, alpha 2  
Col3a1 Collagen, type III, alpha 1  
Col4a3 Collagen, type IV, alpha 3  
Csf1 Colony stimulating factor 1 (macrophage)  
Csf2 Colony stimulating factor 2 (granulocyte-macrophage)  
Ctgf Connective tissue growth factor  
Cxcl12 Chemokine (C-X-C motif) ligand 12 (stromal cell-derived factor 1)  
Cxcl13 Chemokine (C-X-C motif) ligand 13  
Cxcl16 Chemokine (C-X-C motif) ligand 16  
Cxcl3 Chemokine (C-X-C motif) ligand 3  
Cxcl9 Chemokine (C-X-C motif) ligand 9  
Cxcr3 Chemokine (C-X-C motif) receptor 3  
Cxcr4 Chemokine (C-X-C motif) receptor 4  
Ackr3 Chemokine (C-X-C motif) receptor 7  
Fgf1 Fibroblast growth factor 1  
Fgf2 Fibroblast growth factor 2  
Gapdh Glyceraldehyde-3-phosphate dehydrogenase  
Gata4 GATA binding protein 4  
Hgf Hepatocyte growth factor  
Ifng Interferon gamma  
Il10 Interleukin 10  
Il11 Interleukin 11  
Il1b Interleukin 1 beta  
Cecilie Høeg Pedersen and Kaya Bruun Lund 26  
Il4 Interleukin 4  
Il6 Interleukin 6  
Il6r Interleukin 6 receptor  
Itgav Integrin, alpha V  
Itgb3 Integrin, beta 3  
Kdr Kinase insert domain receptor  
Ltbp1 Latent transforming growth factor beta binding protein 1  
Mmp14 Matrix metallopeptidase 14 (membrane-inserted)  
Mmp19 Matrix metallopeptidase 19  
Mmp2 Matrix metallopeptidase 2  
Mmp3 Matrix metallopeptidase 3  
Mmp9 Matrix metallopeptidase 9  
Myh6 Myosin, heavy chain 6, cardiac muscle, alpha  
Myh7 Myosin, heavy chain 7, cardiac muscle, beta  
Ngf Nerve growth factor (beta polypeptide)  
Nkx2-5 NK2 transcription factor related, locus 5 (Drosophila)

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Nos3 Nitric oxide synthase 3, endothelial cell  
Nppa Natriuretic peptide precursor A  
Nppb Natriuretic peptide precursor B  
Nrg1 Neuregulin 1  
Pdgfa Platelet-derived growth factor alpha polypeptide  
Pdgfb Platelet-derived growth factor beta polypeptide (simian sarcoma viral (v-sis) oncogene homolog)  
Pdgfra Platelet derived growth factor receptor, alpha polypeptide  
Pdgfrb Platelet derived growth factor receptor, beta polypeptide  
Pecam1 Platelet/endothelial cell adhesion molecule 1  
Plat Plasminogen activator, tissue  
Polr2a Polymerase (RNA) II (DNA directed) polypeptide A  
Ptgs2 Prostaglandin-endoperoxide synthase 2  
Rpl4 Ribosomal protein L4  
Serpinf1 Serpin peptidase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 1  
Smad2 SMAD family member 2  
Stat1 Signal transducer and activator of transcription 1  
Tlr4 Toll-like receptor 4  
Tek TEK tyrosine kinase, endothelial  
Tgfa Transforming growth factor alpha  
Tgfb1 Transforming growth factor, beta 1  
Tgfbr2 Transforming growth factor, beta receptor II  
Thbs2 Thrombospondin 2  
Tie1 Tyrosine kinase with immunoglobulin-like and EGF-like domains 1  
Timp1 TIMP metallopeptidase inhibitor 1  
Timp2 TIMP metallopeptidase inhibitor 2  
Timp3 TIMP metallopeptidase inhibitor 3  
Tlr2 Toll-like receptor 2  
Tlr3 Toll-like receptor 3  
Tnf Tumor necrosis factor (TNF superfamily, member 2)  
Tnfaip6 Tumor necrosis factor alpha induced protein 6  
Tnfsf13 Tumor necrosis factor (ligand) superfamily, member 13  
Tymp Thymidine phosphorylase  
Vegfa Vascular endothelial growth factor A  
Vegfb Vascular endothelial growth factor B  
Vegfc Vascular endothelial growth factor C  
Cx3cr1 Chemokine (C-X3-C motif) receptor 1  
Tbp TATA box binding protein  
NTC No template control  
NRT No reverse transcriptase control  
RTC Reverse-transcription control  
PPC Positive PCR control  
GDC Genomic DNA control

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