

Supplementary Data Description

Supplementary Data 1: Cohort description and clinical associations to PASC checklist items

Description: Description of sheets and columns

Cohort Description: Population description for core cohort of 182 subjects analyzed

Symptom Prevalence: Table of prevalence of PASC symptoms in COVID-19 cases and controls

Symptoms vs. Clinical Data: Table of tests for dependence of PASC symptoms on medications, labs, and comorbidities

Symptoms vs. Anti-Spike Ab: Table of tests for dependence of PASC symptoms on anti-Spike antibody titers

Symptoms vs. Cell Type Fraction: Table of tests for dependence of PASC symptoms on estimated cell type fractions

Supplementary Data 2: Marker gene enrichments in cell-type-specific DEGs

Description: Description of sheets and columns

No Serology Adjustment: Cell type marker enrichment results for cell-type-specific DEGs with no serology adjustment

Serology Adjustment: Cell type marker enrichment results for cell-type-specific DEGs with serology adjustment

Supplementary Data 3: PASC checklist items DE signatures before controlling for anti-spike antibody titers

Description: Description of sheets and columns

B cells memory: Table of significant DEGs (adj.P.Val \leq 0.05) for B cells memory for all PASC symptoms without serology adjustment.

Macrophages M0: Table of significant DEGs (adj.P.Val \leq 0.05) for Macrophages M0 for all PASC symptoms without serology adjustment.

Macrophages M1: Table of significant DEGs (adj.P.Val \leq 0.05) for Macrophages M1 for all PASC symptoms without serology adjustment.

Mast cells resting: Table of significant DEGs (adj.P.Val \leq 0.05) for Mast cells resting for all PASC symptoms without serology adjustment.

Monocytes: Table of significant DEGs (adj.P.Val \leq 0.05) for Monocytes for all PASC symptoms without serology adjustment.

Neutrophils: Table of significant DEGs (adj.P.Val \leq 0.05) for Neutrophils for all PASC symptoms without serology adjustment.

NK cells resting: Table of significant DEGs (adj.P.Val \leq 0.05) for NK cells resting for all PASC symptoms without serology adjustment.

Plasma cells: Table of significant DEGs (adj.P.Val \leq 0.05) for Plasma cells for all PASC symptoms without serology adjustment.

T cells CD4 memory activated: Table of significant DEGs (adj.P.Val \leq 0.05) for T cells CD4 memory activated for all PASC symptoms without serology adjustment.

T cells CD4 memory resting: Table of significant DEGs (adj.P.Val \leq 0.05) for T cells CD4 memory resting for all PASC symptoms without serology adjustment.

T cells CD8: Table of significant DEGs (adj.P.Val \leq 0.05) for T cells CD8 for all PASC symptoms without serology adjustment.

T cells follicular helper: Table of significant DEGs (adj.P.Val \leq 0.05) for T cells follicular helper for all PASC symptoms without serology adjustment.

T cells gamma delta: Table of significant DEGs (adj.P.Val \leq 0.05) for T cells gamma delta for all PASC symptoms without serology adjustment.

Whole Blood: Table of significant DEGs (adj.P.Val \leq 0.05) for Whole Blood for all PASC symptoms without serology adjustment.

Supplementary Data 4: GO term enrichments for PASC checklist items DE signatures

Description: Description of sheets and columns

B cells mem. NoTA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for B cells memory for all PASC symptoms without serology adjustment.

Macrophages M0 NoTA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for Macrophages M0 for all PASC symptoms without serology adjustment.

Macrophages M1 NoTA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for Macrophages M1 for all PASC symptoms without serology adjustment.

Mast cells rest NoTA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for Mast cells resting for all PASC symptoms without serology adjustment.

Monocytes NoTA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for Monocytes for all PASC symptoms without serology adjustment.

Neutrophils NoTA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for Neutrophils for all PASC symptoms without serology adjustment.

NK cells rest NoTA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for NK cells resting for all PASC symptoms without serology adjustment.

Plasma cells NoTA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for Plasma cells for all PASC symptoms without serology adjustment.

T cells CD4 mem. act. NoTA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for T cells CD4 memory activated for all PASC symptoms without serology adjustment.

T cells CD4 mem. rest NoTA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for T cells CD4 memory resting for all PASC symptoms without serology adjustment.

T cells CD8 NoTA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for T cells CD8 for all PASC symptoms without serology adjustment.

T cells gamma delta NoTA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for T cells gamma delta for all PASC symptoms without serology adjustment.

B cells mem. TA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for B cells memory for all PASC symptoms with serology adjustment.

Macrophages M1 TA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for Macrophages M1 for all PASC symptoms with serology adjustment.

Monocytes TA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for Monocytes for all PASC symptoms with serology adjustment.

Neutrophils TA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for Neutrophils for all PASC symptoms with serology adjustment.

NK cells rest TA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for NK cells resting for all PASC symptoms with serology adjustment.

Plasma cells TA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for Plasma cells for all PASC symptoms with serology adjustment.

T cells CD4 mem. act. TA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for T cells CD4 memory activated for all PASC symptoms with serology adjustment.

T cells CD4 mem. rest TA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for T cells CD4 memory resting for all PASC symptoms with serology adjustment.

T cells CD8 TA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for T cells CD8 for all PASC symptoms with serology adjustment.

T cells gamma delta TA: Table of significantly enriched (adj.P.Val \leq 0.05) Gene Ontology terms for T cells gamma delta for all PASC symptoms with serology adjustment.

Supplementary Data 5: PASC checklist items DE signatures while controlling for anti-spike antibody titers

Description: Description of sheets and columns

B cells memory: Table of significant DEGs (adj.P.Val \leq 0.05) for B cells memory for all PASC symptoms with serology adjustment

Macrophages M0: Table of significant DEGs (adj.P.Val \leq 0.05) for Macrophages M0 for all PASC symptoms with serology adjustment

Macrophages M1: Table of significant DEGs (adj.P.Val \leq 0.05) for Macrophages M1 for all PASC symptoms with serology adjustment

Mast cells resting: Table of significant DEGs (adj.P.Val \leq 0.05) for Mast cells resting for all PASC symptoms with serology adjustment

Monocytes: Table of significant DEGs (adj.P.Val \leq 0.05) for Monocytes for all PASC symptoms with serology adjustment

Neutrophils: Table of significant DEGs (adj.P.Val \leq 0.05) for Neutrophils for all PASC symptoms with serology adjustment

NK cells resting: Table of significant DEGs (adj.P.Val \leq 0.05) for NK cells resting for all PASC symptoms with serology adjustment

Plasma cells: Table of significant DEGs (adj.P.Val \leq 0.05) for Plasma cells for all PASC symptoms with serology adjustment

T cells CD4 memory activated: Table of significant DEGs (adj.P.Val \leq 0.05) for T cells CD4 memory activated for all PASC symptoms with serology adjustment

T cells CD4 memory resting: Table of significant DEGs (adj.P.Val \leq 0.05) for T cells CD4 memory resting for all PASC symptoms with serology adjustment

T cells CD8: Table of significant DEGs (adj.P.Val \leq 0.05) for T cells CD8 for all PASC symptoms with serology adjustment

T cells follicular helper: Table of significant DEGs (adj.P.Val \leq 0.05) for T cells follicular helper for all PASC symptoms with serology adjustment

T cells gamma delta: Table of significant DEGs (adj.P.Val \leq 0.05) for T cells gamma delta for all PASC symptoms with serology adjustment

Whole Blood: Table of significant DEGs (adj.P.Val \leq 0.05) for Whole Blood for all PASC symptoms with serology adjustment

Supplementary Data 6: Cell-type mapping for marker gene enrichments

Description: Description of sheets and columns

DEG Cell Type mappings: Table of cell type mappings from LM22 reference to broad categories used to assemble lists of cell-type specific DEGs

Marker Gene Cell Type Mappings: Table of cell type mappings used to annotate cell type marker genes to broad categories from the scientific literature