Supplemental Figure 1

PBS Vehicle ASA
0 5 10 15 20 25
BAL hemoglobin (mg/dL)

**

LPS
N/D

PBS Vehicle ASA

**
Supplemental Figure 2

A

Control  
LPS  
LPS+ASA

CD11b+ Ly6G+

B

LPS IgG isotype  
LPS  
LPS+ASA

CD11b+ Ly6G+
Supplemental Figure 3

A

PF4-cre x Rosa26_LSL_tdTomato blood

B

WT blood

IgG Isotype-APC

0.55 %

CD41-APC

99.6%

CD41-APC

0%

tdTomato

B

WT blood

CD41-APC

0%

tdTomato
Supplemental Data

Supplemental Figure 1. BAL hemoglobin measurements in PBS and LPS-instilled mice +/- aspirin. **p<0.01 vs. PBS group. Data are mean ± SD of n = 6 - 9 mice per group. N/D = not detected.

Supplemental Figure 2. Aspirin treatment reduces LPS-induced neutrophil-platelet aggregates. (A) Flow cytometry gating strategy for neutrophil-platelet aggregates (NPA) in blood samples. (B) Flow cytometry gating strategy for NPA in BAL. Data are representative plots of five to ten animals per group.

Supplemental Figure 3. $PF4$-cre x Rosa26-LSL-tdTomato platelet specificity in the peripheral blood. Peripheral blood was collected from (A) $PF4$-cre x Rosa26-LSL-tdTomato and (B) WT mice, gated on tdTomato$^+$ events, and tested for CD41-APC expression vs. isotype control. Data are representative of experiments from five animals.

Supplemental Movies

Supplemental Movie 1
Two-photon intravital microscopy movie showing formation of NPA (arrow) in the lung microcirculation under baseline conditions. LysM-eGFP (green), $PF4$-cre x Rosa26-LSL-tdTomato (red), Cascade Blue dextran (i.v., blue). 60 μm z stack. 42 minute movie.

Supplemental Movie 2
Two-photon intravital microscopy movie showing formation of NPA (arrow) in the lung microcirculation after instillation of PBS (50 μl, i.t.) and imaged <2 hours after instillation. LysM-eGFP (green), $PF4$-cre x Rosa26-LSL-tdTomato (red), Cascade Blue dextran (i.v., blue). 40 μm z stack. 20 minute movie.
Supplemental Movie 3

Two-photon intravital microscopy movie showing NPA (arrows) in the lung microcirculation after LPS (5 µg/g, i.t.) and imaged <2 hours after instillation. LysM-eGFP (green), PF4-cre x Rosa26-LSL-tdTomato (red), Cascade Blue dextran (i.v., blue). 40 µm z stack. 20 minute movie.

Supplemental Movie 4

Two-photon intravital microscopy movie with zoom inset and rotational views showing NPA in the lung microcirculation after LPS (5 µg/g, i.t.) and imaged <2 hours after instillation. LysM-eGFP (green), PF4-cre x Rosa26-LSL-tdTomato (red), Cascade Blue dextran (i.v., blue). 40 µm z stack. 20 minute movie.

Supplemental Movie 5

Two-photon intravital microscopy movie showing NPA (arrow) in the lung microcirculation after LPS (5 µg/g, i.t.) + aspirin (0.1 mg/g, i.p.) and imaged <2 hours after instillation. LysM-eGFP (green), PF4-cre x Rosa26-LSL-tdTomato (red), Cascade Blue dextran (i.v., blue). 40 µm z stack. 20 minute movie.

Supplemental Movie 6

Two-photon intravital microscopy movie showing NPA quantification by simulated volumes (yellow) in the lung microcirculation after instillation of PBS (50 µl, i.t.) and imaged <2 hours after instillation. LysM-eGFP (green), PF4-cre x Rosa26-LSL-tdTomato (red), Cascade Blue dextran (i.v., blue). 40 µm z stack. 20 minute movie.

Supplemental Movie 7

Two-photon intravital microscopy movie showing NPA quantification by simulated volumes (yellow) in the lung microcirculation after LPS (5 µg/g, i.t.) and imaged <2 hours after instillation.
LysM-eGFP (green), PF4-cre x Rosa26-LSL-tdTomato (red), Cascade Blue dextran (i.v., blue). 40 μm z stack. 20 minute movie.

**Supplemental Movie 8**

Two-photon intravital microscopy movie showing NPA quantification by simulated volumes (yellow) in the lung microcirculation after LPS (5 μg/g, i.t.) + aspirin (0.1 mg/g, i.p.) and imaged <2 hours after instillation. LysM-eGFP (green), PF4-cre x Rosa26-LSL-tdTomato (red), Cascade Blue dextran (i.v., blue). 40 μm z stack. 20 minute movie.

**Supplemental Movie 9**

Two-photon intravital microscopy movie showing intra-alveolar NPA (arrow) and intravascular NPA (arrowhead) after LPS (5 μg/g, i.t.) and imaged 24 hours after instillation. LysM-eGFP (green), PF4-cre x Rosa26-LSL-tdTomato (red), Cascade Blue dextran (i.v., blue). 40 μm z stack. 21 minute movie.