# **QEEG Clinical Report**

**EEGLens** 





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

### **Personal Data:**

Name: Abouzar Alizade

Gender: Male

Age: 1986-08-25 - 39.2 Handedness: Right

# **Clinical Data:**

Initial diagnosis: Tramadol Medication: Venlafaxine

Date of Recording: 2025-10-16

Source of Referral: Asayesh Psychiatric Clinic - Dr Torabi

This case belongs to Asayesh Psychiatric Clinic - Dr





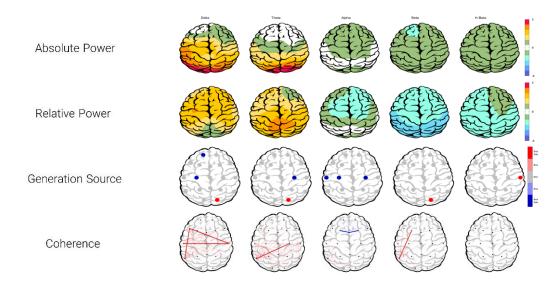




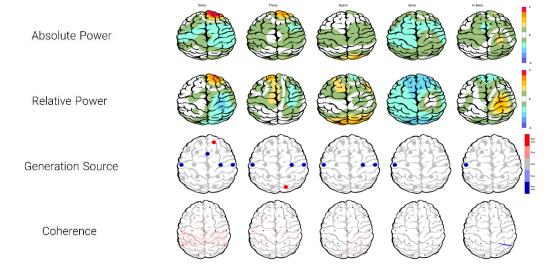


# **Z Score Summary Information**

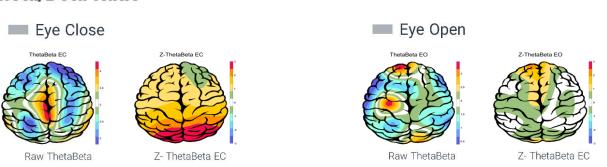
### Eye Close



#### Eye Open



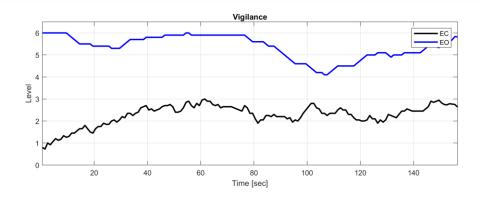
### Theta/Beta Ratio

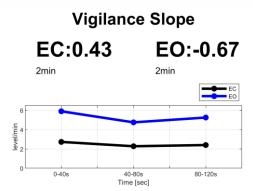






# Vigilance





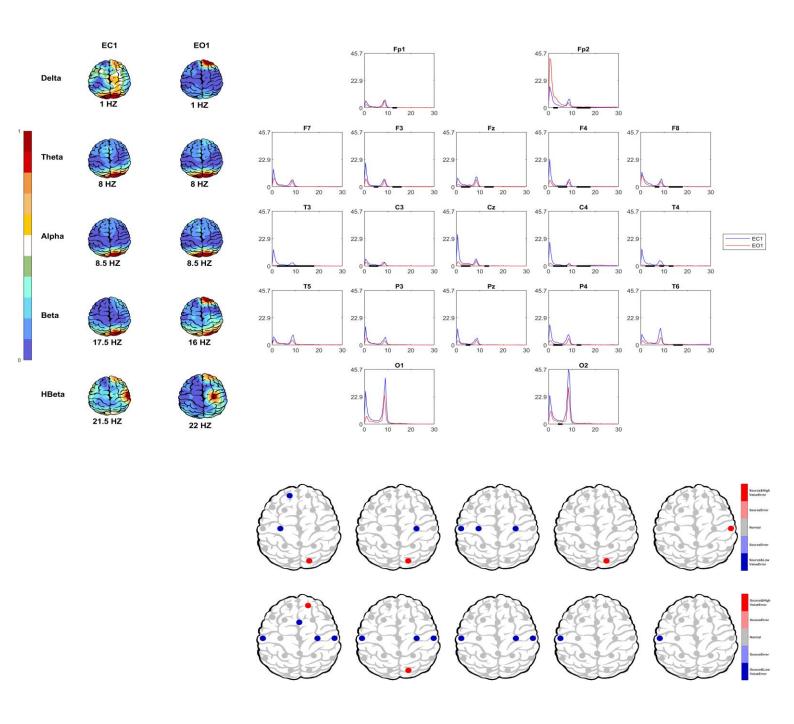
# **EEG Neuromarker Values**

Neuromarker	Region	Value	Assessment
APF - EO	Frontal	08.75	Low
AFP - EC	Frontal	08.75	Low
APF - EO	Occipital	08.75	Low
AFP - EC	Occipital	08.88	Low
Alpha Asymmetry - EO	Frontal	00.13	Anxiety
Alpha Asymmetry - EC	Frontal	00.06	Anxiety
Alpha Asymmetry - EO	Occipital	-0.19	Anhedonia
Alpha Asymmetry - EC	Occipital	-0.14	Anhedonia
Beta Asymmetry - EO	Frontal	00.06	Anhedonia
Beta Asymmetry - EC	Frontal	-0.14	Anxiety
Alpha Blocking	-	-	Not Observed
Arousal Level - EO	-	-	Low
Arousal Level - EC	ů.	-	Low
Vigilance Level - EO	<u>-</u> :	06.00	Normal
Vigilance Level - EC	-	02.00	Low
Vigilance Mean - EO	-	05.38	Normal
Vigilance Mean - EC	-	02.27	Normal
Vigilance Regulation - EO	-	-0.67	Low
Vigilance Regulation - EC	-	00.43	High
Vigilance 0 Stage (%) - EO	H	68.79	Normal
Vigilance 0 Stage (%) - EC	<u></u>	00.00	Normal
Vigilance A1 Stage (%) - E0	-	00.00	-
Vigilance A1 Stage (%) - EC	<u>=</u>	08.28	-





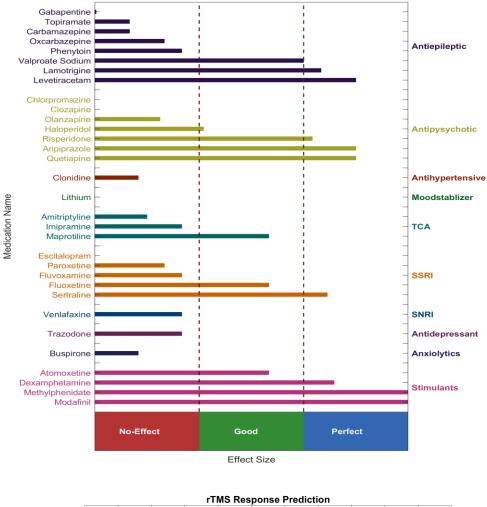
# **EEG Spectra**

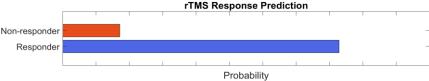






### **QEEG Based Predicting Medication Response**





### **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 Pharmaco 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

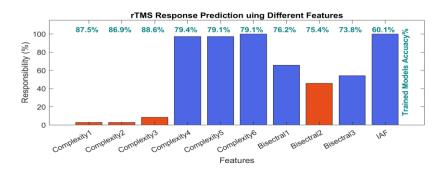
Accuracy: 92.10% Sensitivity: 89.13% Specificity: 97.47%

#### Participants Information

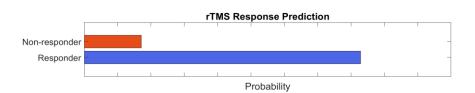




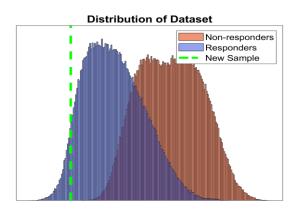
#### Features Information



### 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.



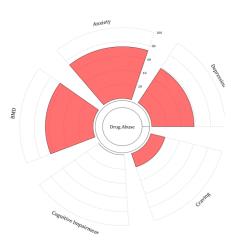


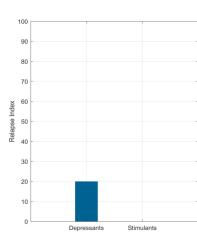
# **Pathological Assessment for Substance Abuse**

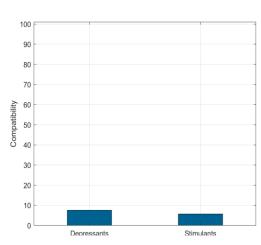


# Relapse Index

### Substance Abuse Compatibility

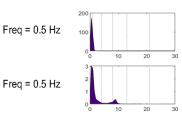






#### Functional Problems Source Detection

#### Eye Close





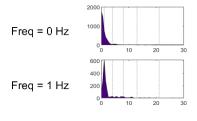




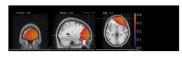
Brodmann area 8 Middle Frontal Gyrus

Brodmann area 18 Lingual Gyrus

#### Eye Open

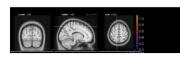






Brodmann area 10 Middle Frontal Gyrus





\*,\* NOT Found \*,\*

#### 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.

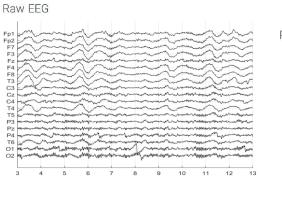
The Compatibility graph shows how closely the patient's EEG neuromarkers match typical EEG changes caused by specific substances. It helps identify the dominant substance effect in cases of multiple drug use. This index is also valid only if the patient has actually used the substances represented.





# **Denoising Information**

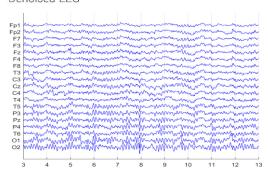
### Eye Close



Rejected Channel



Denoised EEG



Flat Channel



# **Total Recording Time Remaining:**

183.35 sec

# **Number of Eye and Muscle Elements**

Eye: 1 Muscle: 0

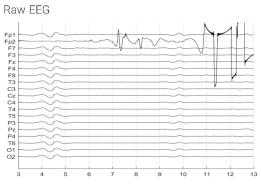
Low Artifact Percentage

High Artifact Percentage

**Total Artifact Percentage** 

**EEG Quality:** perfect

#### Eye Open



Rejected Channel



**Total Recording Time Remaining:** 157.49 sec

**Number of Eye and Muscle Elements** 

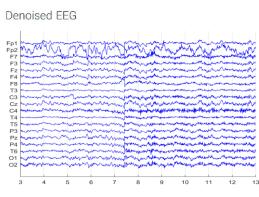
Eye: 4 Muscle: 2

Low Artifact Percentage

High Artifact Percentage

Total Artifact Percentage

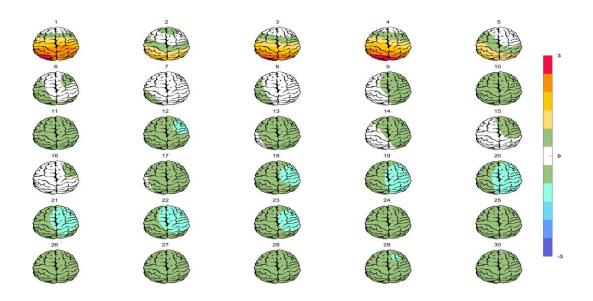
**EEG Quality:** perfect



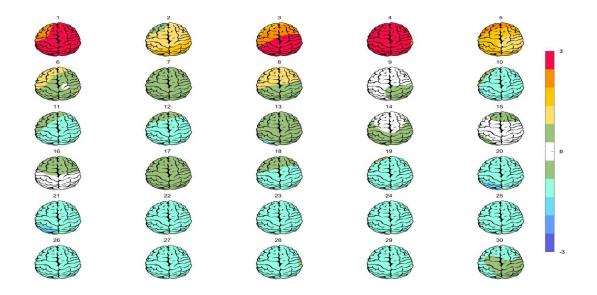




# **Absolute Power-Eye Close**



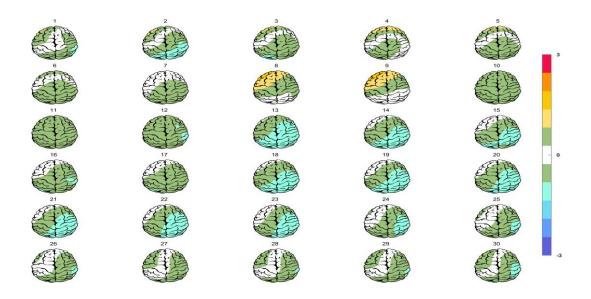
# **Relative Power-Eye Close**



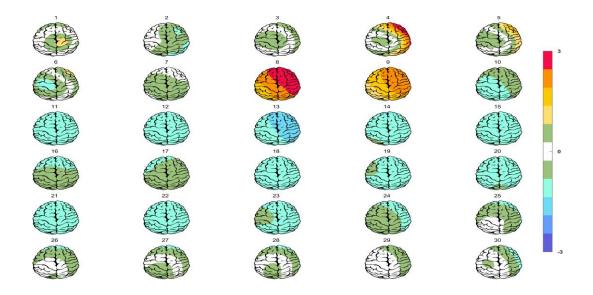




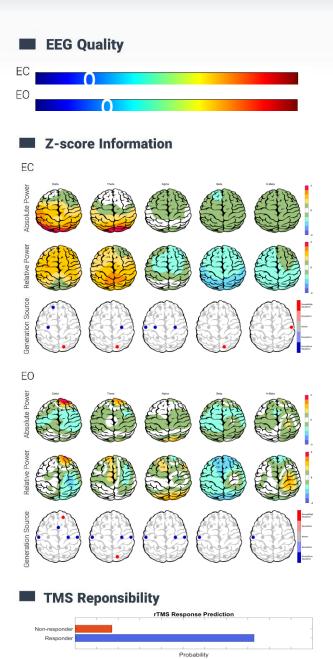
# **Absolute Power-Eye Open**



# **Relative Power-Eye Open**







#### **■ EEG Neuromarker Values**

Neuromarker	Region	Value	Assessment
APF - EO	Frontal	08.75	Low
AFP - EC	Frontal	08.75	Low
APF - EO	Occipital	08.75	Low
AFP - EC	Occipital	08.88	Low
Arousal Level - EO		-	Low
Arousal Level - EC	-	-	Low

QEEGhome Clinical Report