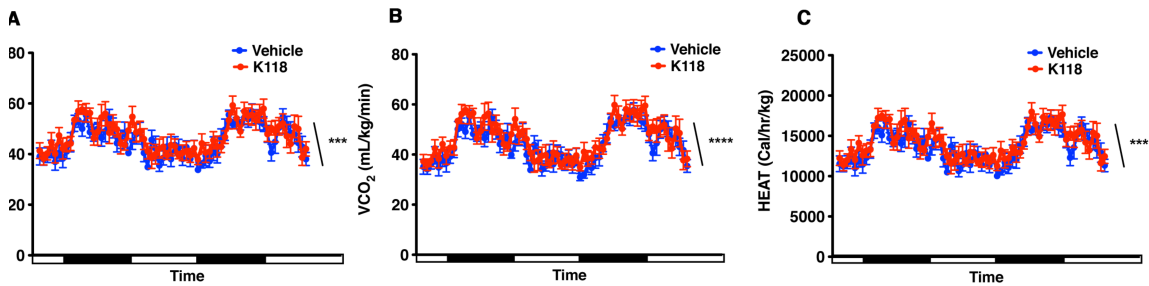
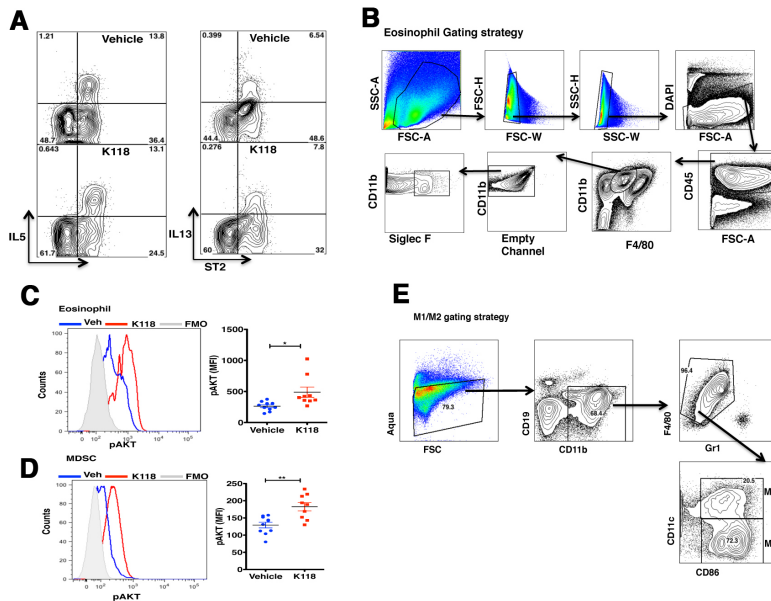


## Supplementary Figures & Figure Legends:

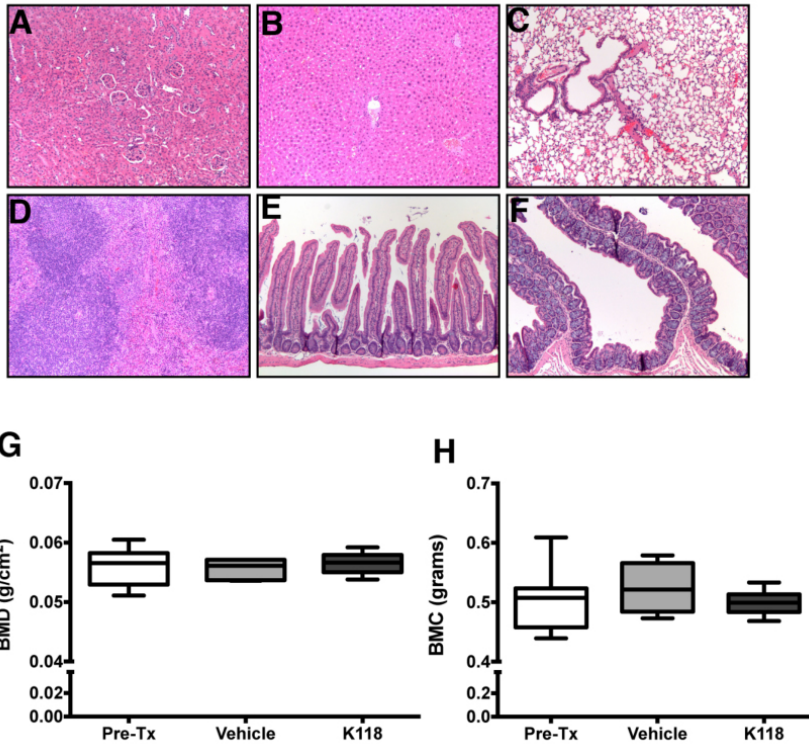


**Supplemental Figure1: Effect of K118 treatment on energy expenditure of Chow fed lean mice:** CLAMS analysis using individually housed groups K118 and vehicle administered chow fed lean mice after two weeks of treatment. Plots represent variations in oxygen consumption (A), CO<sub>2</sub> release (B) and energy expenditure (C) over time in vehicle vs K118 treated mice (n=8) as indicated. Statistical analysis was performed using two-tail ratio paired T-test. Error bars are the mean  $\pm$  SEM. \*\* $P < 0.001$ , \*\*\*\* $P < 0.0001$



**Supplemental Figure2: Effect of K118 treatment on ILC2, eosinophil & MDSC**

A. SVF of WAT of 2 weeks K118 or vehicle treated mice stimulated with PMA (40ng/ml), ionomycin (500ng/ml) and brefeldin A for 4 h. Flow cytometry plots showing IL5 & IL13 production in ILC2 cells ( $\text{Lin}^- \text{CD45}^+ \text{CD4} \text{IL7R}\alpha^+ \text{ST2}^+$ ). B. Eosinophil gating strategy as described previously.(6). C-D pAKT phosphorylation in Eosinophils (C) and MDSC (D) by flow cytometry. Student's t-test, \* $P < 0.05$ , \*\* $P < 0.01$ . E. Flow cytometry plots indicating gating strategy of M1 & M2 macrophages as described elsewhere. M1 ( $\text{CD19}^- \text{CD11b}^+ \text{F4/80}^+ \text{GR1}^{\text{Dim}/-} \text{CD11c}^+ \text{CD86}^{\text{Dim}}$ ), M2 ( $\text{CD19}^- \text{CD11b}^+ \text{F4/80}^+ \text{GR1}^{\text{Dim}/-} \text{CD11c}^- / \text{Dim} \text{CD86}^+$ )(18)



**Supplemental Figure 3: Long-term K118 treatment in mice does not adversely impact any tissue or bone integrity.**

(A-F) Histological appearance of tissues harvested from DIO mice treated with K118 (10mg/kg body weight) or vehicle for four weeks (2x/week). Tissues of K118-administered mice, including

(A) kidney, (B) liver, (C) lung, (D) spleen, (E) small intestine, and (F) large intestine were without significant abnormalities and comparable in appearance to those of vehicle-administered mice (H&E, 100X). (G-H) Bone mineral density (BMD) (G) and bone mineral content (BMC) (H), before (Pre-Tx) and after K118 and vehicle treatment. All results are expressed as mean  $\pm$ SEM, Student's unpaired, two-tailed *t* test \* $p \leq 0.05$ , (n=6).