

QEEG Clinical Report

EEGLens



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

Personal Data:

Name: Sajjad Bayrami
Gender: Male
Age: 1987-03-21 - 38.7
Handedness: Right

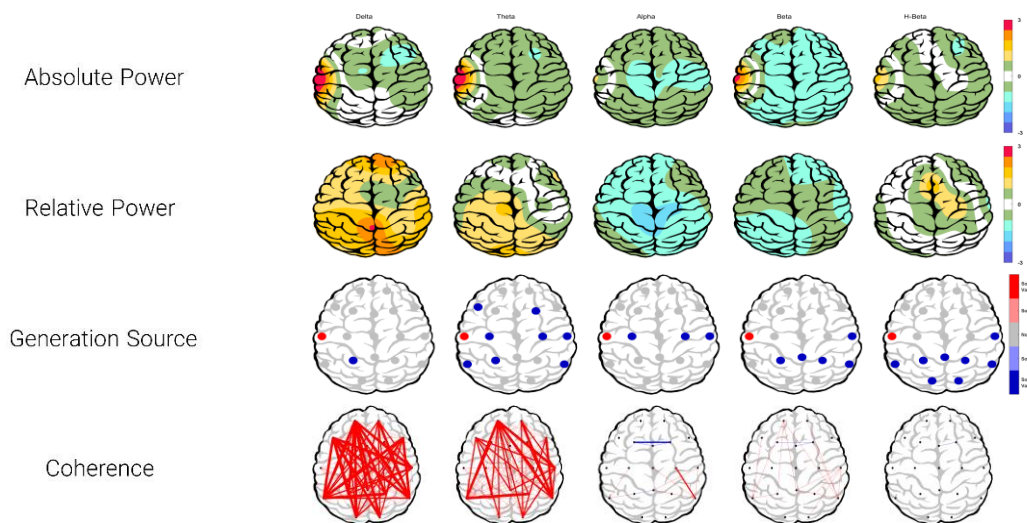
Clinical Data:

Initial diagnosis: B2-Tramadol
Medication: -
Date of Recording: 2025-10-15
Source of Referral: Asayesh Psychiatric Clinic - Dr Torabi

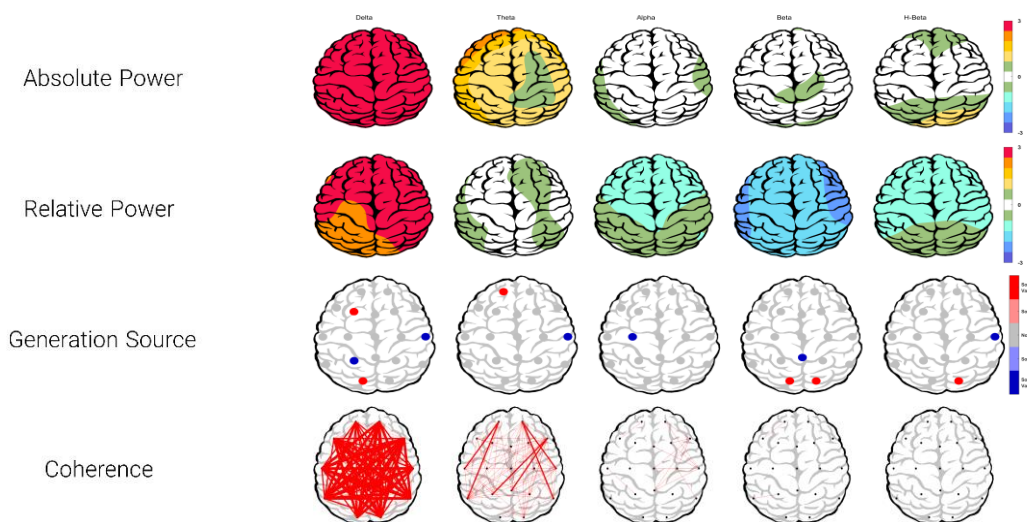
This case belongs to Asayesh Psychiatric Clinic - Dr

Z Score Summary Information

■ Eye Close

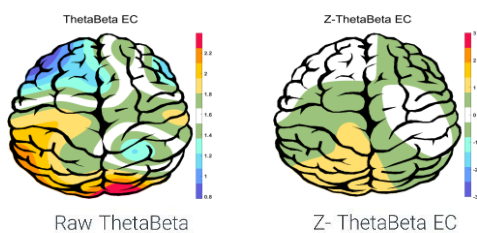


■ Eye Open

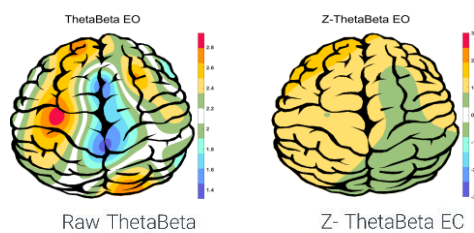


Theta/Beta Ratio

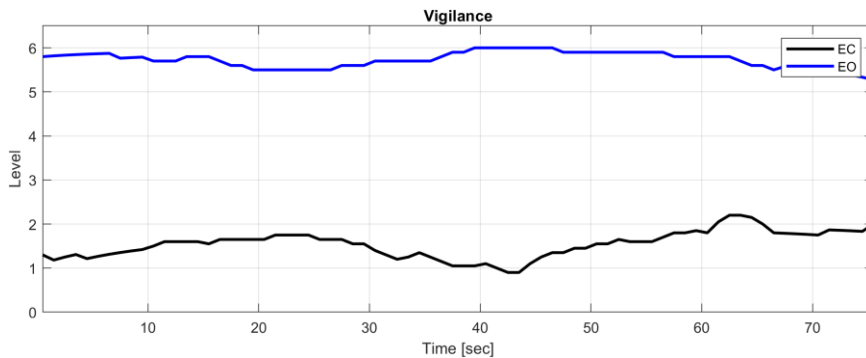
■ Eye Close



■ Eye Open



Vigilance



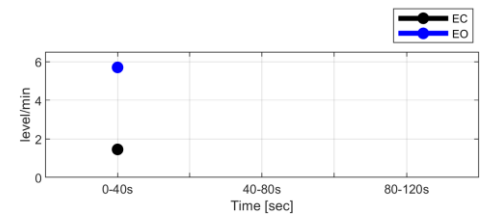
Vigilance Slope

EC:0.41

2min

EO:-0.15

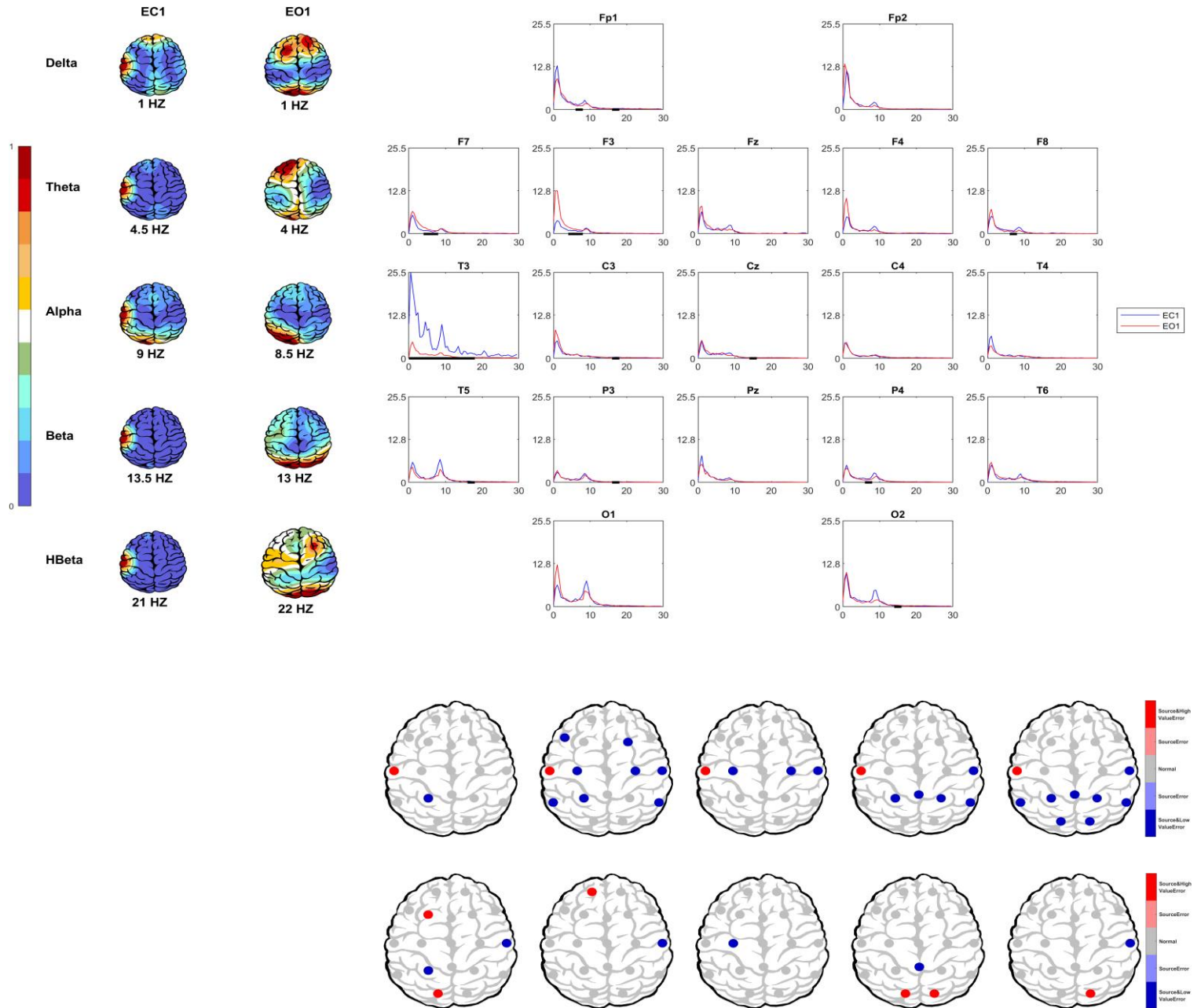
2min



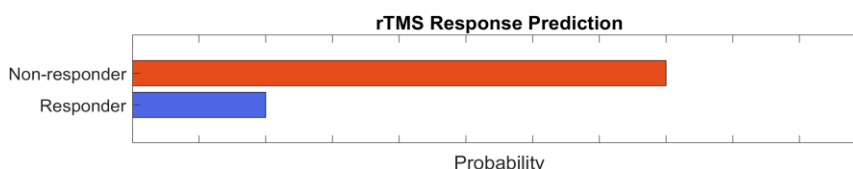
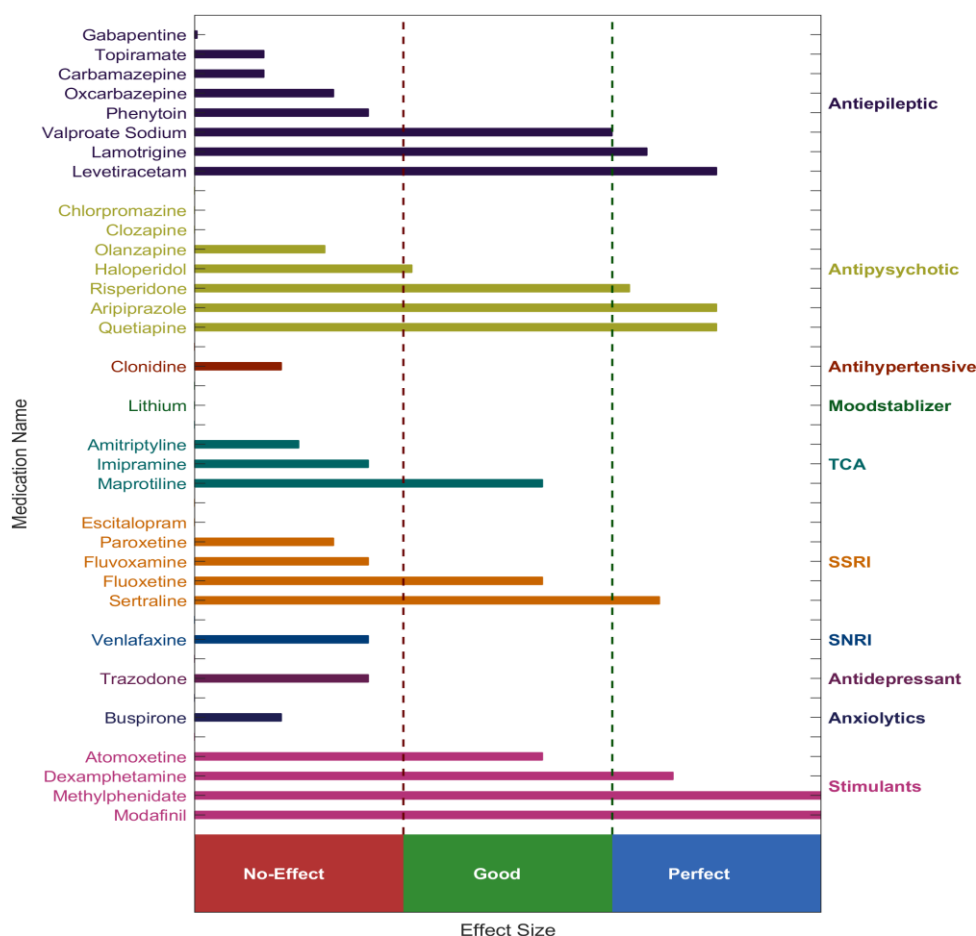
EEG Neuromarker Values

Neuromarker	Region	Value	Assessment
APF - EO	Frontal	09.50	Normal
AFP - EC	Frontal	09.08	Low
APF - EO	Occipital	09.75	Normal
AFP - EC	Occipital	09.25	Low
Alpha Asymmetry - EO	Frontal	00.06	Anxiety
Alpha Asymmetry - EC	Frontal	-0.12	Anhedonia
Alpha Asymmetry - EO	Occipital	00.31	Anxiety
Alpha Asymmetry - EC	Occipital	00.19	Anxiety
Beta Asymmetry - EO	Frontal	-0.06	Anxiety
Beta Asymmetry - EC	Frontal	00.06	Anhedonia
Alpha Blocking	-	-	Not Observed
Arousal Level - EO	-	-	Low
Arousal Level - EC	-	-	Low
Vigilance Level - EO	-	06.00	Normal
Vigilance Level - EC	-	02.00	Low
Vigilance Mean - EO	-	05.71	Normal
Vigilance Mean - EC	-	01.54	Low
Vigilance Regulation - EO	-	-0.15	Normal
Vigilance Regulation - EC	-	00.41	High
Vigilance 0 Stage (%) - EO	-	85.53	High
Vigilance 0 Stage (%) - EC	-	00.00	Normal
Vigilance A1 Stage (%) - EO	-	00.00	-
Vigilance A1 Stage (%) - EC	-	01.32	-

EEG Spectra



QEEG Based Predicting Medication Response



Explanation

These two tables can be considered the most important finding that can be extracted from QEEG. To prepare this list, the NPCIndex Article Review Team has studied, categorized, and extracted algorithms from many authoritative published articles on predict medication response and Pharmac EEG studies. These articles are published between 1970 and 2021. The findings extracted from this set include 85 different factors in the raw band domains, spectrum, power, coherence, and loreta that have not been segregated to avoid complexity, and their results are shown in these diagrams. One can review details in NPCIndex.com .

Medication Recommendation

These two charts, calculate response probability to various medications, according only to QEEG indicators. Blue charts favor drug response and red charts favor drug resistance. The longer the bar, the more evidence there is in the articles. Only drugs listed in the articles are listed. These tables present the indicators reviewed in the QEEG studies and are not a substitute for physician selection.

Report

گزارش:

1.

نتایج تشخیصی:

1.

rTMS Response Prediction

Network Performance

Accuracy: 92.10%
Sensitivity: 89.13%
Specificity: 97.47%

Participants Information

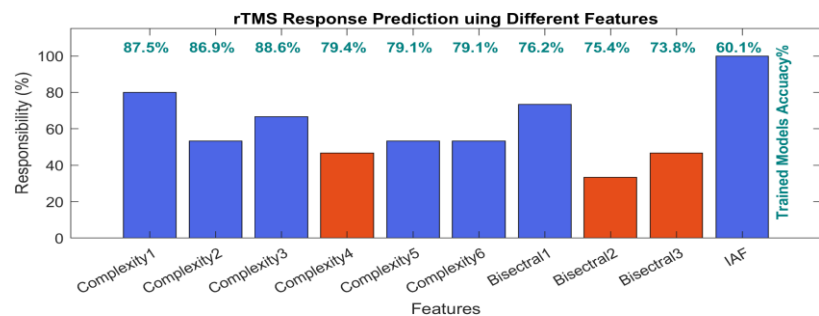
Distribution of Gender



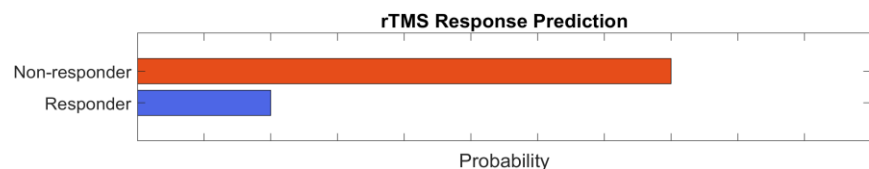
Distribution of Age



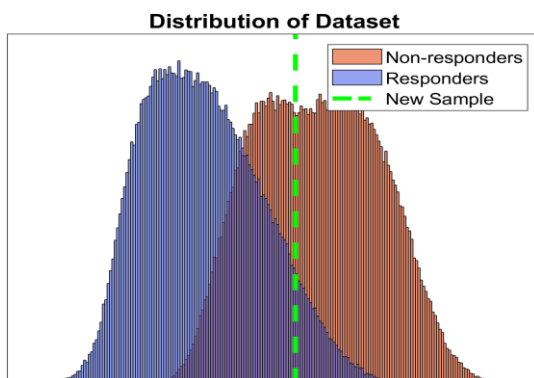
Features Information



Responsibility



Data Distribution

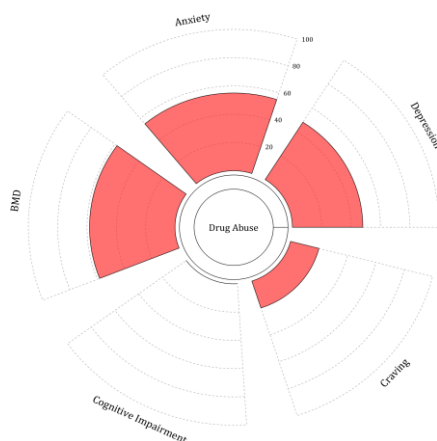


About Predicting rTMS Response

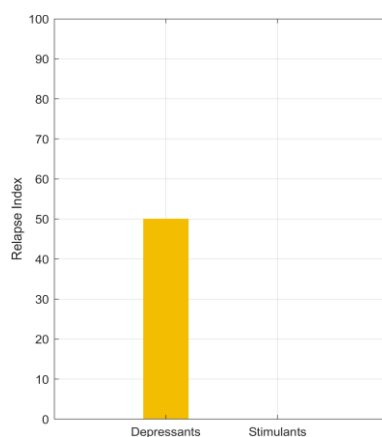
This index was obtained based on machine learning approaches and by examining the QEEG biomarkers of more than 470 cases treated with rTMS. The cases were diagnosed with depression (with and without comorbidity) and all were medication free. By examining more than 40 biomarkers capable of predicting response to rTMS treatment in previous studies and with data analysis, finally 10 biomarkers including bispectral and nonlinear features entered the machine learning process. The final chart can distinguish between RTMS responsive and resistant cases with 92.1% accuracy. This difference rate is much higher than the average response to treatment of 44%, in the selection of patients with clinical criteria, and is an important finding in the direction of personalized treatment for rTMS.

Pathological Assessment for Substance Abuse

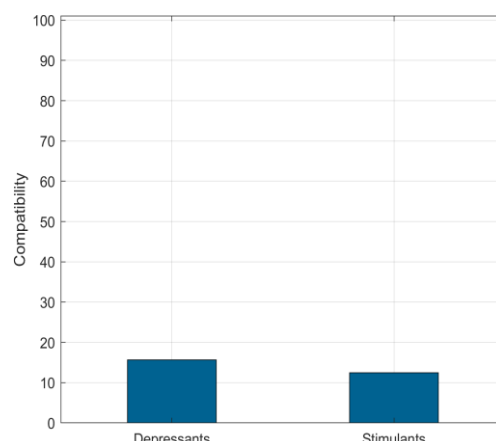
Comorbid Symptoms



Relapse Index

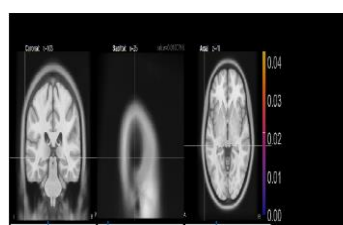
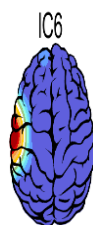
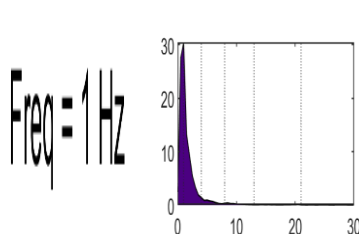


Substance Abuse Compatibility



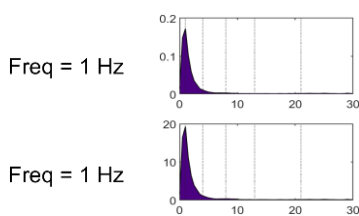
Functional Problems Source Detection

Eye Close

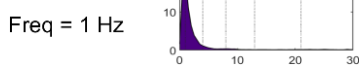


Brodmann area 21
Middle Temporal Gyrus

Eye Open



Brodmann area 10
Medial Frontal Gyrus
Superior Frontal Gyrus



Inferior Frontal Gyrus

Note

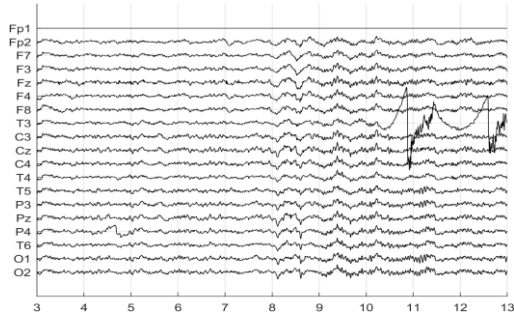
The **Relapse** graph displays the relapse index based on a combination of EEG neuromarkers. It is valid only if the patient has used each of the substances included in the chart; otherwise, the index is not applicable.

The **Compatibility** graph shows how closely the patient's EEG neuromarkers match typical EEG changes caused by specific substances. It helps identify the dominant substance effect in cases of multiple drug use. This index is also valid only if the patient has actually used the substances represented.

Denoising Information

Eye Close

Raw EEG



Rejected Channel



Total Recording Time Remaining:
76.88 sec

Number of Eye and Muscle Elements

Eye: 2

Muscle: 1

Low Artifact Percentage



High Artifact Percentage

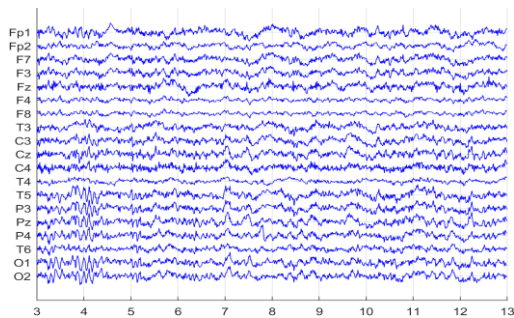


Total Artifact Percentage



EEG Quality: good

Denoised EEG

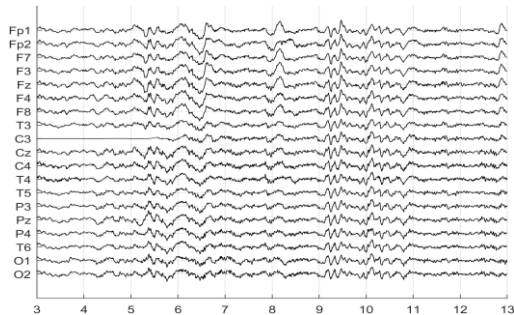


Flat Channel



Eye Open

Raw EEG



Rejected Channel



Total Recording Time Remaining:
159.43 sec

Number of Eye and Muscle Elements

Eye: 2

Muscle: 1

Low Artifact Percentage



High Artifact Percentage

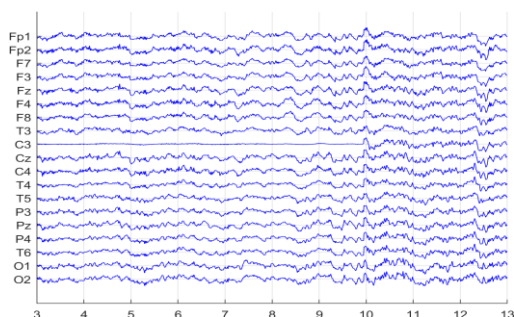


Total Artifact Percentage



EEG Quality: perfect

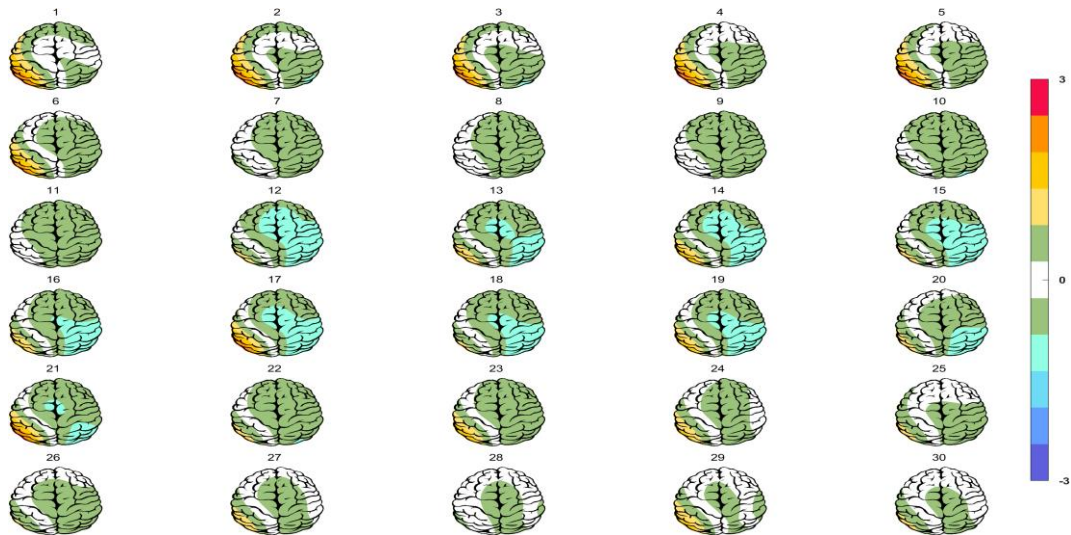
Denoised EEG



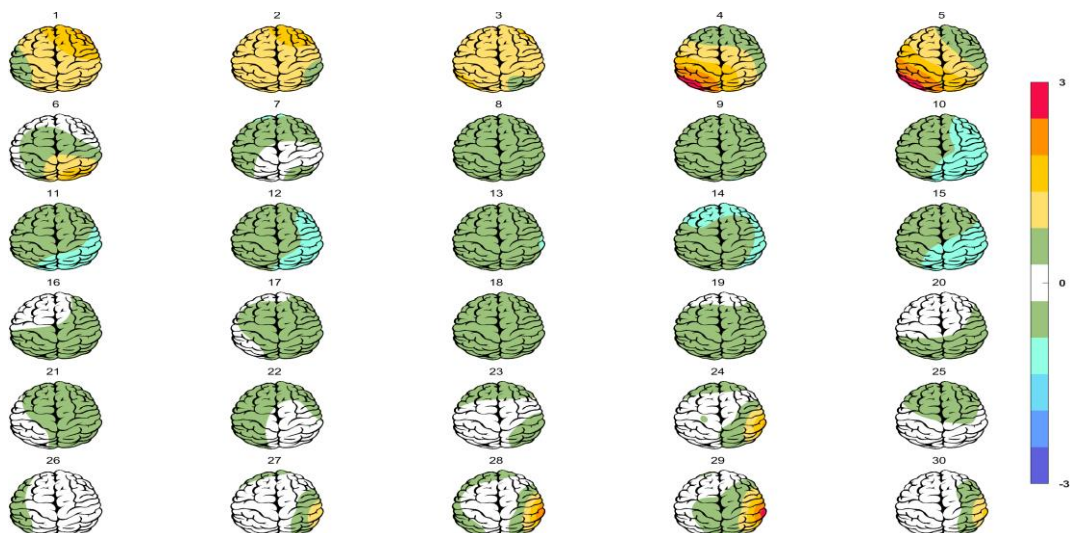
Flat Channel



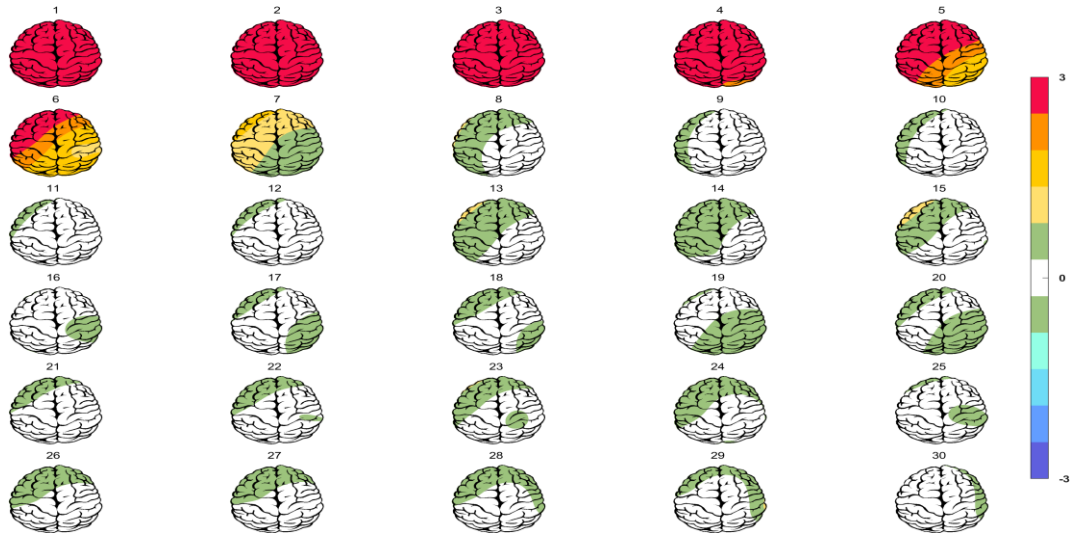
Absolute Power-Eye Close



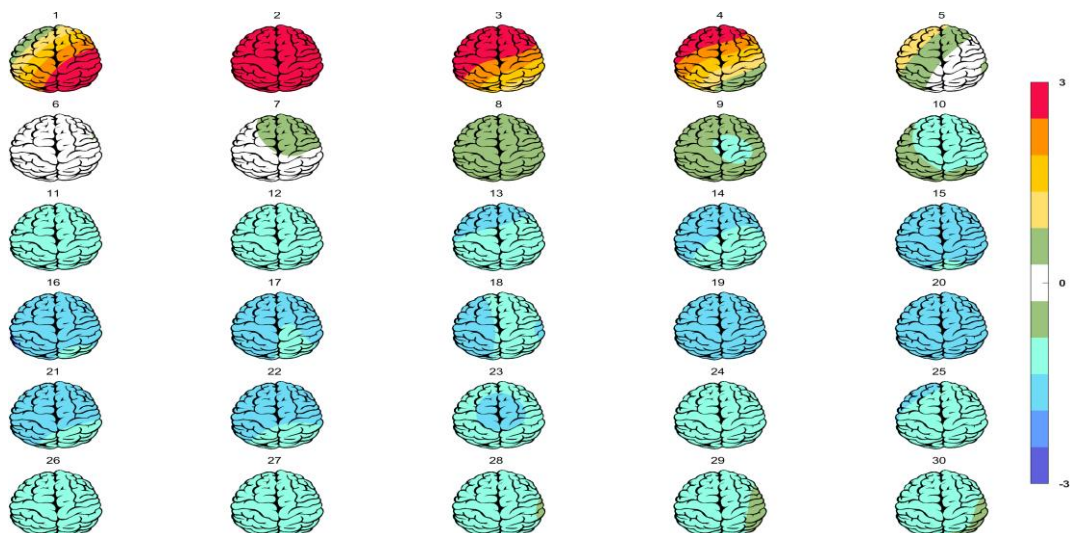
Relative Power-Eye Close

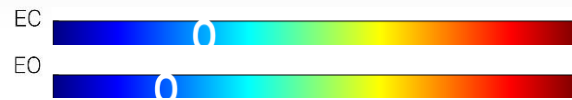
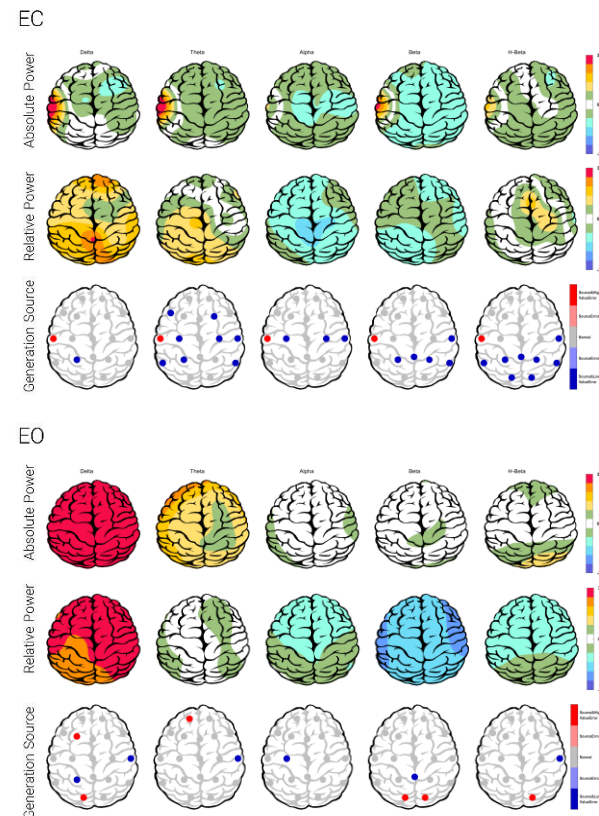
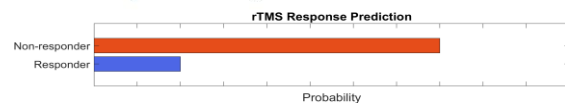


Absolute Power-Eye Open



Relative Power-Eye Open



EEG Quality**Z-score Information****TMS Reponsibility****EEG Neuromarker Values**

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