'A silent killer': COVID-19 shown to trigger inflammation in the brain

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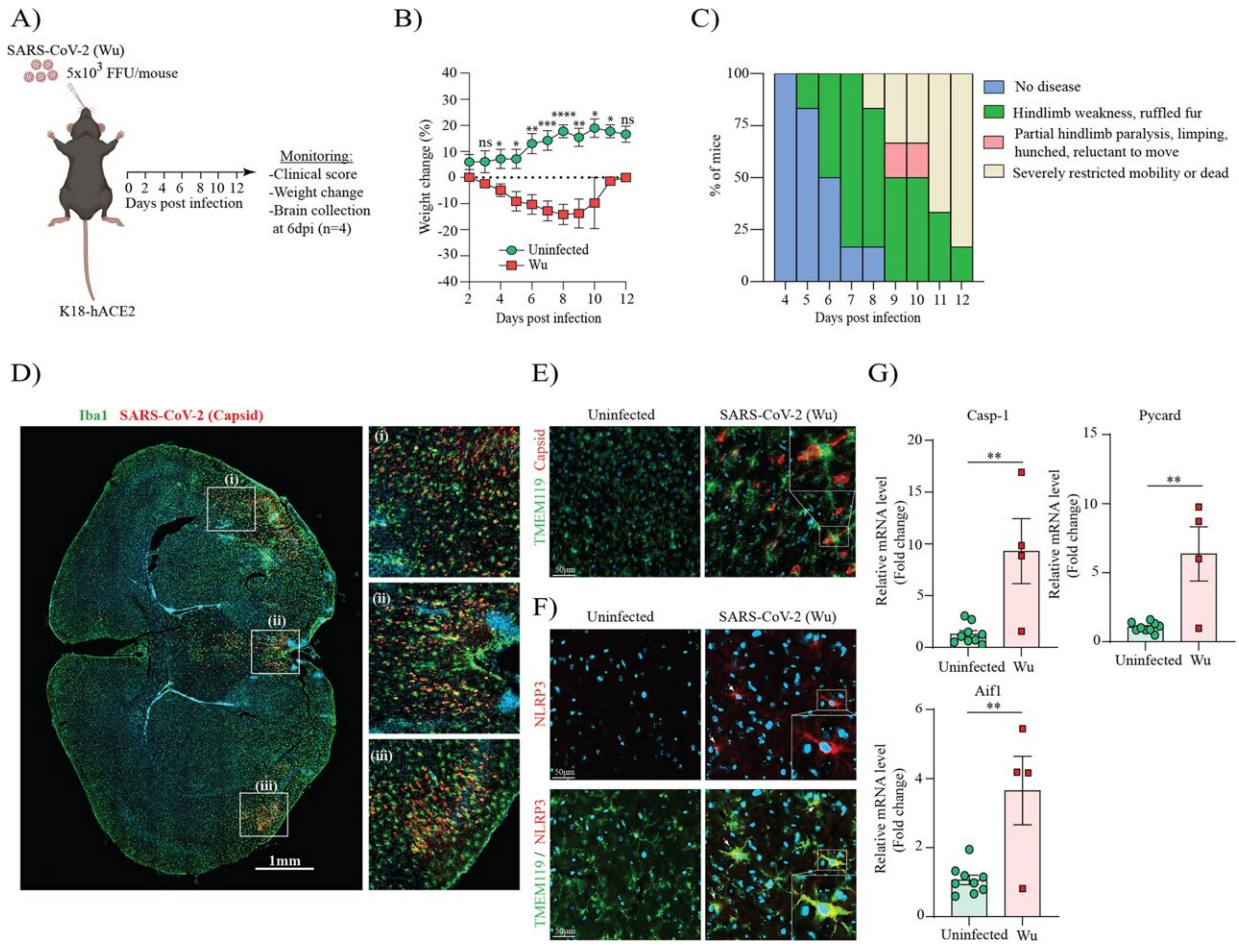

SARS-Cov-2 infected K18-hACE2 mice display virus spread in the brain with extensive microglial activation and NLRP3 inflammasome upregulation. Schematic representation for viral infection in (A). Percentage weight loss up to 12 days post infection (n=6 per group) in (B). Clinical score up to 12 days post SARS-CoV-2 infection (n = 6 per group) in (C). Representative SARS-CoV-2 infected brain at 6 dpi showing microglia marker Iba-1 (in green) and SARS-

CoV-2 nucleocapsid (in red) and cell nuclei (in blue) assessed by immunofluorescence staining (n = 4 per group) in (D). Representative uninfected and SARS-CoV-2 infected brains showing microglial marker TMEM119 (in green) and SARS-CoV-2 nucleocapsid (in red) and cell nuclei (in blue) in (E). Representative uninfected and SARS-CoV-2 infected brains showing microglia marker TMEM119 (n = 4 per group) (in green) and NLRP3 (in red) and cell nuclei (in blue) in (F). Relative mRNA expression of Caspase-1 (Casp-1), Pycard (ASC) and Aif1 (Iba1) in uninfected and SARS-CoV-2 infected brains (n = 4–8 per group) in (G). Data points are means ± SEM from at least four mice per group. *P