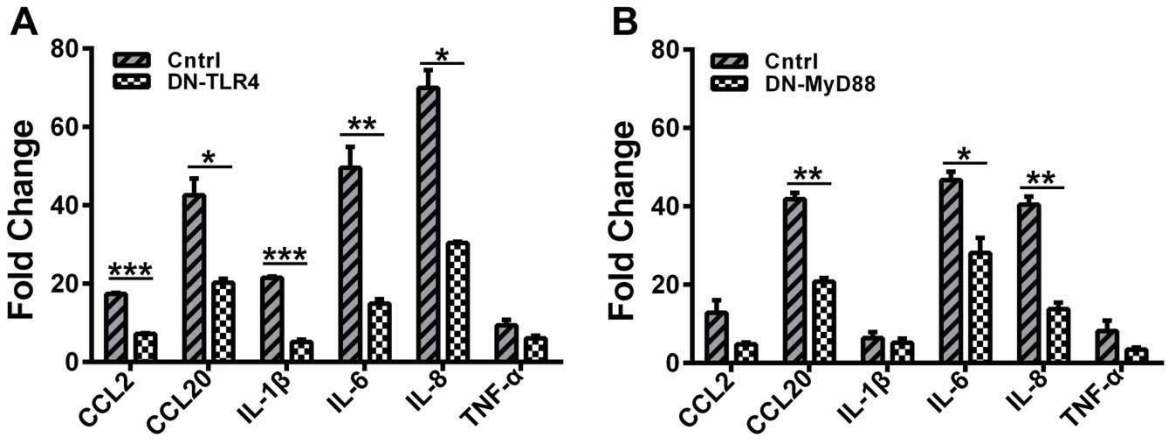
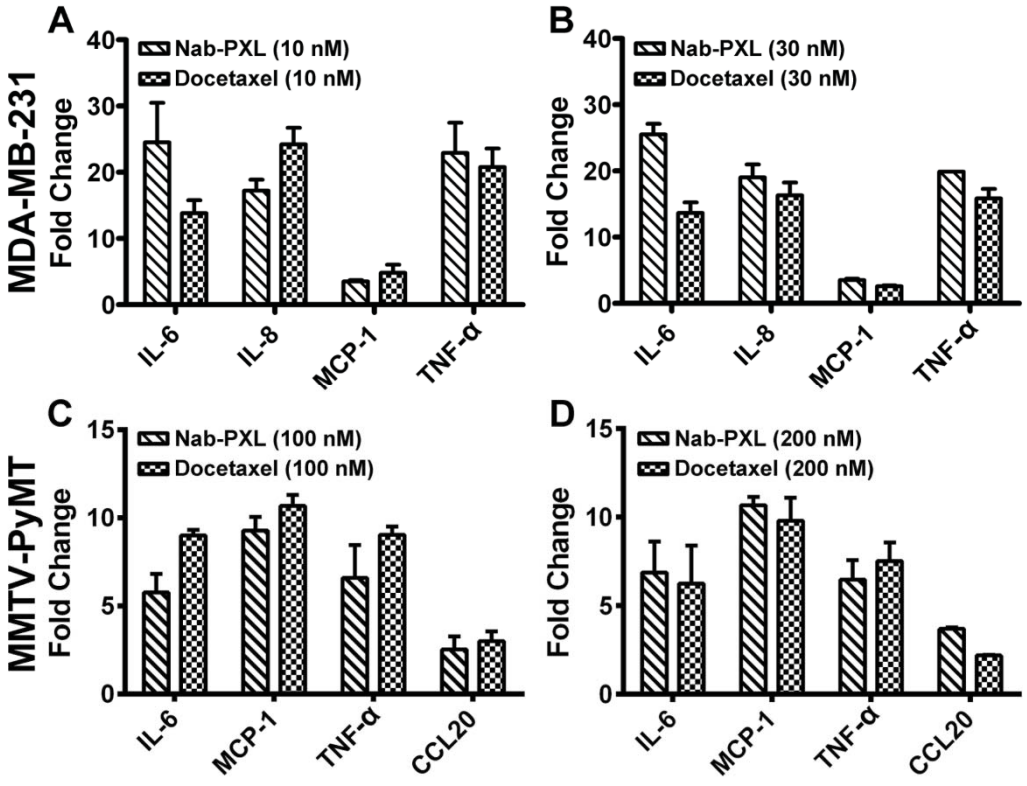
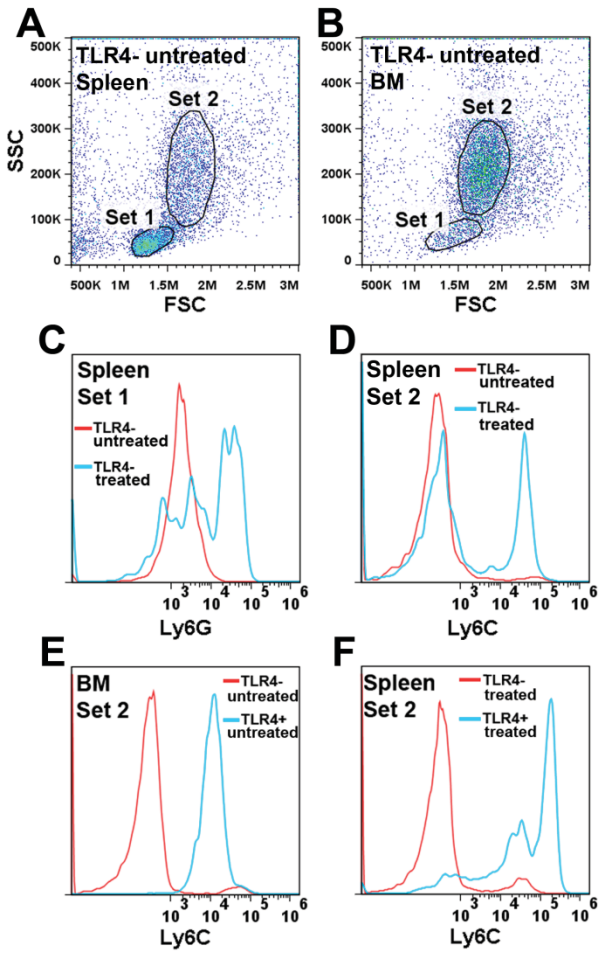


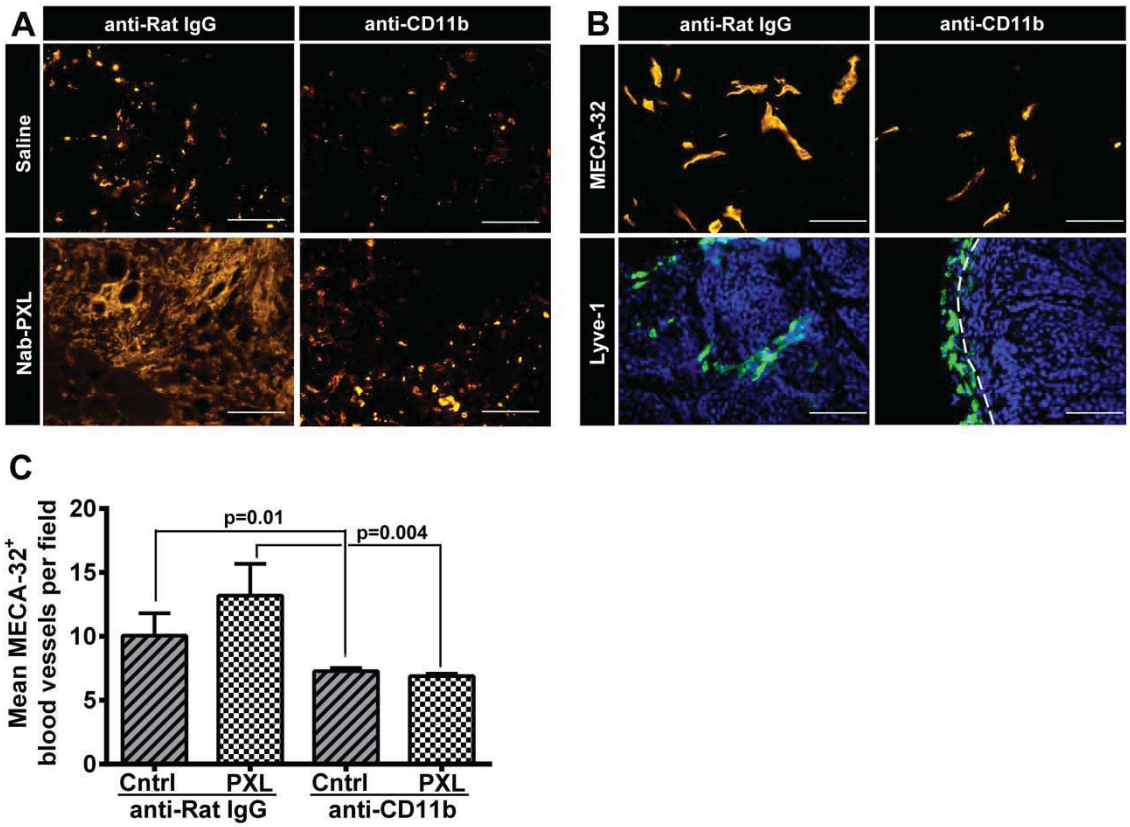
Supplementary Figure S1. *The effects of nab-PXL on upregulation of cytokines in MDA-MB-231 cells expressing dominant negative (DN)-TLR4 or DN-MyD88 and control cell lines.* MDA-MB-231 cells stably expressing either DN-TLR4 (A) or DN-MyD88 (B) and vector control lines were treated with 10nM of nab-PXL or left untreated for 48 hours prior to analysis of cytokine expression by RT-qPCR. All experiments were performed in duplicate and reproduced three times. Data are presented as the mean fold change in transcript expression of inflammatory cytokines in treated cells vs. untreated control ±SEM. Statistical significance between the fold change of the control and DN protein expressing cell lines was determined by a Student's t-test and is indicated as *, **, and *** corresponding to P-values of <0.05, <0.01, and <0.001, respectively.



Supplementary Figure S2: *The comparison of nab-PXL and docetaxel effects on the TLR4-positive human and mouse BC cells.* Human MDA-MB-231 (A & B) and mouse MMTV-PyMT (C & D) lines were treated with equal doses of nab-PXL or docetaxel for 48 hours. MDA-MB-231cells were treated with drugs at doses of 10 and 30 nM, and more resistant MMTV-PyMT cells were treated with drugs at doses of 100 and 200 nM. Upregulation of TLR4-dependent cytokines was assessed by RT-qPCR. All experiments were performed in duplicate and reproduced three times. Data are presented as the mean fold change in mRNA expression of human or mouse inflammatory cytokines in treated cells vs. untreated control ±SEM. No significant differences between nab-PXL and docetaxel were detected in any of the experimental settings.



Supplementary Figure S3. *FACS analysis of spleen and bone marrow cells***.** Scatter plots of both spleen (A) and bone marrow (B) cells show two distinct cell populations, defined and Set 1 and Set 2. Both population sets were in all mice, and each set was analyzed separately for Ly6C and Ly6G expression. (C-F) Representative histograms of Ly6C and Ly6G expression in spleen and bone marrow (BM) comparing expressions between HCC1806^{Cntrl} (TLR4-) and HCC1806^{TLR4+} (TLR4+) tumor bearing mice and between untreated (Cntrl) and nab-PXL treated (PXL).



Supplementary Figure S4. *Effect of a blocking mouse CD11b antibody on PXL-induced tumor recruitment of myeloid cells and blood vascular densities.* HCC1806^{TLR4+} tumors were treated with anti-CD11b antibodies or with isotype-matched control anti-rat IgG followed by treatment with nab-PXL (10 mg/kg for 5 consecutive days). (A) Representative images of tumors harvested after cessation of nab-PXL treatment were stained for CD11b. (B) Representative images of tumors from mice treated with combination therapy of nab-PXL and anti-CD11b or control IgG. Tumor sections were stained with MECA-32 or anti-Lyve-1 antibodies to visualize blood or lymphatic vessels, respectively. Note decreased MECA-32^{+} and absence of intratumoral lymphatic vessels in nab-PXL treated tumors from mice that were co-treated with neutralizing anti-CD11b antibody. Tumor host border is indicated by the white dotted line. All images were acquired at 200x magnification. (C) Blood vessel quantification in tumors from mice treated

saline or nab-PXL, and co-treated with either neutralizing anti-mouse CD11b or control rat IgG. Data are presented as the mean number of MECA-32 positive blood vessel ± SD. Black brackets indicate analyzed groups with P-values determined by a Student's t-test shown above the bracket.