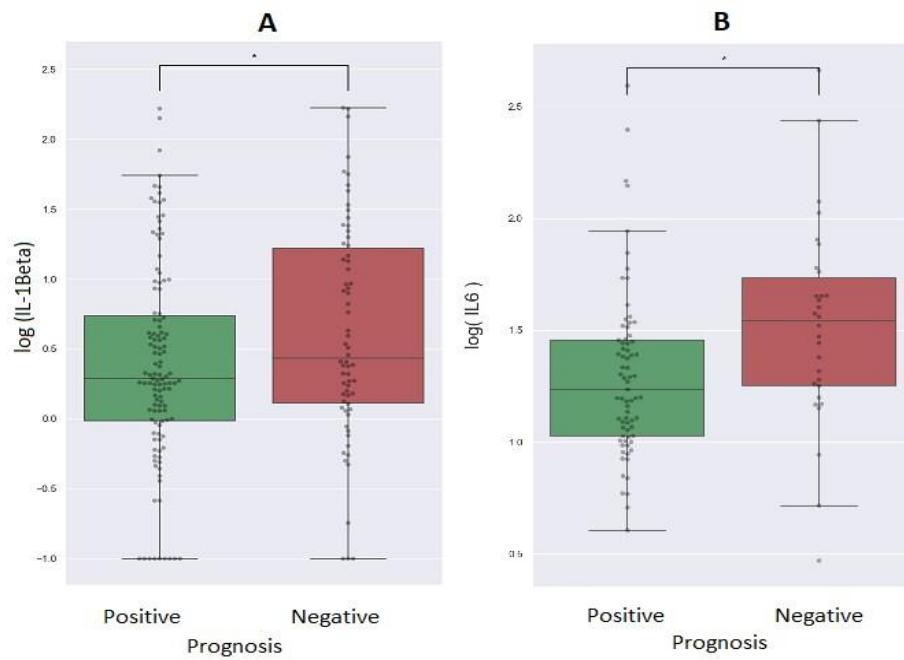
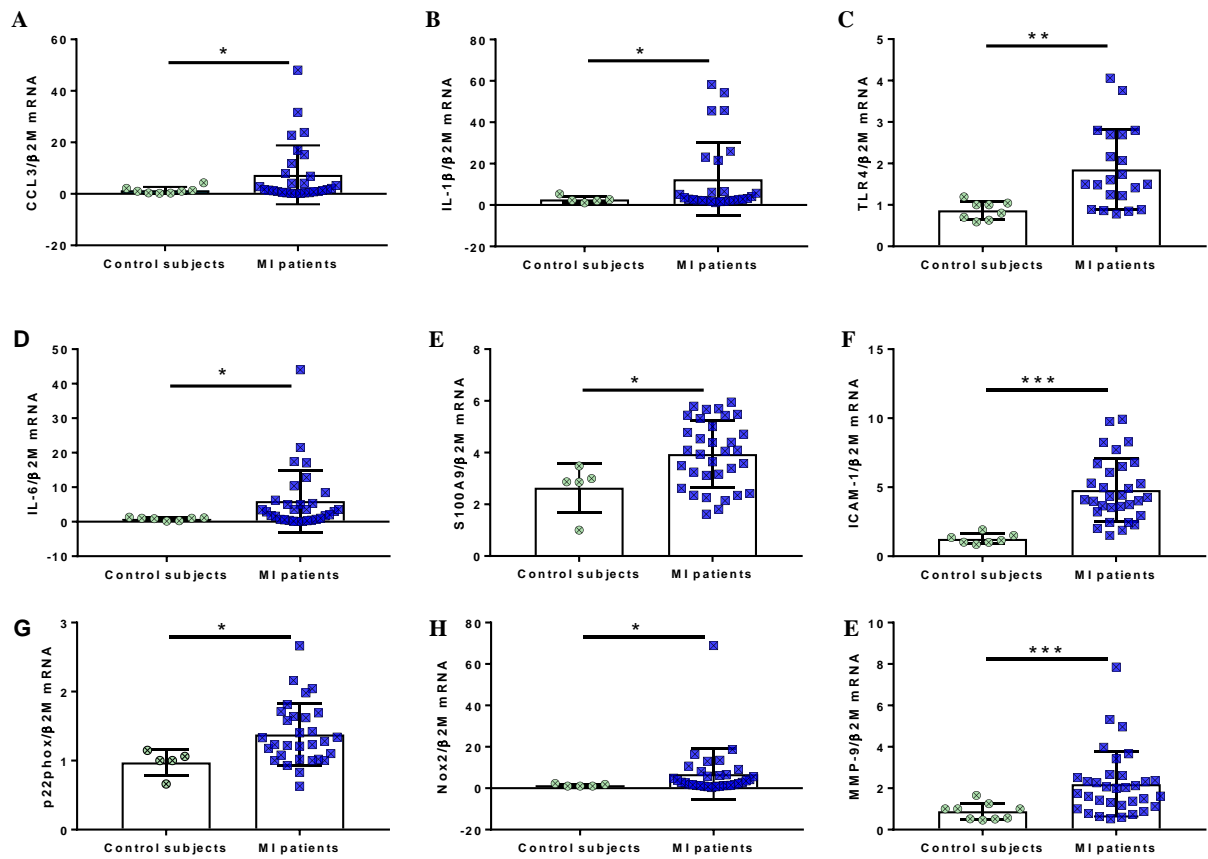


**Supplementary Table S1:****Table S1.** The sequences of oligonucleotide primers used for evaluation of gene expression.

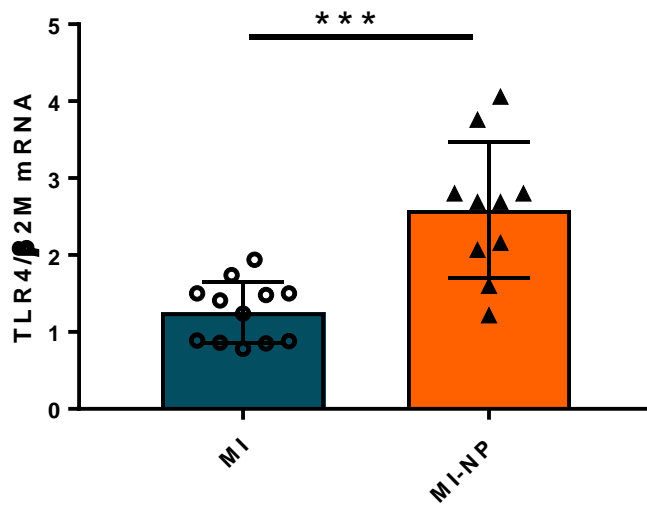
<b>Gene (Human)</b>	<b>Sequences of Oligonucleotide Primers</b>
CCL3	FW: AGTTCTCTGCATCACTTGCTG RV: CCGCTTCGCTTGGTTAGGAA
IL-1 $\beta$	FW: AGAGTGGAGCCTGGTCTTACA RV: CCTTTGCTGACAATAAGCACTGG
IL-18	FW: GATAGCCAGCCTAGAGGTATGG RV: CCTTGATGTTATCAGGAGGATTCA
S100A9	FW: TCCTCGGCTTTGACAGAGTG RV: GCCCCAGCTTCACAGAGTAT
IL-6	FW: CTGCAGAATTCCAGGACCACA RV: TCCGGTGGTGTAAGAGGAC
ICAM-1	FW: GGTTCCTCTGAGCGGCGTCG RV: CCAGCCGAGGACCATACAGC
p22phox	FW: CCCAGTGGTACTTTGGTGCC RV: GCGGTCATGTACTTCTGTCCC
Nox2	FW: ACCGGGTTTATGATATTCCACCT RV: GATTTCGACAGACTGGCAAGA
MMP-9	FW: AGACCTGGGCAGATTCCAAAC RV: CGGCAAGTCTTCCGAGTAGT
TLR4	FW: CACACCGTCATCAGCATTGA RV: CTCTGGCGTAGAGCTATCACT



**Supplementary Figure S1.** Box plots showing the comparison of Interleukine Beta 1 (IL1-Beta) (A) and Interleukine 6 (IL-6) (B) levels between patients with favorable vs unfavorable prognosis (Student t test, \* $p < 0.05$ ).



**Supplementary Figure S2. Gene expression of inflammatory molecules in MI patients versus health controls.** Neutrophils from MI patients exhibit increased expression of all investigated genes. (A-E) The expression of genes associated with an inflammatory phenotype of neutrophils CCL3, IL-1 $\beta$ , IL-18, IL-6, S100A9, ICAM-1, as well as of p22phox, Nox-2, and MMP-9 were investigated in neutrophils from control healthy subjects or patients with MI (M\_NP). \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$  (control vs. MI).



**Supplementary Figure S3. Gene expression of TLR4 in MI patients with or without negative prognosis.** Neutrophils from ACS patients with negative prognostic exhibit increased expression of TLR4 in neutrophils isolated within first 24h after MI onset., \*\*\* $p < 0.001$ , (MI\_NP vs. MI).