SUPPLEMENTARY INFORMATION

GLOSSARY

**Macrophages**: Tissue resident myeloid cells with immunoregulatory properties in lymphoid and non-lymphoid organs such as the brain. Involved in tissue homeostasis during health, development and disease by clearance of apoptotic/necrotic cells, production of growth factors and inflammatory/antiinflammatory molecules. Mobile within tissues. Equipped with numerous pathogen-recognition and chemokine receptors for active sensing and responding.

**Microglia**: Macrophages of the CNS that immigrate into the developing neuroectoderm early during ontogenesis. Long half life that encompasses potentially the whole life of the individual. Limited turnover with blood hematopoietic cells. Undergo instead local self renewal. Can adopt surface marker and functions of dendritic cells or activated blood monocytes.

**Monocytes**: Circulating myeloid cells in the blood, bone marrow and spleen that expand upon activation. Produce subsequently inflammatory and toxic molecules and phagocytose dead cells. Can differentiate into inflammatory dendritic cells or macrophages during disease. In mice, two different populations, namely “inflammatory” Ly-6C^hi^CCR2^*^CX3CR1^lo^ monocytes and “resident” Ly-6C^lo^CCR2^*^CX3CR1^hi^ monocytes were described.

**Mononuclear phagocytes of the CNS**: Phagocytic cells found in the CNS. Brain endogenous myeloid cells such as microglia as well as immigrated myeloid cells (mostly monocytes) from the circulation can become activated mononuclear phagocytes independent from their developmental origin.
Bone-marrow-derived phagocytes (BM-DP): Describe the mononuclear myeloid cells that engraft into the diseased CNS (e.g. Alzheimer’s disease, irradiation injury etc.) with subsequent similar features of dendritic cells or endogenous microglia in terms of localization, marker and/or morphology. Presumably functionally different from the plethora of endogenous microglia engrafted during embryogenesis.