

Description of Additional Supplementary Files

File name: Supplementary Data 1

Description: PCA score matrix derived from rat CSF EV miRNA sequencing.

File name: Supplementary Data 2

Description: Raw counts per million (CPM) values for miRNAs detected in CSF- and plasma-derived EVs.

File name: Supplementary Data 3

Description: Differential expression analyses for CSF and plasma miRNAs (normalized expression levels, FDR-adjusted P-values, log₂ fold changes).

File name: Supplementary Data 4

Description: qPCR results for miR-9a-3p levels in rat CSF-derived EVs.

File name: Supplementary Data 5

Description: qPCR-based expression profiles of miR-9a-3p across distinct CNS regions (Sheets 1–5).

File name: Supplementary Data 6

Description: Cellular localization data of miR-9a-3p based on FISH and immunostaining in astrocytes, neurons, oligodendrocytes, and microglia.

File name: Supplementary Data 7

Description: CPM values from EV miRNA-seq of human CSF samples comparing control, non-recovery, and recovery groups (two worksheets).

File name: Supplementary Data 8

Description: $\Delta\Delta CT$ values from in vitro qPCR analysis validating miR-9-3p overexpression using AAV vectors.

File name: Supplementary Data 9

Description: Transcriptomic changes in human motor neurons following lentiviral miR-9-3p transduction (CPM values from RNA sequencing).

File name: Supplementary Data 10

Description: Gene ontology (GO) enrichment analysis results based on the motor neuron RNA-seq data (two worksheets: highly vs. lowly expressed genes).