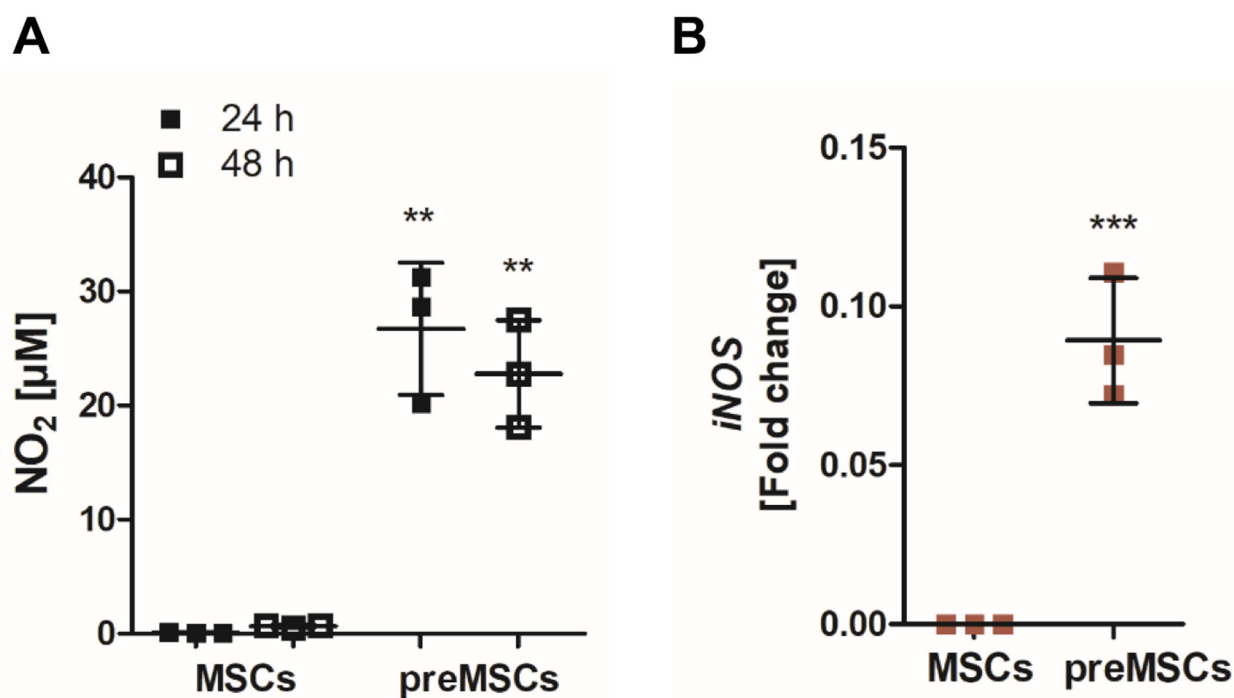
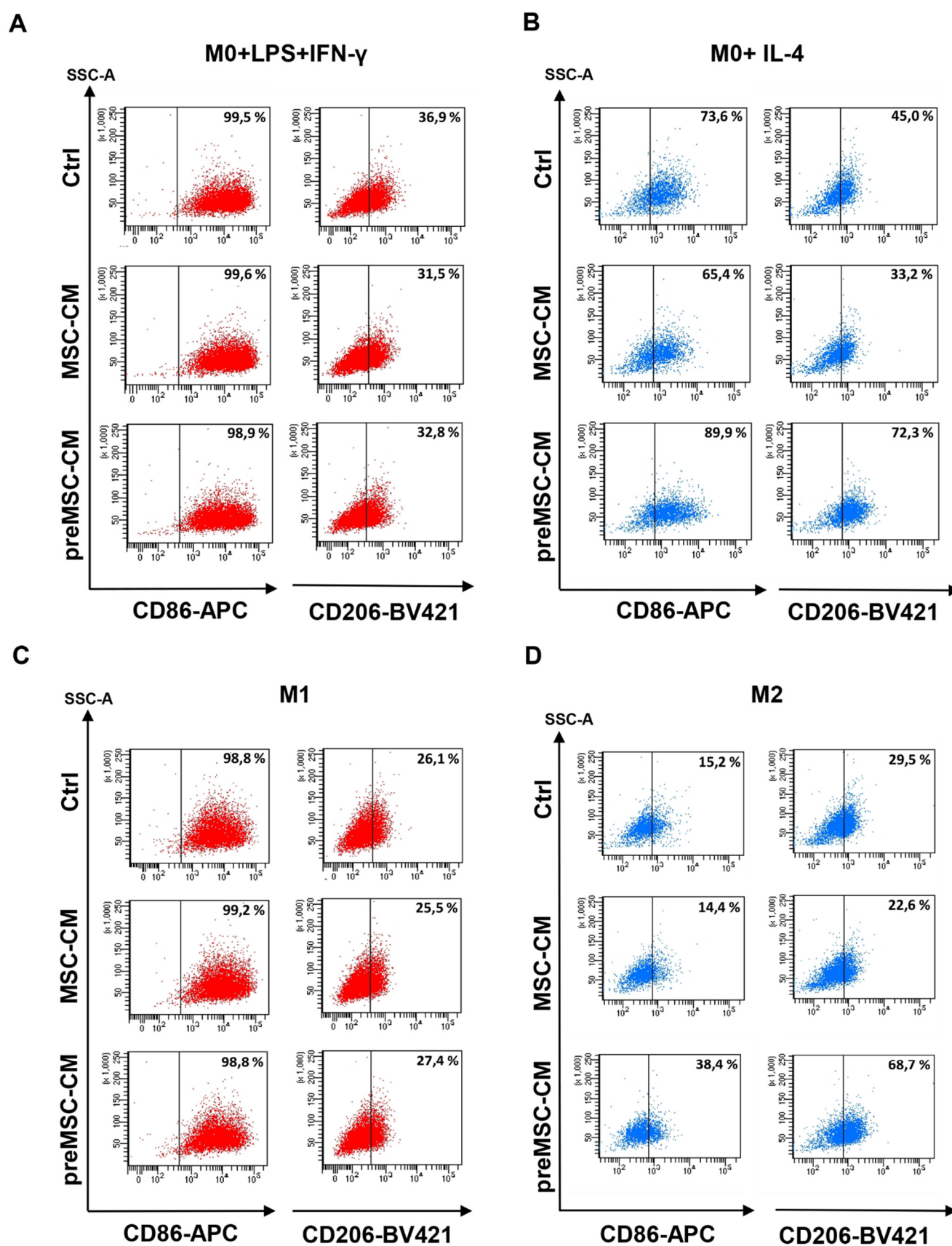


**Figure S1.** Characterization of polarized macrophages. Murine, bone marrow-derived cells were cultured in the presence of 20 ng/ml M-CSF for seven days to obtain differentiated M0 macrophages. Cells were further polarized into M1-like macrophages by LPS (100 ng/ml) and IFN- $\gamma$  (20 ng/ml) or into M2-like cells by IL-4 (20 ng/ml). **(A)** After 24 h, the expression of CD86 (M1 marker) and CD206 (M2 marker) was quantified by flow cytometry. The percentage of positive cells and median fluorescence intensity (MFI) are depicted ( $n = 3$ ). **(B)** The expression of the M1-specific genes *iNOS*, *IL-6* and *TNF- $\alpha$*  as well as of M2-specific *Arg 1* were analyzed by real-time PCR ( $n = 4$ ). \* $p < 0.05$ ; \*\*\* $p < 0.001$ .

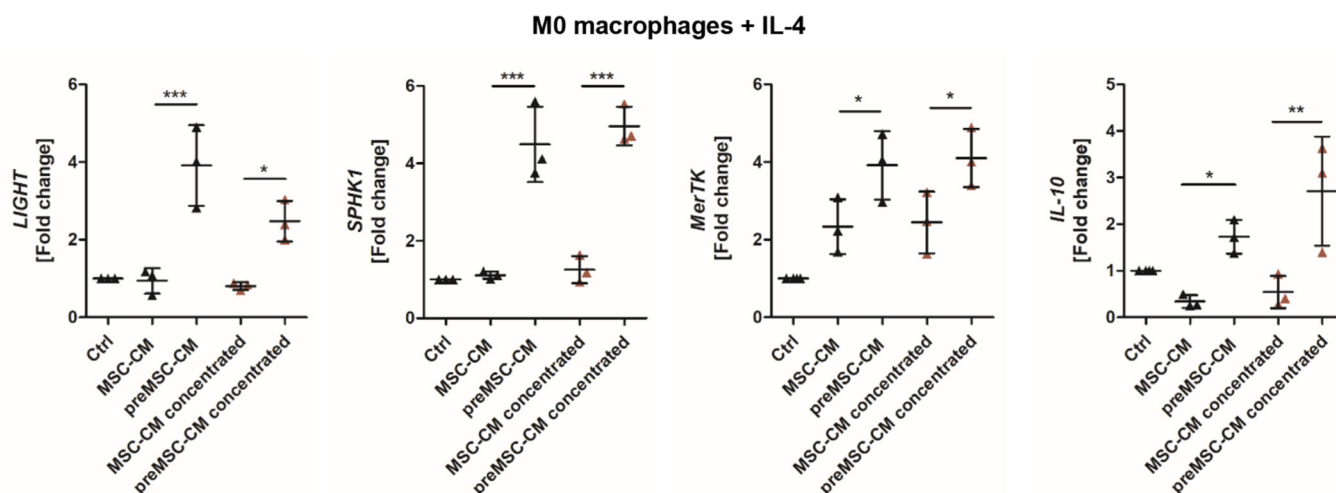


**Figure S2.** Impact of preconditioning on nitric oxide production by MSCs. Murine, bone marrow-derived MSCs were treated with IFN- $\gamma$  (30 ng/ml) and IL-1 $\beta$  (3 ng/ml) for 24 h. Then, supernatants were collected. Cells were washed with PBS and further cultured in serum-free culture medium for additional 24 hours. **(A)** Nitrite levels were quantified in culture supernatants of MSCs and preconditioned MSCs (preMSCs) by Griess assay after 24 h and 48 h (n = 3). **(B)** The expression of iNOS was quantified by real-time PCR after 48 h (n = 3). \*\*p < 0.01; \*\*\*p < 0.001.



**Figure S3.** Impact of (pre)MSC-CM on CD86 and CD206 surface expression. Representative flow cytometry dot plots from one experiment showing CD86 and CD206 expression on macrophages

under M1- (A) and M2a-polarizing (B) culture conditions. In addition, CD86 and CD206 expression on M1 (C) and M2 (D) macrophages is depicted. Cells cultured in the absence of (pre)MSC-CM served as control (Ctrl).



**Figure S4.** Impact of concentrated MSC-CM on the expression of M2b/M2c-specific genes in macrophages. Murine M0 macrophages were incubated in the presence of IL-4 (20 ng/ml) and 20% MSC-CM or preMSC-CM for 24 h. In parallel experiments, MSC-CM was 4-fold concentrated using centrifugal filters (3 kDa cut-off) and 5% concentrated CM was added to the cells. Cells cultured in the absence of MSC-CM served as control (Ctrl). The expression of the M2b/M2c-specific genes *LIGHT*, *SPHK1*, *MerTK* and *IL-10* was analyzed by real-time PCR (n = 3). \*p < 0.05; \*\*p < 0.01; \*\*\*p < 0.001.