Mouse	IL-1 beta	AAAAGAAGGTGCTCATGTCCTCATCCTGGAAGGTCCACGGGAAAGACACAGGTAGCTGCCACAGCTTCTCCACAGCCACAATGAGTGATACTGCCTGCCTGAAGCTCTTGTTGAT		NC_000068.7
	CCL2	GACATACATTAAAAACCTGGATCGGAACCAAATGAGATCAGAACCTACAACTTTATTTAAAACTGCATCTGCCCTAAGGTCTTCAGCACCTTTGAATGTGAAGTTGACCCGTAAATCTGAAGCTAATGCATCCACT		NC_000077.6
	SIRT1	GGAACCTTTGCCTCATCTACA	CACCTAGCCTATGACACAACTC	NM_019812.3
	LXRα	GAGGGACAGTGTCTTGGTAATG	CCGTTGCAGAATCAGGAGAA	NM_001177730.1
	ABCA1	GGGTGGTGTTCTTCCTCATTAC	CACATCCTCATCCTCGTCATTC	NM_013454.3
	ABCG1	TCCTCCCAGACTTCCTTTCT	CCACAAGGTGGATCGAGTATTT	NM_009593.2

ESM Table 1. Primer sequences used in qRTPCR analysis.

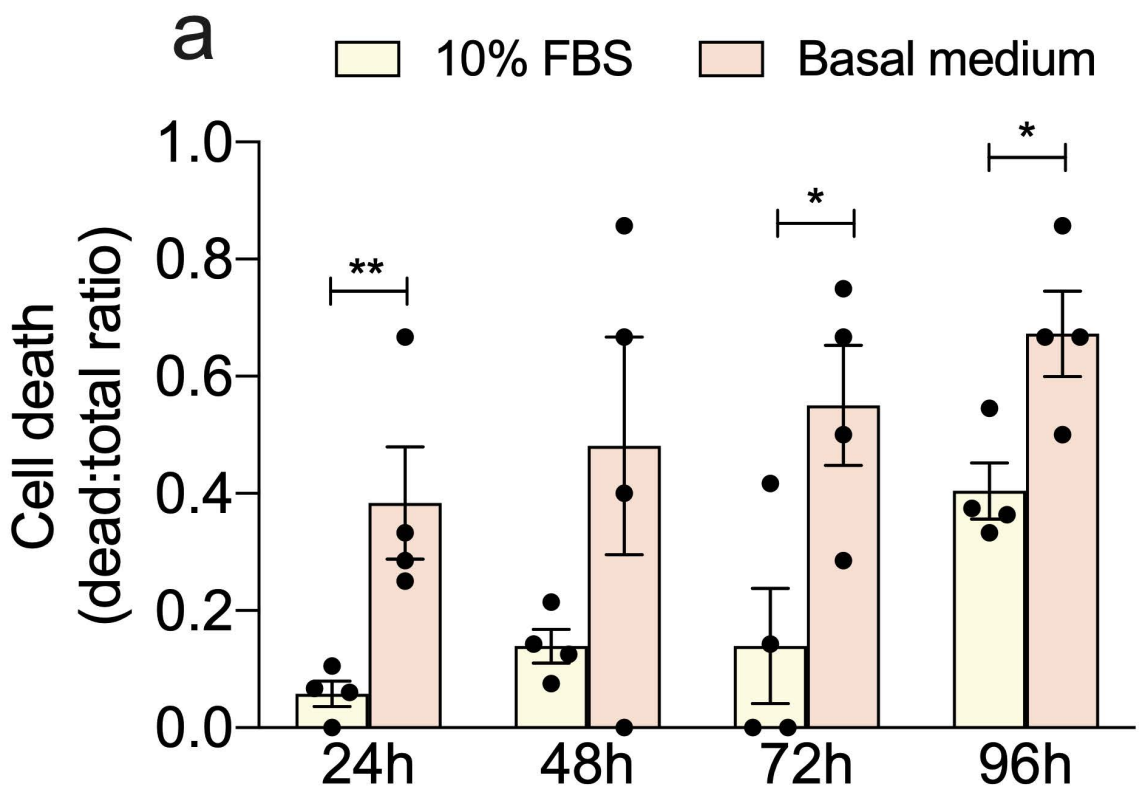
Antigen	Fluorophore	Vendor	Number	Titer
Ly6G	SB600	ThermoFisher	63-9668-82	1/200
CD45	SB645	ThermoFisher	64-0451-82	1/100
CD11b	SB780	ThermoFisher	78-0112-82	1/100
CCR2	FITC	R&D Systems	FAB5538F-100	1/100
CD133	PercP-eFluor710	ThermoFisher	46-1331-82	1/100
Ly6C	APC	ThermoFisher	17-5932-52	1/200
Flk-1	AF700	ThermoFisher	56-5821-81	1/100
Viability dye	eFluor506	ThermoFisher	65-0866-14	1/200

ESM Table 2. Panel of antibodies used to determine myeloid cells on bone marrow and blood. For preparation of antibody mixes, Brilliant Stain buffer was used and samples were incubated for 30 minutes at 4ºC in the dark, followed by two washes. Titers refer to final dilution factors, and staining volume per sample was 100 µl. SB: Super Bright, BV: Brilliant Violet, BB: Brilliant Blue, AF: AlexaFluor, PE: Phycoerythrin, APC: Allophycocyanin.

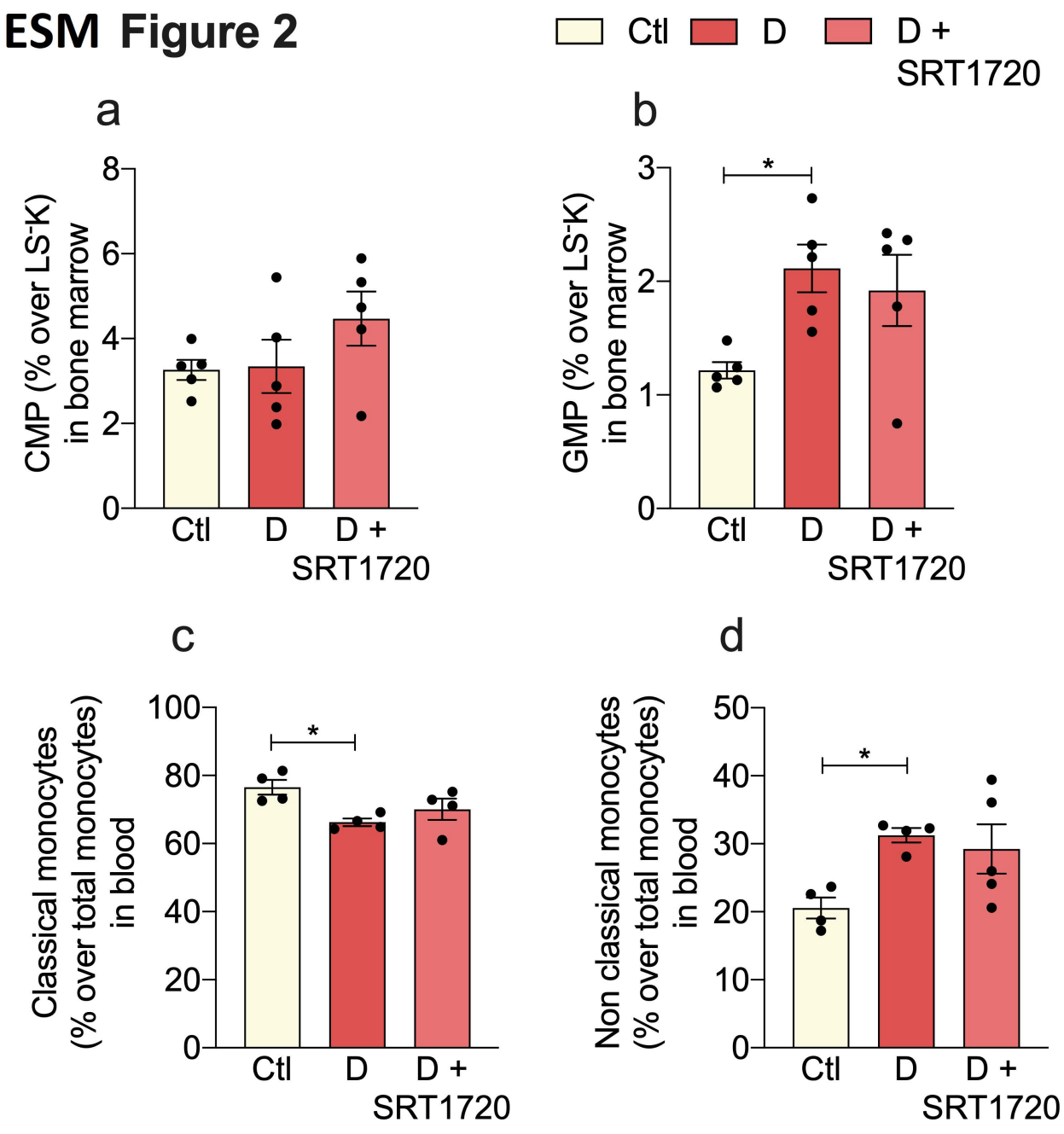
Antigen	Fluorophore	Vendor	Number	Titer
c-Kit (CD117)	SB436	ThermoFisher	48-1171-82	1/100
FcyRII/III	SB600	ThermoFisher	63-0161-82	1/100
Sca-1	SB645	ThermoFisher	64-5981-82	1/100
Lineage cocktail	FITC	ThermoFisher	22-7778-72	1/50
CD34	PE	ThermoFisher	MA5-17831	1/100
Flk2/Flt3	APC	ThermoFisher	17-1357-41	1/100
CD127 (IL7Ra)	APC-Cy7	ThermoFisher	47-1271-82	1/100
Viability dye	eFluor506	ThermoFisher	65-0866-14	1/200

ESM Table 3. Panel of antibodies used to determine precursor cells on bone marrow. For preparation of antibody cocktail, Brilliant Stain buffer was used and samples were incubated for 30 minutes at 4ºC in the dark, followed by two washes. Titers refer to final dilution factors, and staining volume per sample was 100 µl. SB: Super Bright, BV: Brilliant Violet, BB: Brilliant Blue, AF: AlexaFluor, PE: Phycoerythrin, APC: Allophycocyanin.

ESM Figure 1



ESM Fig. 1. Long-term exposure to base media leads to retinal endothelial (REC) cell death. REC were culture in base media (MCDB 131 medium) without serum or growth factors present. Cell death was assayed via trypan blue exclusion assay, n=4; *p<0.05, **p<0.001. Data are represented as mean ± SEM.



ESM Fig. 2. Diabetes (6 months)-induced changes in the bone marrow and blood of db/db mice. Diabetes significantly increases the number of GMP (B) without a change in CMP (A) in the bone marrow. The SIRT1 agonist SRT1720 had a tendency towards an increase in CMP (A) and decrease on GMP (B), but SRT1720 effect did not reach significance, n=5. In the blood, diabetes induces decrease in the classical (C), and increase in non-classical (D) monocytes, the effect was not corrected by SRT1720, n=4; *p<0.01. Data are represented as mean ± SEM.