## **QEEG Clinical Report**

**EEGLens** 





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

## **Personal Data:**

Name: Amir Reza Akhavan

Gender: Male

Age: 1989-11-26 - 36.1 Handedness: Right

## **Clinical Data:**

Initial diagnosis: Convulsion Medication: ES-citalopram

Date of Recording: 2025-10-19 Source of Referral: Dr Ghasemi



This case belongs to Dr Ghasemi









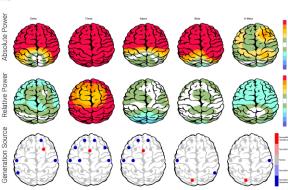
#### **EEG** Quality

EC

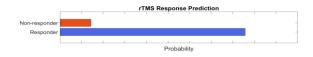


#### Z-score Information

EC



#### **■** TMS Reponsibility



#### **EEG Neuromarker Values**

Neuromarker	Region	Value	Assessment
AFP - EC	Frontal	10.33	Normal
AFP - EC	Occipital	10.25	Normal
Arousal Level - EC	-	-	Normal

QEEGhome Clinical Report

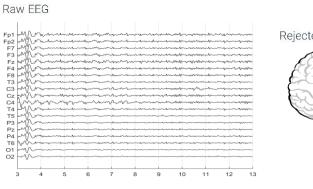
Dr Ghasemi





## **Denoising Information**

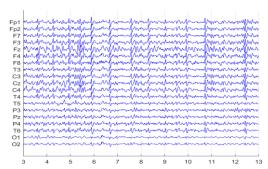
#### Eye Close



Rejected Channel



Denoised EEG



Flat Channel

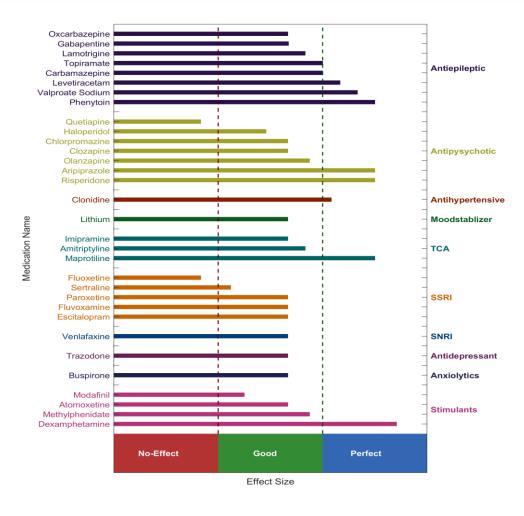


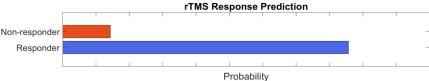
**Total Recording Time Remaining:** 107.33 sec **Number of Eye and Muscle Elements** Eye: 2 Muscle: 0 Low Artifact Percentage High Artifact Percentage **Total Artifact Percentage EEG Quality:** good





## **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.





## **rTMS Response Prediction**

#### Network Performance

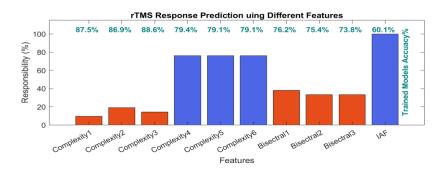
Accuracy: 92.10% Sensitivity: 89.13% Specificity: 97.47%

#### Participants Information

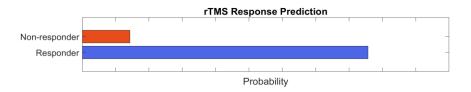




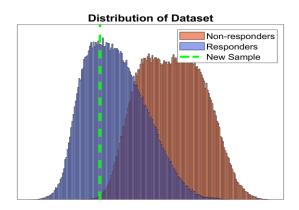
#### Features Information



#### Responsibility



#### Data Distribution



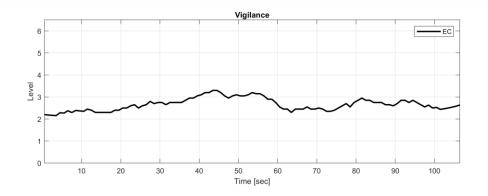
#### **About Predicting rTMS Response**

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.

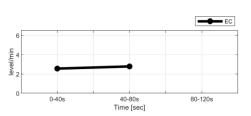




## Vigilance



# Vigilance Slope **0.10**



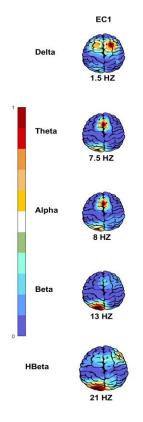
## **EEG Neuromarker Values**

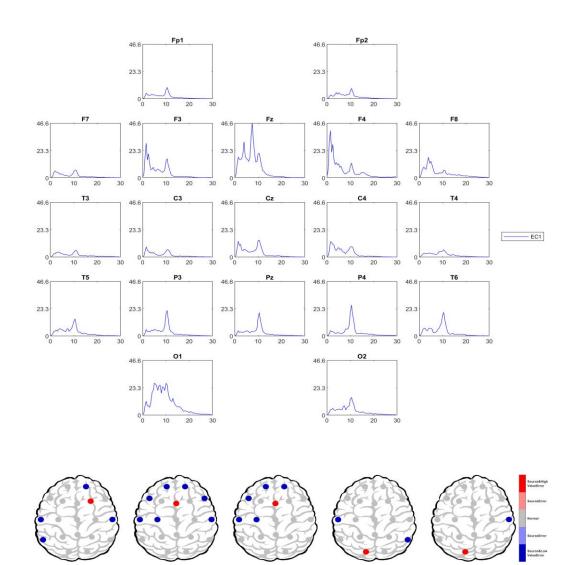
Neuromarker	Region	Value	Assessment
APF	Frontal	10.33	Normal
APF	Occipital	10.25	Normal
Alpha Asymmetry	Frontal	00.11	Anxiety
Alpha Asymmetry	- Occipital	00.39	Anxiety
Beta Asymmetry	Frontal	-0.32	Anxiety
Arousal Level		-	Normal
Vigilance Level		02.00	Low
Vigilance Mean		02.66	Normal
Vigilance Regulation		00.10	Normal
Vigilance 0 Stage (%)	<b>-</b>	00.00	Normal
Vigilance A1 Stage (%)	_	03.74	-





## **EEG Spectra**



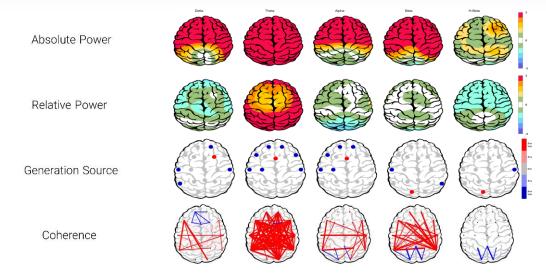




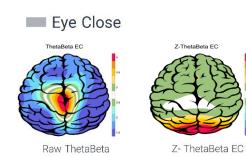


## **Z Score Summary Information**

Eye Close



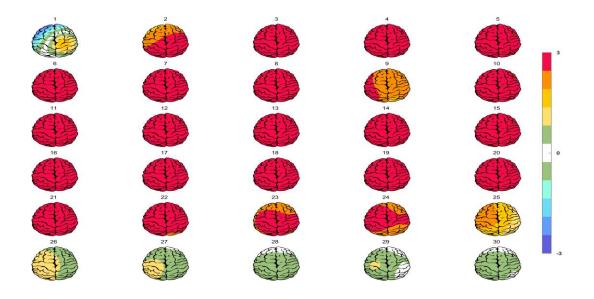
## **Theta/Beta Ratio**







## **Absolute Power-Eye Close**



## **Relative Power-Eye Close**

