**SUPPLEMENTAL MATERIALS**

**SUPPLEMENTAL FIGURE LEGENDS**

**Supplemental Figure 1.** Difference in CD3+ immune cell infiltrates by histologic subtype of mesothelioma, with epithelioid cases shown in blue or sarcomatoid/biphasic histology shown in red. The median and interquartile range for each graph are shown.

**Supplemental Figure 2.** Comparison of immune cell infiltrates among patients who received (red) or did not receive (blue) neoadjuvant chemotherapy prior to surgical resection of their tumor.

**Supplemental Figure 3.** Quantification of monocyte subtypes in tumor samples. Percentages for CD33+ myeloid derived suppressor cells (MDSCs, CD14high/HLA-DRlow), as well as for CD14+ CD16- and CD14+ CD16+ monocytes are shown for PD-L1 negative (blue) and PD-L1 positive (red) tumors. The median and interquartile range are shown.

**Supplemental Figure 4.** Comparison of immune cell infiltrates by mutational subtype in mesothelioma samples. Panel (**A**) shows the fraction of live cells that were CD45+ in *BAP1* wild-type (wt, blue) or *BAP1* mutant (red) samples. Panel (**B**) shows the fraction of live cells that were CD45+ in *NF2* wild-type (wt, blue) or *NF2* mutant (red) samples. The median and interquartile range for each graph are shown.

**Supplemental Figure 5.** Statistical analysis of t-SNE maps from **Figure 6**. (**A**) Violin plot showing tumor histologic subtype compared to the distance from the center of the Normal Cluster. Linear regression analysis of CD3+ cells (**B**) and CD66b+ cells (**C**) as a distance from the Normal Cluster. (**D**) Violin plot showing PD-L1 immunohistochemical staining compared to the distance from the Normal Cluster. Linear regression analysis of CD8+ cells that were TIM-3+/PD-1+ (**E**) or CD4+ cells that were FOXP3+ (**F**) as a distance from the Normal Cluster. In the violin plots (**A**,**D**), the median and quantiles are shown in the box plots. In the linear regression plots (**B**,**C**,**E**,**F**), shaded regions indicate the 95% confidence interval.

**Supplemental Figure 6.** Kaplan-Meier overall survival analysis for patients according to histologic subtype (**A**), PD-L1 immunohistochemical status (**B**), and CD3 infiltration as assessed by either flow cytometry (**C**) or immunohistochemistry (**D**). In panels **C** and **D**, “low” and “high” CD3 status was defined as being below or above the median CD3 value, respectively.

**SUPPLEMENTAL FIGURES**

**Supplemental Figure 1**

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**Supplemental Figure 2**

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**Supplemental Figure 3**

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**Supplemental Figure 4**

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**Supplemental Figure 5**

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**Supplemental Figure 6**

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