

Supplemental Figure Descriptions

Figure S1: Statistics for Immune Cell Densities Represented in Figure 2.

a) Immune cell density means with standard deviations are listed for UPS, ERMS, and ARMS. Paired comparison p-values calculated via Mann-Whitney t-test is on right end of table. The only statistically significant difference among the three sarcoma subtypes is CD163⁺ cell densities ($p < 0.05$). **b)** Correlation of CSF1R expression to CD163 density. In all STS subtypes, there is a positive correlation between CSF1R expression and CD163 density.

Figure S2 – Laser Capture Microdissection: Areas of tumor with TLS, and areas of tumor devoid of TLS, surveyed by immunohistochemistry were isolated by laser capture microdissection and extracted for RNA. Images here show the process of choosing areas of interest via microscopy and using laser technology to isolate specimen from slide.

Figure S3: a) Breakdown of CD4⁺ cells by Foxp3 status via MFC. Total means listed are frequency of events out of either CD4⁺/Foxp3⁺ or CD4⁺/Foxp3⁻ cells. **b)** Breakdown of CD8⁺ cells by PD-1 status. Total means listed are frequency of events out of either CD8⁺/PD-1⁺ or CD8⁺/PD-1⁻ cells. **c)** There is a positive correlation between PD-1 expression and IFN- γ production in CD8⁺ T-cells.

Figure S5: a) CIBERSORT immune deconvolution analysis in published LMS gene sets, compared with UPS gene sets. Heatmaps are representative of CIBERSORT relative immune fraction scores. **b)** CIBERSORT relative immune fraction score means with standard deviation of sarcoma subtypes. Comparison of means analyzed via 2way ANOVA, Tukey's multiple comparisons test. Highlighted cells are statistically significant with p values < 0.005 .

Abbreviations: SD = Standard Deviation; LMS: Leiomyosarcoma; UPS: Undifferentiated Pleomorphic Sarcoma.