BRAINSCAN by Neurocode

Pioneering Diagnostics to Prevent & Reverse Cognitive Decline

Participant: Apollo Health

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BRAINSCAN
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Thank you for taking BRAINSCAN. You now have the opportunity to take control of your cognitive health and potentially change your destiny. The results of the three tests are detailed below. They are complementary, and together they provide an accurate, comprehensive check-up of your current brain status.

(Please note that none of these tests alone can provide a definitive diagnosis, and they should be interpreted in conjunction with clinical signs and symptoms. We suggest that you discuss these results further with your practitioner and get on an optimal treatment program.)

Phosphorylated Tau 217 (p-Tau 217)

Phosphorylated Tau 217 (p-Tau 217) is a new blood biomarker that is specific for Alzheimer's disease pathophysiology. It is comparable to the "gold standard" for diagnosing Alzheimer's disease, which currently utilizes expensive and invasive testing — positron emission tomography (PET) imaging and/or a spinal tap which is used to sample and analyze cerebrospinal fluid. A high p-Tau 217 does not tell you that you have Alzheimer's-related dementia, or even mild cognitive impairment (MCI), but it does tell you that you should not wait to begin optimal treatment, so that you can avoid cognitive decline (or reverse it if it has already begun).

p-Tau 217 also allows you to follow improvements, just as you can follow your blood glucose or cholesterol as they improve. Therefore, once you begin prevention or treatment, you should see improvements in your p-Tau 217 in 6-12 months.

- The p-Tau 217 laboratory test performed by Neurocode is clinically validated for individuals 45 and older.
- For more details on this biomarker test, see Phosphorylated Tau 217 (p-Tau 217) Technical Details.

Your Results

Test	Your Result	Interpretation	Optimal Range
p-Tau 217	0.26 ng/l	Normal	< 0.47 ng/l

Your p-Tau 217 result is 0.26 ng/l

This is excellent! Congratulations! This is a normal p-Tau 217, indicating that not even the earliest stages of Alzheimer's-related pre-dementia (which occur over a decade before dementia) have begun. It's a good idea to repeat this p-Tau 217 test every two years, so you can avoid cognitive decline for your lifetime.

Phosphorylated Tau 217 (p-Tau 217) Technical Details

The p-Tau 217 test is a single molecule assay powered by Simoa® using the ALZpath Dx antibody to p-Tau 217 developed by ALZpath Inc. This is a laboratory developed test (LDT) whose performance characteristics were determined by Neurocode, USA Inc. It has not yet been cleared or approved by the U.S. Food and Drug Administration. The laboratory is regulated under CLIA to perform high-complexity testing.

There are comorbid conditions that may affect phosphorylated tau levels in the blood. These can include conditions affecting hepatic and renal function, such as chronic kidney disease (CKD) or liver disease, as well as a history of stroke or myocardial infarction. Certain medications to support kidney function may also play a role in heightened levels of p-Tau 217.

Additionally, differences in results based on racial and ethnic background, sex, and age have not yet been established.

p-Tau 217 results obtained using different methods cannot be used interchangeably.

Neurofilament Light (NfL)

NfL (neurofilament light) increases when there is ongoing damage to nerve cells from any cause, such as vascular disease or head trauma or any neurodegenerative process. Therefore, it is an excellent complementary test for p-Tau 217. It is age-dependent, so that it is lowest at a young age, and rises slightly as we age (this slight, age-related increase is normal), but if there is too much increase, it warns us that there is likely to be some ongoing damage, offering us a chance to identify and treat the problem.

Please note a few caveats and details about the NfL blood test:

- NfL levels measured in the evening may be more than 10% lower than those measured in the morning (Benedict et al 2020).
- Higher levels of NfL can occur in patients with a history of stoke, atrial fibrillation, myocardial infarction, chronic kidney disease, pregnancy, and diabetes. Lower levels may be found in persons who are obese (BMI ≥ 30) (Syrjanen et al 2022).
- This is a laboratory developed test, its performance was determined by Neurocode USA Inc. It has not yet been cleared or approved by the Food and Drug Administration.)

Your Results

Test	Your Result	Interpretation	Optimal Range
NfL	40 ng/l	High	≤ 28.0 ng/l

Your NfL result is 40 ng/l

Your NfL result is high for your age. This indicates that there is likely to be some ongoing damage to nerve cells, which may be from any number of causes, such as vascular disease or previous trauma or a degenerative process. It is an excellent idea to talk with a ReCODE 2.0 trained practitioner about this result so that it can be determined what is contributing to this increase, and if can be corrected.

Glial Fibrillary Acidic Protein (GFAP)

GFAP (glial fibrillary acidic protein) is a test that reflects ongoing inflammation and repair in the brain, offering us a long-term warning of 10 years or more, and thus the ability to avoid dementia. It is complementary to the p-Tau 217 and NfL tests, because they reflect processes in neurons (nerve cells), whereas GFAP reflects the activation of non-neuron brain cells—glial cells (which support neurons), and specifically astroglial cells (the brain also has oligodendroglial cells, which produce the myelin that wraps the neuron processes, and microglia, which clean up damage). Astroglial cells produce GFAP when they are activated in response to brain damage.

Please note the following caveats:

- Test results are for research use only. Not to be used for diagnostic purposes.
- Test performance was determined by Neurocode USA Inc. It has not been cleared or approved by the Food and Drug Administration.

Your Results

Test	Your Result	Interpretation	Optimal Range
GFAP	200 ng/l	High	≤ 78.2 ng/l

Your GFAP result is 200 ng/l

Your GFAP result is higher than it should be, but please do not worry about this—GFAP is an early indicator of brain inflammation and ongoing repair, so it is important to determine what is causing this increase, and then begin optimal treatment the ReCODE protocol (see Continuing Education, at the end of the report). You can re-check in 6-12 months to determine whether there has been improvement, and meanwhile, please keep optimizing treatment. It is an excellent idea to talk with a ReCODE 2.0 trained practitioner about this result.

Summarizing Your Results

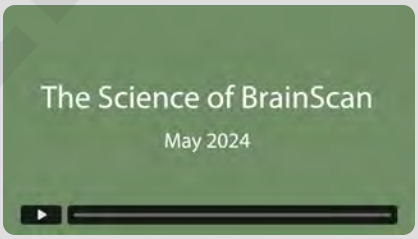
No evidence of Alzheimer's, but there is some evidence of brain inflammation and some nerve cell damage, so please talk with your practitioner to determine why and begin treatment.

We suggest you discuss these results further with your practitioner and get on an optimal treatment program.

Continuing Education

The Science of BrainScan

For more information on BrainScan and its three tests, watch the webinar "The Science of BrainScan." In the webinar, Dr. Bredesen and Dr. Hans Frykman present the background and importance of p-Tau 217, NfL, and GFAP, explain what to do after you receive your results, and answer some frequently asked questions.



Watch the Webinar

The First Real Hope for Alzheimer's

If your results are not what you had hoped for, please do not despair—there is now so much that can be done to help, unlike in the past. This is a new era in Alzheimer's prevention and treatment.

Apollo Health is rewriting the Alzheimer's story by offering Dr. Dale Bredesen's protocols directly to consumers and practitioners. Our successful treatment is the first to demonstrate sustained cognitive improvement in participants. Unlike other options, it also delivers improved overall health as the primary side effect. Imaging has even demonstrated improvements in brain volumetrics and biomarkers. Our peer-reviewed, published success is unprecedented, but we acknowledge that it is in the early stages, and we are constantly working to gather more evidence. Dr. Bredesen and his colleagues are currently conducting a randomized controlled clinical trial at six study sites in the United States.

What's Next

With your BRAINSCAN score as a guide, you now have the power to work actively to optimize your brain health. By using a precision medicine approach that identifies the actual contributors (e.g., inflammation, insulin resistance, nutrient deficiencies, etc.) that are driving your current state of cognition, you can target and address each with a multifactorial approach. Join the thousands who are working to reverse cognitive decline with our ReCODE Program. We invite you to become an active participant in your cognitive health.

Join ReCODE

If you have additional questions, email customer support at **support@ahnphealth.com** or call **(800) 450-0805**.