

Clinician Q&A on Blood Tests for Alzheimer's Disease

This resource brings together practical guidance from clinicians experienced in the diagnosis and management of Alzheimer's disease on the use of blood tests. It is organized by common questions clinicians face, from patient selection and workup through test performance, coverage, and interpretation of results.

1 Are there Alzheimer's blood tests cleared by the FDA?

Key Takeaways:

- Blood tests serve two main roles: as a triage tool to decide who should go on for further testing, or as a confirmatory tool to identify amyloid pathology.
- There are currently four FDA cleared tests measuring different markers and covering different practice settings. Other lab-developed tests may also be available to you.

"Several tests are now FDA cleared and high performing. Importantly, some are cleared for use in primary care as well as specialty settings, which makes them a practical tool for clinicians across the board. A p-tau217 based test is frequently used by default."



Jeff Burns, MD University of Kansas

2 Are the results of blood tests accurate enough for the evaluation of Alzheimer's disease?

Key Takeaways:

- The accuracy of the test depends on several factors. Some tests provide a simple positive or negative result, while others include an "indeterminate" range in between.
- For a searchable database with more information on the performance of these tests visit www.alzdiagnostichub.org.

"The accuracy of an Alzheimer's blood test depends on the type of marker. Generally, p-tau217 tests are the most accurate for testing for the presence of Alzheimer's disease proteins in the brain. Several of these tests have an accuracy of 90 to 95%."



Kyra O'Brien, MD University of Pennsylvania

3 In what patient profiles and clinical situations would you consider ordering a blood test to evaluate Alzheimer's disease?

Key Takeaways:

- These tests are an important new resource for confirming an Alzheimer's diagnosis in patients with cognitive impairment. They are not recommended currently for asymptomatic patients or the "worried well."
- Patients with certain comorbidities such as kidney disease may want to consider an alternative option.

"A blood test makes the most sense for patients who already show measurable cognitive impairment and whose evaluation would benefit from knowing whether Alzheimer's pathology is present. That's especially valuable when a confirmed diagnosis could open the door to amyloid-targeting therapy, but it also applies when the answer simply helps the patient and family understand what they're facing and plan ahead. These tests are not meant for people without measurable cognitive symptoms."



Greg Cooper, MD Norton Healthcare

4 What clinical steps should be taken prior to ordering a blood test?

Key Takeaways:

- Confirm cognitive impairment first with a cognitive and functional assessment.
- Rule out other treatable causes and consider structural imaging, so the blood test result fits a complete clinical picture.

"Two clinical steps should be taken. First, a brief cognitive assessment combined with a functional assessment. Then evaluate for addressable causes, for example: screen for depression, anxiety, sleep apnea, and alcohol misuse, and check for thyroid abnormality and B12 deficiency. Have a conversation with patients and care partners about what the results of the test will mean."



Deanna Willis, MD Indiana University

5 What are the implications of a positive or negative test result, and how do you discuss the results with patients and caregivers?

Key Takeaways:

- Frame results as one input in the clinical picture, not a verdict; a result gains meaning alongside the history, exam, and reason for testing.
- Deliver results with clear next steps the patient can act on, and set aside time for the conversation, since this news carries weight for patients and families.

"A positive result indicates that a patient's cognitive impairment may be due to Alzheimer's disease. A negative result means their symptoms are not due to Alzheimer's disease. Patients and caregivers should be given written information on the result and its impact on their care plan, and they should be connected to psychosocial supports as needed."



Kyra O'Brien, MD University of Pennsylvania

Blood Tests for Alzheimer's Disease

6 What steps follow a positive blood test result, and do I still need a PET or CSF test?

Key Takeaways:

- For tests being used as a triage tool, a positive result would suggest a patient should proceed to further evaluation with a specialist. That may include testing such as PET or CSF.
- If being used as a confirmatory test, a positive result with a clear clinical picture can often stand on its own; when considering anti-amyloid therapy, most clinicians still confirm with PET or CSF today, though that is shifting.

"A positive blood test raises the likelihood of Alzheimer's pathology, but on its own it isn't a diagnosis. A blood test with high sensitivity and specificity can be used for diagnosis without confirmatory PET or CSF testing in appropriate clinical circumstances, such as a high pre-test probability. In some cases confirmation may be helpful: if the pre-test probability is high and the blood test is negative, a confirmatory test can rule out a false negative. For those who tested to better understand their condition, the result can still be informative and valuable in its own right."



Greg Cooper, MD Norton Healthcare

7 Is there value to a blood test even if the patient may not want or be eligible for a new disease-modifying treatment?

Key Takeaways:

- A blood test has value even when treatment is not an option, by telling families whether Alzheimer's is the likely cause of cognitive impairment and helping them plan ahead.
- Care stays the same either way, with symptom management, lifestyle interventions, and patient/caregiver support at the center.

"Yes. Even when a patient is not a candidate for or does not wish to pursue a disease-modifying treatment, the patient and caregivers can still find value in a blood test for the information it provides about the likelihood of Alzheimer's disease. Lifestyle modifications, care planning, and symptom management will continue to be the mainstay of treatment regardless of test results."



Deanna Willis, MD Indiana University

8 Are the blood tests covered by insurance?

Key Takeaways:

- Coverage and reimbursement are expanding: Medicare has set reimbursement rates and Anthem is the first major commercial insurer with an Alzheimer's blood test coverage policy, with more expected.
- Until more coverage policies are in place, patients can still be covered on a case by case basis. This varies by plan and region.

"Medicare has set reimbursement rates for immunoassay Alzheimer's blood tests, but a rate does not guarantee coverage. Until there is a national or local coverage policy, Medicare patients can still be covered on a case-by-case basis. Documenting cognitive impairment symptoms or a relevant MCI / dementia diagnosis is important in these situations. On the commercial side, some insurers have begun covering tests, but specific insurers and plans vary. Without a coverage policy, commercial patients can still be evaluated on a case-by-case as well."



Deanna Willis, MD Indiana University

9 What concerns, if any, do you have about the use of blood tests to diagnose Alzheimer's disease?

Key Takeaways:

- These tests perform best in patients with objective cognitive symptoms; primary care clinicians play a vital role in guiding who gets tested and interpreting what a result means.
- As direct-to-consumer testing grows, that clinical guidance is what keeps results meaningful and helps patients avoid confusion.

"The main concern is who gets tested. This test is useful for patients with a syndrome of mild cognitive impairment or dementia, cognitive change that is new, persistent, uncharacteristic, and corroborated by testing and family input. First the syndrome, then the test. In that situation positive predictive value is high and a positive result meaningfully increases confidence that Alzheimer's disease is driving the clinical picture. Outside that population predictive value falls and results become harder to interpret. This area is advancing rapidly, and there is a bright future for using these tests to stratify risk and apply prevention strategies, but that day has not yet arrived."



Jeff Burns, MD University of Kansas

Meet the Experts

Clinician Insights on Alzheimer's Disease Blood Tests



Kyra S. O'Brien, MD, MSHP

Assistant Professor of Neurology, University of Pennsylvania Perelman School of Medicine; Medical Director, Penn Medicine GUIDE Program; Senior Fellow, Penn Leonard Davis Institute of Health Economics

Dr. O'Brien is a board certified neurologist and dementia specialist who evaluates patients for neurodegenerative cognitive disorders at the Penn Memory Center. She earned her bachelor's degree in biology from Yale University and completed medical school, her neurology residency, a cognitive neurology fellowship, and a master's in health policy research at the University of Pennsylvania. Her research focuses on improving access to care for people living with Alzheimer's disease and related dementias and their care partners, with attention to the primary care setting and to the clinical utility and implementation of advances in Alzheimer's diagnostics, including plasma biomarkers.



Jeffrey M. Burns, MD, MS

Edward H. Hashinger Professor of Medicine; Co-Director, University of Kansas Alzheimer's Disease Research Center (KU ADRC)

Dr. Burns is a neurologist and co-director of the KU ADRC, one of the nation's designated Alzheimer's Disease Research Centers. He also directs the Department of Neurology's Neurocognitive Division and the KU ADRC's Clinical Core, a site for national clinical trial networks. He started the Alzheimer's clinical research program at the University of Kansas Medical Center in 2004. Dr. Burns earned his BA from the University of Notre Dame and his MD from the University of Kansas Medical Center, completed his neurology residency at the University of Virginia, and finished a postdoctoral fellowship in Alzheimer's disease at Washington University in St. Louis. He is board certified in neurology and has been continuously funded as an NIH principal investigator since 2005, studying how lifestyle factors influence brain aging and Alzheimer's progression.



Gregory E. Cooper, MD, PhD, MBA, FAAN, FAAPL

Chief of Adult Neurology and Director of the Memory Center, Norton Neuroscience Institute, Louisville, KY

Dr. Cooper leads adult neurology and directs the Memory Center at the Norton Neuroscience Institute, where he focuses on the care and treatment of individuals with Alzheimer's disease and related disorders. He earned his MD and PhD at the University of Kentucky, completed his neurology residency and a fellowship in behavioral neurology and cognitive neuroscience at the University of Iowa, and later earned an MBA. Before joining Norton in 2021, he directed the dementia clinic at the University of Iowa, worked at the Sanders-Brown Center on Aging at the University of Kentucky, and formed and led the Baptist Health Memory Care Program. He has served as principal investigator on numerous clinical trials and maintains a strong interest in education and caregiver support.



Deanna R. Willis, MD, MBA, FAFAP, FNAP

Professor of Primary Care and Population Health Research and Vice Chair of Research, Department of Family Medicine, Indiana University School of Medicine

Dr. Willis is a board certified family physician at Indiana University School of Medicine. She earned her medical degree from the University of Missouri-Columbia and an MBA from the Indiana University Kelley School of Business. She served as principal investigator of the Indiana University and IU Health Davos Alzheimer's Collaborative flagship site, and her work focuses on the early detection of Alzheimer's disease and related dementias in primary care, including the implementation of cognitive screening and blood biomarkers. She is a past president of the Indiana Academy of Family Physicians.

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CEOi Alzheimer's Diagnostic Hub

To learn more about the FDA cleared and other lab developed blood tests visit CEOi's diagnostic hub:

alzdiagnostichub.org



Alzheimer's Policy Working Group

To explore how APWG is advancing Alzheimer's detection in primary care and improving coverage frameworks for scalable care, visit our website:

alzpolicy.org