Immunological testing for **autoimmune encephalitis**

Encephalitis Antibody Evaluation

Clinical clues to autoimmune encephalitis

Autoimmune encephalitis is a relatively new category of immune-mediated disease involving the central nervous system.[1] It can impair function, and present via a subacute onset of memory disturbance, cognitive impairment, seizures, psychosis, and a loss of consciousness or even coma.

The direct causes of autoimmune encephalitis are unknown; it is often accompanied by a paraneoplastic disorder or exposure to common bacteria (streptococcus or mycoplasma pneumonia, with or without active infection).

The importance of an early diagnosis

Autoimmune encephalitis can be a difficult clinical diagnosis for physicians due to:

- Overlapping clinical, imaging, and laboratory features that mimic other disorders
- Symptoms that can appear at various times and intensity

Following a complete clinical evaluation — including appropriate neuroimaging tests — screening tests that can identify the correct pathophysiology of autoimmune encephalitis can help physicians select an appropriate first-line therapy, which often consists of corticosteroids, IV immunoglobulin (IVIg), plasma exchange, or tumor removal.

Timely initiation of the appropriate therapy gives patients the best chance at a successful recovery.[1] Research shows that 50% of patients[2] with anti-NMDA receptor encephalitis show improvement within 4 weeks of receiving treatment, and 80% of patients have partial or complete recovery following treatment.[2]

A comprehensive testing solution that streamlines the path to diagnosis

The Autoimmune Encephalitis Evaluation from Quest Diagnostics delivers clear, positive identification of specific antibodies so you can start treatment quickly, and help your patients regain motor, executive, and cognitive functions that are often disabled while afflicted with the disorder.

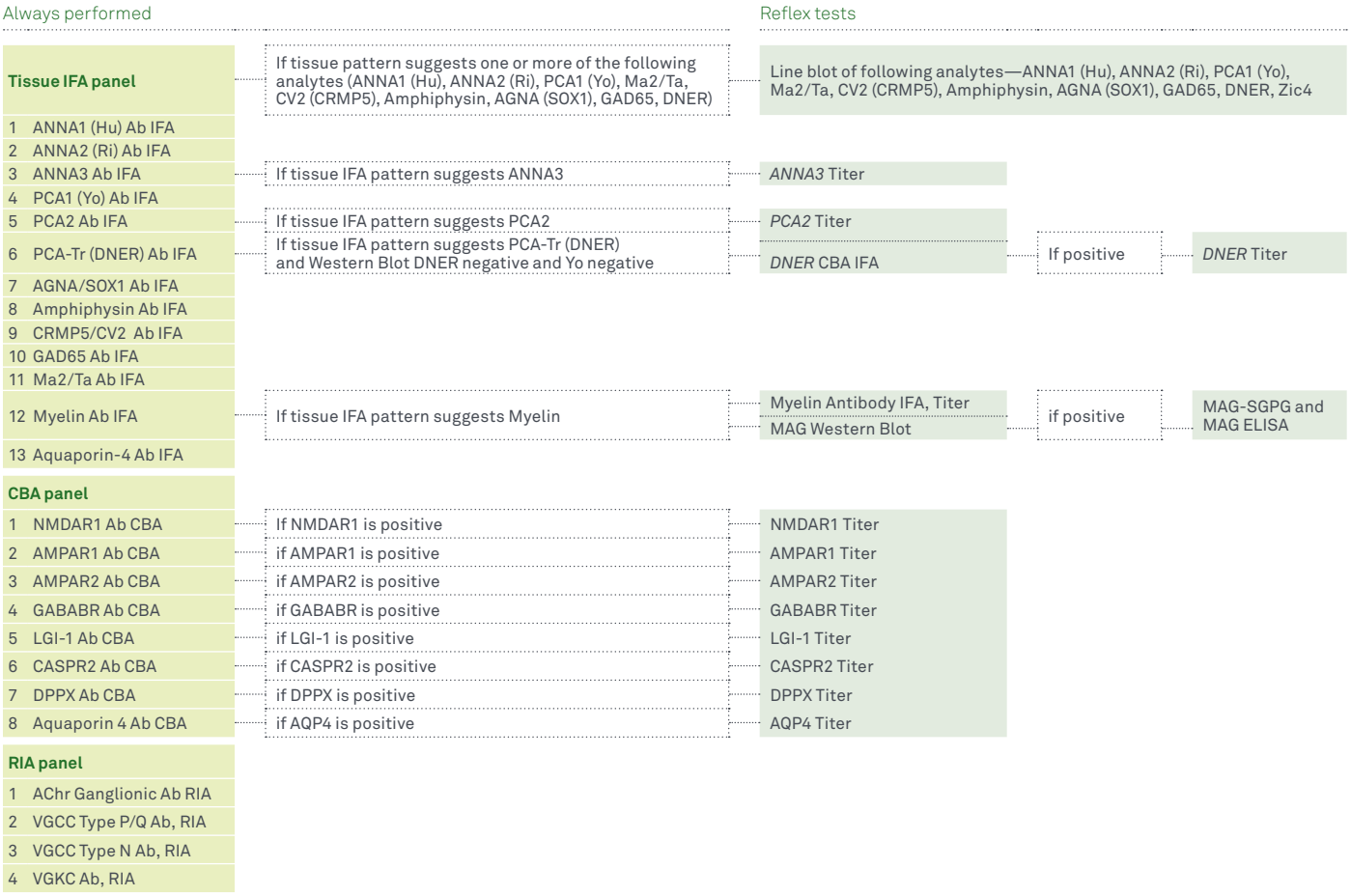
The panel is built on 25 antibodies commonly found in autoimmune encephalitis. A 7- to 14-day turnaround can be significant, allowing physicians to establish an effective treatment protocol and halt the progression of devastating symptoms.

When used in conjunction with other clinical testing, the Autoimmune Encephalitis Evaluation can help physicians make an informed diagnosis, improve patient outcomes, and increase the likelihood of recovery.

Quest Diagnostics™

Encephalitis Antibody Evaluation

The Encephalitis Antibody Evaluation with Reflex to Titer and Line Blot, Serum consists of three distinct panels, with the appropriate titer reflex if an antibody is positively identified.



Test ordering information

Test code	Test name	CPT codes*	Preferred specimen Red-top tube	Turnaround time	Specimen Stability		
					Ambient	Refrigerated	Frozen
94955	Encephalitis Antibody Evaluation with Reflex to Titer and Line Blot, Serum	86255 (x20), 86341, 83519 (x4)	Preferred volume: 6mL serum Minimum volume: 3.5mL	7–14 days	24 hours	48 hours	21 days

*The CPT codes provided are based on AMA guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payer being billed.

For alternative specimen options, please visit QuestDiagnostics.com.

Quest Diagnostics offers a comprehensive test menu for autoimmune diseases through the stages of care: screening, diagnosis, monitoring, and progress. Contact us by phone at 1.866.MY.QUEST (1.866.697.8378).

References

1. Kelley BP, Patel SC, Marin HL, et al. Autoimmune encephalitis: pathophysiology and imaging review of an overlooked diagnosis. *AJNR Am J Neuroradiol*. 2017;38(6):1070-1078. http://www.ajnr.org/content/38/6/1070. Accessed September 27, 2017.
2. Autoimmune Disease Statistics. American Autoimmune Related Diseases Association, Inc. https://www.aarda.org/news-information/statistics/. Accessed September 26, 2017.
3. Bost C, Pascual O, Honnorat J. Autoimmune encephalitis in psychiatric institutions: current perspectives. *Neuropsychiatr Dis Treat*. 2016; 12: 2775-2787. doi: 10.2147/NDT.S82380. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5089825/#b8-ndt-12-2775. Accessed September 25, 2017.
4. Titulaer MJ, McCracken L, Gabilondo I, et. al. Treatment and prognostic factors for long-term outcome in patients with anti-NMDA receptor encephalitis: an observational cohort study. *Lancet Neurol*. 2013 Feb; 12(2): 157-65. doi: 10.1016/s1474-4422(12)70310-1. Epub 2013 Jan 3. https://www.ncbi.nlm.nih.gov/pubmed/23290630. Accessed September 25, 2017.
5. Lancaster E, Martinez-Hernandez E, Dalmau J. Encephalitis and antibodies to synaptic and neuronal cell surface proteins. *Neurology*. 2011 Jul 12; 77(2):179-189. doi: 10.1212/WNL.0b013e318224afde. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3140073/. Accessed September 25, 2017.

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