

Key Conclusions

- ▶ CSF-TC quantification may serve as a valuable adjunct to MRI and CSF cytology for confirming suspected LMD and reducing diagnostic ambiguity
- ▶ Integration of CSF-TC analysis with NGS may provide molecular insights that inform personalized treatment decisions in CNS-involved metastatic disease
- ▶ Larger prospective studies are needed to validate diagnostic thresholds, refine clinical utility, and guide routine implementation of CSF liquid biopsy in LM workups

Background

This retrospective single institution analysis whether CSF tumor cell enumeration (TCE) with NGS could improve diagnostic confidence and inform clinical decision-making in patients with suspected LM.

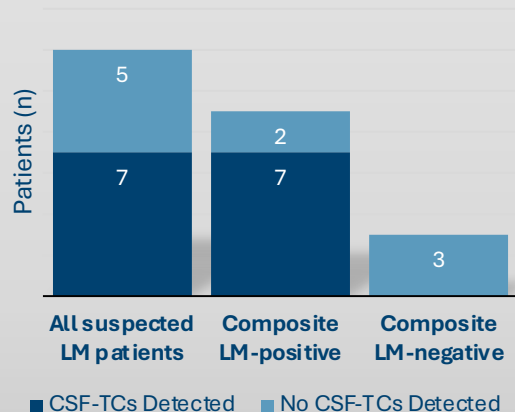
Methods

- ▶ Retrospective case series of 12 patients with suspected LMD evaluated at a single institution from October 2022 to October 2023
- ▶ CSF samples were analyzed using the CNSide assay for TCE and NGS, alongside standard MRI and CSF cytology
- ▶ Diagnostic performance was assessed using a composite LM-positive definition based on positive CSF cytology or unequivocal MRI findings

Results

1 CNSide detected CTCs in 7/12 patients

2 Using a cutoff of CSF-TC/mL >0, CNSide demonstrated 77.8% sensitivity



	Value
Sensitivity	77.8%
Specificity	100%
PPV	100%
NPV	60%
Accuracy	88.3%



CNSide®

During the time of data analysis and manuscript writing, CNSide was run as a Laboratory Developed Test at Biocept, Inc. in a California CLIA-certified and CAP-accredited laboratory. CNSide was acquired by Plus Therapeutics in May 2024, and the test was made commercially available in March 2026 by CNSide Diagnostics LLC, a wholly owned subsidiary of Plus Therapeutics, Inc.

Disclosure

None of the authors were employed by, or consultants for, Biocept during the time of data analysis and manuscript writing.

Study

This was a retrospective case series performed at a single institution on patients treated between October 2022 and October 2023 under an IRB approved protocol where the IRB agreed to waive consent.

Study Snapshot

This Study Snapshot was developed by CNSide Diagnostics, LLC. The source data for this Study Snapshot is a peer-reviewed publication by Onoichenco et. al. (Reference: "Utility of cerebrospinal fluid circulating tumor cell quantification and next-generation sequencing in patients with suspicion for leptomeningeal disease". *Neurooncol Adv.* 2026;8(1):vdag046.)

Regulatory Status

CNSide is a Laboratory Developed Test (LDT) for which safety and effectiveness have not yet been established. The test is labeled as RUO-Research Use Only. Not for diagnostic purposes.

Contact Information

CNSide Diagnostics, LLC
6420 Levit Green Blvd, Suite 210, Houston, TX 77021
Phone: 877-288-4174
Fax: 858-875-52009
Email: support@CNSide-Dx.com
Website: <https://www.CNSide-Dx.com>



Scan the Quick Response (QR) Code with a smart phone or tablet to link to the publication