



QEEG Clinical Report

The QEEG report is provided by NPCindex Institute, operating under the QEEGhome brand.

Personal Data:

Name: Test Test

Gender: Female

Age: 1981-08-20 - 45.1

Handedness: Right

Clinical Data:

Initial diagnosis: OCD-Panic

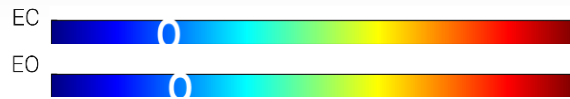
Medication: Clomipramine-Paroxetine

Date of Recording: 2026-07-15

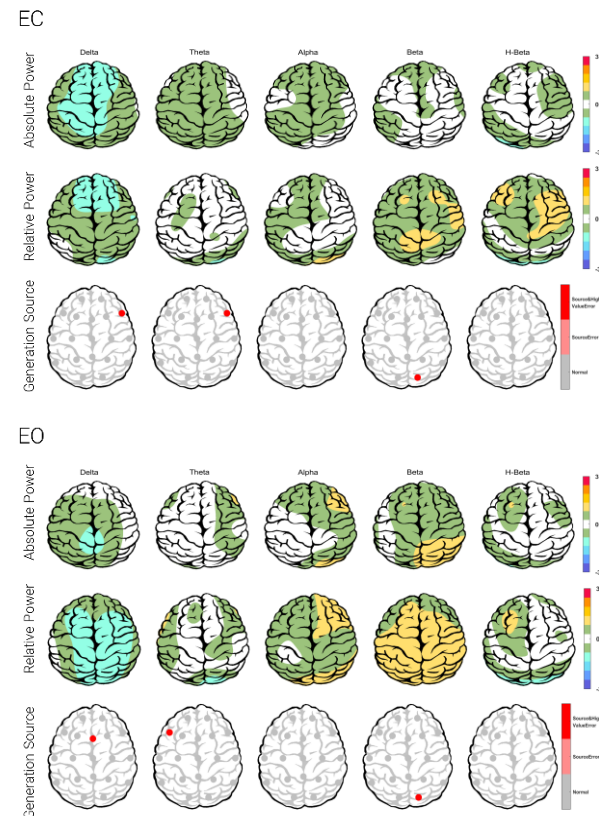
Source of Referral: Test

This case belongs to Test

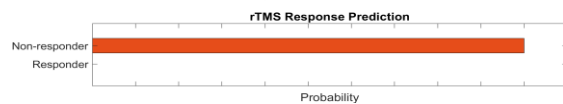
EEG Quality



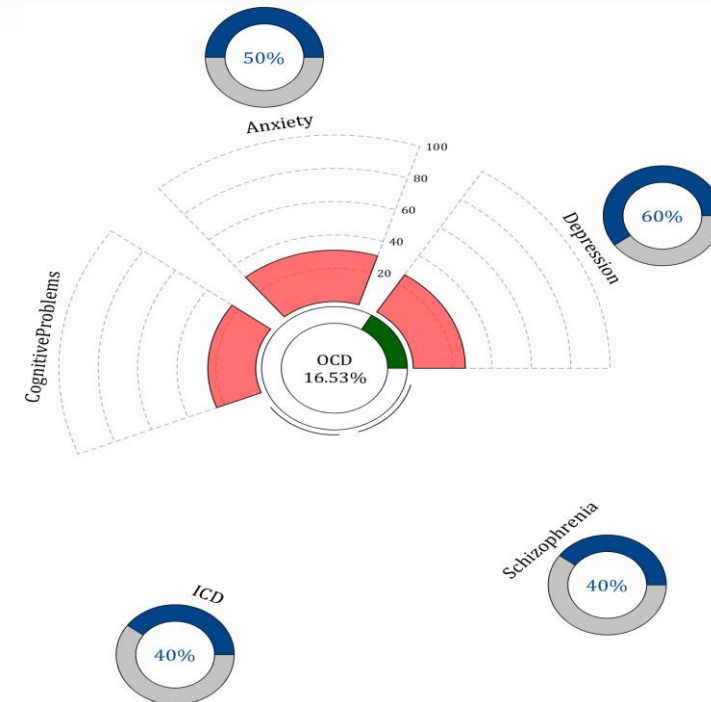
Z-score Information



TMS Responsibility



Pathological Assessment



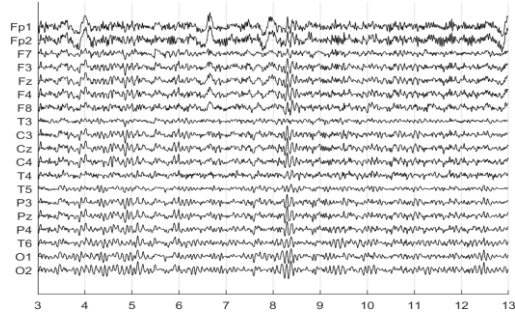
EEG Neuromarker Values

Neuromarker	Region	Value	Assessment
APF - EO	Frontal	11.33	High
APF - EC	Frontal	11.00	High
APF - EO	Occipital	11.88	High
APF - EC	Occipital	11.12	High
Arousal Level - EO	-	-	High
Arousal Level - EC	-	-	Normal

Data Quality Analysis

■ Eye Close

Raw EEG



Rejected Channel



Total Recording Time Remaining:

96.22 sec

Number of Eye and Muscle Elements

Eye: 2

Muscle: 0

Low Artifact Percentage



High Artifact Percentage

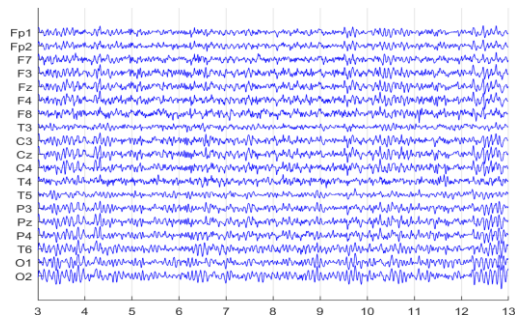


Total Artifact Percentage



EEG Quality: perfect

Denosed EEG

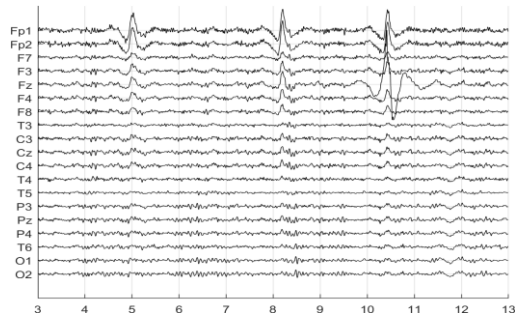


Flat Channel



■ Eye Open

Raw EEG



Rejected Channel



Total Recording Time Remaining:

85.05 sec

Number of Eye and Muscle Elements

Eye: 2

Muscle: 0

Low Artifact Percentage



High Artifact Percentage

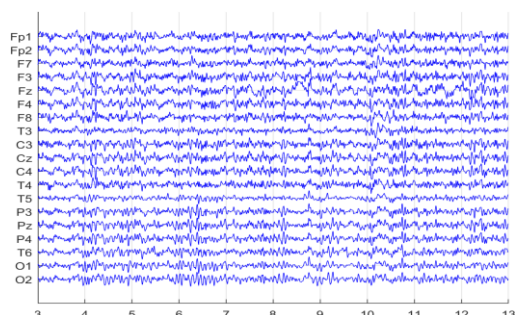


Total Artifact Percentage



EEG Quality: good

Denosed EEG

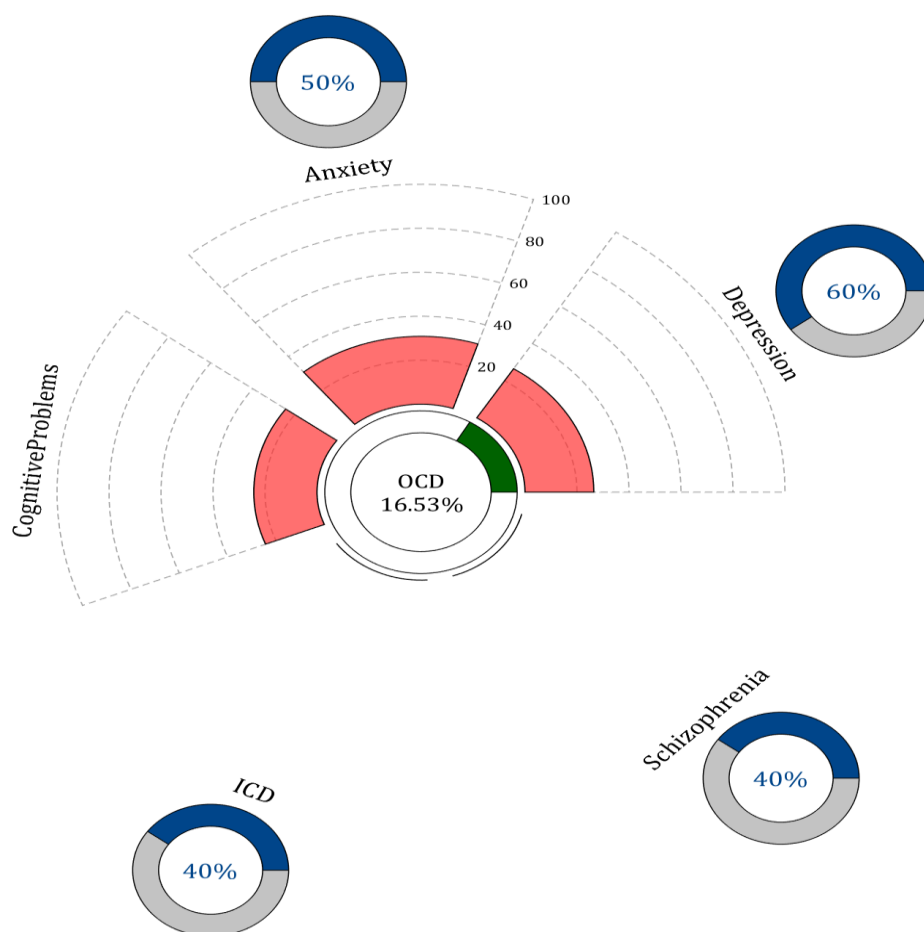


Flat Channel



Pathological Assessment

Obsessive-Compulsive Spectrum Disorders



Description

According to the guidelines, the initial diagnosis of OCD could have comorbidities such as **alcohol abuse, depression, and anxiety**. It also differentially diagnoses with **anxiety, impulsive control disorder, depression, and schizophrenia**.

In the above graph, the **red area** shows the percentage of each comorbidity from your patient's EEG markers. Observe that each comorbidity marker is not unique and can be shared with other comorbidities.

Side circles in the above graph represent the differential diagnosis between depression and its misdiagnosis conditions based on your patient's EEG markers and trained artificial intelligence. The differential diagnosis probability is represented by **the bold blue bars** in the circles, and the probability of depression is represented by the **gray bars**.

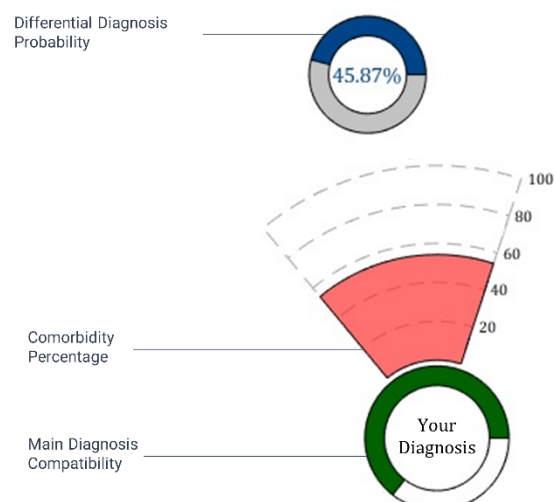
Note: In case your patient has drug abuse, obtain the substance abuse pathologic page of QEEGhome by registering the diagnosis under the initial diagnoses section of the website.

References:

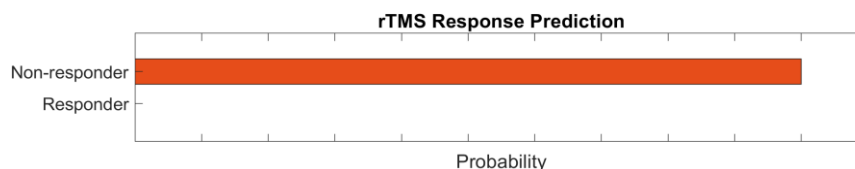
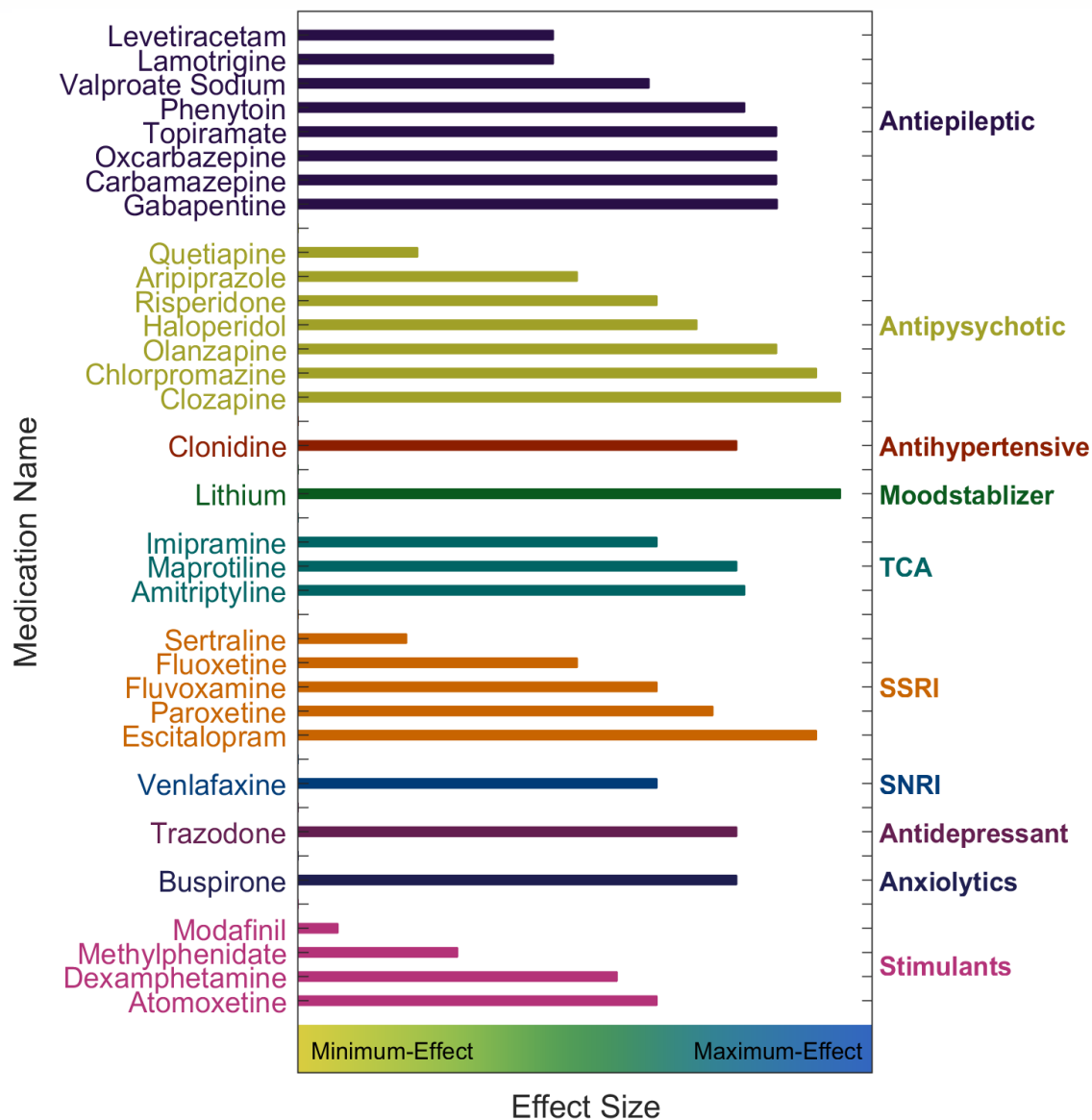
Sadock, B. J., Sadock, V. A., & Ruiz, P. (Eds.). (2025). Kaplan and Sadock's comprehensive textbook of psychiatry (11th ed., Vols. 1–2). Wolters Kluwer
 Sadock, B. J., Sadock, V. A., & Ruiz, P. (2022). Kaplan and Sadock's synopsis of psychiatry: Behavioral sciences/clinical psychiatry (12th ed.). Wolters Kluwer

User Manual

This section is only meant to explain the different parts of the pathologic chart and is not related to your patient's data.



QEEG Based Predicting Medication Response



Explanation

These two tables present the primary neuromarker findings from NPCindex Research Institute, derived from our research on medication-free Iranian cohorts.

The NPCindex team identified and validated 85 candidate features across raw bands, spectra, power, coherence, and LORETA, and report them here without sub-segregation to minimize complexity.

For context and methodology, see qeeghome.com.

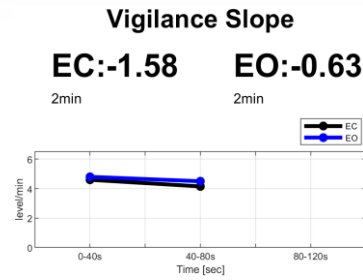
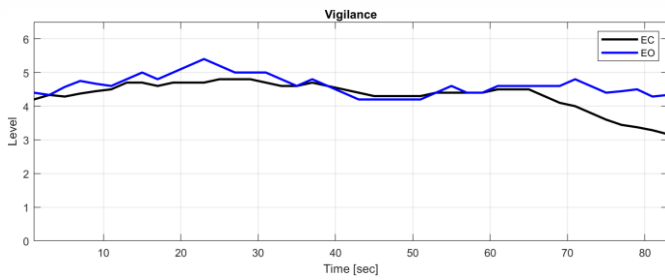
Medication Recommendation

Use the medication charts in three quick steps:

- 1- Filter the medication groups by your working diagnosis.
- 2- Within each group, re-filter by your clinical assessment and the patient's specifics (comorbidities, contraindications, preferences).
- 3- From the remaining options, use the reported effect sizes to choose.

Based on papers, following this workflow has raised our response rates by ~20–30%.

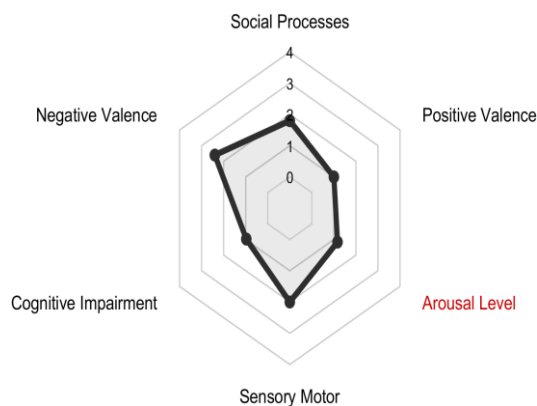
Vigilance



EEG Neuromarker Values

Neuromarker	Region	Value	Assessment
APF-EO	Frontal	11.33	High
APF-EC	Frontal	11.00	High
APF-EO	Occipital	11.88	High
APF-EC	Occipital	11.12	High
Alpha Asymmetry	Frontal	00.02	Anxiety
Alpha Asymmetry	Occipital	-0.27	Anhedonia
Beta Asymmetry	Frontal	-0.02	Anxiety
Alpha Blocking Error	-	-	Not Observed
Arousal Level-EO	-	-	High
Arousal Level-EC	-	-	Normal
Vigilance Level-EO	-	04.00	Normal
Vigilance Level-EC	-	04.00	Normal
Vigilance Mean-EO	-	04.62	Low
Vigilance Mean-EC	-	04.31	Normal
Vigilance Regulation-EO	-	-0.63	Low
Vigilance Regulation-EC	-	-1.58	Low
Vigilance 0 Stage (%) -EO	-	30.95	Normal
Vigilance 0 Stage (%) -EC	-	00.00	Normal
Vigilance A1 Stage (%) -EO	-	00.00	-
Vigilance A1 Stage (%) -EC	-	47.62	-

RDoC Domain

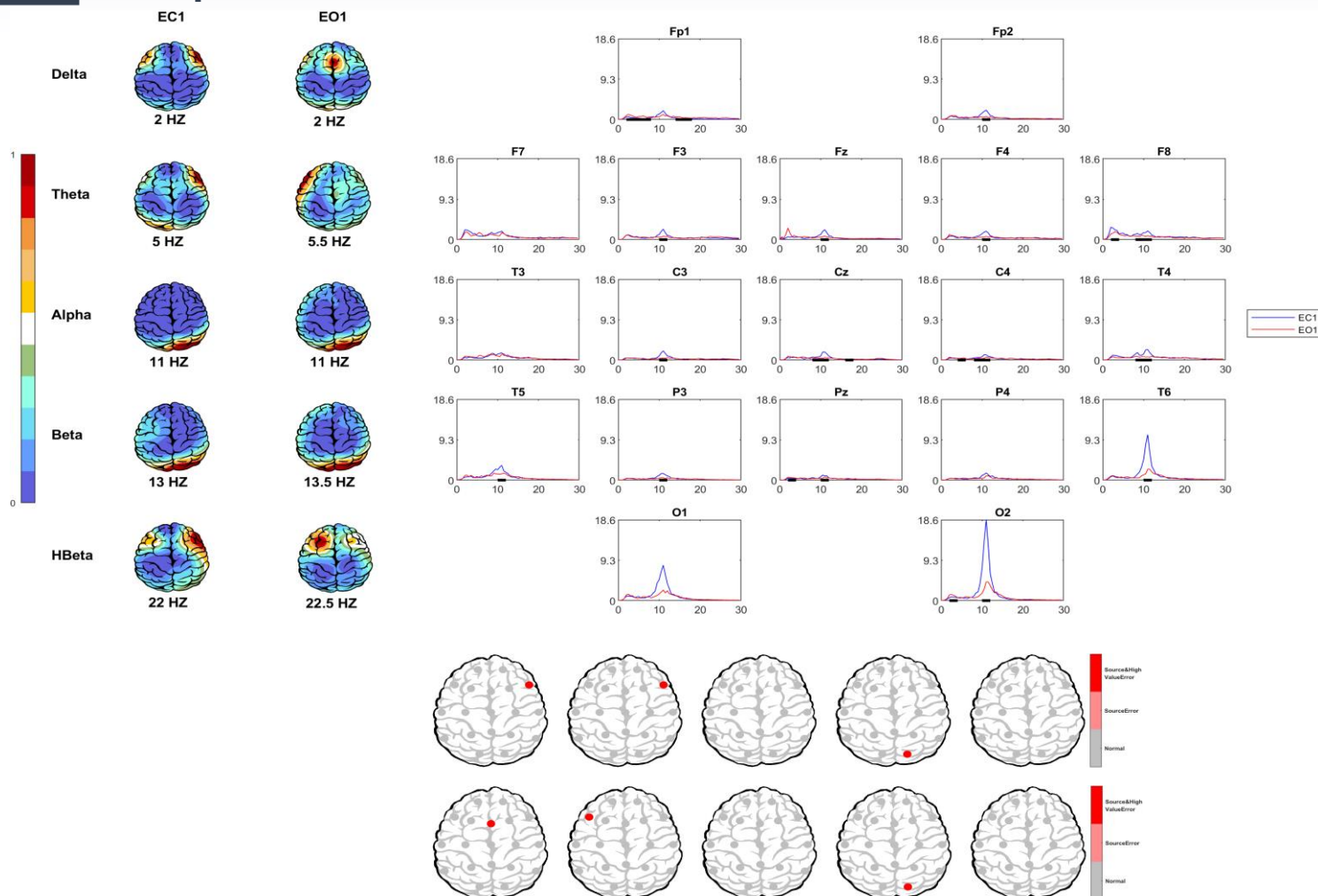


RDoC Description

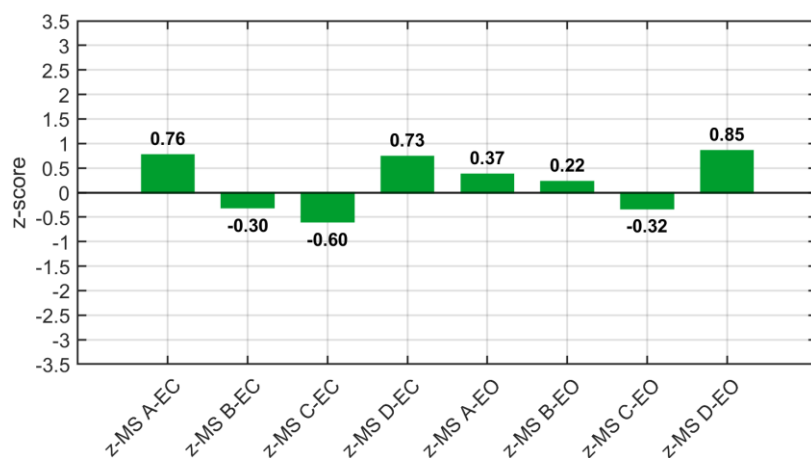
This chart uses a graded scale from 1 to 4, where values closer to 4 indicate greater pathological deviation.

A color-coding system in **Arousal Level** supports rapid interpretation: black denotes normal-range values, red indicates elevated or hyper-arousal, and blue indicates reduced or hypo-arousal relative to the normative database.

EEG Spectra



Brain Networks Analysis

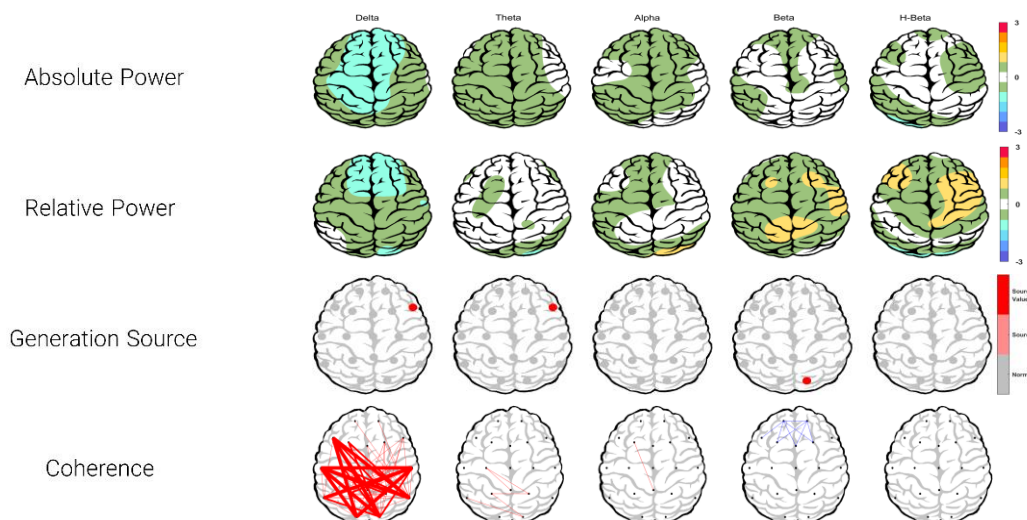


Explanation

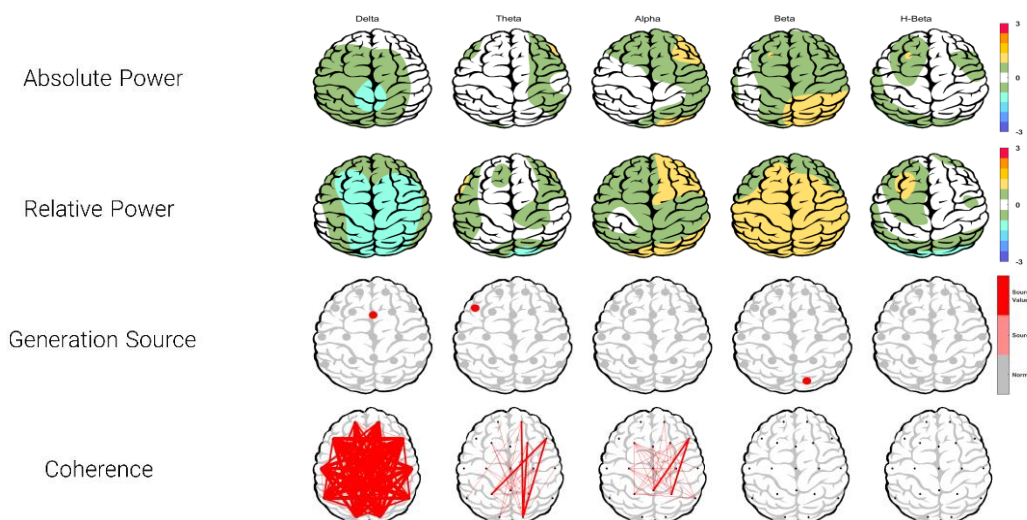
Topomap Pattern (Typical)	Microstate	Associated Brain Networks
	Microstate A	Auditory network, Phonological-temporal network
	Microstate B	Visual network
	Microstate C	Saliency network, Default Mode Network (DMN)
	Microstate D	Dorsal Attention Network

Z Score Summary Information

■ Eye Close

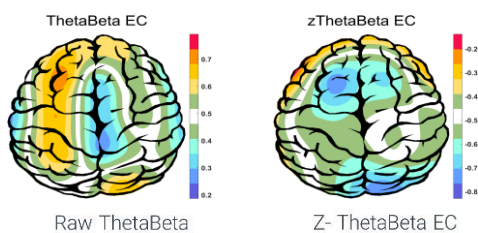


■ Eye Open

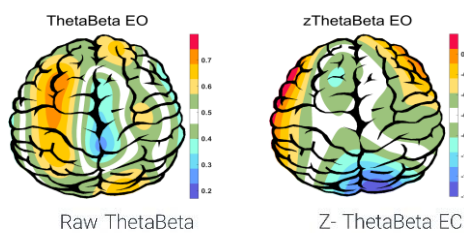


Theta/Beta Ratio

■ Eye Close



■ Eye Open





Protocol Suggestion Report

This report is provided by NPCindex Institute, operating under the QEEGhome brand.

Personal Data:

Name: Test Test

Gender: Female

Age: 1981-08-20 - 45.1

Handedness: Right

Clinical Data:

Medication: Clomipramine-Paroxetine

Date of Recording: 2026-07-15

Source of Referral: Test

This case belongs to Test

Clinical Profile

Initial diagnosis:

OCD

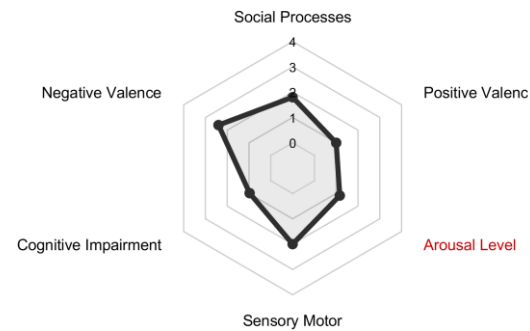
Comorbidities:

Panic

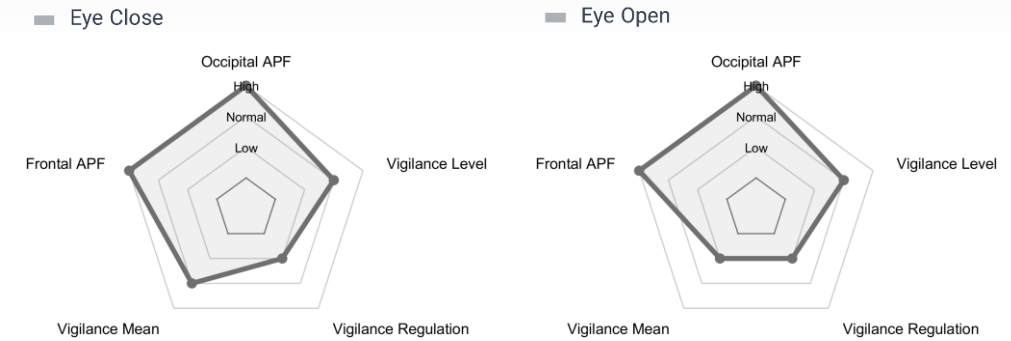
Phenotypes:

Anxiety

RDoC Profile



Neurophysiological Profile



Network Profile

Dorsal Attention Network



Level
 Eye Open: 0.84791
 Eye Close: 0.73392

Default Mode Network



Level
 Eye Open: -0.32048
 Eye Close: -0.59682

Salience Network



Level
 Eye Open: -0.32048
 Eye Close: -0.59682

Visual Network



Level
 Eye Open: 0.21709
 Eye Close: -0.30176

Phonological-Temporal Network



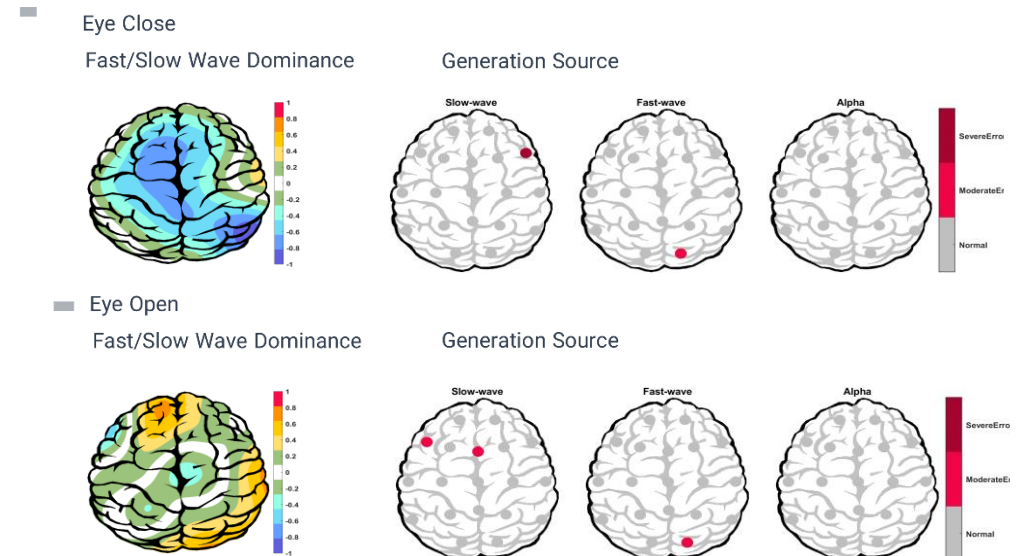
Level
 Eye Open: 0.36585
 Eye Close: 0.76392

Auditory Network



Level
 Eye Open: 0.36585
 Eye Close: 0.76392

Special Topomaps





TMS Suggestion Protocols

Condition	Target Brain Region	Stimulation Parameters	Evidence Level / Approval	Type
OCD (Pre-SMA)	Bilateral pre-supplementary motor area (pre-SMA, ~15% anterior to Cz)	1 Hz rTMS @ 110–120% rMT ~1,500 pulses per session	Level C (Experimental, evidence supported)	Inhibitory
OCD (Deep DMPFC)	Dorsomedial PFC (midline, ~25% nasion–inion)	20 Hz Deep rTMS @ ~100% of leg motor MT (D-B80/H7 coil) 2,000 pulses per session	Level A (FDA/CE Approved, adjunct)	Excitatory
OCD (Deep bilateral)	mPFC + anterior cingulate (dual Cone coil targeting both hemispheres)	20 Hz deep TMS @ 100%–120% rMT (H7 coil) ~2,000 pulses per session	Level B (Evidence Supported, off-label intensification)	
OCD (Orbitofrontal)	Right Orbitofrontal Cortex (OFC, frontopolar Fp2 region)	cTBS (continuous theta burst, inhibitory pattern) @ 80%–100% rMT 600 pulses per session	Level C (Off-label experimental)	Mixed
OCD (SMA – accelerated)	Supplementary Motor Area (SMA proper, midline)	cTBS (robotic neuronavigated) @ 80% rMT 1,800 pulses per day	Level C (Experimental, pilot trials)	

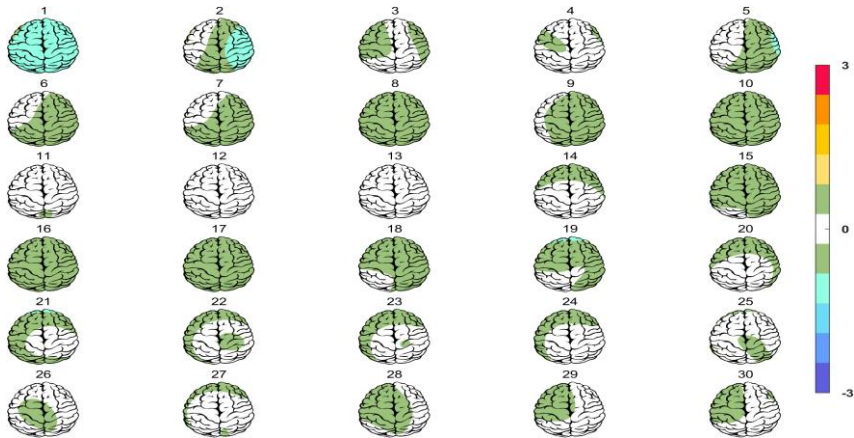
TDCS Suggestion Protocols

Electrode Placement (Anode/Cathode)	Stimulation Parameters	Evidence Level / Approval
Anode: Right Supraorbital, Cathode: Pre-SMA/SMA	2 mA, 20-30 min	Level B
Anode: Left DLPFC, Cathode: Right Supraorbital	2 mA, 20 min	Level C
Anode: Left Supraorbital, Cathode: Right OFC	2 mA, 20 min	Level C

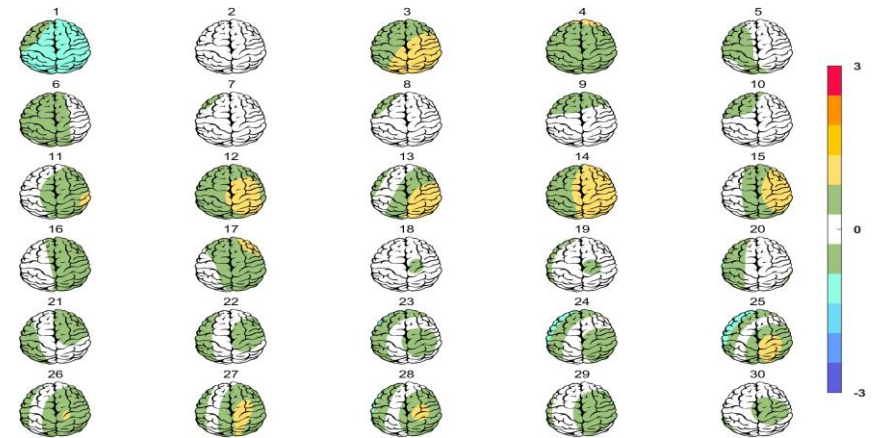
LORETA Networks

	Networks
1	ExecutiveFunction
2	Salience
3	DefaultMood
4	DorsalAttention
5	MesulamExecutiveFunction
6	DTIFrontalLimbic
7	Anxiety

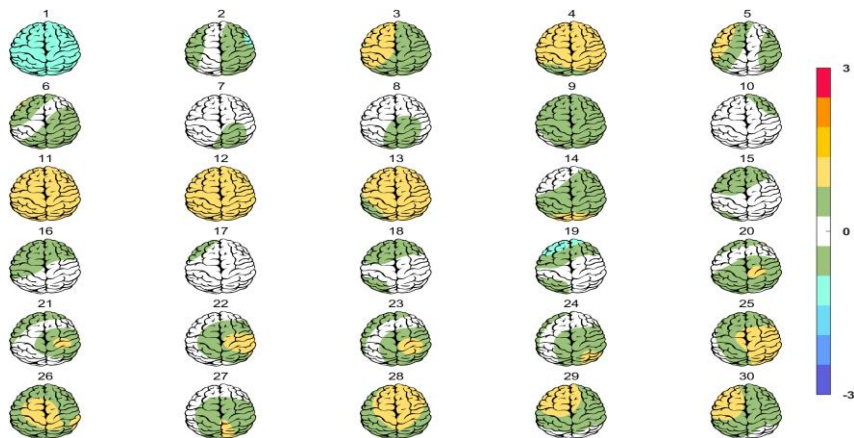
Absolute Power - EC



Absolute Power - EO



Relative Power - EC



Relative Power - EO

