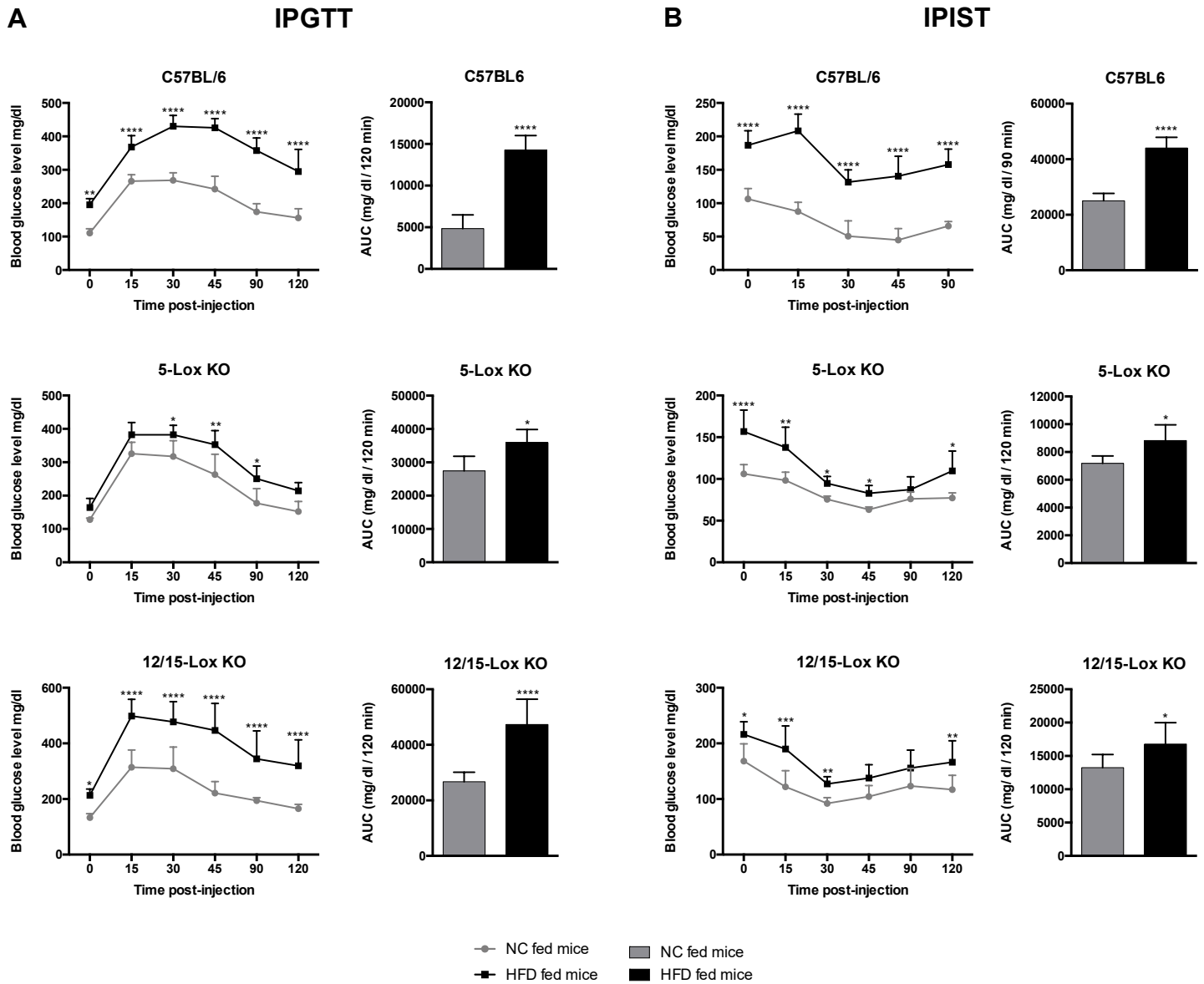


Supplemental figure 1: Gating strategies for analysis of cells in wound exudates.

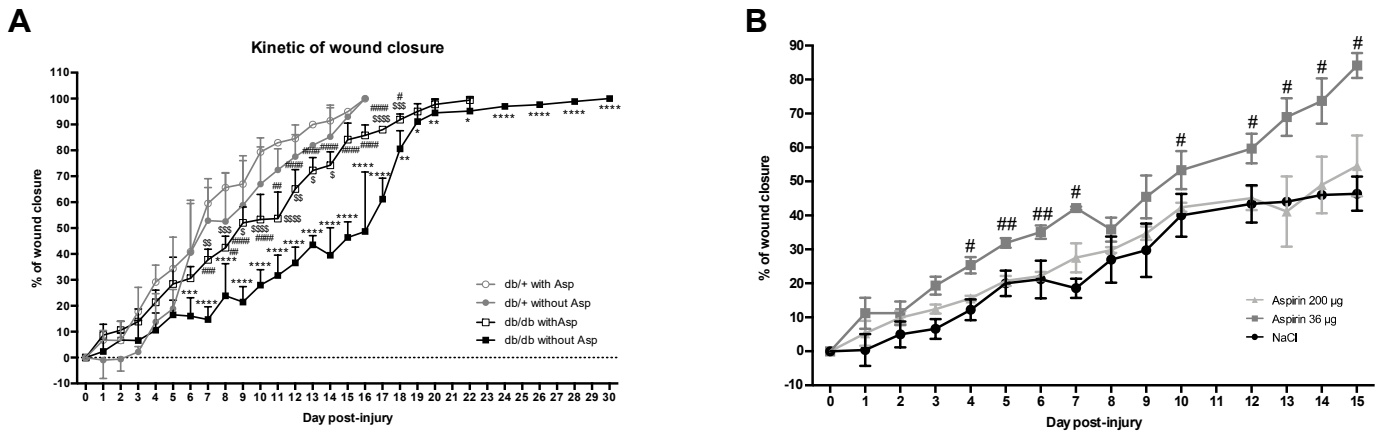
Forward scatter (FSC) and side scatter (SSC) parameters were used to identify single, viable cells and to eliminate any debris, dead cells and clumps or doublets. Cells were stained with a viability dye to make sure to exclude all dead cells from the analysis. F4/80-APC, F4/80-PE, 7/4-FITC, Ly6G-APC and CD36-PE antibodies were used in different staining panels to evaluate the proportion of macrophages and PNNs, the capacity of macrophage to engulf apoptotic PNNs (efferocytosis) and the expression of CD36 at the surface of macrophages, as represented in the gating strategies.



Supplemental figure 2: Glucose tolerance and insulin sensitivity tests

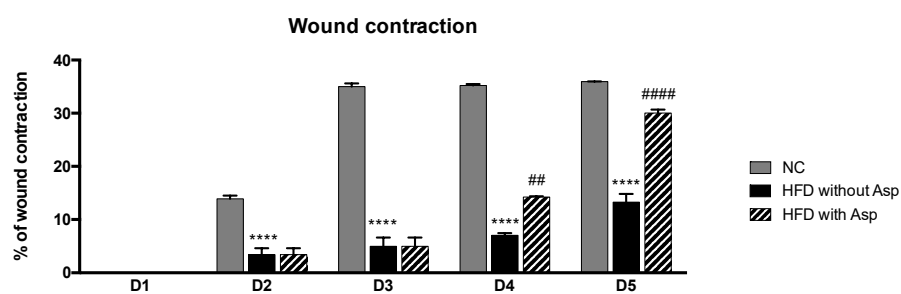
(A) Serum glucose levels during i.p. glucose tolerance test performed after a glucose load in NC or HFD fed WT, 5-LOX or 12/15-LOX deficient mice. (B) Serum glucose levels during i.p. insulin sensitivity test performed after an insulin load in NC or HFD fed WT, 5-LOX or 12/15-LOX deficient mice.

Results correspond to mean \pm SD (n=8 mice per group). * p <0.05, ** p <0.01, *** p <0.001, **** p <0.0001 HFD fed mice compared to NC fed mice.



Supplemental figure 3: Topical treatment with low-dose of aspirin in diabetic *db/db* mice accelerates wound healing.

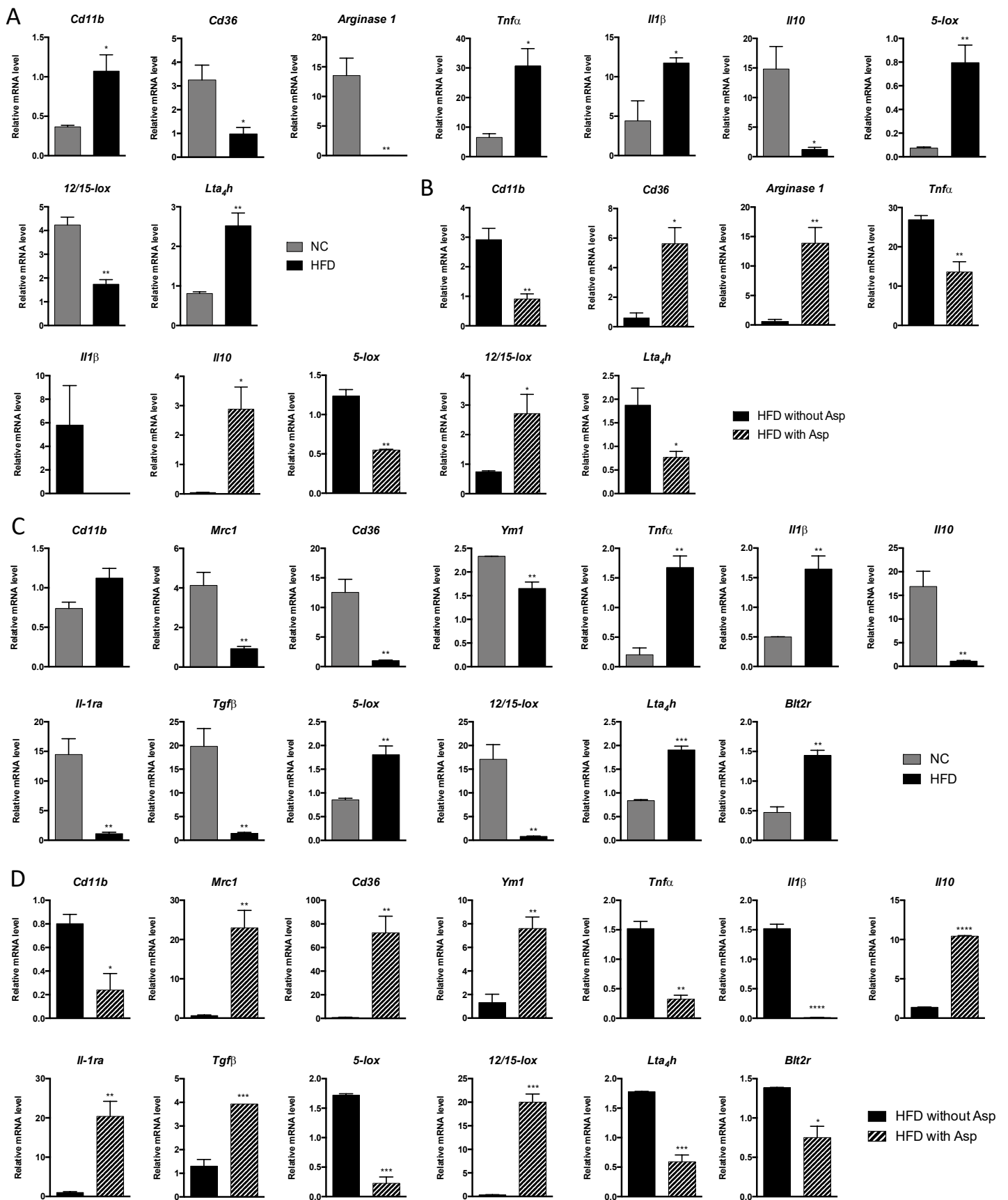
(A) Kinetic of wound closure in non-diabetic *db/+* and diabetic *db/db* mice treated or not with Aspirin. Results correspond to mean \pm SD (n=8 mice per group). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, **** $p < 0.0001$ *db/db* mice without Aspirin vs. *db/+* mice without Aspirin; # $p < 0.05$, ## $p < 0.01$, ### $p < 0.001$, #### $p < 0.0001$ *db/db* mice with Aspirin compared to *db/+* with Aspirin, \$ $p < 0.05$, \$\$ $p < 0.01$, \$\$\$ $p < 0.001$, \$\$\$\$ $p < 0.0001$ *db/db* mice with Aspirin compared to *db/db* mice without Aspirin. (B) Percentage of wound closure in diabetic *db/db* mice treated or not with 200 μ g or 36 μ g of Aspirin. Results correspond to mean \pm SD (n=8 mice per group). # $p < 0.05$, ## $p < 0.01$ compared to *db/db* mice treated with vehicle (NaCl).



Supplemental figure 4: Topical treatment with low-dose of aspirin improves wound contraction.

Percentage of wound contraction in NC or in HFD fed mice treated or not with Aspirin.

Results correspond to mean \pm SD (n=8 mice per group). ****p<0.0001 NC fed mice without Aspirin vs. HFD fed mice without Aspirin. ##p<0.01, ####p<0.0001 HFD fed mice without Aspirin compared to HFD fed mice with Aspirin.



Aspirin treatment modulates wound and exudates macrophage polarization to promote wound healing in diabetic mice

(A-B) Gene expression analysis of pro- and anti-inflammatory markers in exudate macrophages from NC and HFD fed mice at day 3 post-injury (A) and from HFD fed mice treated or not with Aspirin at day 5 post-injury (B). (C-D) Gene expression analysis of pro- and anti-inflammatory markers in macrophages from wound tissue of NC and HFD fed mice at day 3 post-injury (C) and of HFD fed mice treated or not with Aspirin at day 5 post-injury (D). Results correspond to mean \pm SEM (n=8 mice per group). *p<0.05, **p<0.01, ***p<0.001, ****p<0.0001 compared to respective control