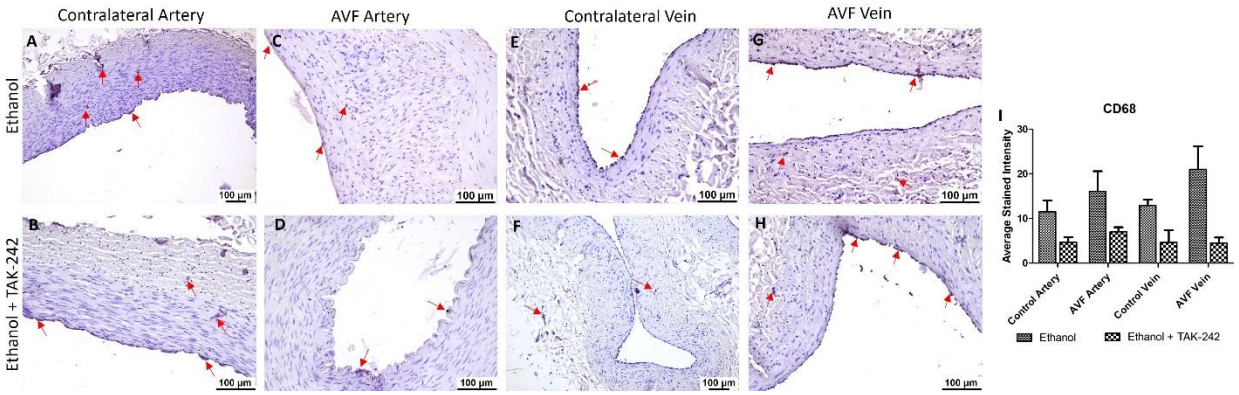
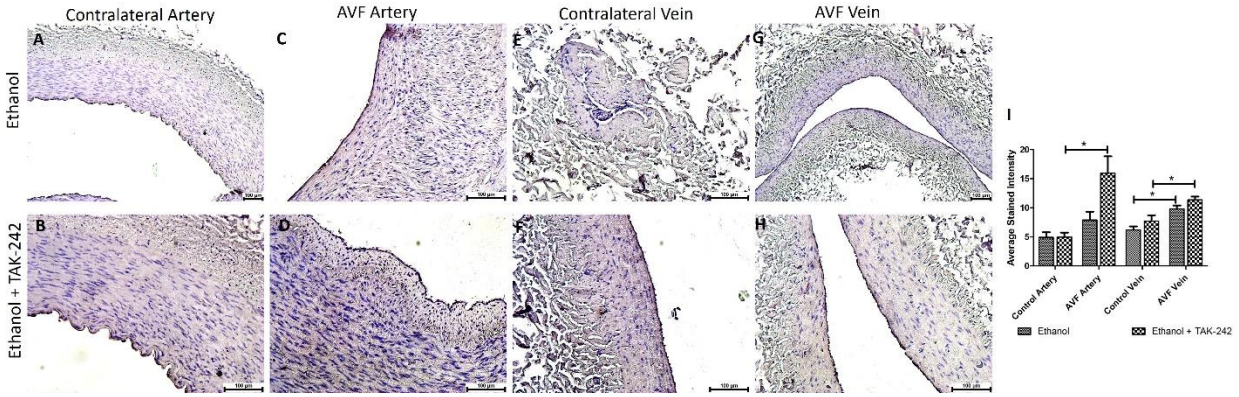
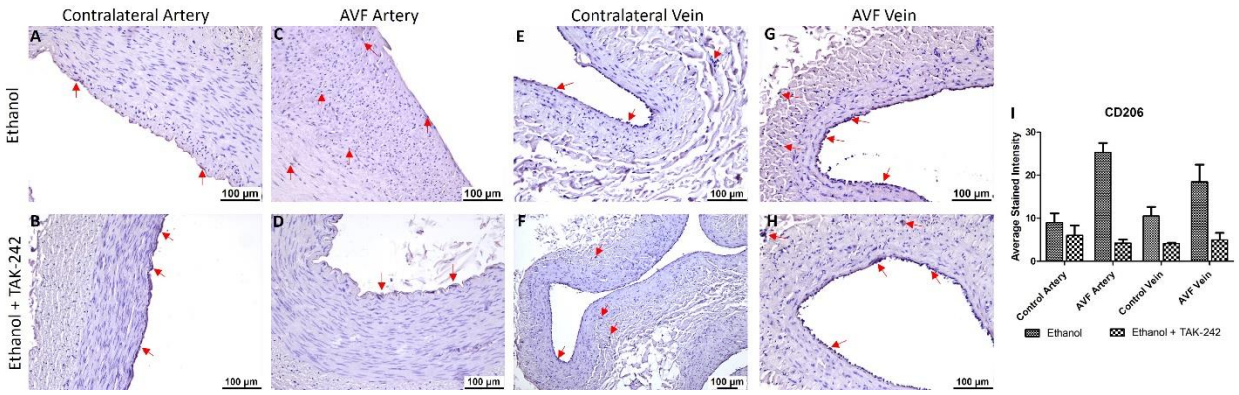


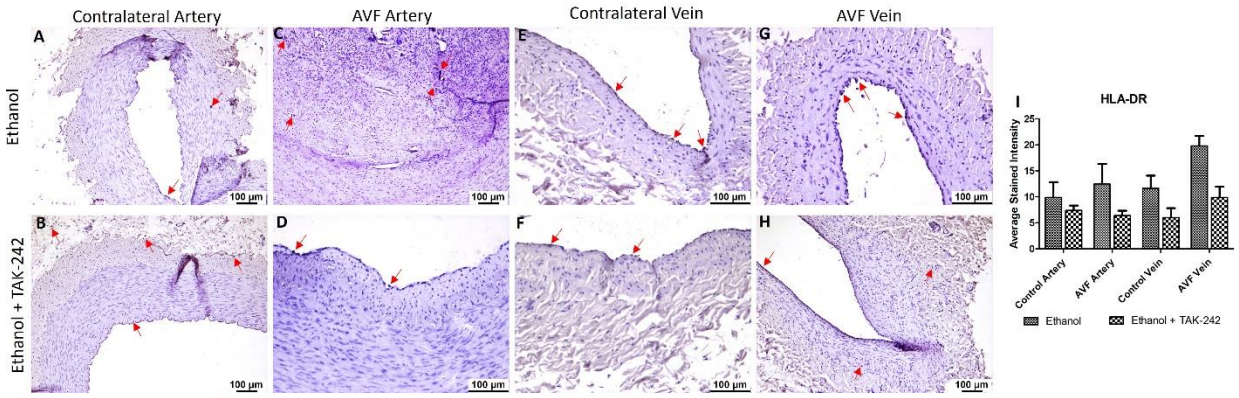
Supplementary Figure 1: Immunostaining for macrophages in femoral vessels involved in arteriovenous fistula (AVF) and contralateral femoral vessels in swine treated with toll-like receptor (TLR)-4 inhibitor TAK-242 and vehicle control (30% ethanol). Immunostaining for CD68 in contralateral femoral vessels (panels A, B, E, and F) and femoral vessels involved in AVF (panels C, D, G, and H), and average stained intensity (panel I). These images are represented images from all swine selected for this study. Red arrows show the positively stained immune cells. All data are presented as Mean ± SEM. A probability (*p*) value <0.05 was considered as significant. *p<0.05, ***p<0.001.



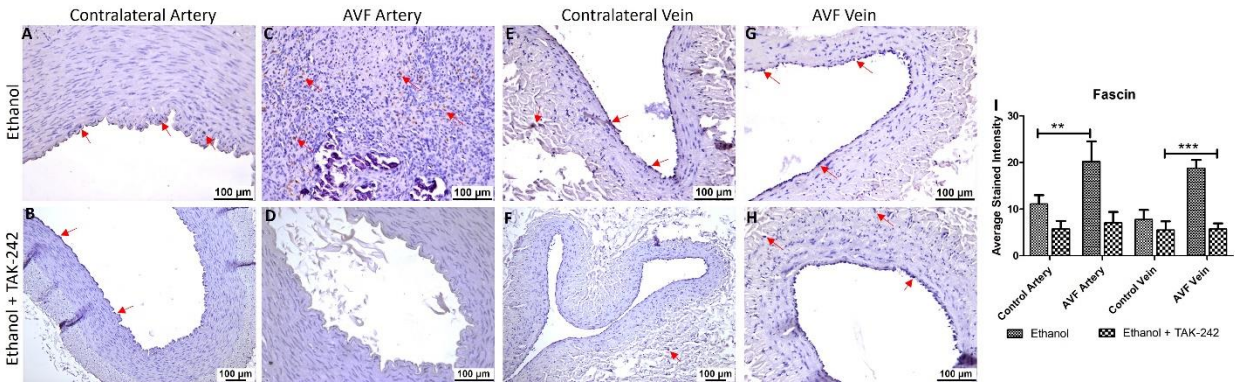
Supplementary Figure 2: Immunostaining for macrophages in femoral vessels involved in arteriovenous fistula (AVF) and contralateral femoral vessels in swine treated with toll-like receptor (TLR)-4 inhibitor TAK-242 and vehicle control (30% ethanol). Immunostaining for CD86 in contralateral femoral vessels (panels A, B, E, and F) and femoral vessels involved in AVF (panels C, D, G, and H), and average stained intensity (panel I). These images are represented images from all swine selected for this study. Red arrows show the positively stained immune cells. All data are presented as Mean ± SEM. A probability (*p*) value <0.05 was considered as significant. *p<0.05,



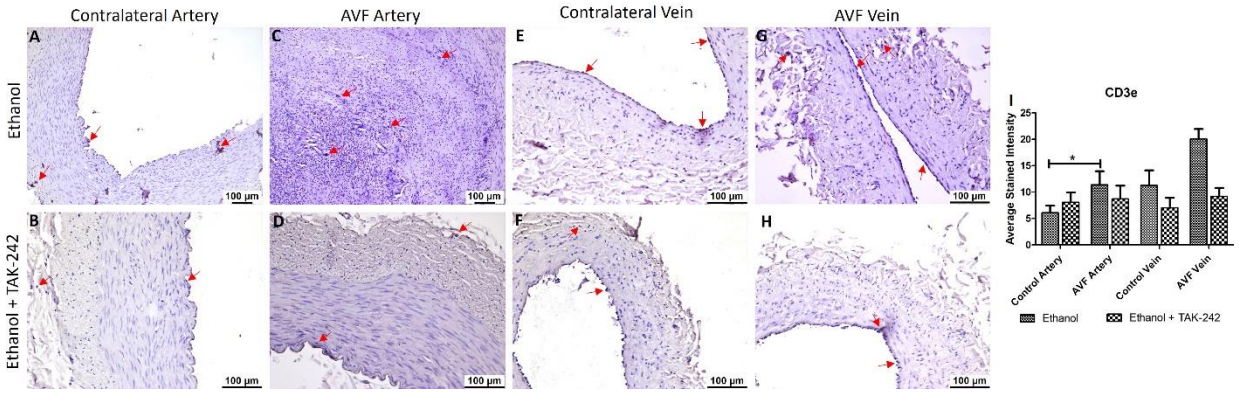
Supplementary Figure 3: Immunostaining for macrophages in femoral vessels involved in arteriovenous fistula (AVF) and contralateral femoral vessels in swine treated with toll-like receptor (TLR)-4 inhibitor TAK-242 and vehicle control (30% ethanol). Immunostaining for CD206 in contralateral femoral vessels (panels A, B, E, and F) and femoral vessels involved in AVF (panels C, D, G, and H), and average stained intensity (panel I). These images are represented images from all swine selected for this study. Red arrows show the positively stained immune cells. All data are presented as Mean ± SEM. A probability (*p*) value <0.05 was considered as significant.



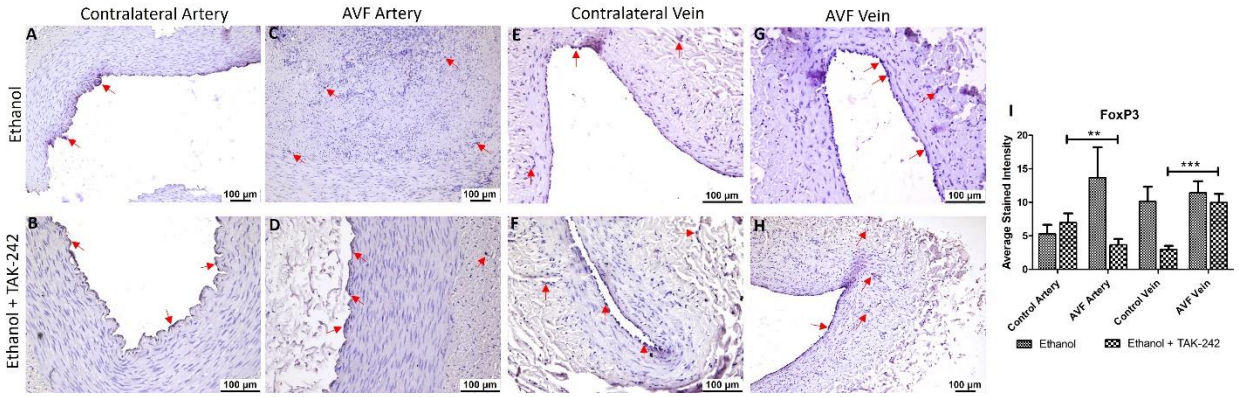
Supplementary Figure 4: Immunostaining for dendritic cells in femoral vessels involved in arteriovenous fistula (AVF) and contralateral femoral vessels in swine treated with toll-like receptor (TLR)-4 inhibitor TAK-242 and vehicle control (30% ethanol). Immunostaining for HLA-DR in contralateral femoral vessels (panels A, B, E, and F) and femoral vessels involved in AVF (panels C, D, G, and H), and average stained intensity (panel I). These images are represented images from all swine selected for this study. Red arrows show the positively stained immune cells. All data are presented as Mean ± SEM. A probability (*p*) value <0.05 was considered as significant. *p<0.05.



Supplementary Figure 5: Immunostaining for dendritic cells in femoral vessels involved in arteriovenous fistula (AVF) and contralateral femoral vessels in swine treated with toll-like receptor (TLR)-4 inhibitor TAK-242 and vehicle control (30% ethanol). Immunostaining for fascin in contralateral femoral vessels (panels A, B, E, and F) and femoral vessels involved in AVF (panels C, D, G, and H), and average stained intensity (panel I). These images are represented images from all swine selected for this study. Red arrows show the positively stained immune cells. All data are presented as Mean ± SEM. A probability (*p*) value <0.05 was considered as significant. **p<0.01 and ***p<0.001.



Supplementary Figure 6: Immunostaining for T lymphocytes in femoral vessels involved in arteriovenous fistula (AVF) and contralateral femoral vessels in swine treated with toll-like receptor (TLR)-4 inhibitor TAK-242 and vehicle control (30% ethanol). Immunostaining for CD3e in contralateral femoral vessels (panels A, B, E, and F) and femoral vessels involved in AVF (panels C, D, G, and H), and average stained intensity (panel I). These images are represented images from all swine selected for this study. Red arrows show the positively stained immune cells. All data are presented as Mean ± SEM. A probability (*p*) value <0.05 was considered as significant. *p<0.05.



Supplementary Figure 7: Immunostaining for T-regulatory cells in femoral vessels involved in arteriovenous fistula (AVF) and contralateral femoral vessels in swine treated with toll-like receptor (TLR)-4 inhibitor TAK-242 and vehicle control (30% ethanol). Immunostaining for FoxP3 in contralateral femoral vessels (panels A, B, E, and F) and femoral vessels involved in AVF (panels C, D, G, and H), and average stained intensity (panel I). These images are represented images from all swine selected for this study. Red arrows show the positively stained immune cells. All data are presented as Mean ± SEM. A probability (*p*) value <0.05 was considered as significant. **p<0.01 and ***p<0.001.

ID	Gene.name	log2FoldChange	pvalue		
ENSSSCG00000025578	ALDH1A2	2.1946143	0.0264553	Aldehyde Dehydrogenase 1 Family Member A2	Regulates dendritic cells
ENSSSCG00000006452	CD1D	2.30609	0.0003104	cluster of differentiation 1d	expressed on the surface of various human antigen-presenting cells. They are non-classical MHC proteins, related to the class I MHC proteins, and are involved in the presentation of lipid antigens to T cells.
ENSSSCG00000006309	CD247	2.7839417	0.0006591	cluster of differentiation 247	encode T-cell receptor zeta
ENSSSCG00000017723	CCL2	2.0913567	0.0389061	C-C Motif Chemokine Ligand 2	CCL2/CCR2 signaling is best known for its role in regulating macrophage recruitment and polarization during inflammation
ENSSSCG00000002821	CCL22	4.877724	0.0087413	C-C Motif Chemokine Ligand 22	secreted by dendritic cells and macrophages, Anti-inflammatory role through Trges
ENSSSCG00000006736	CD2	3.495897	0.0105241	cluster of differentiation 2	surface antigen found on all peripheral blood T-cells
ENSSSCG00000000705	CD27	3.4907096	0.0278599	cluster of differentiation 27	a member of the TNF-receptor superfamily, upon binding to CD70 regulates

					survival and activation of T, B, and NK lymphocytes,
ENSSSCG00000008742	CD38	3.4456209	0.0405325	cluster of differentiation 38	CD38 can modulate cell recruitment, cytokines and chemokines release, cell activation, phagocytosis, and antigen presentation. CD38 expressing cells consume NAD+ to produce cADPR an event that leads to inflammation, CD38 deficiency significantly alleviated angiotensin II (Ang II)-induced vascular remodeling in mice
ENSSSCG00000015093	CD3D	4.4951389	0.0048688	cluster of differentiation 3D	CD3D is correlated with immune checkpoint and immune-infiltrated cells
ENSSSCG00000013115	CD5	4.0148291	0.0095633	cluster of differentiation 5	promote IL-10 secretion
ENSSSCG00000002866	CEBPA	4.0512723	0.0008851	CCAAT Enhancer Binding Protein Alpha	role in controlling maturation of the myeloid lineage and is also expressed during the late phase of inflammatory responses when signs of inflammation are decreasing
ENSSSCG00000016688	CPVL	7.0612297	0.0409585	Carboxypeptidase Vitellogenic Like	involves in antigen presentation
ENSSSCG00000016855	FYB1	2.0614249	0.0008376	FYN Binding Protein 1	Acts as an adapter protein of the FYN and LCP2 signaling cascades in T-cells (By similarity). May play a role in linking T-cell signaling to remodeling of the actin cytoskeleton (PubMed:10747096, PubMed:16980616). Modulates the expression of IL2,Involved in platelet activation
ENSSSCG00000022490	GPR83	7.1226312	0.0375859	G Protein-Coupled Receptor 83	modulate Tregs in inflammation
ENSSSCG00000013655	ICAM1	2.2900766	0.0347179	Intercellular Adhesion Molecule 1	regulates neutrophil adhesion and transcellular migration of TNF-alpha-activated vascular endothelium under flow
ENSSSCG00000009051	IL15	2.0407497	0.0009599	Interleukin 15	Cytokine that stimulates the proliferation of T-lymphocytes. Stimulation by IL15 requires interaction of IL15 with components of the IL2 receptor, including IL2RB and probably IL2RG but not

					IL2RA. In neutrophils, stimulates phagocytosis probably by signaling through the IL15 receptor, composed of the subunits IL15RA, IL2RB and IL2RG, which results in kinase SYK activation
ENSSSCG00000015037	IL18	2.8385591	1.20E-05	Interleukin 18	A proinflammatory cytokine primarily involved in polarized T-helper 1 (Th1) cell and natural killer (NK) cell immune responses
ENSSSCG00000011579	PPARG	4.0384355	0.0009478	Peroxisome proliferator-activated receptor gamma	role in inflammation
ENSSSCG00000013839	RASAL3	3.3558667	0.0437882	RAS Protein Activator Like 3	Rasal3 controls the magnitude of inflammatory responses through the survival of both naive T cells and activated T cells
ENSSSCG00000015550	RGS16	3.1492297	0.0457468	Regulator Of G Protein Signaling 16	regulate T lymphocyte activation in response to inflammatory stimuli and migration induced by CXCR4
ENSSSCG00000030680	TCF7	2.736719	0.0355257	Transcription Factor 7	promote T cells differentiating to Th2 or memory T cells
ENSSSCG00000022512	TRDC	4.2549358	0.0079438	T Cell Receptor Delta Constant	one component of the γδ T cell receptor which is essential for development of γδ T cells
ENSSSCG00000029813	TSPAN5	2.0982716	0.0259364	Tetraspanin 5	Endothelial Tspan5- and Tspan17-ADAM10 complexes may regulate inflammation by maintaining normal VE-cadherin expression and promoting T lymphocyte transmigration.

Supplementary Table 1