VOXNEURO

John Doe 0001-P0018
68 Year Old Male
Late-Middle Adult (55-70)

Healthcare Enterprise
Health Clinic #1
June 12, 2026

The digital analysis of electroencephalogram (EEG) covered in this report is performed by a software that normalizes EEG data from neurophysiological and neuropsychological tests. The software's algorithms automatically calculate conventional EEG parameters and normalize the data through comparison to a reference database.

ERP Scores are the straight average of event-related potential (ERP) Amplitude and Latency Scores (pp. 1-7). **Behavior Scores** include Accuracy, Speed, and Consistency, providing context to the ERP results and are included on each of the Detailed ERP Analysis pages (pp. 3-7). **Resting State Scores** analyzing power bands and power band ratio values are also provided (pp. 1 & 8). Averaged **Evoked Potential (EP) waveforms** are displayed when optional paradigms are completed (p.9).

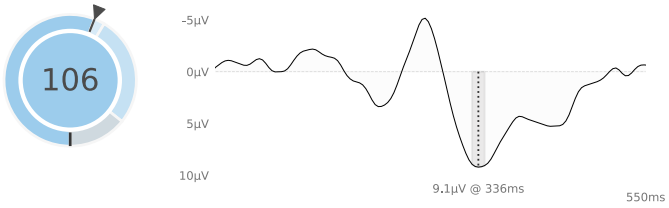
cfNI does not diagnose medical conditions, but serves to aid trained clinicians in better assessing normalized EEG responses to a range of tests.

Test: EEG Response(s)	EEG Recordings
Auditory Oddball: P300	**4m 31s**
Go No-Go: N200	**4m 31s**
CVMT: P300b	**6m 30s**
Eriksen Flanker: N200 & P300b	**4m 23s**
Resting State: α, θ, β/θ, β/(α+θ)	**5m 24s**
AEP: Average Waveform	**3m 11s**
VEP: Average Waveform	**2m 23s**

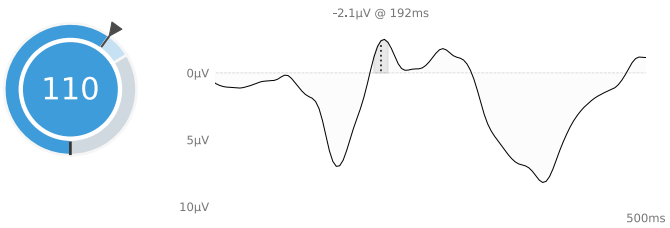
Total EEG Time Recorded: 30m 53s

ERP Scores

Auditory Oddball: P300 — Central/Parietal



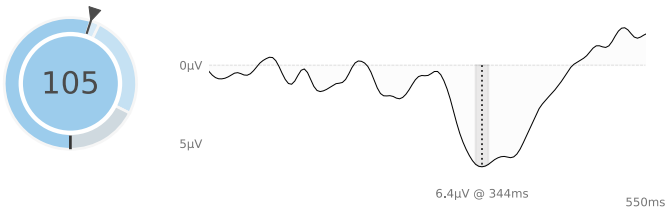
Eriksen Flanker: N200 — Frontal/Central



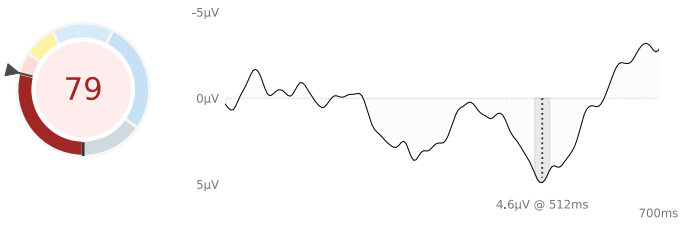
Go No-Go: N200 — Frontal/Central



Eriksen Flanker: P300b — Central/Parietal



CVMT: P300b — Central/Parietal



Resting State Scores

99	**Alpha** α	104	**Theta** θ
106	**Beta/(Alpha+Theta)** β / (α + θ)	106	**Beta/Theta** β / θ



Each outcome is transformed into a standardized score on a scale of 50-150, with a mean of 100.

Scores are categorized relative to the age-matched database using reference limits established at the 2.5th, 10th, 90th, and 97.5th percentiles with 90% confidence intervals. Expected Range reflects scores between the 10th and 90th percentile reference limits. Borderline Below and Borderline Above Expected Range indicates proximity to the 10th and 90th percentile reference limits respectively, and may overlap with the adjacent outer category. Below and Above Expected Range reflect scores outside the 2.5th and 97.5th percentile reference limits respectively. For full score derivation and interpretation guidance, see the Detailed ERP Analysis pages (pp. 3-7) and Understanding the Report's Scores (pp. 13-14).

Clinician:
Treatment Recommended: ☐ Yes ☐ No

Signature **Date**

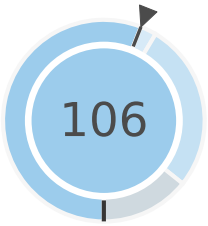
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John Doe 0001-P0018
Late-Middle Adult (55-70)

June 12, 2026

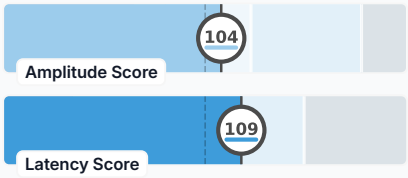
Auditory Oddball: P300

Auditory Oddball presents repetitive "standard" auditory tones that are occasionally interrupted by less frequent "deviant" or "oddball" tones. Patients are instructed to listen for and respond to the oddball tones. The test is designed to elicit the P300 ERP, a positive deflection which normally peaks in the 300-400 ms range.



ERP Score

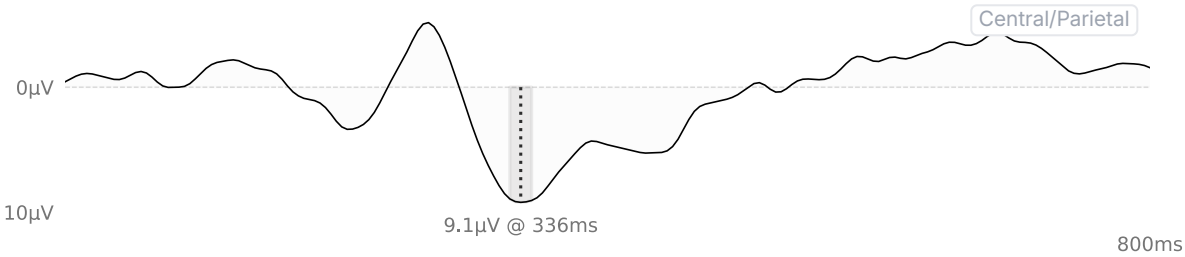
ERP Score: Breakdown



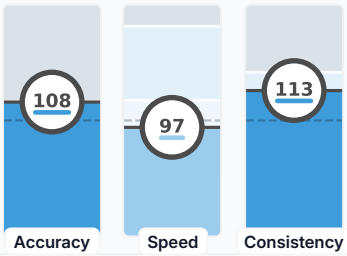
Recorded Time: 4m 31s

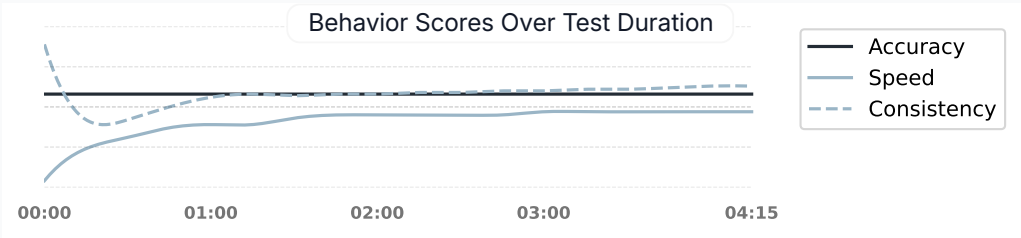
*The Auditory Oddball: P300 results indicate the patient's ERP Score fell **in the Expected Range**, with a score of* **106**

*Amplitude Score = **Expected Range***
*Latency Score = **Borderline Above Expected Range***



Behavior Scores





Score Legend

Score	Description
Below Expected Range	*Score falls below the 2.5th percentile reference limit for this patient's age group.*
Borderline Below Expected Range	*Score falls approximately at or below the 10th percentile reference limit for this patient's age group. Due to the proximity of the 10th and 2.5th percentile bounds, this score may overlap with the Below Expected Range category.*
Expected Range	*Score falls above the 10th and below the 90th percentile reference limits for this patient's age group.*
Borderline Above Expected Range	*Score falls approximately at or above the 90th percentile reference limit for this patient's age group. Due to the proximity of the 90th and 97.5th percentile bounds, this score may overlap with the Above Expected Range category.*
Above Expected Range	*Score falls above the 97.5th percentile reference limit for this patient's age group.*

Score Composition

Score	Underlying Metric
ERP Scores	
ERP Score	*Average of Amplitude & Latency scores*
Amplitude Score	*P300 peak voltage (µV) - Central/Parietal*
Latency Score	*P300 peak timing (ms) - Central/Parietal*
Behavior Scores	
Accuracy	*Correct response rate (%)*
Speed	*Response time (ms)*
Consistency	*Response time variablility (ms)*

Score Composition table is intended to help clinicians understand the underlying metrics behind each score. All scores in the Score Composition table are reported as standardized scores on a scale from 50 to 150, with a mean of 100. Scores are normalized against the age-matched reference database. See 'Understanding the Report's Scores' (pp. 13-14) for more information.



Each outcome is transformed into a standardized score on a scale of 50-150, with a mean of 100.

Scores are categorized relative to the age-matched database using reference limits established at the 2.5th, 10th, 90th, and 97.5th percentiles with 90% confidence intervals. For full score derivation and interpretation guidance, see the Understanding the Report's Scores (pp. 13-14).

Signature

Date

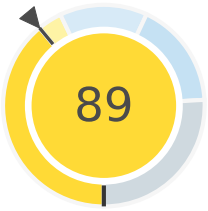
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John Doe 0001-P0018
Late-Middle Adult (55-70)

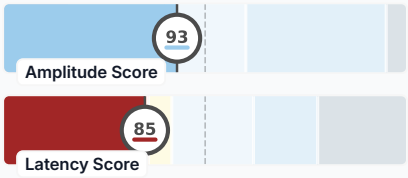
June 12, 2026

Go No-Go: N200

Go No-Go presents repetitive "standard" auditory tones that are occasionally interrupted by rare "deviant" tones. Patients are instructed to respond to each standard tone while withholding a response to the deviant tone. The test is designed to elicit the N200 ERP, a negative deflection which normally peaks between the 200-300 ms range.



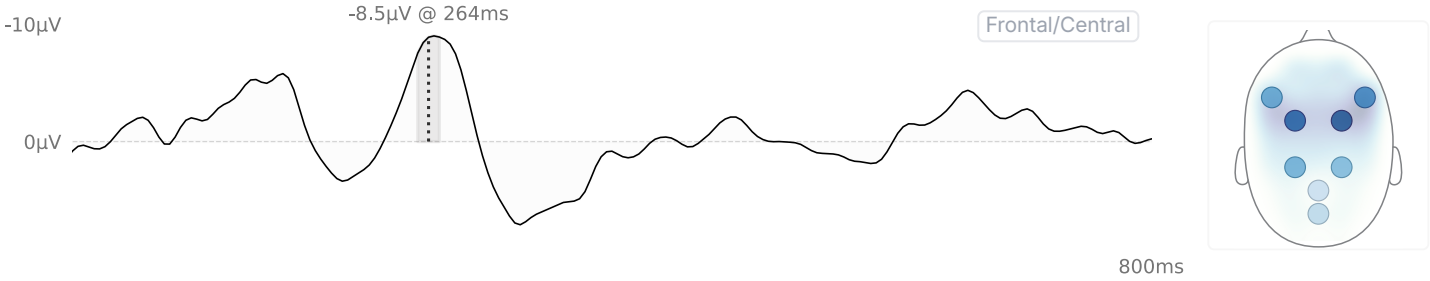
ERP Score: Breakdown



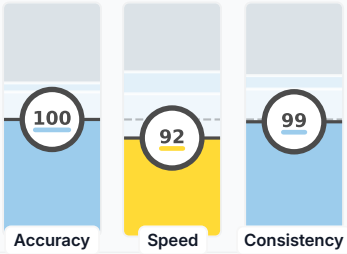
Recorded Time: 4m 31s

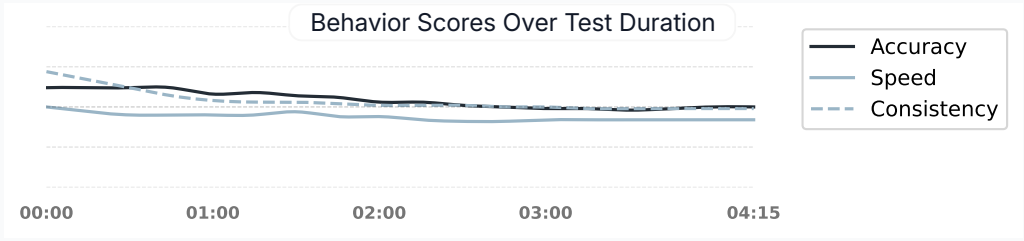
*The Go No-Go: N200 results indicate the patient's ERP Score fell within a **Borderline Range Below the Expected Range**, with a score of* ***89***

*Amplitude Score = **Expected Range***
*Latency Score = **Below Expected Range***



Behavior Scores





Score Legend

Score	Description
Below Expected Range	*Score falls below the 2.5th percentile reference limit for this patient's age group.*
Borderline Below Expected Range	*Score falls approximately at or below the 10th percentile reference limit for this patient's age group. Due to the proximity of the 10th and 2.5th percentile bounds, this score may overlap with the Below Expected Range category.*
Expected Range	*Score falls above the 10th and below the 90th percentile reference limits for this patient's age group.*
Borderline Above Expected Range	*Score falls approximately at or above the 90th percentile reference limit for this patient's age group. Due to the proximity of the 90th and 97.5th percentile bounds, this score may overlap with the Above Expected Range category.*
Above Expected Range	*Score falls above the 97.5th percentile reference limit for this patient's age group.*

Score Composition

Score	Underlying Metric
ERP Scores	
ERP Score	*Average of Amplitude & Latency scores*
Amplitude Score	*N200 peak voltage (µV) - Frontal/Central*
Latency Score	*N200 peak timing (ms) - Frontal/Central*
Behavior Scores	
Accuracy	*Correct response rate (%)*
Speed	*Response time (ms)*
Consistency	*Response time variablility (ms)*

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Signature **Date**

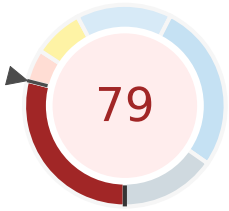
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Late-Middle Adult (55-70)

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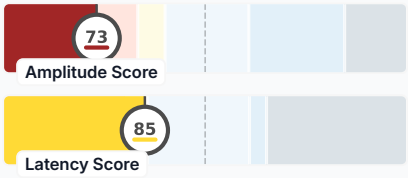
CVMT: P300b

The Continuous Visual Memory Test (CVMT) presents abstract images, with a small subset of the images repeated. Patients are instructed to respond to each image and indicate whether it is new or repeated. The test is designed to elicit the P300b ERP, a positive deflection which normally peaks in the 250-600 ms range.



ERP Score

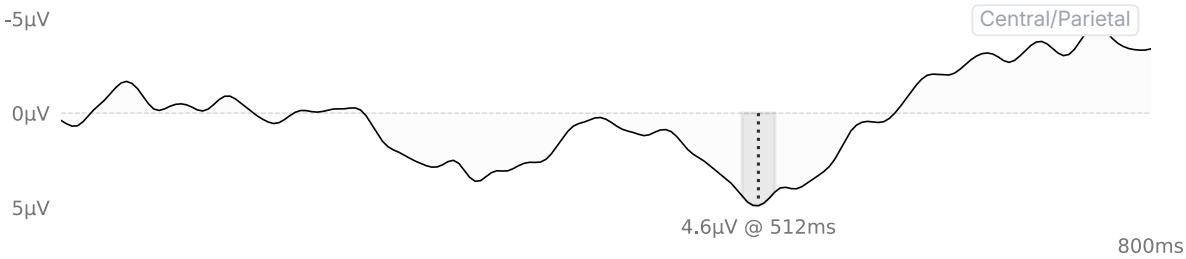
ERP Score: Breakdown



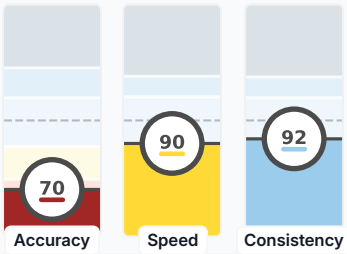
Recorded Time: 6m 30s

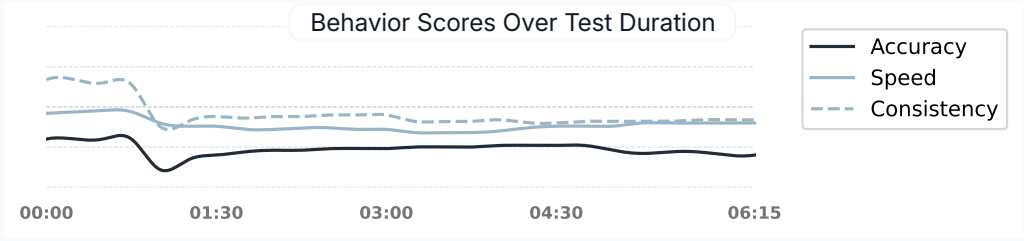
The CVMT: P300b results indicate the patient's ERP Score fell ***Below the Expected Range****, with a score of* ***79***

Amplitude Score = ***Below Expected Range***
Latency Score = ***Borderline Below Expected Range***



Behavior Scores





Score Legend

Score	Description
Below Expected Range	*Score falls below the 2.5th percentile reference limit for this patient's age group.*
Borderline Below Expected Range	*Score falls approximately at or below the 10th percentile reference limit for this patient's age group. Due to the proximity of the 10th and 2.5th percentile bounds, this score may overlap with the Below Expected Range category.*
Expected Range	*Score falls above the 10th and below the 90th percentile reference limits for this patient's age group.*
Borderline Above Expected Range	*Score falls approximately at or above the 90th percentile reference limit for this patient's age group. Due to the proximity of the 90th and 97.5th percentile bounds, this score may overlap with the Above Expected Range category.*
Above Expected Range	*Score falls above the 97.5th percentile reference limit for this patient's age group.*

Score Composition

Score	Underlying Metric
ERP Scores	
ERP Score	*Average of Amplitude & Latency scores*
Amplitude Score	*P300b peak voltage (µV) - Central/Parietal*
Latency Score	*P300b peak timing (ms) - Central/Parietal*
Behavior Scores	
Accuracy	*Correct response rate (%)*
Speed	*Response time (ms)*
Consistency	*Response time variablility (ms)*

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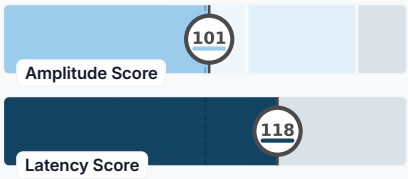
Eriksen Flanker: N200

Eriksen Flanker presents sets of randomized left- or right-pointing arrows. There is a target stimulus in the center flanked by non-target stimuli, which may be pointing in the same or different direction than the center, target arrow. Patients are instructed to detect the target stimulus in the center and respond to identify what direction it is facing, while ignoring surrounding arrows. The test is designed to elicit both the N200 ERP, a negative deflection which normally peaks in the 200-330 ms range, and P300b ERP, a positive deflection which normally peaks in the 300-400 ms range.



ERP Score

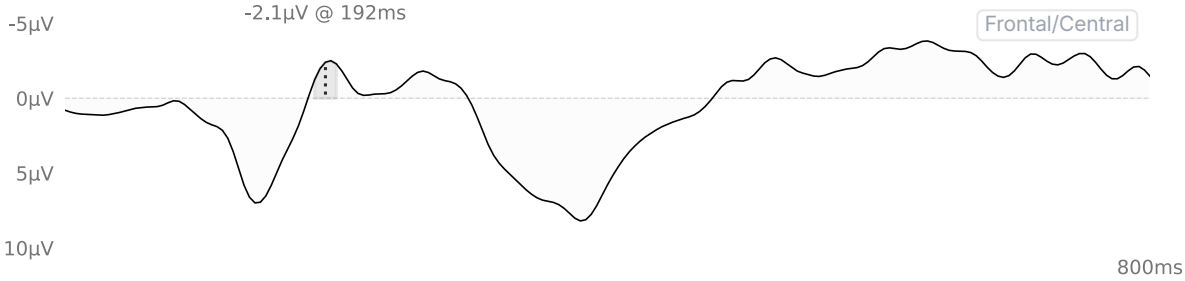
ERP Score: Breakdown



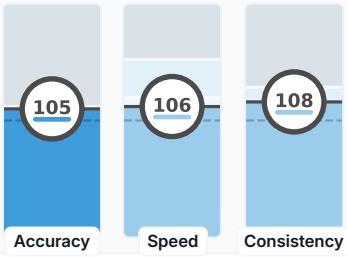
Recorded Time: 4m 23s

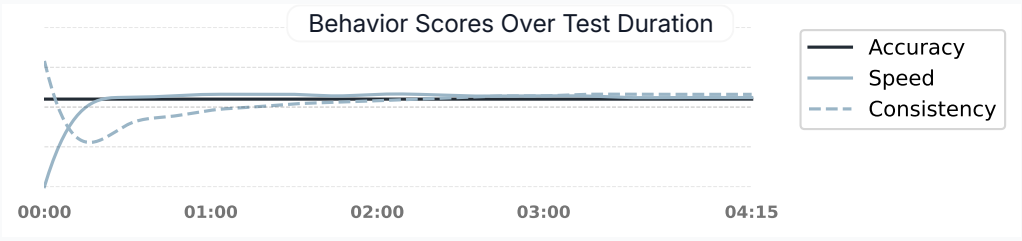
*The Eriksen Flanker: N200 results indicate the patient's ERP Score fell within a **Borderline Range Above the Expected Range**, with a score of* **110**

*Amplitude Score = **Expected Range***
*Latency Score = **Above Expected Range***



Behavior Scores





Score Legend

Score	Description
Below Expected Range	*Score falls below the 2.5th percentile reference limit for this patient's age group.*
Borderline Below Expected Range	*Score falls approximately at or below the 10th percentile reference limit for this patient's age group. Due to the proximity of the 10th and 2.5th percentile bounds, this score may overlap with the Below Expected Range category.*
Expected Range	*Score falls above the 10th and below the 90th percentile reference limits for this patient's age group.*
Borderline Above Expected Range	*Score falls approximately at or above the 90th percentile reference limit for this patient's age group. Due to the proximity of the 90th and 97.5th percentile bounds, this score may overlap with the Above Expected Range category.*
Above Expected Range	*Score falls above the 97.5th percentile reference limit for this patient's age group.*



Each outcome is transformed into a standardized score on a scale of 50-150, with a mean of 100.

Scores are categorized relative to the age-matched database using reference limits established at the 2.5th, 10th, 90th, and 97.5th percentiles with 90% confidence intervals. For full score derivation and interpretation guidance, see the Understanding the Report's Scores (pp. 13-14).

Score Composition

Score	Underlying Metric
ERP Scores	
ERP Score	*Average of Amplitude & Latency scores*
Amplitude Score	*N200 peak voltage (µV) - Frontal/Central*
Latency Score	*N200 peak timing (ms) - Frontal/Central*
Behavior Scores	
Accuracy	*Correct response rate (%)*
Speed	*Response time (ms)*
Consistency	*Response time variablility (ms)*

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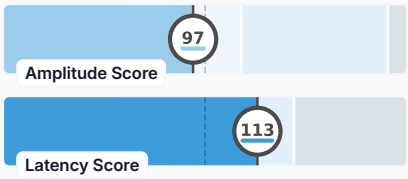
Eriksen Flanker: P300b

Eriksen Flanker presents sets of randomized left- or right-pointing arrows. There is a target stimulus in the center flanked by non-target stimuli, which may be pointing in the same or different direction than the center, target arrow. Patients are instructed to detect the target stimulus in the center and respond to identify what direction it is facing, while ignoring surrounding arrows. The test is designed to elicit both the N200 ERP, a negative deflection which normally peaks in the 200-330 ms range, and P300b ERP, a positive deflection which normally peaks in the 300-400 ms range.



ERP Score

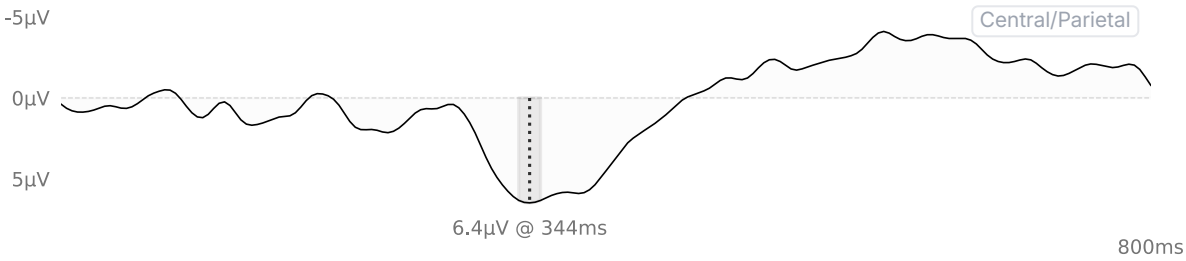
ERP Score: Breakdown



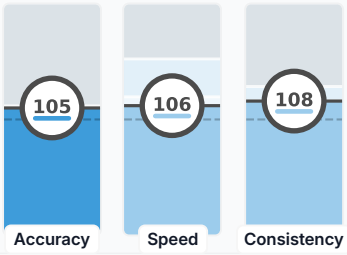
Recorded Time: 4m 23s

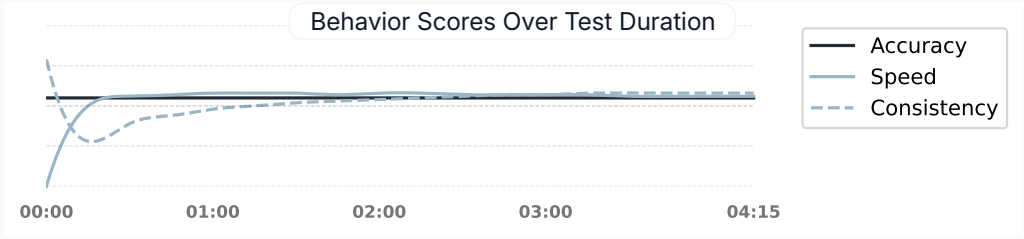
*The Eriksen Flanker: P300b results indicate the patient's ERP Score fell **in the Expected Range**, with a score of* **105**

*Amplitude Score = **Expected Range***
*Latency Score = **Borderline Above Expected Range***



Behavior Scores





Score Legend

Score	Description
Below Expected Range	*Score falls below the 2.5th percentile reference limit for this patient's age group.*
Borderline Below Expected Range	*Score falls approximately at or below the 10th percentile reference limit for this patient's age group. Due to the proximity of the 10th and 2.5th percentile bounds, this score may overlap with the Below Expected Range category.*
Expected Range	*Score falls above the 10th and below the 90th percentile reference limits for this patient's age group.*
Borderline Above Expected Range	*Score falls approximately at or above the 90th percentile reference limit for this patient's age group. Due to the proximity of the 90th and 97.5th percentile bounds, this score may overlap with the Above Expected Range category.*
Above Expected Range	*Score falls above the 97.5th percentile reference limit for this patient's age group.*



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ERP Scores	
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Amplitude Score	*P300b peak voltage (µV) - Central/Parietal*
Latency Score	*P300b peak timing (ms) - Central/Parietal*
Behavior Scores	
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Speed	*Response time (ms)*
Consistency	*Response time variablility (ms)*

Score Composition table is intended to help clinicians understand the underlying metrics behind each score. All scores in the Score Composition table are reported as standardized scores on a scale from 50 to 150, with a mean of 100. Scores are normalized against the age-matched reference database. See 'Understanding the Report's Scores' (pp. 13-14) for more information.

Signature **Date**

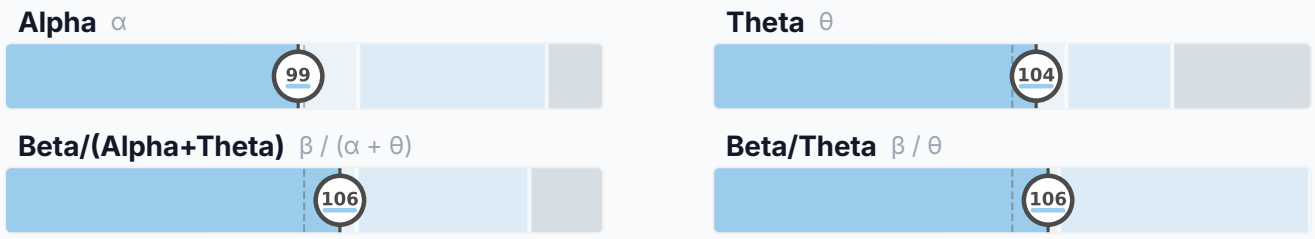
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John Doe 0001-P0018
Late-Middle Adult (55-70)

June 12, 2026

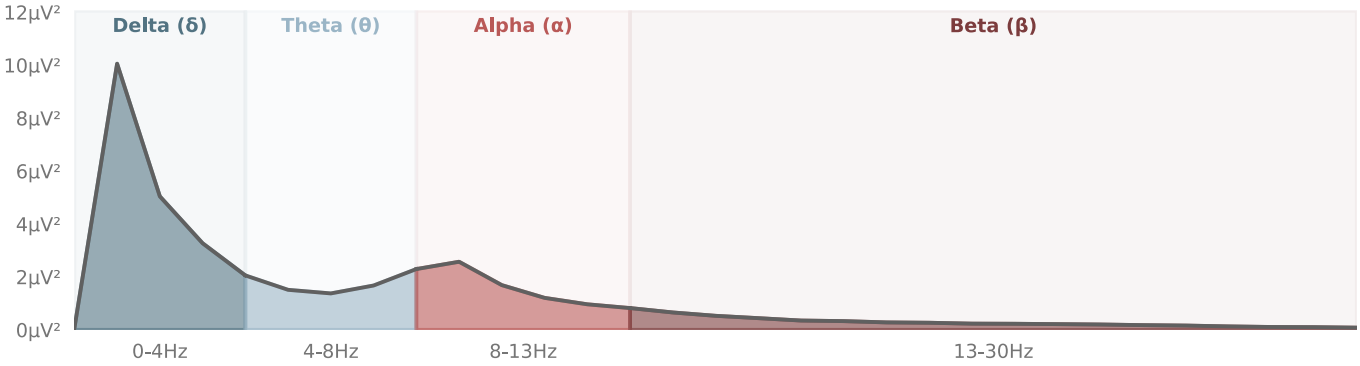
Resting State

Resting-state EEG records brain activity while the patient is in a state of rest, that is, while the patient keeps eyes open, remains still and relaxed, and is not performing any assigned tests. This baseline measurement of brain function reviews the frequency bands and ratios of the band power spectrum.



Recorded Time: 5m 24s

Power Spectral Density



Score Legend

Score	Description
Below Expected Range	*Score falls below the 2.5th percentile reference limit for this patient's age group.*
Borderline Below Expected Range	*Score falls approximately at or below the 10th percentile reference limit for this patient's age group. Due to the proximity of the 10th and 2.5th percentile bounds, this score may overlap with the Below Expected Range category.*
Expected Range	*Score falls above the 10th and below the 90th percentile reference limits for this patient's age group.*
Borderline Above Expected Range	*Score falls approximately at or above the 90th percentile reference limit for this patient's age group. Due to the proximity of the 90th and 97.5th percentile bounds, this score may overlap with the Above Expected Range category.*
Above Expected Range	*Score falls above the 97.5th percentile reference limit for this patient's age group.*

Score Composition

Score	Underlying Metric
Alpha (α)	*Baseline electrical activity in the 8-13 Hz frequency range.*
Theta (θ)	*Baseline electrical activity in the 4-8 Hz frequency range.*
Beta/(Alpha+Theta) β / (α + θ))	*Baseline electrical activity ratio of Beta power to combined Alpha and Theta power*
Beta/Theta (β / θ)	*Baseline electrical activity ratio of Beta power to Theta power*

Score Composition table is intended to help clinicians understand the underlying metrics behind each score. All scores in the Score Composition table are reported as standardized scores on a scale from 50 to 150, with a mean of 100. Scores are normalized against the age-matched reference database. See 'Understanding the Report's Scores' (pp. 13-14) for more information.



Each outcome is transformed into a standardized score on a scale of 50-150, with a mean of 100.

Scores are categorized relative to the age-matched database using reference limits established at the 2.5th, 10th, 90th, and 97.5th percentiles with 90% confidence intervals. For full score derivation and interpretation guidance, see the Understanding the Report's Scores (pp. 13-14).

Signature

Date

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John Doe 0001-P0018
Late-Middle Adult (55-70)

June 12, 2026

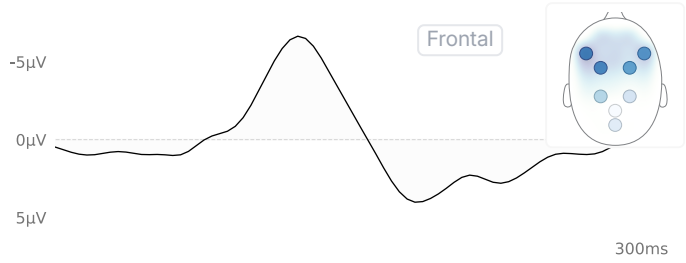
EP Waveforms

The Auditory Evoked Potentials (AEP) test presents alternating tones while the patient's neural activity is time-locked to each stimulus. The Visual Evoked Potentials (VEP) test presents an alternating, flashing checkerboard while neural activity is time-locked to each stimulus.

Auditory Evoked Potentials (AEP)

Average waveform of the brain's response to auditory stimuli

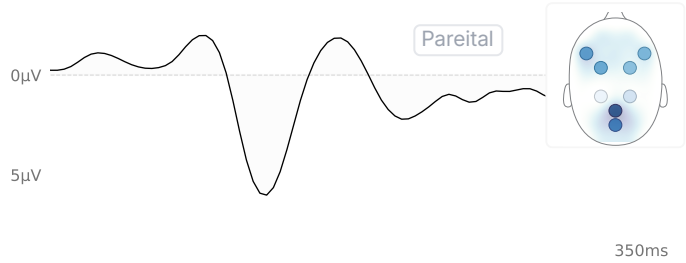
Recorded Time: 3m 11s



Visual Evoked Potentials (VEP)

Average waveform of the brain's response to visual stimuli

Recorded Time: 2m 23s



Signature **Date**

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Glossaries

All Scores within this report represent standardized comparisons of a patient's measurements relative to an age-stratified reference database and are displayed on a scale of 50-150 with a mean of 100.

Score Type	Description
ERP Score	*Score based on the straight average of the patient's ERP Amplitude Score and ERP Latency Score.*
ERP Amplitude Score	*Score based on the strength of an ERP's neural response, derived from ERP Peak voltage (μV).*
ERP Latency Score	*Score based on the timing of an ERP's neural response, derived from ERP Peak timing (ms).*
Behavior Scores	*Accuracy, Speed, and Consistency Scores based on the patient's behavioral test responses during EEG recording. Behavior scores contextualize the ERP scores.*
Accuracy	*Score based on the correctness of behavioral responses, derived from correct response rate (%).*
Speed	*Score based on speed of behavioral responses, derived from response time (ms).*
Consistency	*Score based on the consistency of behavioral responses, derived from response time variability (ms).*
Resting State Scores	*Scores based on Alpha (α), Theta (θ) , Beta/(Alpha+Theta) β/(α+θ), and Beta/Theta (β/θ) values.*
Alpha (α)	*Score derived from the brain's baseline electrical activity in the 8-13 Hz frequency range.*
Theta (θ)	*Score derived from the brain's baseline electrical activity in the 4-8 Hz frequency range.*
Beta/(Alpha+Theta) β/(α+θ)	*Score derived from the brain's baseline electrical activity ratio of Beta power to combined Alpha and Theta power.*
Beta/Theta (β/θ)	*Score derived from the brain's baseline electrical activity ratio of Beta power to Theta power.*

Test: EEG Response	Description
Auditory Oddball: P300	*Auditory Oddball presents repetitive "standard" auditory tones that are occasionally interrupted by less frequent "deviant" or "oddball" tones. Patients are instructed to listen for and respond to the oddball tones. [1, 2]* *The test is designed to elicit the P300 ERP, a positive deflection which normally peaks in the 300-400 ms range. [2]* *1. Iragui, V. J., Kutas, M., Mitchiner, M. R., & Hillyard, S. A. (1993). Effects of aging on event-related brain potentials and reaction times in an auditory oddball task. Psychophysiology, 30(1), 10-22.* *2. Raggi, A., Serretti, A., & Ferri, R. (2025). The P300 component of the auditory event-related potential in adult psychiatric and neurologic disorders: a narrative review of clinical and experimental evidence. International Clinical Psychopharmacology, 40(5), 259-274* *3. Hamilton, H. K., Roach, B. J., Bachman, P. M., Belger, A., Carrion, R. E., Duncan, E., ... & Mathalon, D. H. (2019). Association between P300 responses to auditory oddball stimuli and clinical outcomes in the psychosis risk syndrome. JAMA psychiatry, 76(11), 1187-1197.*
Go No-Go: N200	*Go No-Go presents repetitive "standard" auditory tones that are occasionally interrupted by rare "deviant" tones. Patients are instructed to respond to each standard tone while withholding a response to the deviant tone. [1, 2]* *The test is designed to elicit the N200 ERP, a negative deflection which normally peaks between the 200-300 ms range. [1]* *1. Cheng, C. H., Tsai, H. Y., & Cheng, H. N. (2019). The effect of age on N2 and P3 components: A meta-analysis of Go/Nogo tasks. Brain and cognition, 135* *2. Zhang, N., An, W., Yu, Y., Wu, J., & Yang, J. (2024). Go/No-Go ratios modulate inhibition-related brain activity: an event-related potential study. Brain Sciences, 14(5), 414.*

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Glossaries - Continued

Test: EEG Response	Description
Continuous Visual Memory Test: P300b	*The Continuous Visual Memory Test (CVMT) presents abstract images, with a small subset of the images repeated. Patients are instructed to respond to each image and indicate whether it is new or repeated. [1, 2]* *The test is designed to elicit the P300b ERP, a positive deflection which normally peaks in the 250-600 ms range. [1, 2]* *1. Harker, K. T., & Connolly, J. F. (2007). Assessment of visual working memory using event-related potentials. Clinical neurophysiology : official journal of the International Federation of Clinical Neurophysiology, 118(11), 2479-2488.* *2. Retzlaff, P. D., & Morris, G. L. (1996). Event-related potentials during the Continuous Visual Memory Test. Journal of clinical psychology, 52(1), 43-47.*
Eriksen Flanker: N200 & P300b	*Eriksen Flanker presents sets of randomized left- or right-pointing arrows. There is a target stimulus in the center flanked by non-target stimuli, which may be pointing in the same or different direction than the center, target arrow. Patients are instructed to detect the target stimulus in the center and respond to identify what direction it is facing, while ignoring surrounding arrows. [1-4]* *The test is designed to elicit both the N200 ERP, a negative deflection which normally peaks in the 200-330 ms range, and P300b ERP, a positive deflection which normally peaks in the 300-400 ms range. [3]* *1. König, N., Steber, S., Borowski, A., Bliem, H. R., & Rossi, S. (2021). Neural processing of cognitive control in an emotionally neutral context in anxiety patients. Brain Sciences, 11(5), 543.* *2. Kopp, B., Rist, F., & Mattler, U. (1996). N200 in the flanker task as a neurobehavioral tool for investigating executive control. Psychophysiology, 33(3), 282-294.* *3. Patel, S. H., & Azzam, P. N. (2005). Characterization of N200 and P300: selected studies of the event-related potential. International journal of medical sciences, 2(4), 147.* *4. Wild-Wall, N., Falkenstein, M., & Hohnsbein, J. (2008). Flanker interference in young and older participants as reflected in event-related potentials. Brain Research, 1211, 72-84.*
Resting State: Alpha (α), Theta (θ), Beta/(Alpha+Theta) β / (α + θ)), Beta/Theta (β / θ)	*Resting-state EEG records brain activity while the patient is in a state of rest, that is, while the patient keeps eyes open, remains still and relaxed, and is not performing any assigned tests. [1, 2]* *This baseline measurement of brain function reviews the frequency bands and ratios of the band power spectrum. [2]* *The test is used to measure the following bands and ratios:* • *Alpha (α) [3]* • *Theta (θ) [4]* • *Beta/(Alpha+Theta) β / (α + θ)) [5]* • *Beta/Theta (β / θ) [6]* *1. Getzmann, S., Gajewski, P. D., Schneider, D., & Wascher, E. (2024). Resting-state EEG data before and after cognitive activity across the adult lifespan and a 5-year follow-up. Scientific Data, 11(1), 988.* *2. Mantini, D., Perrucci, M. G., Del Gratta, C., Romani, G. L., & Corbetta, M. (2007). Electrophysiological signatures of resting state networks in the human brain. Proceedings of the National Academy of Sciences, 104(32), 13170-13175.* *3. Zhang, Y., Zhang, Z., Du, F., Song, J., Huang, S., Mao, J., Xiang, W., Wang, F., Liang, Y., Chen, W., Lin, Y., & Han, C. (2024). Shared oscillatory mechanisms of alpha-band activity in prefrontal regions in eyes open and closed state using a portable EEG acquisition device. Scientific reports, 14(1), 26719.* *4. Asada, H., Fukuda, Y., Tsunoda, S., Yamaguchi, M., & Tonoike, M. (1999). Frontal midline theta rhythms reflect alternative activation of prefrontal cortex and anterior cingulate cortex in humans. Neuroscience letters, 274(1), 29-32.* *5. Ahmed, Y., Ferguson-Pell, M., Adams, K., & RÃos RincÃ³n, A. (2025). EEG-Based Engagement Monitoring in Cognitive Games. Sensors (Basel, Switzerland), 25(7), 2072.* *6. Putman, P., Verkuil, B., Arias-Garcia, E., Pantazi, I., & van Schie, C. (2014). EEG theta/beta ratio as a potential biomarker for attentional control and resilience against deleterious effects of stress on attention. Cognitive, Affective, & Behavioral Neuroscience, 14(2), 782-791.*

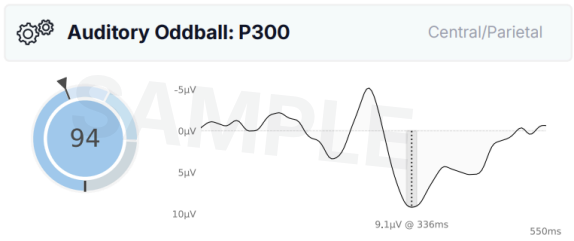
Test: EEG Response	Description
Auditory Evoked Potentials / AEP Average waveform of the brain's response to auditory stimuli	*The Auditory Evoked Potentials (AEP) test presents alternating tones while the patient's neural activity is time-locked to each stimulus. [1-3]* *1. Hu L, Boutros NN, Jansen BH. Evoked potential variability. J Neurosci Methods. 2009 Mar 30;178(1):228-36.* *2. Simkin, D. R., Thatcher, R. W., & Lubar, J. (2014). Quantitative EEG and Neurofeedback in Children and Adolescents. Child and Adolescent Psychiatric Clinics of North America, 23(3), 427-464.* *3. Ruth, R. A., & Lambert, P. R. (1991). Auditory evoked potentials. Otolaryngologic clinics of North America, 24(2), 349-370.*
Visual Evoked Potentials / VEP Average waveform of the brain's response to visual stimuli	*The Visual Evoked Potentials (VEP) test presents an alternating, flashing checkerboard while neural activity is time-locked to each stimulus. [1]* *1. Baiano, C., & Zeppieri, M. (2022). Visual Evoked Potential. PubMed; StatPearls Publishing. https://www.ncbi.nlm.nih.gov/books/NBK582128/* *2. Hu L, Boutros NN, Jansen BH. Evoked potential variability. J Neurosci Methods. 2009 Mar 30;178(1):228-36.*

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Report Guide

Page 1: Report Summary

This page serves as a central overview of the administered tests and presents a concise summary of the patient's test results. Each ERP Score is visually complemented by its corresponding analyzed and averaged ERP waveform, offering a direct representation of the neural response.



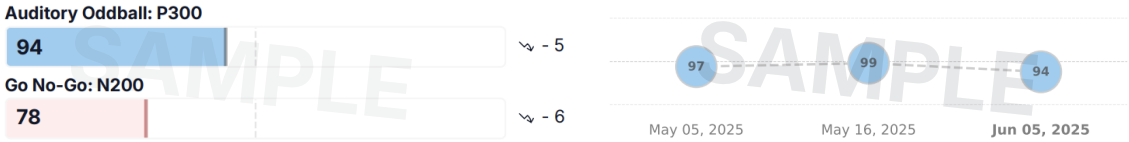
When Resting State and EPs have been recorded, the results will be displayed following the ERP Scores. Key neurophysiological summary metrics will be provided for the Resting State test, while simple average waveforms will be provided for AEP/VEP testing.

The bottom left-hand corner displays the Score Scale, which can be referenced across all ERP, Behavior, and Resting State scores to understand how a patient's results are categorized relative to the age-matched reference database.

The bottom right-hand corner is dedicated to clinical notes from the signing clinician. Clinicians are able to provide additional details, beyond what is previewed on the summary page, on an appended page.

Page 2: Tracking Changes

This page presents a comparative analysis of the patient's ERP Scores over time across multiple appointments. The graphical representations are divided into two distinct sections to provide different perspectives on the evolution of these scores.



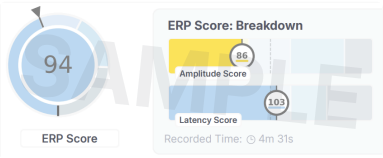
The upper section displays the patient's scores compared to the reference database, and shows the magnitude and direction (+/-) of change relative to the previous ERP Score.

The lower section displays the patient's ERP Scores over time, between the most recent appointment and the prior appointment/s (up to four).

This allows for a quick understanding of how the patient's scores compare to the reference database and whether scores have changed over time.

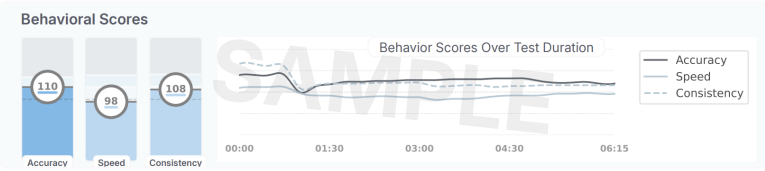
Pages 3-7: Detailed ERP Analysis

These pages provide in-depth analyses of each ERP Score and break down the electrophysiological and behavioral components for a detailed understanding of the results from each test.



The top section of each detailed ERP analysis page deconstructs the ERP Score represented in the Report Summary (page 1 of the report) into its primary components: the ERP Amplitude Score, reflecting the strength of the neural response, and the ERP Latency Score, indicating the speed of the neural response. The standardized score for each component is displayed alongside its reference range category relative to the reference population. Directly below, the characteristic ERP waveform illustrates the temporal evolution of the brain's electrical activity. The topographical electrode distribution provides a spatial visualization of the ERP signal across electrode locations.

Behavior Scores - Accuracy, Speed, and Consistency - add context to the ERP Scores by reporting the patient's physical responses during each test. A minimum threshold of correct behavioral responses is required to generate ERP Amplitude and Latency Scores. Where this threshold is not met, affected scores will be absent and a data warning will be displayed. A linear graph visualizes the behavioral responses throughout the test's duration.



At the foot of each page, a score scale provides the full reference limit category descriptions, and a score key identifies the underlying EEG parameter measured by each score on that page. Both elements cross-reference the Understanding the Report's Scores section (pp. 13-14) for full derivation detail.

Pages 8-9: Detailed Resting State Scores and EP Waveforms

These pages display all Resting State Scores (α, θ, β / θ, β / (α + θ)) alongside a power spectral density visualization provided for illustrative purposes.

If AEP and/or VEP paradigms are completed, an average waveform is displayed for illustrative purposes.



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Report Guide - Continued

Understanding the Report's Scores

All scores presented within this report represent standardized comparisons of a patient's measurements relative to an age-stratified reference database, and are reported as a standardized score with accompanying color-coded reference range classification.

Scores reported include ERP Scores (including ERP Amplitude and ERP Latency individual scores), Behavior Scores, and Resting State Scores. **ERP Scores** are the straight average of event-related potential (ERP) Amplitude and Latency Scores (pp. 1-7). **Behavior Scores**, include Accuracy, Speed, and Consistency, providing context to the ERP results and are included on each ERP Score detailed page (pp. 3-7). **Resting State Scores** analyzing power bands and power band ratio values are also provided (pp. 1 & 8).

Standardized Scores

Each device output value is converted to a standardized score on a scale of 50-150 using the mean and standard deviation of the age-matched reference population for that outcome measure and test. A score of 100 represents the reference population mean. Scores above or below 100 reflect the magnitude of deviation from that mean.

Figure 1 - Standardized Score Transformation

Derivation Chain

Device Output	Z-Score	T-Score	Score
VALUE uV, ms, etc.	**FORMULA** z = (x-μ)/σ	**FORMULA** T = 50 + 10z	**FORMULA** S = T + 50

Score Interpretation Reference

Device Output	Z-Score	T-Score	Score
9.1uv Measured peak voltage	**-0.6** z = (9.1 - 10.5) / 2.3	**44** T = 50 + (10 x -0.6)	**94** S = 44 + 50

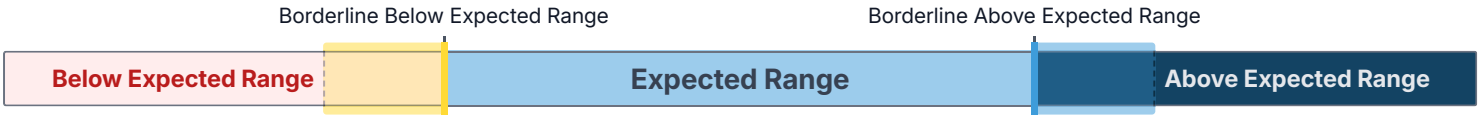
Figure 1: Left - each device output value is converted to a z-score using the mean and standard deviation of the age-matched reference population for that outcome measure and test. The z-score is converted to a T-score (T = 50 + 10z), then to the final standardized score (S = T + 50). Values in the worked example are illustrative. Right - reference table mapping z-scores to standardized scores for clinical interpretation.

Score Interpretation Reference

Z-Score	Score
< -2.33	< 77
-2.33 to -1.64	78 to 84
-1.64 to -1.0	85 to 90
-1.0 to 0.0	91 to 99
0.0	**100**
0.0 to 1.0	101 to 110
1.0 to 1.64	111 to 116
1.64 to 2.33	117 to 123
> 2.33	> 123

Reference Limit Categorization

Each outcome measure is also evaluated relative to non-parametric reference limits established at the 2.5h, 10th, 90th, and 97.5th percentiles of the age-matched reference database, with 90% confidence intervals. This is done per score, per test. These reference limits determine the category into which a patient's score falls.



Score	Description
Below Expected Range	*Score falls below the 2.5th percentile reference limit for this patient's age group.*
Borderline Below Expected Range	*Score falls approximately at or below the 10th percentile reference limit for this patient's age group. Due to the proximity of the 10th and 2.5th percentile bounds, this score may overlap with the Below Expected Range category.*
Expected Range	*Score falls above the 10th and below the 90th percentile reference limits for this patient's age group.*
Borderline Above Expected Range	*Score falls approximately at or above the 90th percentile reference limit for this patient's age group. Due to the proximity of the 90th and 97.5th percentile bounds, this score may overlap with the Above Expected Range category.*
Above Expected Range	*Score falls above the 97.5th percentile reference limit for this patient's age group.*

Figure 2: A patient's score is compared to their reference limit derived from the age-matched reference database per outcome measure, per test, and a category is assigned based on its position relative to those limits.

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Report Guide - Continued

Unavailable Scores

Device-level minimum thresholds are required to generate ERP and Resting State outputs. ERP Amplitude Score requires a minimum of 20 sufficient event epochs; ERP Latency Score and ERP Score each require a minimum of 30. Where only the 20-epoch threshold is met, ERP Amplitude Score is generated while ERP Latency Score and ERP Score are absent. Where neither threshold is met, all ERP outputs are absent. Resting State Scores require a minimum of 30 sufficient epochs. In all cases where outputs are absent due to device-level thresholds, the absent output reflects insufficient event epochs at the device analysis level and is not considered invalid.

Insufficient event epochs may result from poor behavioral accuracy during the test or excessive EEG artifacts. Behavior Scores - Accuracy, Speed, and Consistency - remain available regardless of whether ERP thresholds are met, and can assist the clinician in understanding the context of absent outputs.

Figure 3 - Examples of Unavailable Scores

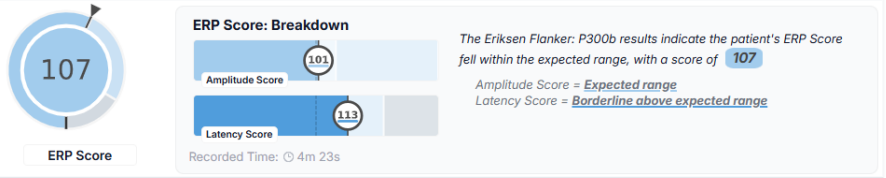
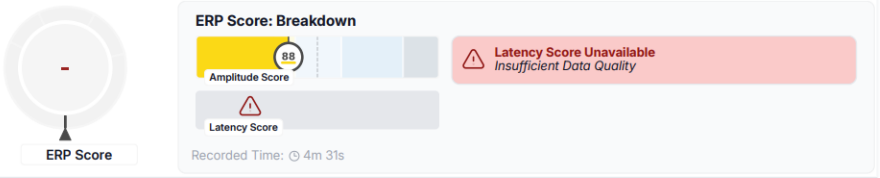
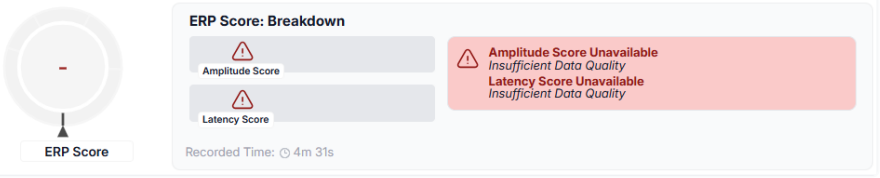
Scenario	Unavailable Scores	Visual Example
More than 30 trials Normal Data Quality Thresholds Met	**None** All Scores Present	
Between 20 and 30 trials Amplitude Data Quality Thresholds Met	**2** ERP Score & Latency Score	
Less than 20 trials Data Quality Thresholds Not Met	**3** ERP Score, Latency Score, Amplitude Score	

Figure 3: The three ERP output threshold scenarios and their corresponding report display. Row 1 - where 30 or more sufficient epochs are recorded, all ERP Amplitude, Latency, and ERP Scores are generated. Row 2 - where 20 or more but fewer than 30 sufficient epochs are recorded, ERP Amplitude Score is generated while ERP Latency Score and ERP Score are absent; the specific cause of absence is identified as either insufficient behavioral accuracy or excessive EEG artifacts. Row 3 - where fewer than 20 sufficient epochs are recorded, all ERP outputs are absent. Resting State Scores and Behavior Scores are not shown in the examples above: Resting State Scores require a minimum of 30 sufficient epochs and are absent where this threshold is not met; Behavior Scores - Accuracy, Speed, and Consistency - are always generated regardless of trial count.

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Report Labeling

Product Use Disclaimer

This report was generated using the prescription-use, Cognitive Function Neuroimaging (cfNI) software device, designed and intended for the analysis and normalization of electroencephalogram (EEG) signals and test performance data acquired from adults aged 18-70. The system's structured output report reflects post-hoc statistical analysis and comparison to reference populations, and is intended to aid - but not replace - qualified clinicians with clinical decision making. This system's outputs do not confirm the presence or absence of clinical diagnoses, nor do they recommend treatments.

The outcome report is solely intended to be utilized by qualified clinicians. Reports must be interpreted in combination with other clinical data. Final diagnosis and treatment decisions are made by the reviewing clinician. Clinicians may include neurologists, psychologists, psychiatrists, or other qualified professionals under the relevant jurisdictional regulations who are authorized to carry out the interpretation and utilization of EEG based data. Clinicians do not require specialized EEG waveform knowledge, however they should possess a general familiarity with cognitive function, neurophysiological measures, and the implications of related data findings.

Warnings

⚠ **The cfNI device does not provide a diagnosis and must not be used as a substitute for clinical evaluation or other diagnostic procedures.**

⚠ **The cfNI device is restricted to qualified and trained personnel. Users must complete device training appropriate to their role before operating the system.**

⚠ **Outputs from the cfNI device are intended to support clinical decision-making. They should be interpreted in conjunction with other clinical information, not in isolation.**

⚠ **Use of non-compatible EEG hardware, custom electrode layouts, or altered stimulus paradigms are not validated and may result in inaccurate or incomplete data.**

⚠ **Poor signal quality, incorrect electrode placement, or other deviation derived from Technician user error may affect output usability.**

⚠ **A stable internet connection is required for core functions including user login, report generation, and data storage. Unreliable connectivity may interrupt operation or lead to data loss.**

⚠ **Users are responsible for implementing appropriate data security, privacy protections, and access control measures in accordance with institutional policies.**

Medical Billing Disclaimer

This report may support clinical procedures that correspond to established CPT codes. Determination of appropriate billing, coding, and supporting documentation remains at the discretion of the treating clinician, in accordance with applicable payer policies and clinical guidelines. Reimbursement outcomes may vary depending on clinician credentials, clinical context, and payer-specific requirements.

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* For clinical use only, by trained and qualified clinicians. Data reflects post-hoc statistical analysis and comparison to reference populations. Outputs do not provide a diagnosis and must not be used as a substitute for clinical evaluation or other diagnostic procedures. Intended to support clinical decision-making and should be interpreted in conjunction with other clinical information.