

## **Description of Additional Supplementary Files**

### Supplementary Data 1

Description: Differential gene expression of cell types in the VS TME

### Supplementary Data 2

Description: Gene signatures for cell types identified in studies of murine peripheral nerves

### Supplementary Data 3

Description: Somatic variants detected using whole exome sequencing.

### Supplementary Data 4

Description: InferCNV HMMI3 region data

### Supplementary Data 5

Description: Passing filter copy number altered segments from whole exome sequencing data.

### Supplementary Data 6

Description: DEGs of Schwann cell subtypes

### Supplementary Data 7

Description: GO BP enrichment among VS-SC subpopulations

### Supplementary Data 8

Description: DEGs of stromal cell subpopulations

### Supplementary Data 9

Description: DEGs of NK and T-cell subpopulations

### Supplementary Data 10

Description: Myeloid cell metaprogram genes

### Supplementary Data 11

Description: Imputed Cibersortx cell type fractions

### Supplementary Data 12

Description: CellChat Ligand-Receptor Predictions

### Supplementary Data 13

Description: Probes added to IDT IDT Exome Hyb Panel v2 for whole exome sequencing.

### Supplementary Data 14

Description: Sequencing QC Data

### Supplementary Data 15

Description: Single Cell ATAC Sequencing Cell Metadata

### Supplementary Data 16

Description: Single Cell RNA Sequencing Cell Metadata