

## Polarization behavior of bone marrow-derived macrophages on charged P(VDF-TrFE) coatings

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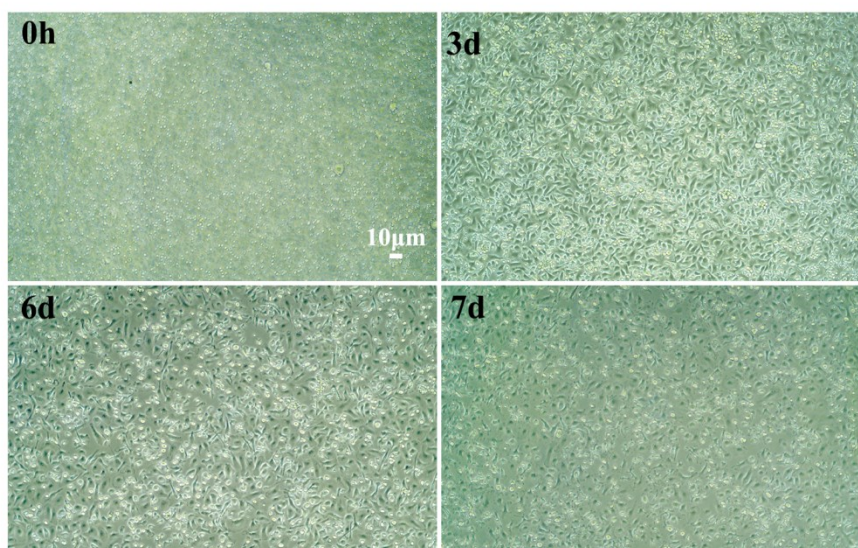


Figure S1. Induction of bone-marrow derived macrophages (BMDMs) by M-CSF.

Table S1. Primers used for real-time PCR.

Gene	Forward primer sequence (5'–3')	Reverse primer sequence (5'–3')
CD80	GCCTTGCCGTTACAACCTC	TACTCGGGCCACACTTTT
TNF- $\alpha$	CGCTGAGGTCAATCTGC	GGCTGGGTAGAGAATGGA
CD206	CAAGCGATGTGCCTACC	AATGCTGTGGATACTTGCC
IL-10	GCCCTTTGCTATGGTGTC	TCTCCCTGGTTTCTCTTCC
$\alpha$ M	CGCAAGAACACCAAGGA	TCAAAGAAGGCACGGATA
$\beta$ 2	GGAGCATCGAGTATAGGCA	ACTGTATCCGTGAAACCCA
$\alpha$ 5	ACTGCCACCTGCCAAGAT	GACTGTGCTGCTTGTCTGC
$\beta$ 1	AGCAACAATTCACCCACAG	TTCGAGACAGAGCAAGCA
Kv1.3	TGTGGATGGGAGGATGTT	CTTTGGGGAGTTTTCTGCT
actin	GCTCCGGCATGTGCAAAG	CCTTCTGACCCATTCCCAC

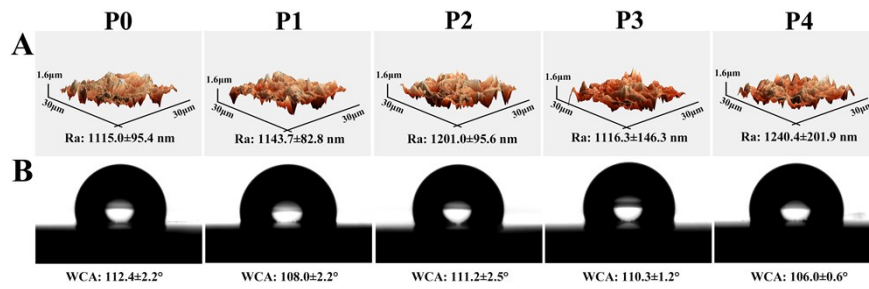


Figure S2. AFM images (A) and water contact angles (B) of the P(VDF-TrFE) coatings.

Table S2. Surface potential intensity of P(VDF-TrFE) coatings after electrically poled treatment.

Group	Surface potential (-mV)
P0	54
P1	65
P2	68
P3	71
P4	85

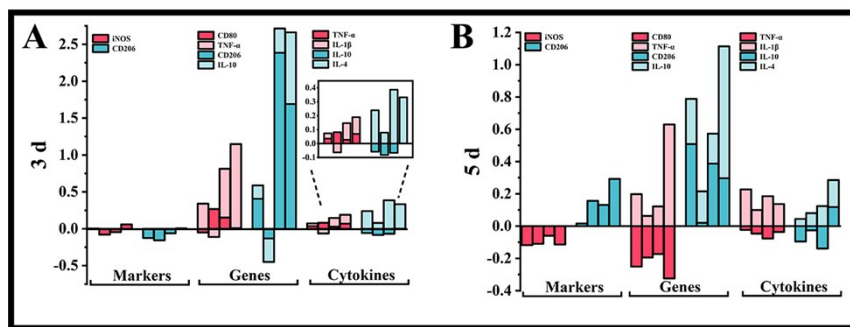


Figure S3. Semi-quantitative statistics of fluorescence intensity of macrophages surface markers and changes in gene expression and cytokines secretion of macrophages at 3 days (A) and 5 days (B) (each of the four bars represents the change range of P1, P2, P3, P4 compared with P0).

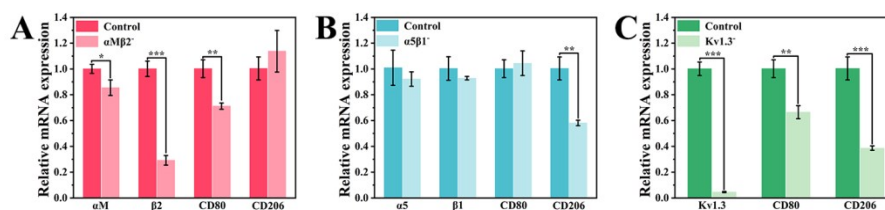


Figure S4. Effect of  $\alpha M\beta 2$  (A),  $\alpha 5\beta 1$  (B) and Kv1.3 (C) inhibition on mRNA expressions of corresponding integrin, potassium ion channel and phenotypic gene (CD80 and CD206) on P0 coatings.