Figure e-1. Enrichment analysis of the differentially expressed isoforms.

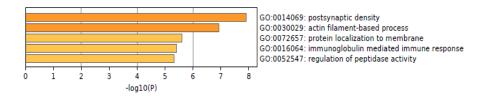


Figure e-1. The five most significant Gene ontology and KEGG pathway enrichment analyses obtained from the list of isoforms showing a significant differential usage.

**Figure e-2.** Enrichment analysis of the genes uniquely affected from the transcript model approach.

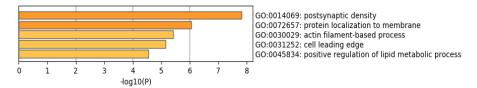


Figure e-2. The five most significant Gene ontology and KEGG pathway enrichment analyses obtained from the list of genes uniquely affected as a result of differentially expressed isoforms.

**Figure e-3.** Enrichment analysis of the genes uniquely identified from the gene model approach.

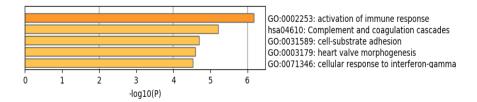


Figure e-3. The five most significant Gene ontology and KEGG pathway enrichment analyses obtained from the list of genes uniquely affected as a result of differentially expressed genes.

Figure e-4. Cell type composition in the ALS and HC motor cortex.

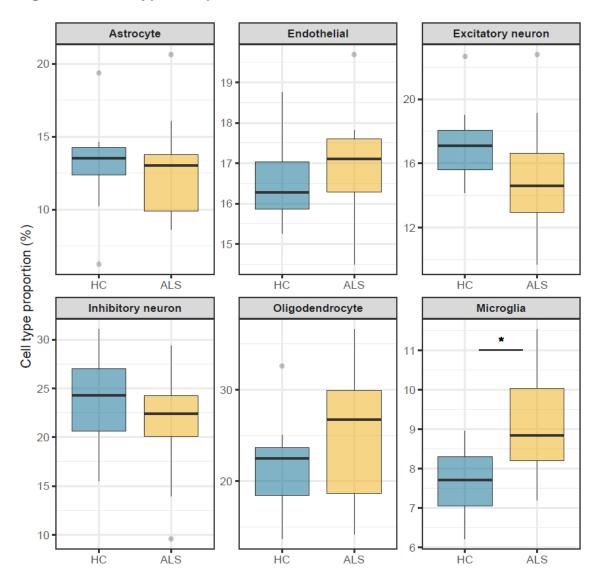


Figure e-4. Estimation of cell-type proportions by MuSiC using the Allen Brain Atlas human single-nucleus RNAseq dataset<sup>10</sup>.

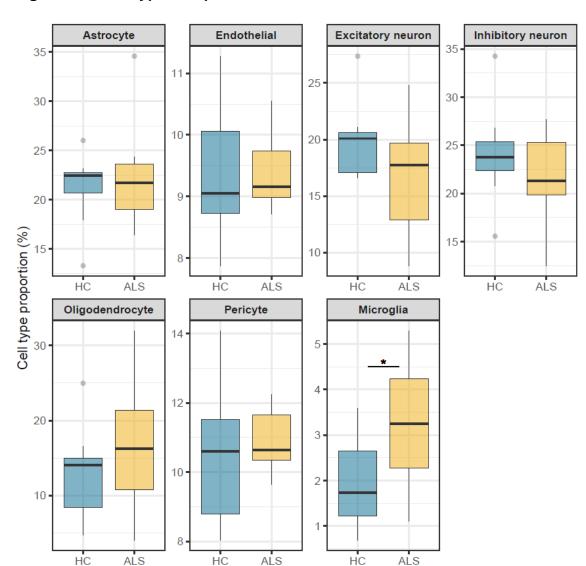


Figure e-5. Cell type composition in the ALS and HC motor cortex.

Figure e-5. Estimation of cell-type proportions by MuSiC using the human single-nucleus RNAseq dataset from Lake and collaborators<sup>11</sup>.

Figure e-6. Correlation between TREM2 expression and Mic1 proportion.

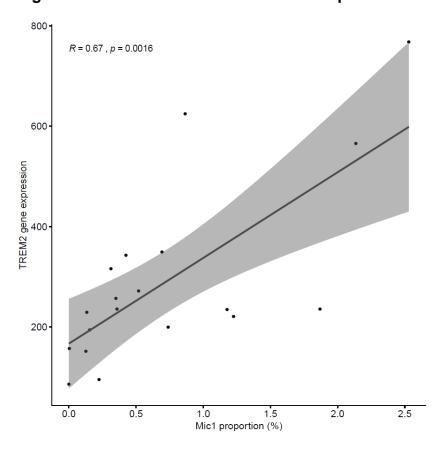


Figure e-6. Correlation between the expression of *TREM2* and the estimates of Mic1 proportion in the individuals included in this study.

Figure e-7. Analysis of the density of microglial cells.

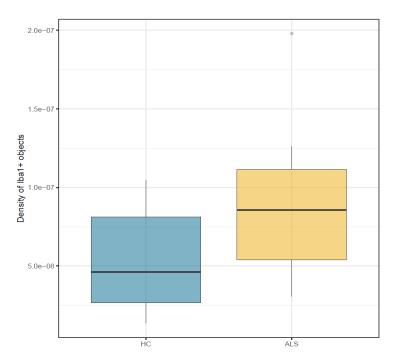


Figure e-7. Density of lba1+ objects for each postmortem individual included in this study.

Figure e-8. Analysis of the proportion of Mic1 (DAM) cells.

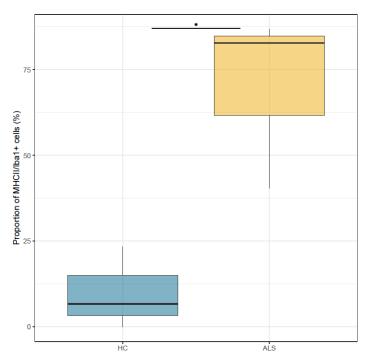


Figure e-8. Proportion of Iba1+ cells expressing MHC class II markers in the motor cortex of HC and ALS patients.

Figure e-9. Analysis of pTDP43 aggregation in the ALS and HC motor cortex.

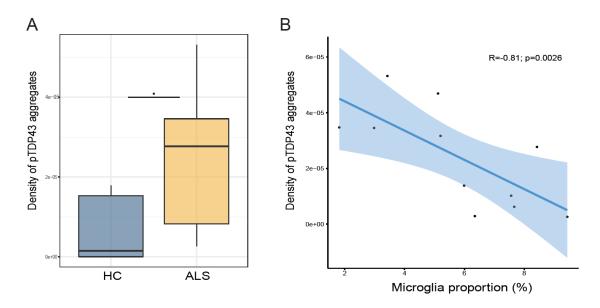


Figure e-9. Density of pTDP43 aggregates for each postmortem individual included in this study (A). Correlation between the burden of pTDP43 aggregates and the estimates of microglial proportion (B).