Theme: ……..

The title should be concise, informative and as short as possible

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Presence of immunoglobulin oligoclonal bands in the cerebrospinal fluid of Multiple Sclerosis (MS) patients supports the hypothesis of an infectious etiology, although their antigenic targets remain elusive. Neurotropic mouse hepatitis virus (MHV) infection in mice provides a useful tool for studying mechanisms of demyelination in a virus-induced experimental model of MS. This study uses Affymetrix microarray analysis to compares differential spinal cord mRNA levels between mice infected with demyelinating and non-demyelinating strains of MHV to identify host immune genes expressed in this demyelinating disease model. The study reveals that during the acute stage of infection, both strains induce inflammatory innate immune response genes, whereas upregulation of several immunoglobulin genes during chronic stage infection is unique to infection with the demyelinating strain. Results suggest demyelinating strain induced innate-immune response during acute infection may promote switching of Ig isotype genes during chronic infection that could potentially play a role in antibody-mediated progressive demyelination even after viral clearance.

Key words: Keyword1; Keyword2; Keyword3; Keyword4.

