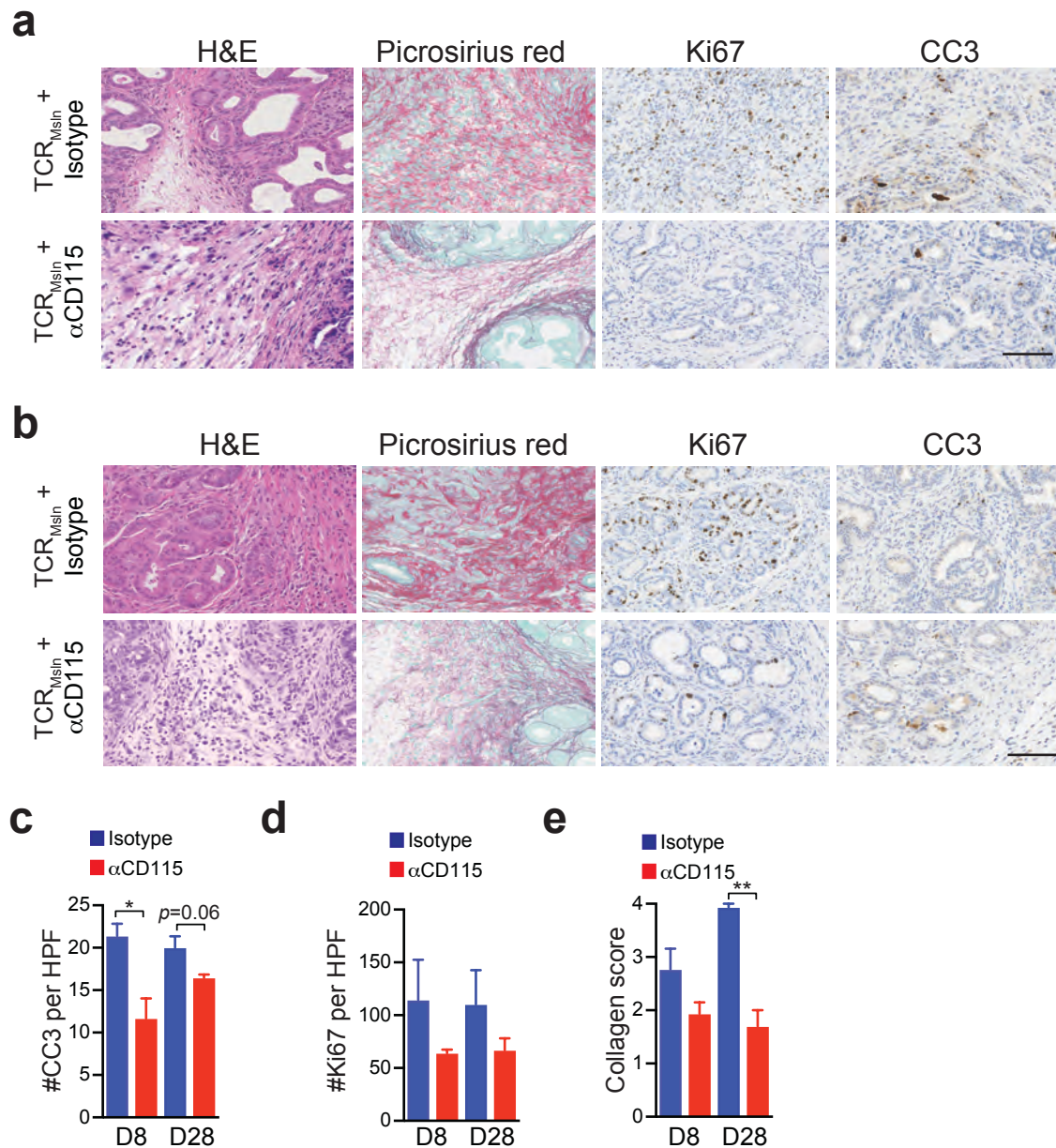


## Supplementary Figures 1-4

**Differential effects of depleting versus programming tumor-associated macrophages on anti-tumor activity of engineered T cells in pancreatic ductal adenocarcinoma**

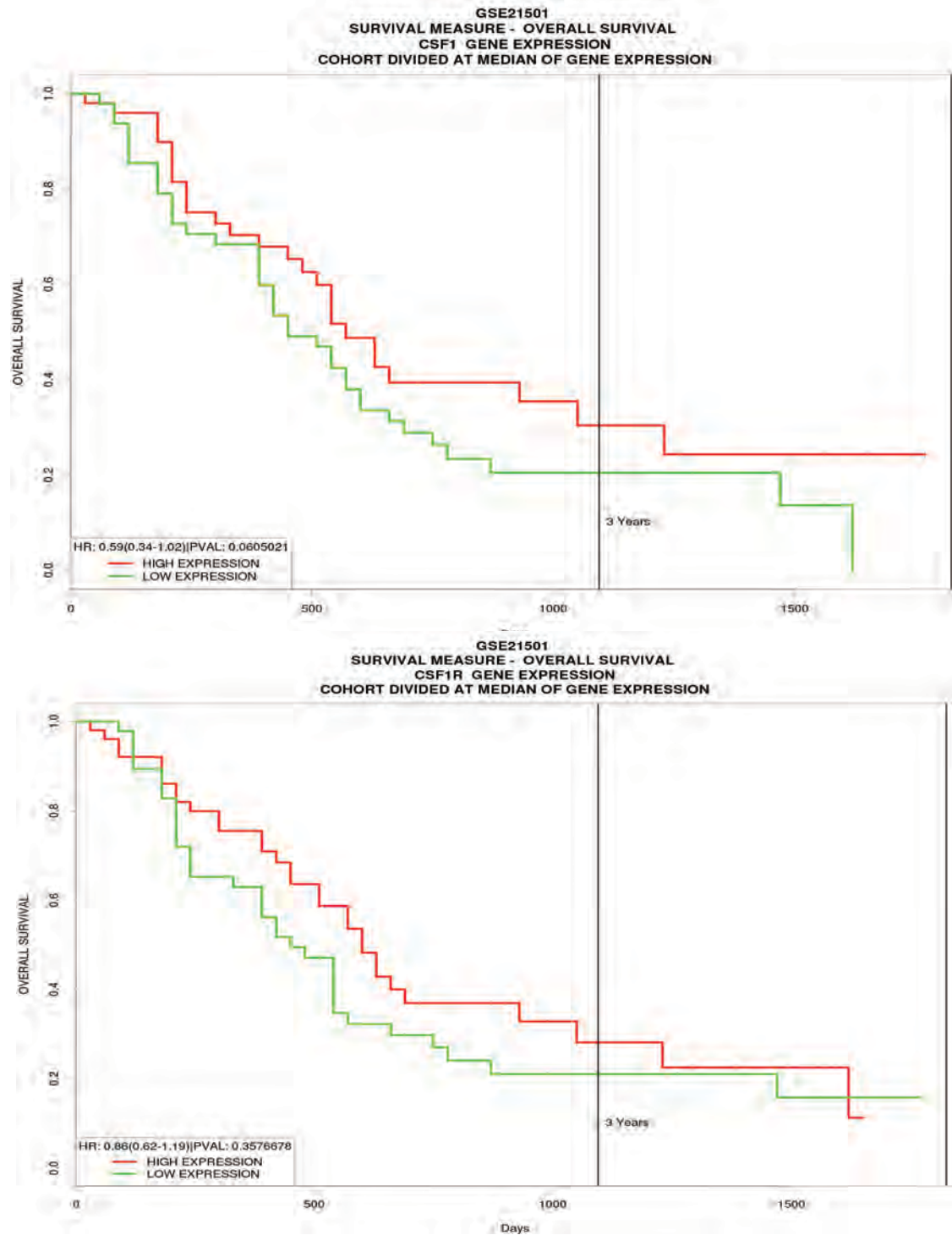
Stromnes, IM *et. al.*,

## Supplementary Figure 1



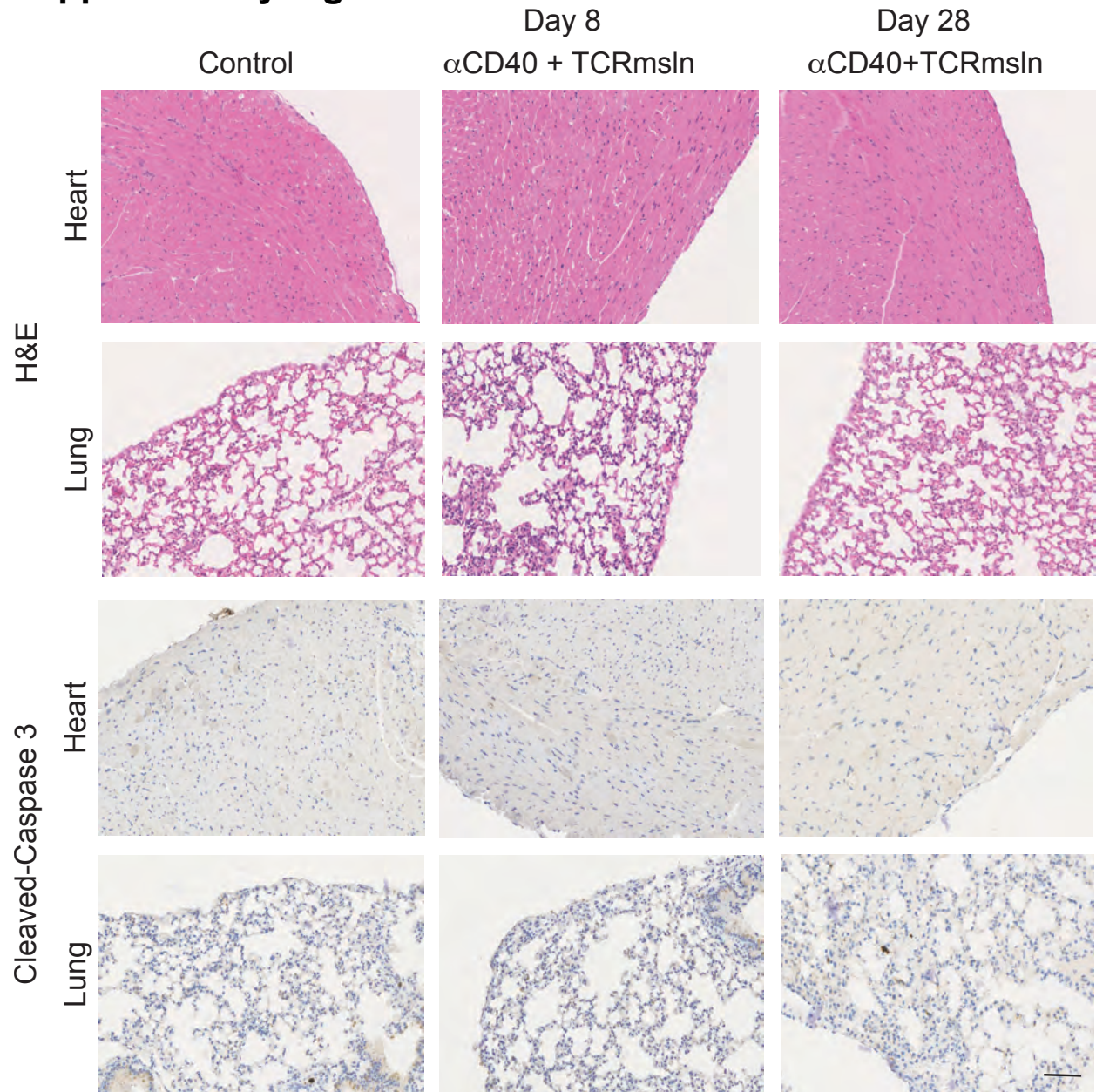
**Supplementary Figure 1.** Csf1R blockade + TCR<sub>Msln</sub> cell therapy disrupts fibroinflammation in autochthonous PDA. (a) Histological and immunohistochemical staining of tumors from representative *KPC* mice treated with T cell therapy ± αCD115 at day 8. Scale bar, 25 μm. (b) Histological and immunohistochemical staining of tumors from representative *KPC* mice treated with T cell therapy ± αCD115 at day 28. Scale bar, 25 μm. (c) Number of cleaved-caspase 3<sup>+</sup> (CC3) tumor cells per high power field (HPF) at 8 and 28 days post therapy. (d) Number of Ki67<sup>+</sup> tumor cells per HPF at day 8 and day 28 post T cell therapy. Average number of proliferating cells per mouse (n=3). Data are mean ± SEM. (e) Collagen levels in the tumor stroma were scored on a 0-4 scale (see Methods). The mean of the average score per mouse (n=3) were averaged and data are mean ± SEM. \* denotes p<0.05 and \*\* indicates p<0.005 (two-tailed unpaired Student's *t* test).

## Supplementary Figure 2



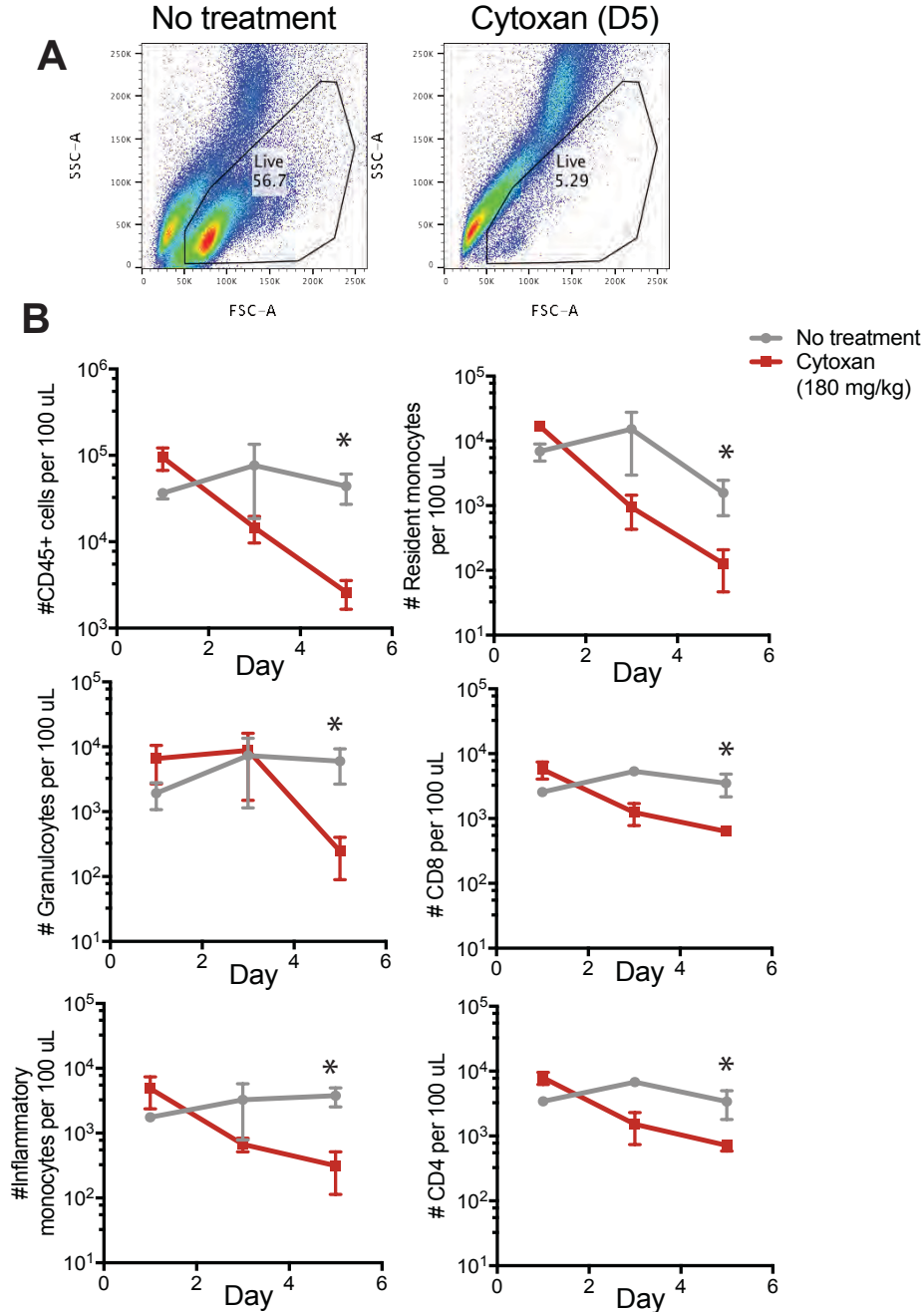
**Supplementary Figure 2.** Overall survival of pancreatic cancer patients that had high or low expression of CSF1 (top) or CSF1R (bottom) was determined by the ProgGene public database (<http://watson.compbio.iupui.edu/chirayu/proggen/database/index.php>).

### Supplementary Figure 3



**Supplementary Figure 3.** Analysis of normal tissues that express low levels of mesothelin following administration of  $\alpha$ CD40 + engineered T cells. Representative H&E staining and cleaved caspase 3 staining from mice that received T cell therapy +  $\alpha$ CD40 at 8 or 28 days post T cell transfer. Scale bar, 50 microns. Data are representative of n=3 mice per group.

## Supplementary Figure 4



**Supplementary Figure 4.** Administration of cyclophosphamide induces lymphopenia in mice. **A)** Representative FACS plots from the blood of mice treated with a single dose of cytoxan (180 mg/kg) at day 5. n=3 per group. **B)** Number of circulating immune cells in control or treated mice was determined by flow cytometry. n=3 mice per group. \*p<0.05, Student's t test