

Figure S1. Representative screenshot of the LymphPulse 3.0 Matlab<sup>™</sup> based software.



Figure S2. Cytometer setup for the measurement of extracellular vesicles in cell culture media. (A) The flow cytometer was calibrated for EV detection using the ApogeeMix containing non-fluorescent silica beads (black; 180, 240, 300, 590, 880, and 1300 nm) and FITC-fluorescent latex beads (red; 110 and 500 nm). (B) Fluorescent count beads (1  $\mu$ M in diameter) were used to quantify the concentration of beads per sample. (C) Representative sample and (D) its Triton X-100 control. (E) Background control of antibody mix.



Figure S3. Assessement of membrane LDLR expression by flow cytometry. (A) Backgating strategy for the detection of membrane LDLR on lymphatic endothelial cells. (B) Fluorescence minus one (FMO) and (C) single stain controls were used to set the gates for the CD31<sup>+</sup>Podoplanin<sup>+</sup> cells. (D) Representative histograms for CD45, CD31 and podoplanin FMO controls (dotted lines). n = 3.



Figure S4. In vivo assessment of dendritic cell transport in the lymphatics. Two weeks after the intraperitoneal injection of an AAV1 containing a shLdlr or shSCR, dendritic cell migration was determined following a 18 h contact sensitization assay in (A) wild-type and (B)  $Pcsk9^{-/-}$  mice. Black histogram, ShSCR and grey histogram, ShLdlr. (C) Representative dot plots of FITC<sup>+</sup>CD11c<sup>+</sup> cells in skin-draining LNs. n = 4-9.



Figure S5. Effect of PCSK9 on human LEC markers and cell cycle distribution. Protein expression of (A) LYVE-1 and (B) podoplanin was measured in human LEC following a 16 h incubation with 6.5 µg/ml human recombinant PCSK9. (C) Representative histogram of the assessment of cell cycle performed by flow cytometry, and (D) quantification of the proportion of cells in the S phase following exogenous PCSK9 treatment. n = 3-7.