

Patient ID 321	Patient Name IMPLEMENTATION, TEST T	Birth Date 1973-05-01	Sex F	Age 51
Order Number X100462302	Client Order Number X100462302	Ordering Physician UNKNOWN, PROVIDER	Report Notes	
Account Information C7028846 DLMP Rochester		Collected 01 May 2024 11:00		

CJD Evaluation, CSF

CJD Eval Interp, CSF

MCR

A positive RT-QuIC result with an elevated t-Tau/p-Tau (181) ratio is strongly suggestive of prion disease and in the correct clinical context fulfills the CDC diagnostic criteria of probable prion disease. A definite diagnosis of sporadic prion disease can only be established through neuropathological assessment of brain tissue.(1) These results should be interpreted in the appropriate clinical context along with other clinical and paraclinical findings.

The t-Tau/p-Tau (181) ratio has been reported to have higher diagnostic accuracy compared to total Tau or 14–3–3.(2,3)

The National Prion Disease Pathology Surveillance Center (NPDPS) coordinates autopsies and neuropathologic examinations on suspected prion disease cases as part of their ongoing surveillance program. The NPDPS may be able to offer a no-cost autopsy for this patient. If desired, they may be reached at 1–216–368–0587 or by email at cjdsurveillance@uhhospitals.org

In addition, patients with positive RT-QuIC results may be eligible for an experimental treatment trial for prion disease. For more information, please visit <https://case.edu/medicine/pathology/divisions/national-prion-disease-pathology-surveillance-center/treatment-trials>

References:

- <https://www.cdc.gov/prions/cjd/diagnostic-criteria.html>
- Hamlin C, Puoti G, Berri S, et al: A comparison of tau and 14–3–3 protein in the diagnosis of Creutzfeldt-Jakob disease. *Neurology*. 2012 Aug 7;79(6):547–52.
- Skillback T, Rosen C, Asztely F, Mattsson N, Blennow K, Zetterberg H: Diagnostic performance of cerebrospinal fluid total tau and phosphorylated tau in Creutzfeldt-Jakob disease: results from the Swedish Mortality Registry. *JAMA Neurol*. 2014 Apr;71(4):476–83.

Result Name	Value	Unit	Reference Value	Performing Site
 RT-QuIC Prion, CSF	Positive		Negative	1 MCR

Performing Site Legend

Code	Laboratory	Address	Lab Director	CLIA Certificate
MCR	Mayo Clinic Laboratories - Rochester Main Campus	200 First Street SW, Rochester, MN 55905	William G. Morice M.D. Ph.D	24D0404292
SDL	Mayo Clinic Laboratories - Rochester Superior Drive	3050 Superior Drive NW, Rochester MN 55905	William G. Morice M.D. Ph.D.	24D1040592

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Tau CJD Evaluation, CSF

Result Name	Value	Unit	Reference Value	Performing Site
 t-Tau/p-Tau 	33	ratio	≤18	SDL
 Total-Tau 	500	pg/mL	≤393	 2 SDL
ADDITIONAL INFORMATION The testing method is an electrochemiluminescence assay manufactured by Roche Diagnostics Inc. Values obtained with different assay methods or kits may be different and cannot be used interchangeably.				
Phospho-Tau(181P)	15.0	pg/mL		SDL
ADDITIONAL INFORMATION The testing method is an electrochemiluminescence assay manufactured by Roche Diagnostics Inc. Values obtained with different assay methods or kits may be different and cannot be used interchangeably.				

Received: 02 May 2024 11:35

Reported: 02 May 2024 11:40

Laboratory Notes

- This test was developed and its performance characteristics determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.
- This test has been modified from the manufacturer's instructions. Its performance characteristics were determined by Mayo Clinic in a manner consistent with CLIA requirements. This test has not been cleared or approved by the U.S. Food and Drug Administration.

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