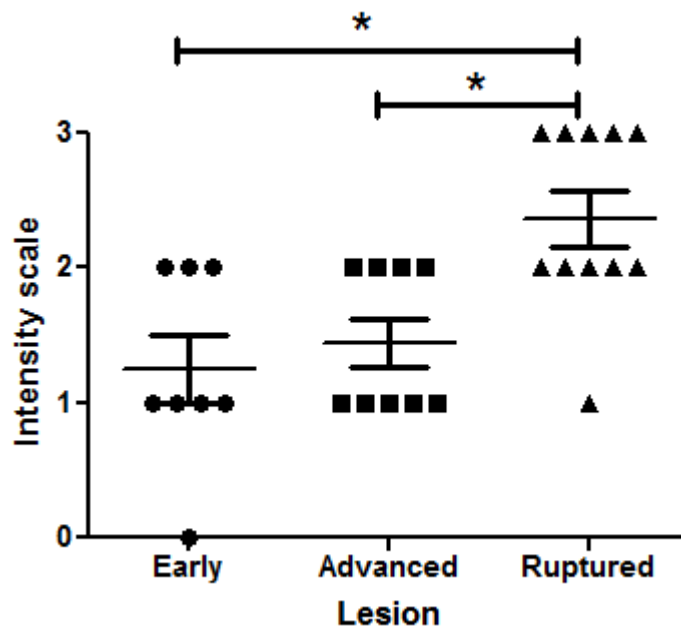


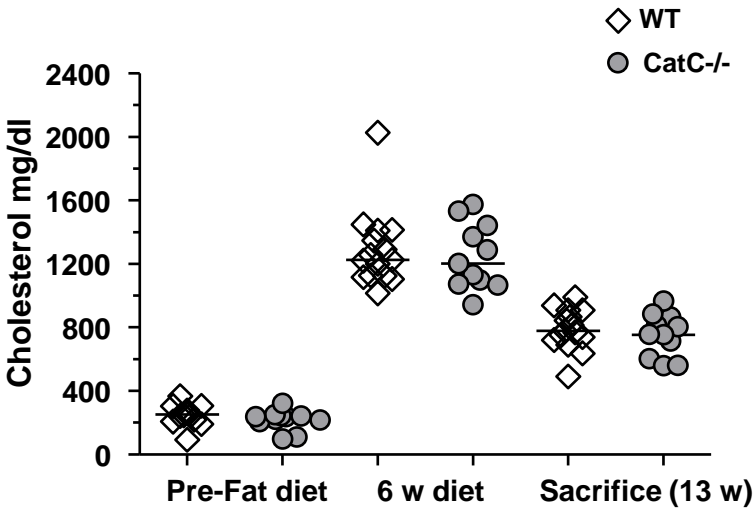
# Supplement Material : Supplement Figures I-IX

## Supplement Fig. I



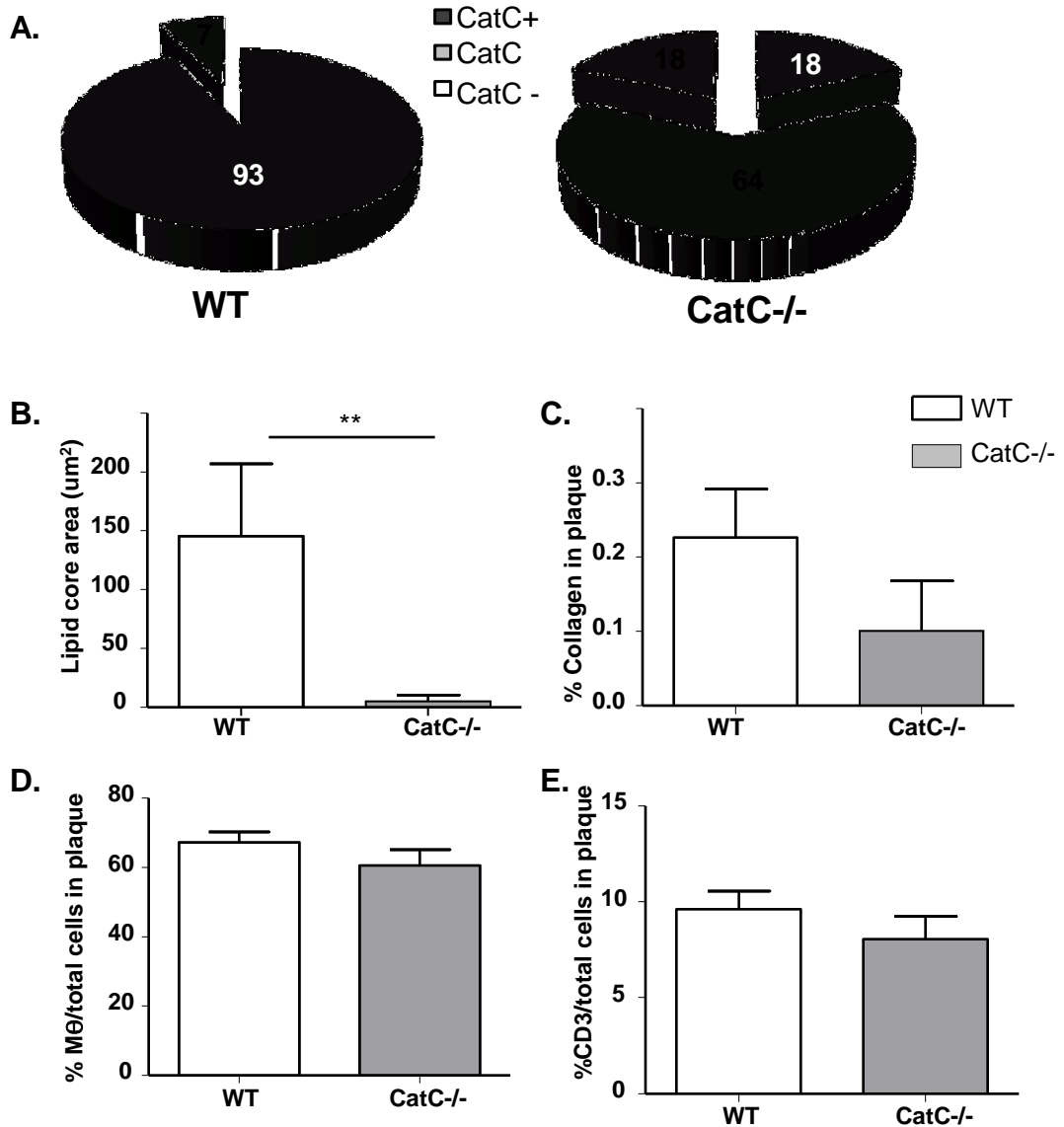
Legend Supplemental Fig. I: Semi-quantitative analysis of CatC expression in early, stable and ruptured human lesions as determined by immunohistochemistry. \*= p<0.05.

# Supplement Fig. II



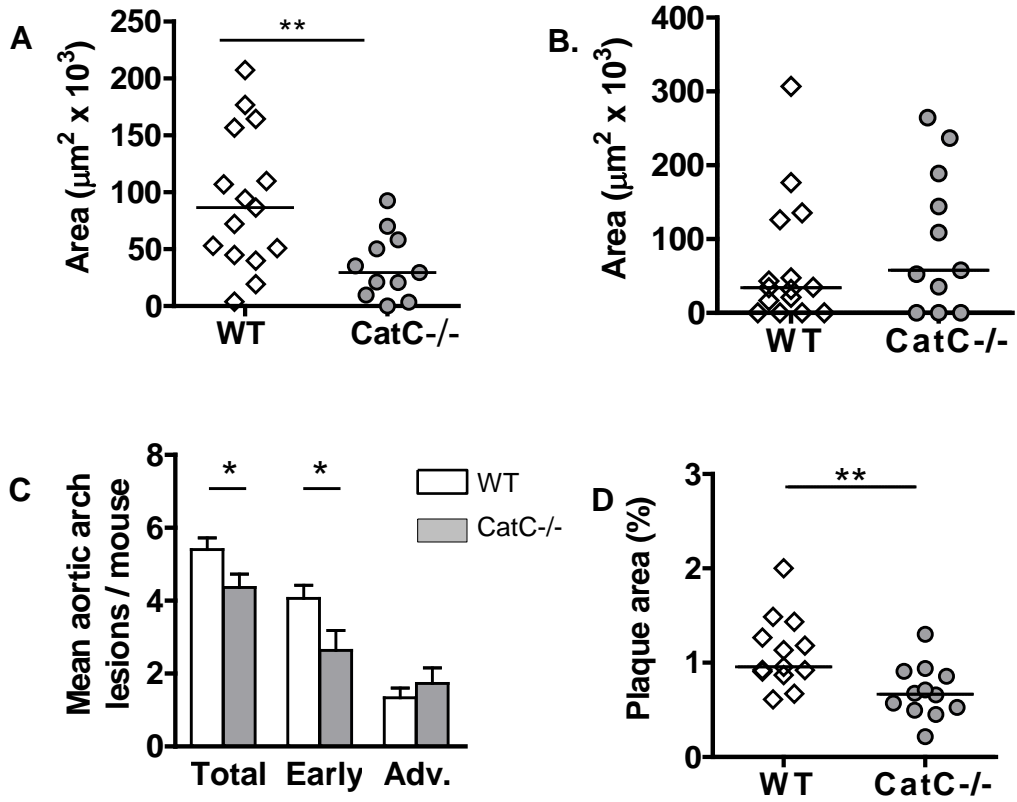
Legend Supplement Fig. II: Serum cholesterol levels pre-, after 6 w diet and at sacrifice of WT (n=15) and CatC-/- chimeric mice (n=11)

# Supplement Fig. III



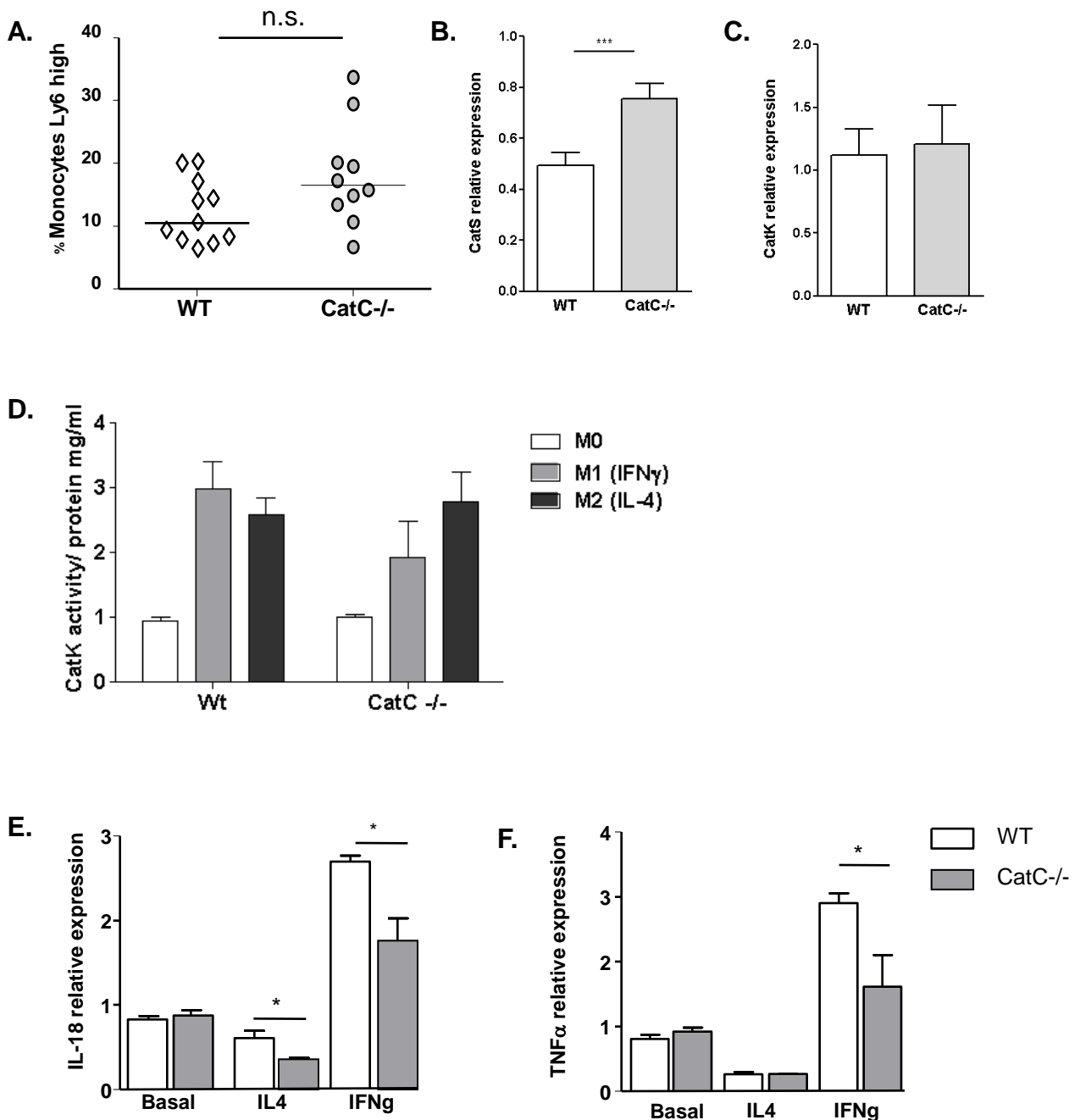
Legend Supplemental Fig. III: Further analysis of the collar-induced atherosclerotic lesions in the carotid artery, A: Contribution of hematopoietic CatC to total plaque CatC expression in WT and CatC<sup>-/-</sup> mice. Further analysis of plaque components is shown in B: Lipid core area, C: Collagen content, D: Macrophage content and E: CD3<sup>+</sup> cells

## Supplement Fig. IV



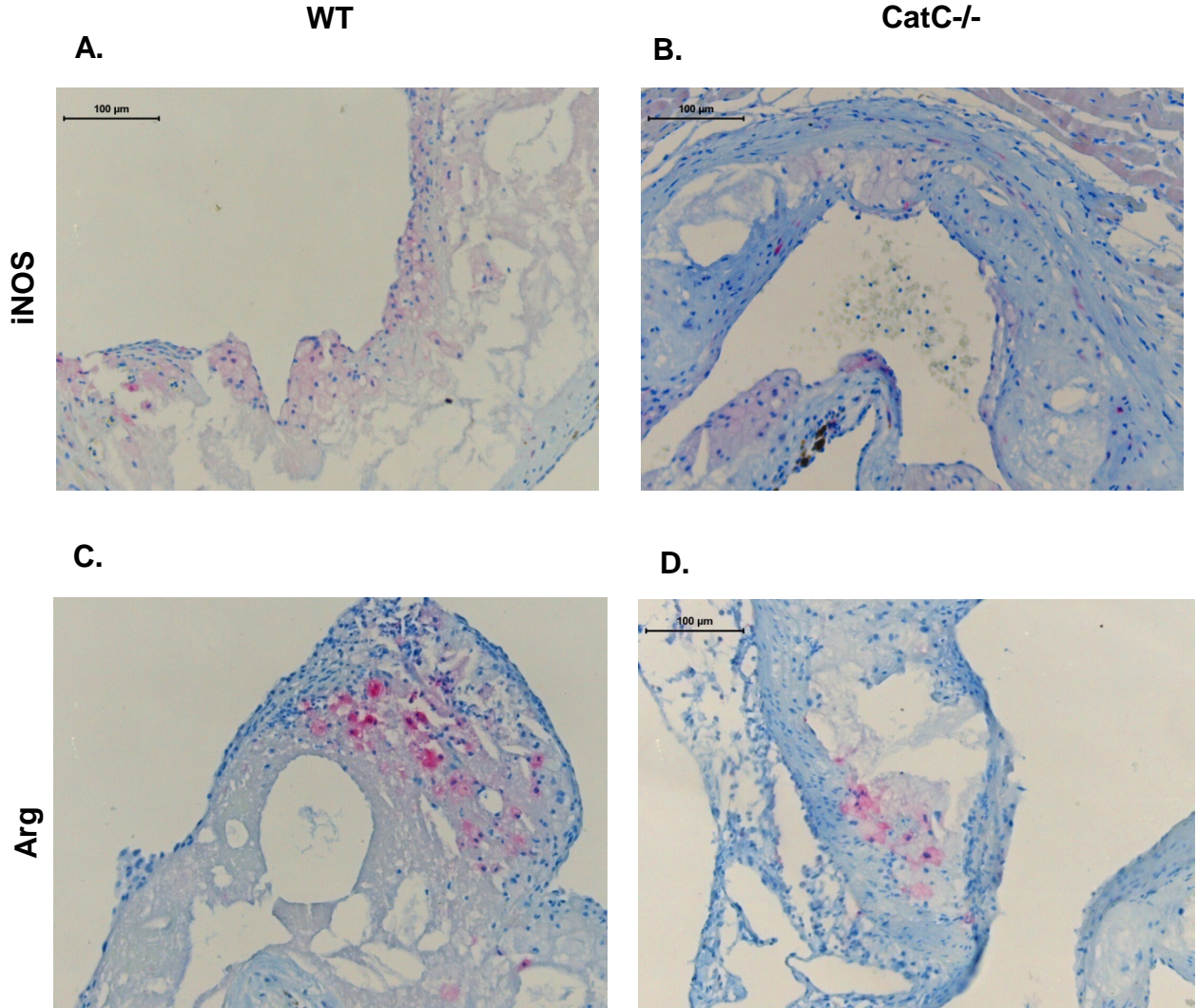
Legend Supplement Fig. IV. A: plaque area of early and B: advanced lesions in the aortic arch, C: number of total, early and advanced lesions in the aortic arch, D: "En face" analysis of the percentage of lipid accumulation relative to abdominal and thoracic aorta surface area. \* = p < 0.05, \*\* p < 0.01.

## Supplement Fig. V



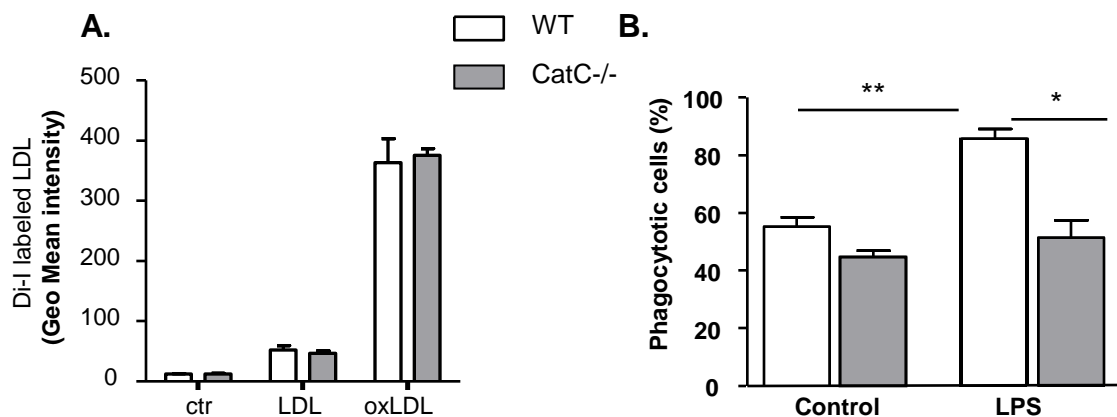
Legend Supplemental Fig. V. A: Percentage of monocytes in the blood (Lys6high-positive cells). Relative mRNA expression of CatS (B) and CatK (C) in spleen of WT (n=15) and CatC<sup>-/-</sup> chimeric mice (n=11). D: CatK activity (relative to protein concentration, normalized to M0) in lysates of Wt and CatC<sup>-/-</sup> BMDM, in M0, M1 (stimulation with IFN $\gamma$ ) and M2 macrophages (stimulation with IL-4) in vitro (cells of n=4 mice). E-F: Relative mRNA expression of IL-18 (E) and TNF-alpha (F) in BMDM in basal conditions and after stimulation with IL-4 and IFN $\gamma$  in vitro (in four wells from 3 pooled mice). \* = p<0.05, \*\*\* p<0.001.

## Supplemental Fig. VI



Legend Supplemental Fig. VI. Immunohistochemical staining of aortic root atherosclerotic lesions of WT (panel A, C) and CatC<sup>-/-</sup> chimera mice (panel B, D) for iNOS (M1 marker, panel A-B) and Arg-1 (M2 marker, panel C-D)

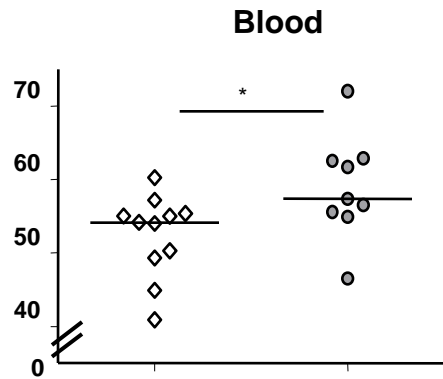
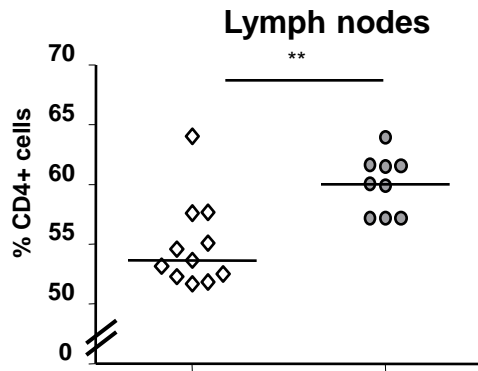
## Supplement Fig. VII



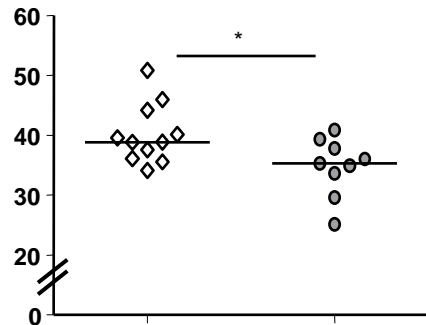
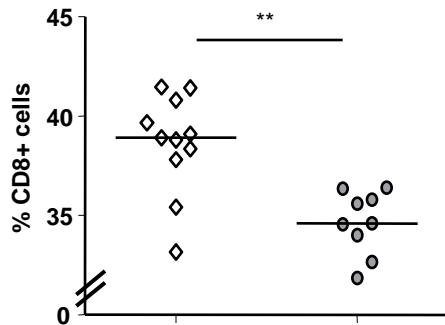
Legend Supplemental Fig. VII. A.: Uptake of DiI labeled LDL and ox-LDL in BMDM of WT (n=4) and CatC<sup>-/-</sup> mice (n=3), B: Uptake of apoptotic cells by BMDM in basal and LPS-stimulated conditions (triplicate wells, from 3 pooled donor WT and CatC<sup>-/-</sup> mice, analysis of 4-6 photos/ well).

# Supplement Fig. VIII

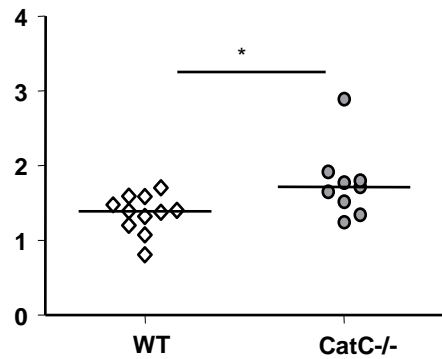
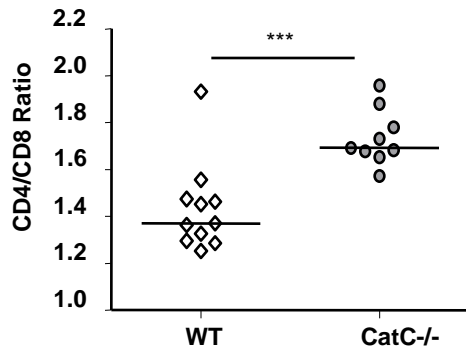
A.



B.



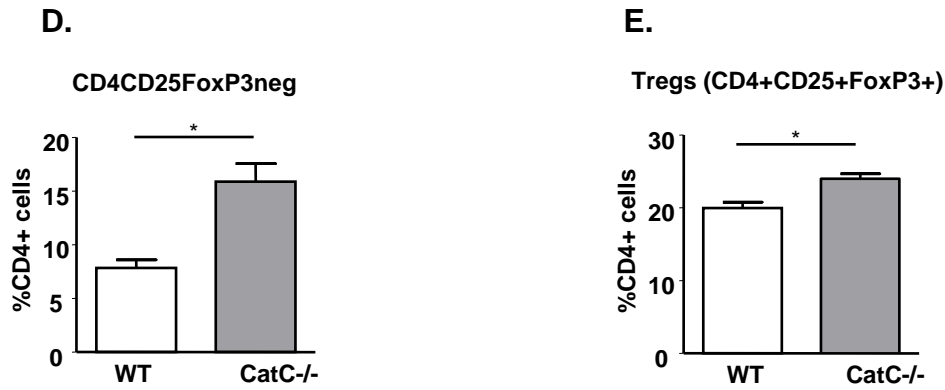
C.



Supplemental Fig. VIII, continued next page, legend on next page

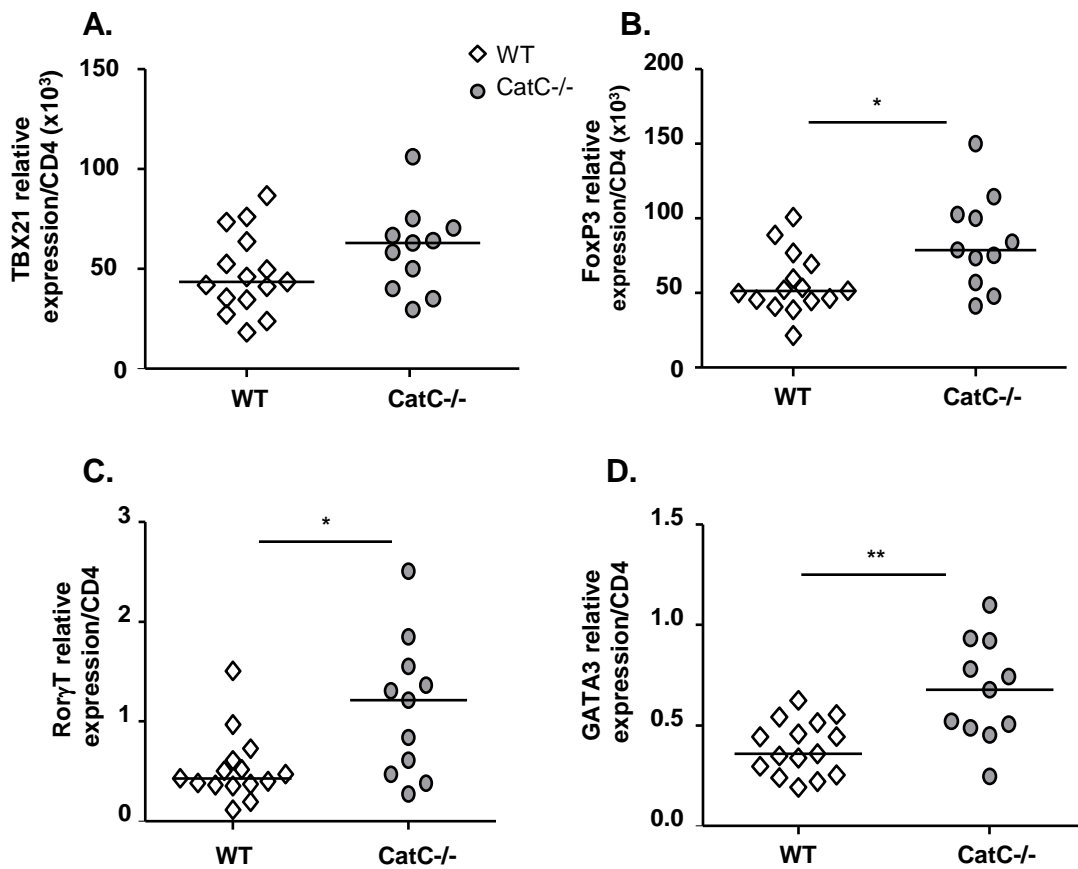


## Supplement Fig. VIII, continued



Legend Supplemental Fig. VIII. A-C: shows FACS analysis of lymph nodes (left panels) and blood (right panels) in WT (n=11) and CatC<sup>-/-</sup> chimeric mice (n=9), A: CD4<sup>+</sup> T cells, B: CD8<sup>+</sup> T cells, C: CD4/CD8 ratio. D-E: Analysis of splenic CD4 T cells subpopulations CD4CD25FoxP3neg (D) and CD4<sup>+</sup>CD25<sup>+</sup>FoxP3<sup>+</sup> (E) in WT (n=4) and CatC<sup>-/-</sup> mice (n=3). \* = p<0.05, \*\* p<0.01, \*\*\* = p<0.001.

# Supplement Fig. IX



Legend Supplemental Fig. IX : A-D. Relative mRNA levels corrected for CD4 expression in spleen of TBX21 (A), FoxP3 (B), Ror  $\gamma$  T (C) and GATA3 (D) in WT (n=15) and CatC $^{-/-}$  chimeric mice (n=15)