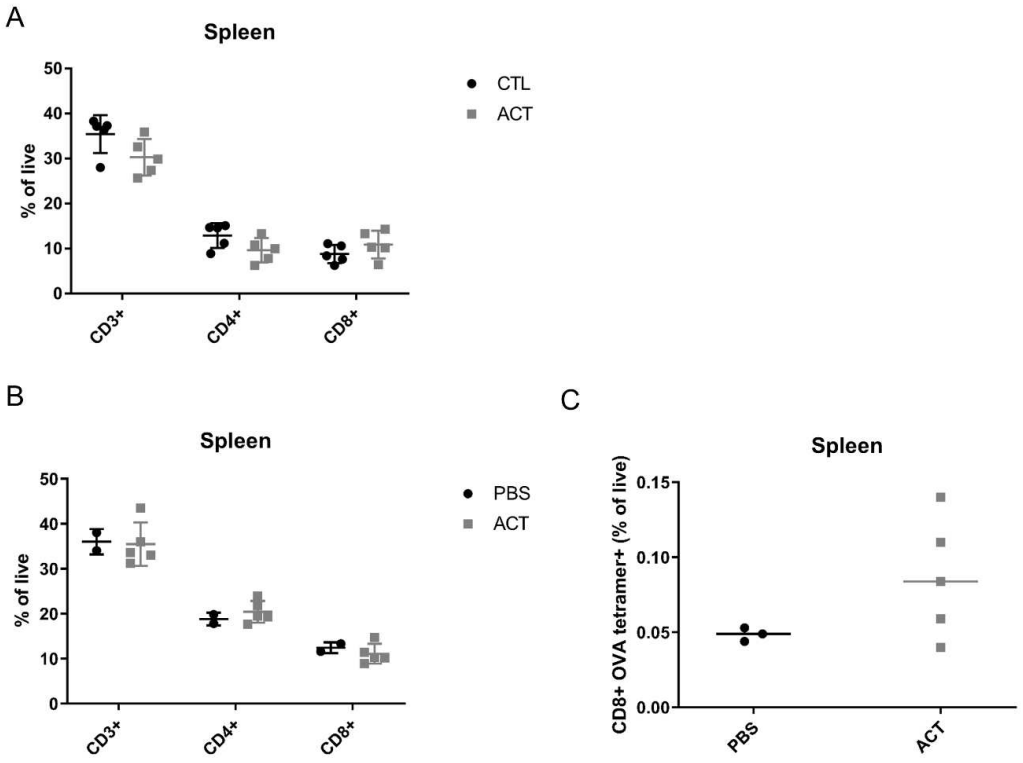
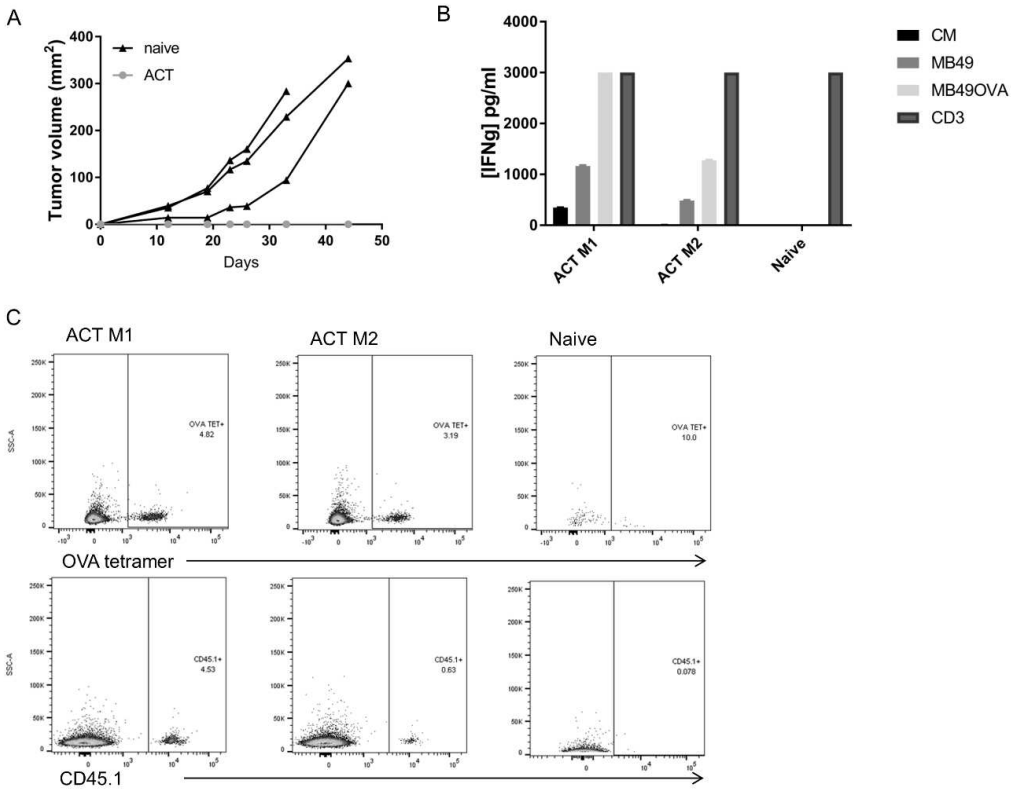
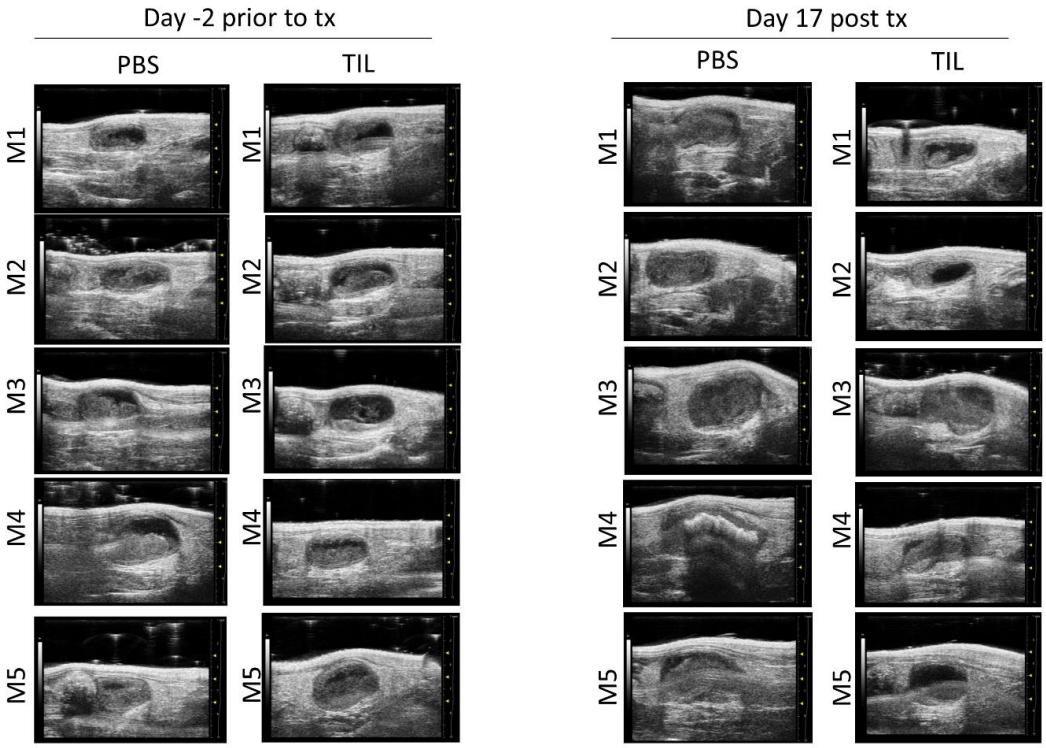


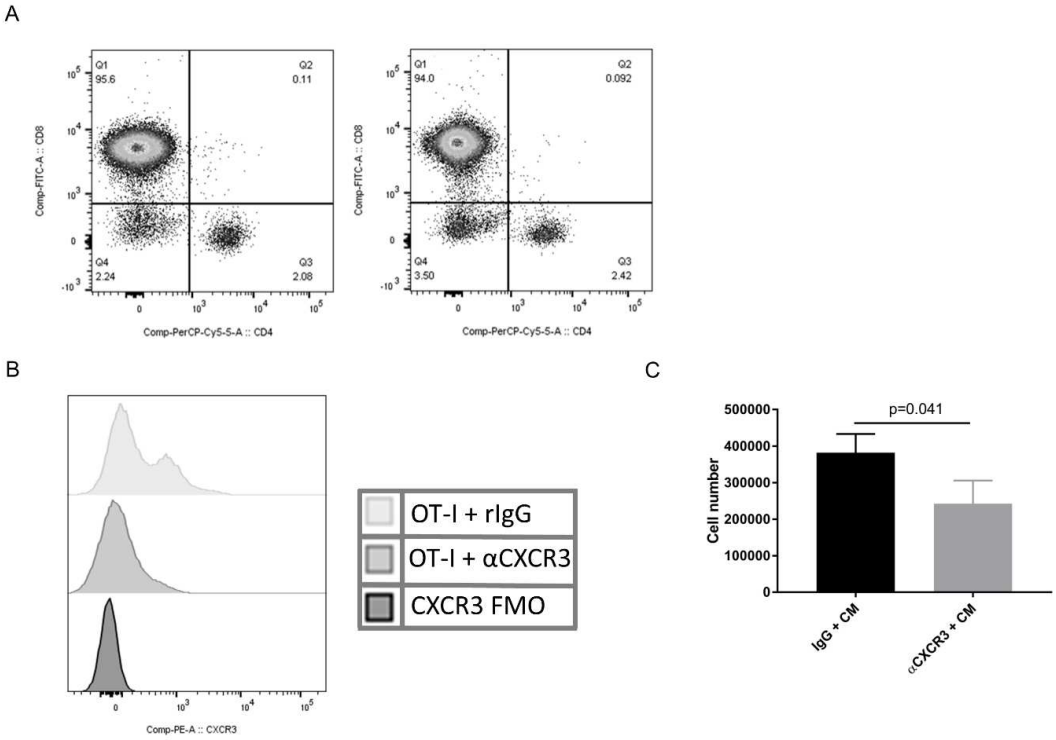
Supplemental Figure 1: T cell populations within the spleen do not change after ACT. Systemic ACT treatment did not change bulk $CD3^+$, $CD4^+$, or $CD8^+$ T cell populations within the spleen as determined by flow cytometry (A). Intravesical ACT treatment did not change bulk $CD3^+$, $CD4^+$, $CD8^+$ or $CD8^+$OVAtetramer$^+$ T cell populations within the spleen as determined by flow cytometry (B-C).



Supplemental Figure 2: Systemic ACT treated mice reject MB49 tumor re-challenge. Two mice treated with systemic ACT that had complete tumor elimination were challenged with the parental MB49 bladder cancer cell line on the opposite flank along with 2 naïve mice. Both cured mice rejected MB49 tumor growth (A). Splenocytes were co-cultured with CM, MB49, MB49OVA or anti-CD3. IFN-gamma was produced in both treated mice when co-cultured with tumor cells (B). Splenocytes from systemic ACT treated mice were analyzed by flow cytometry (C). $CD8^+OVAtetramer^+$ T cells and $CD8^+CD45.1^+$ T cells were detected over 100 days after treatment. N=3 per group. Repeated 2 times.



Supplemental Figure 3: Intravesical TIL delivery prevents MB49 tumor growth. Ultrasound images comparing 3 mice per group on day 8 (day of treatment) and day 18.



Supplemental Figure 4: CXCR3 blocking antibody blocks CXCR3 detection and migration *in vitro*. OT-I T cells pre-coated with antibodies were screened for CXCR3 expression. Both groups had similar levels of $CD4^+$ and $CD8^+$ T cells (A). OT-I T cells coated with anti-CXCR3 had a decrease in detectable CXCR3 by flow cytometry (B). A decrease in migration was seen when OT-I T cells were coated with anti-CXCR3 *in vitro* using a trasnwell insert and MB49OVA conditioned media (C).