Patient ID	Patient Name		Birth Date	Sex	Age
SA00178452	TESTINGRNV, REPORTS A		1964-11-11	M	61
Order Number	**Client Order Number**	**Ordering Physician**	**Report Notes**		
SA00178452	SA00178452	CLIENT,CLIENT			
Account Information		**Collected**			
C7028846 DLMP Rochester		03 Dec 2025 12:00			

Rapid Progress Dementia Eval, CSF

RPD Eval Interp, CSF

MCR

The cause of this patient's rapidly progressive dementia is likely prion disease.There is evidence of comorbid neuropathological changes associated with Alzheimer's disease. See individual interpretative test comments.

CJD Interpretation

A positive RT-QuIC result with a normal t-Tau/p-Tau (181) ratio is supportive 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 (NPDPSC) coordinates autopsies and neuropathologic examinations on suspected prion disease cases as part of their ongoing surveillance program. The NPDPSC 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:
1. https://www.cdc.gov/prions/cjd/diagnostic-criteria.html

2. 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.

3. 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.

If a non-prion neurodegenerative disease is suspected to be the cause of rapidly progressive dementia (RPD) in this patient, your patient may be eligible for the Bio-RaPID (Biomarkers and Rates of Progression in Dementia) study, providing assessments, follow-up, and testing via Mayo Clinic in Jacksonville, FL or Rochester, MN. This study aims to identify diagnostic and prognostic biomarkers and novel treatment targets with the potential to arrest or slow pathologic progression in patients with rapid and typical progressive Alzheimer's disease, Lewy body disease, frontotemporal lobar degeneration, and vascular cognitive impairment. To learn more or to refer a patient, please contact 904–953–6523.

Result Name	Value	Unit	Reference Value	Performing Site
Abn **RT-QuIC Prion, CSF**	**Positive**		Negative	1 MCR
t-Tau/p-Tau	10	ratio	≤18	SDL

Performing Site Legend

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

Patient ID	Patient Name		Birth Date	Sex	Age
SA00178452	TESTINGRNV, REPORTS A		1964-11-11	M	61
Order Number	**Client Order Number**	**Ordering Physician**	**Report Notes**		
SA00178452	SA00178452	CLIENT,CLIENT			
Account Information		**Collected**			
C7028846 DLMP Rochester		03 Dec 2025 12:00			

Alzheimer's Disease Evaluation, CSF

Result Name	Value	Unit	Reference Value	Performing Site
High **p-Tau/Abeta42**	**0.125**	ratio	≤0.028	SDL

AD Interpretation

SDL

The elevated p-Tau/Abeta42 ratio is consistent with the presence of pathological changes associated with Alzheimer's disease.

The p-Tau/Abeta42 ratio provides better concordance with amyloid Positron Emission Tomography (PET) imaging when compared to Abeta42, phospho-Tau and total-Tau individually. A cut-off of 0.028 provides optimal balance between negative % agreement (NPA) and positive % agreement (PPA) when compared to amyloid PET results. A p-Tau/Abeta42 ratio of ≤0.028 has a 92% NPA with normal amyloid PET. A ratio of >0.028 has a 92% PPA with abnormal amyloid PET.

Failure to adhere to the sample collection instructions provided in the Lab Test Catalog may result in falsely reduced Abeta42 concentrations; potentially affecting subsequent interpretations as well as the p-Tau/Abeta42 ratio.

The p-Tau assay measures p-Tau181 (Tau phosphorylated at threonine 181).

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.

Performing Site Legend

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SDL	Mayo Clinic Laboratories - Rochester Superior Drive	3050 Superior Drive NW, Rochester MN 55905	Nikola Baumann Ph.D.	24D1040592

MAYO CLINIC LABORATORIES

Patient ID	Patient Name		Birth Date	Sex	Age
SA00178452	TESTINGRNV, REPORTS A		1964-11-11	M	61
Order Number	**Client Order Number**	**Ordering Physician**	**Report Notes**		
SA00178452	SA00178452	CLIENT,CLIENT			
Account Information		**Collected**			
C7028846 DLMP Rochester		03 Dec 2025 12:00			

Result Name	Value	Unit	Reference Value	Performing Site
Low **Abeta42**	**200**	pg/mL	>834	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.				
Total-Tau	250	pg/mL		2 SDL
REFERENCE VALUE ≤ 238 (AD Evaluation) ≤ 393 (CJD Evaluation) 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.				
High **Phospho-Tau(181P)**	**25.0**	pg/mL	≤21.6	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: 04 Dec 2025 17:41 **Reported:** 05 Dec 2025 08:41

Laboratory Notes

1 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.

2 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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