

## Division of Laboratory Medicine

Immunology

# NMDA – N-methyl-D-aspartate receptor antibodies

### Referred to:

Clinical Laboratory Immunology  
Churchill Hospital  
Churchill Drive  
Old Road  
Headington  
Oxford  
OX3 7LE  
UK

## General information

**Indication:** Cerebral dysfunction. Paraneoplastic encephalitis associated with immature teratoma of the ovary.

**Specimen transport:** At room temperature

**Repeat frequency:** At change of clinical symptoms

**Special precautions:** None

## Laboratory information

**Normal reference range:** Negative

**Volume and sample type:** A paired 0.5mL serum and 0.5mL CSF sample, although plasma is acceptable.

**Method:** Cell based assay/Immunofluorescence Microscopy

**Turnaround time:** (calendar days from sample receipt to authorised result): Median - 16, 95th percentile - 34

## Clinical information

**Indications for the test:** NMDA receptor antibodies are associated with the different sub units of the NMDA receptor. Antibodies to the delta or NR2 subunits of NMDA receptor are associated with limbic encephalitis, systemic lupus erythematosus (SLE), ataxia and epilepsy partialis continua. Antibodies against the NR1, NR2A and NR2B subunits of the NMDA are found in patients presenting with psychiatric symptoms, amnesia, seizures, dyskinesias, autonomic dysfunction and loss of consciousness. In women younger than 45 years, a form of encephalitis associated with ovarian teratoma and presenting with seizures and psychiatric symptoms has been described.

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For additional information please see our referral laboratory's user guide:

<http://www.ouh.nhs.uk/immunology/diagnostic-tests/tests-catalogue/nmda-antibodies.aspx>

**(Last updated May 2018)**