

# Signature Antibody Detection for anti-NMDAR Encephalitis with preceding Herpes Simplex Encephalitis (SAD NEWS)



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Diagnostic



Neurology & Autoimmunity

## SUMMARY

Herpes simplex encephalitis (HSE) is the most common viral encephalitis globally. Within three months of infection, ~23% of HSE patients develop a secondary autoimmune anti-NMDAR encephalitis (NMDARE), associated with worse long-term outcomes. NMDARE patients can achieve remarkable improvements under adequate immunosuppressive therapies. However, delayed treatment correlates with poor outcome.

The team has identified a distinctive antibody signature in HSE/NMDARE patients and aims to develop a diagnostic test that allows identification of patients at risk for secondary NMDARE after HSE. In the future, early interventions may help to prevent secondary autoimmunity and associated long-term morbidity.

## PROJECT GOALS

- Optimize and validate a prototype assay to detect predictive signature antibodies
- Develop a score for risk evaluation

## LONG-TERM GOALS

- Perform clinical study and certification as IVD
- Outlicense to IVD company