





QEEG Clinical Report BrainLens V0.4

Report Description

Personal & Clinical Data

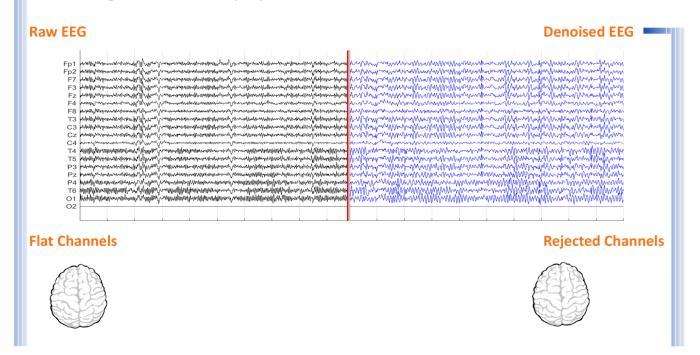
Name	Seddighe Kazemi	Date of Recording	15-Jun-2024
Date of Birth - Age	21-Mar-1988 - 36.23	Gender	Female
Handedness(R/L)	Right	Source of Referral	Dr Rahimi
Initial Diagnosis		BTD	
Current Medication	Medication Free		

Dr Rahimi





Denoising Information (EC)



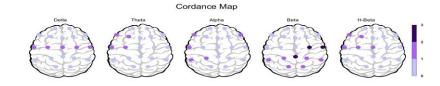
Number of Eye and Muscle Elements		Low Artifact Percentage			
Eye	1	Muscle	0	0	
Total Arti	fact Percentage			High Artifact Percentage	
()			0		
EEG Quali	ity	bad		Total Recording Time Remaining	248.06 sec





Pathological assessment for mood disorders

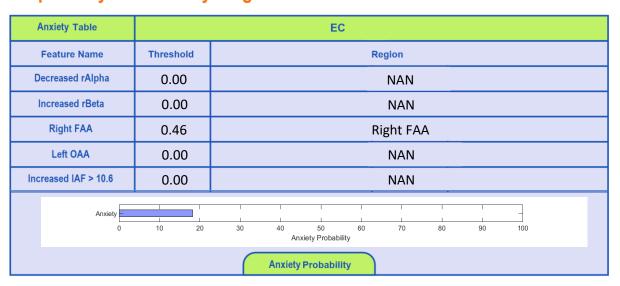
Compare to Mood Disorders Database



EEG Compatibility with Depression Diagnosis

Depression Table	EC		
Feature Name	Threshold	Region	
Increased Global rAlpha	1.00	global	
Increased global rTheta	0.50	global	
Decreased rDelta	-0.50	LF-RF-MF-C-O-	
Increased rBeta	0.00	NAN	
Left FAA	0.00	NAN	
Right OAA	1.00	Right OAA	
Decreased Coherence (D, T)	0.00	NAN	
Increased Coherence (A, B)	1.00	Increased Coherence (A,B)	
depression 0	10 20	30 40 50 60 70 80 90 100 Depression Probability	
Depression Probability			

EEG Compatibility with Anxiety Diagnosis





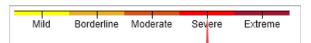


EEG Compatibility with Mood Swings Diagnosis *

Mood Swings Table	EC			
Feature Name	Threshold	Region		
Decreased rAlpha	0.00	NAN		
Increased (rDelta+rTheta)	0.50	RT		
Increased rBeta	0.00	NAN		
Decreased Alpha Coherence	0.00	NAN		
Right FAA	0.46	Right FAA		
BMD 0	I I 10 20	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Mood Swings Probability				

* This index can only be investigated if there are symptoms of mood swings (R/O BMD or R/O mood swings).

Depression Severity



Anxiety Severity



Cognitive Functions



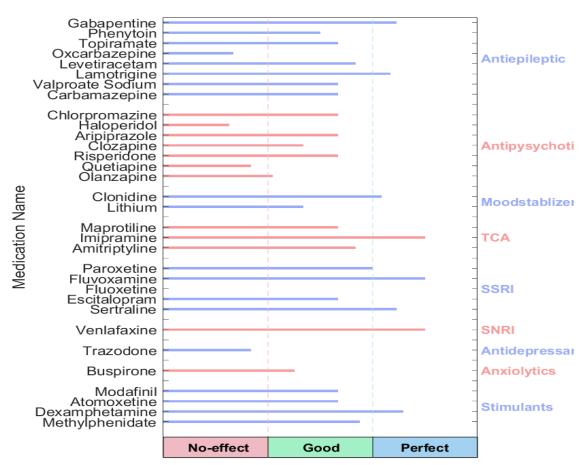
Arousal Level Detection







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 .

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.



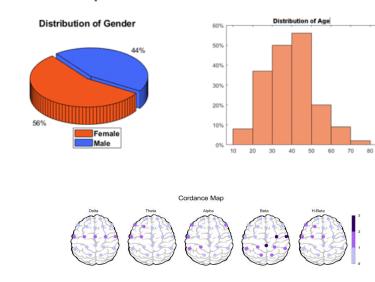


rTMS Response Prediction

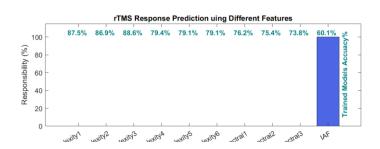
Network Performance

Accuracy: 92.1% Sensitivity: 89.13% Specificity: 97.47%

Participants Information



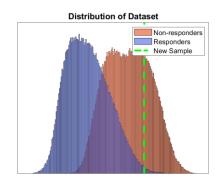
Features Information



Responsibility



Data Distribution



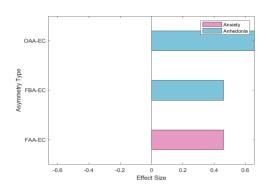
About Predicting rTMS Response

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.

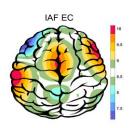




Alpha Asymmetry(AA)



IAF(EC)

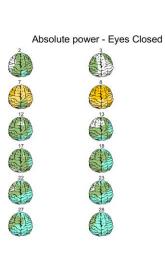


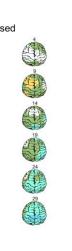
Eye Close IAF= 08.88

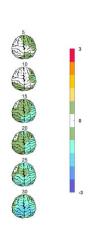
Absolute Power-Eye Closed (EC) 🌮







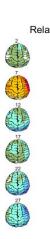


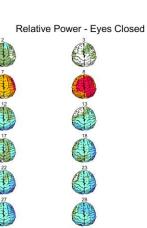


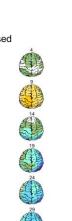
Relative Power-Eye Closed (EC) 🌮

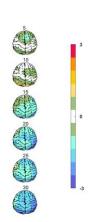








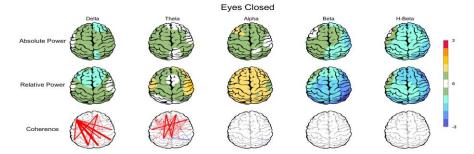




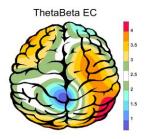


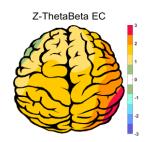


Z Score Summary Information (EC)

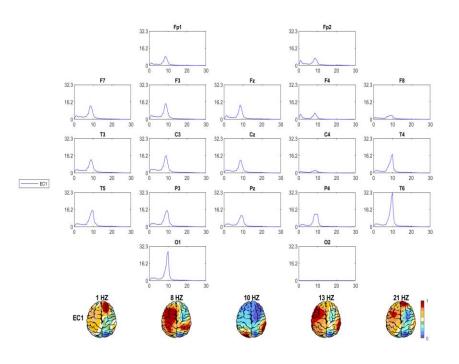


E.C.T/B Ratio (Raw- Z Score)





EEG Spectra



Arousal Level

