

## **Analysis of the expression of laminin alpha-4 on choroid plexus tissue**

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### Research question and background

We recently detected melanoma cell adhesion molecule (MCAM) positive T cells in white matter lesions as well as in the gray matter of MS patients, suggesting that lymphocytes might employ MCAM as adhesion molecule for trafficking into the CNS. Studies suggest laminin-411 ( $\alpha4\beta1\gamma1$ ) as a ligand for MCAM. We therefore aim to investigate whether laminin  $\alpha4$  is expressed on choroid plexus tissue of Multiple Sclerosis (MS) patients. The choroid plexus is a possible entry sites for lymphocytes into the central nervous system (CNS).

### Methods and tissues used

Formalin fixed paraffin embedded tissue sections containing choroid plexus tissue of MS patients were used. For immunofluorescence studies assessing the expression of laminin  $\alpha4$  on the choroid plexus samples were stained with primary antibodies directed against laminin alpha 4. For the staining amplification with TSATM Plus Biotin kit was done according to the manufacturers instruction.

### Results and conclusion

Further stainings are needed to clarify whether laminin  $\alpha4$  is expressed on choroid plexus tissue.