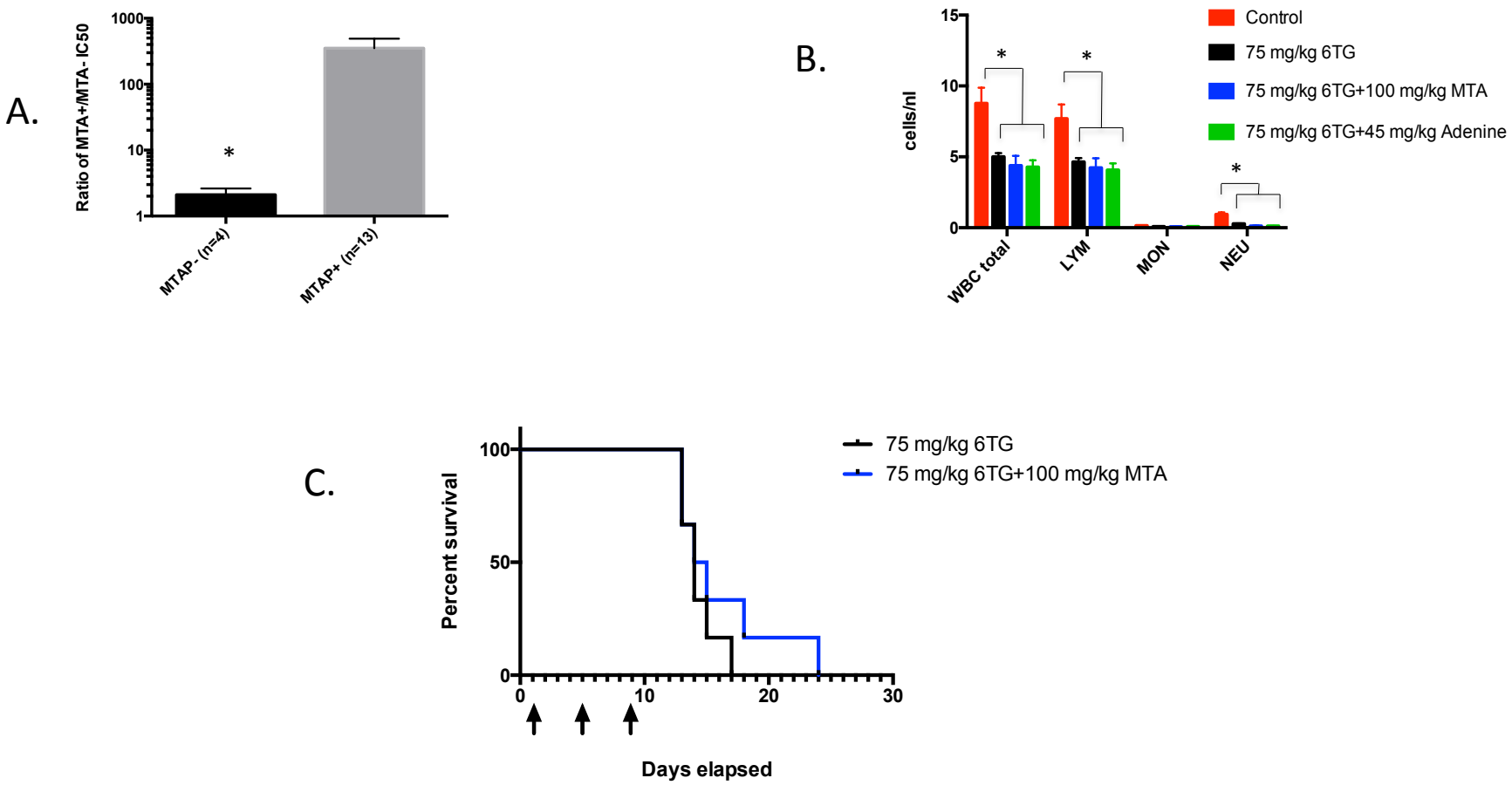
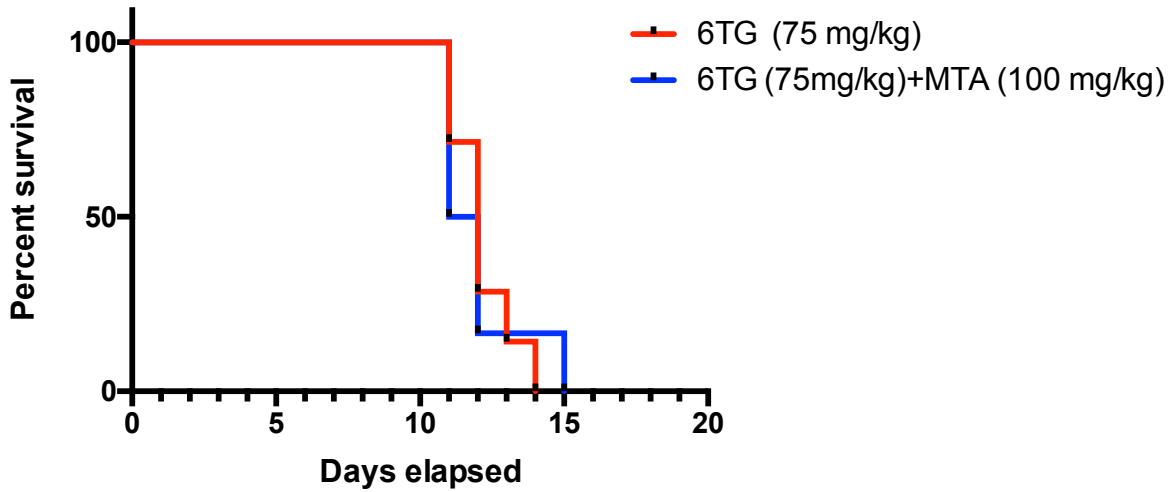
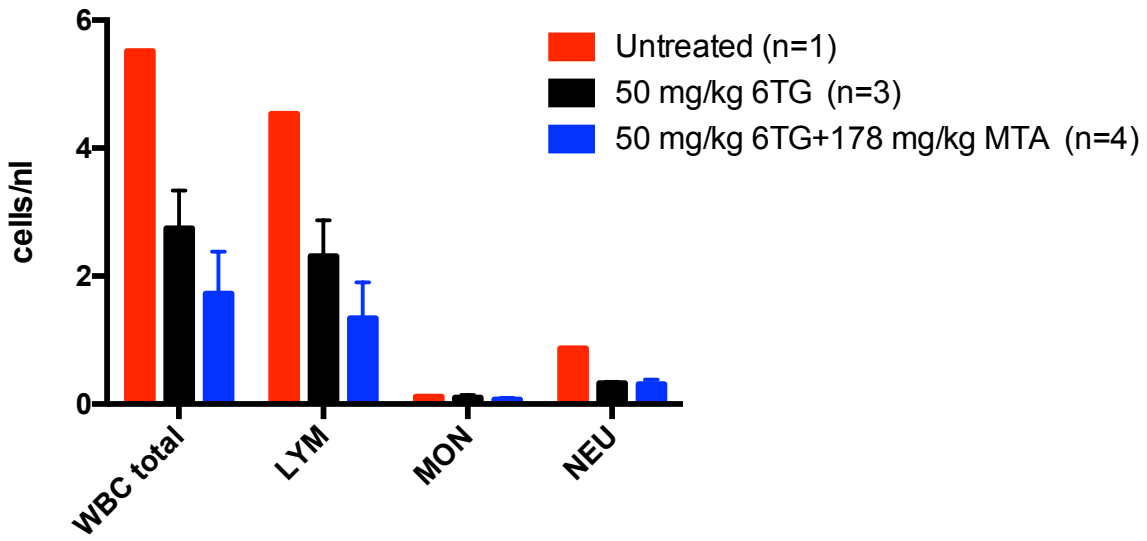


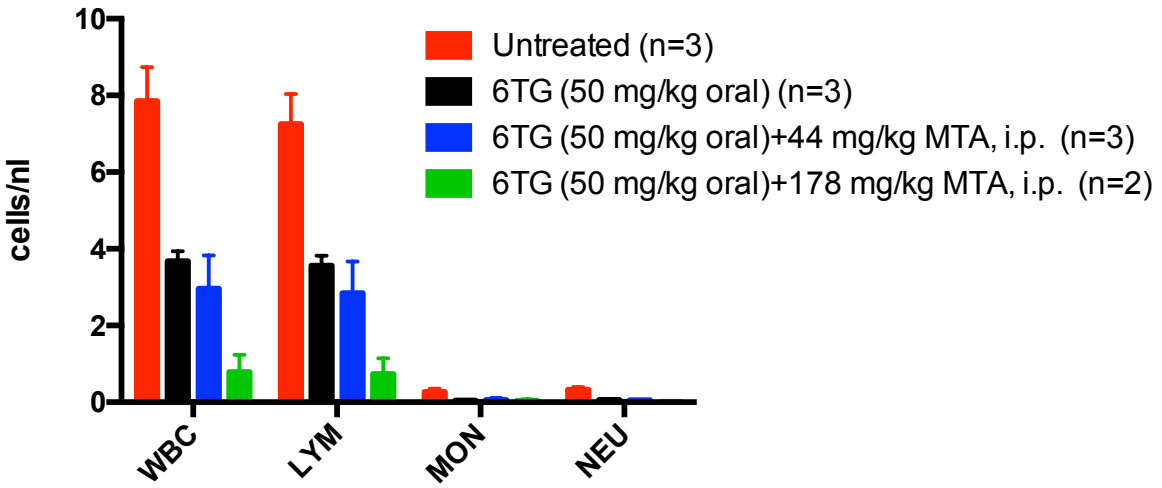
Supplementary Figure 1. MTA protection and 6TG. A. Graph shows the ratio of calculated IC50 for 6TG either in the presence or absence of 10 μM MTA for 17 different cell lines (Supplemental Table 1). Note the log scale on Y axis. Asterisk indicates P<0.004. Error bars standard error of mean (SEM). B. Mice were divided into four groups (n=4) and injected i.p. with either vehicle (Control), 6TG, 6TG+MTA, or 6TG+adenine at the indicated doses. After 4 days, blood was drawn and WBC's were analyzed. Asterisk indicates P<0.05 compared to untreated control. C. SCID mice were treated with either 6TG (n=6) or 6TG+MTA (n=6) at the indicated dose. Arrows indicate day of injection. Mice were examined each day until declared moribund.



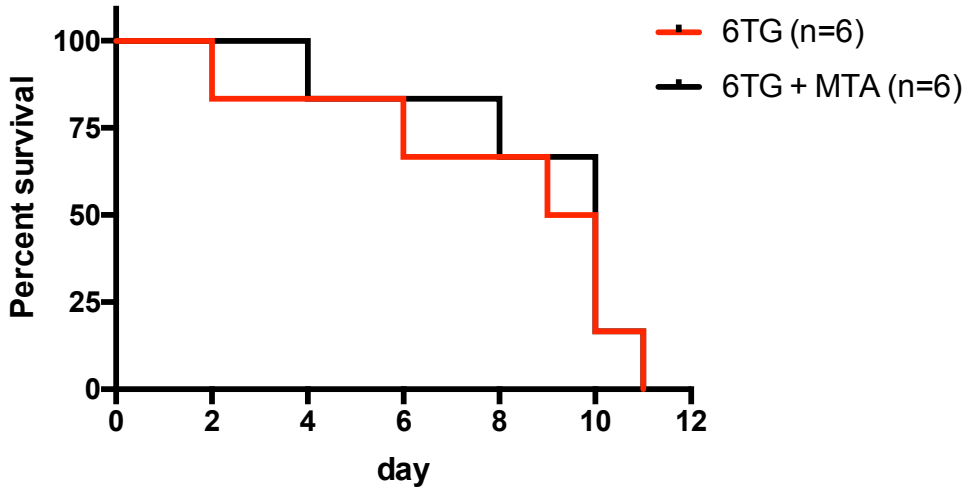
Supplementary Figure 2. Survival of C57BL6 mice treated multiple dose i.p. 6TG and i.p. 6TG+MTA. C57BL6 mice were given the indicated doses of 6TG (n=7) and MTA (n=6) by i.p. injection on days 1, 5, 9. Mice were then followed till moribund.



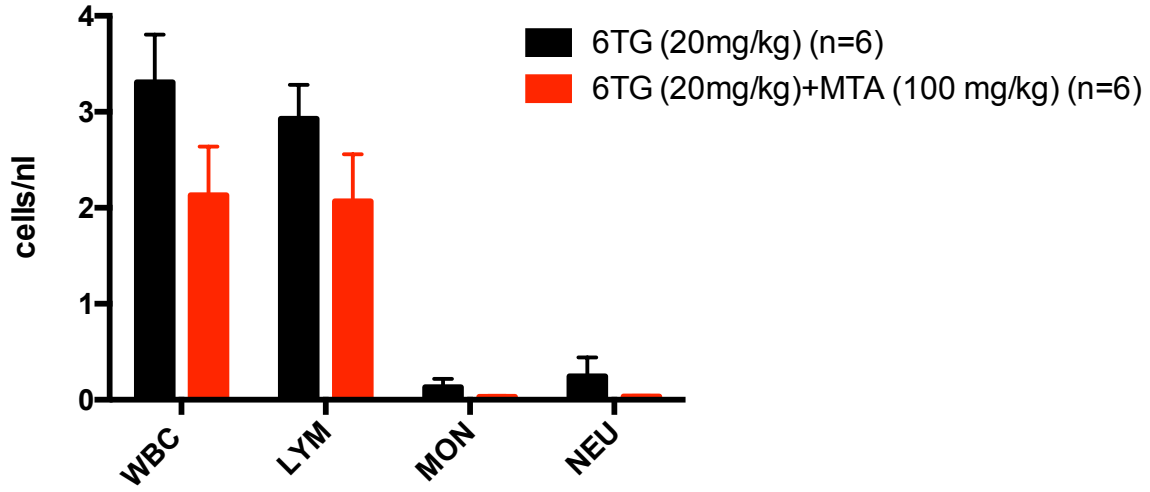
Supplementary Figure 3. WBCs of C57BL6 mice treated with single dose oral 6TG and oral 6TG +MTA. C57BL6 mice were given the indicated doses of 6TG or 6TG+MTA by oral gavage. Mice were given MTA one hour proceeding 6TG. Blood counts were performed 4 days later. Error bar shows SEM.



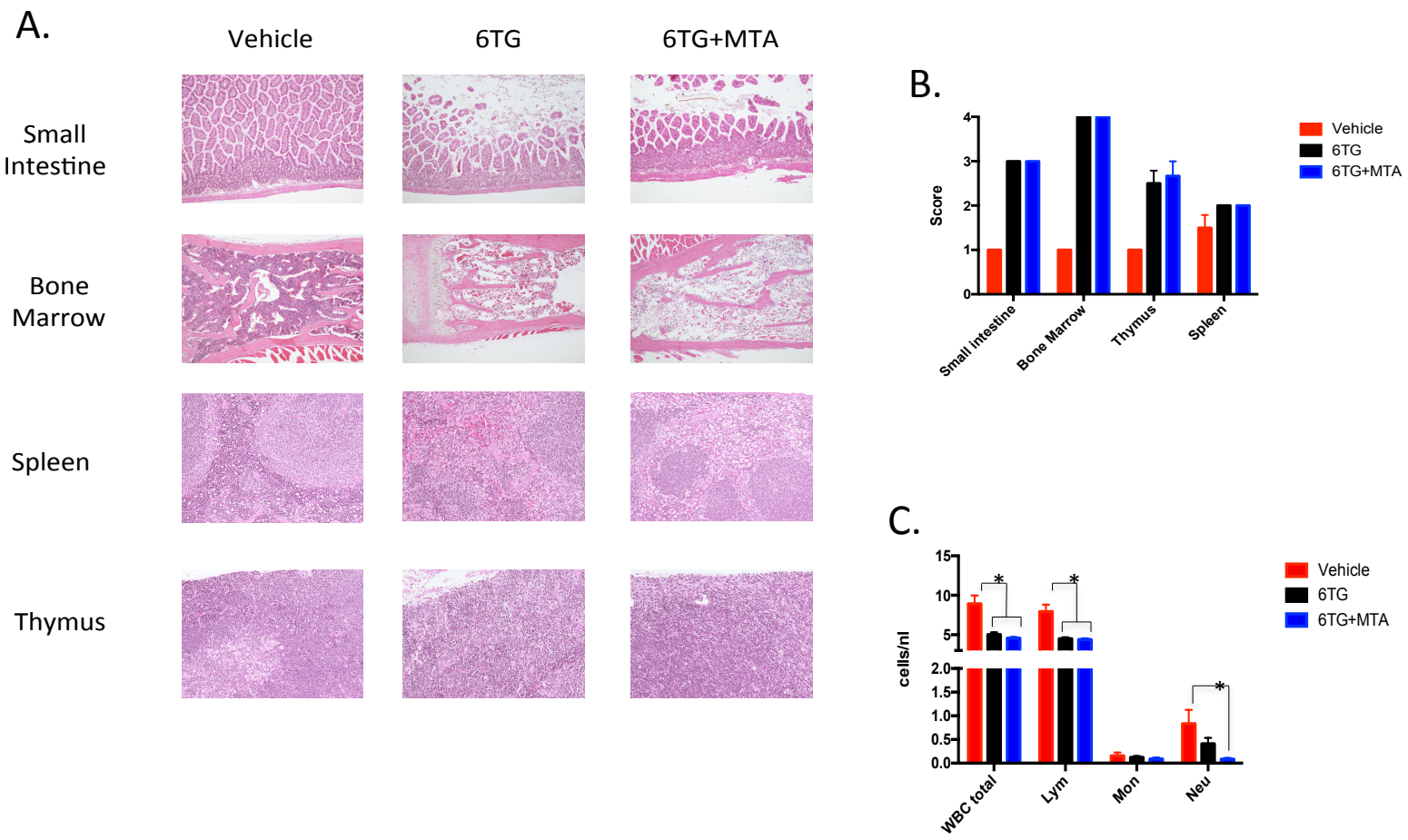
Supplementary Figure 4. WBCs of C57BL6 mice treated with single dose oral 6TG and i.p. 6TG+MTA. C57BL6 mice were given the indicated dose of 6TG by oral gavage, while MTA was given by i.p. injection. Mice were given MTA two hours proceeding 6TG. Blood counts were performed 3 days later.



Supplementary Figure 5. Survival of C57BL6 mice treated with multiple dose i.p. 6TG and continuous 6TG+MTA by osmotic pump. C57BL6 mice injected i.p. with 75 mg/kg 6TG on day 1, 4 and 7. On day 0 mice were implanted with a Alzet osmotic pump containing either a 50% DMSO solution or 50% DMSO +MTA (53 mg/ml). Flow rate of pump was 1.03 ul per hour. Mice in each group were then monitored for the next 11 days.



Supplemental Figure 6. WBCs of C57BL6 mice treated with multiple low dose i.p. 6TG and i.p. 6TG+MTA. C57BL6 mice injected i.p. with indicated amounts of 6TG or 6TG+MTA for five consecutive days. On the ninth day blood was collected and analyzed. Error bars show SEM.



Supplemental Figure 7. 6TG and 6TG+MTA toxicity in mouse tissues. Mice (n=4/group) were injected with either vehicle, 75 mg/kg 6TG, or 75 mg/kg 6TG +100 mg/Kg MTA for four consecutive days. Tissue was collected on day 5. A. Representative images of indicated H and E stained tissues. B. H and E stained images were rated blindly by a pathologist on a four point scale (1=normal; 4=severe cellular atrophy). Mean ratings for each tissue is shown. C. Bar chart showing various white blood cell measures in control and treated animals. Asterisk indicates $P<0.05$ compared to untreated control. Error bars show SEM.