





QEEG Clinical Report BrainLens V0.4

Report Description

Personal & Clinical Data

Name	Nasibe Mortazi	Date of Recording	05-Nov-2024		
Date of Birth - Age	01-Mar-1981 - 43.68	Gender	Female		
Handedness(R/L)	Right	Source of Referral	Asayesh Psychiatric Clinic -		
Initial Diagnosis	Anxiety-OCD-P.g.y(Mother)				
Current Medication	Buspirone-Fluoxetine				

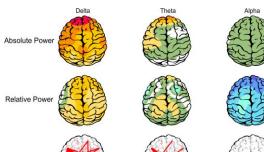
Asayesh Psychiatric Clinic -Dr Torabi





Z Score Summary Information (EC)









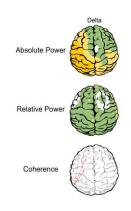


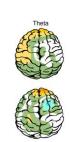


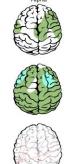




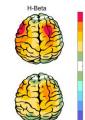
Z Score Summary Information (EO)









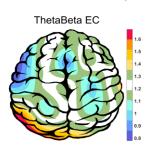


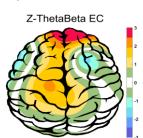




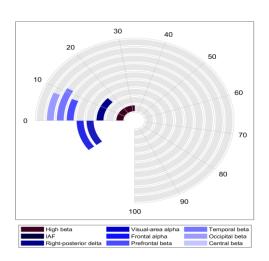


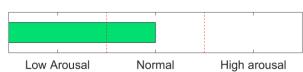
E.C.T/B Ratio (Raw- Z Score)



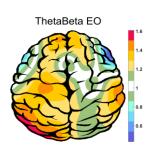


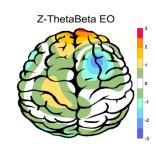
Arousal Level





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

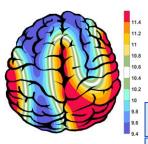








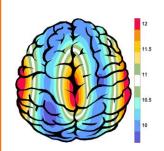
APF(EO)



Frontal APF= 09.58

Posterior APF= 11.50

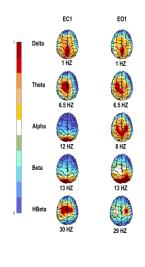
APF(EC)

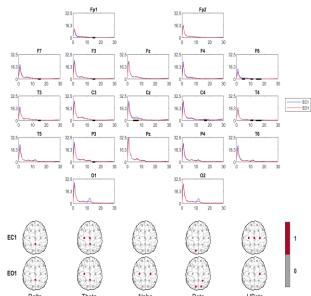


Frontal APF= 09.92

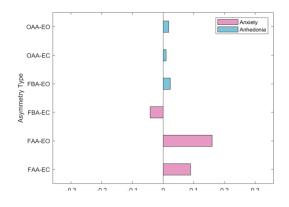
Posterior APF= 12.00

EEG Spectra





Alpha Asymmetry(AA)



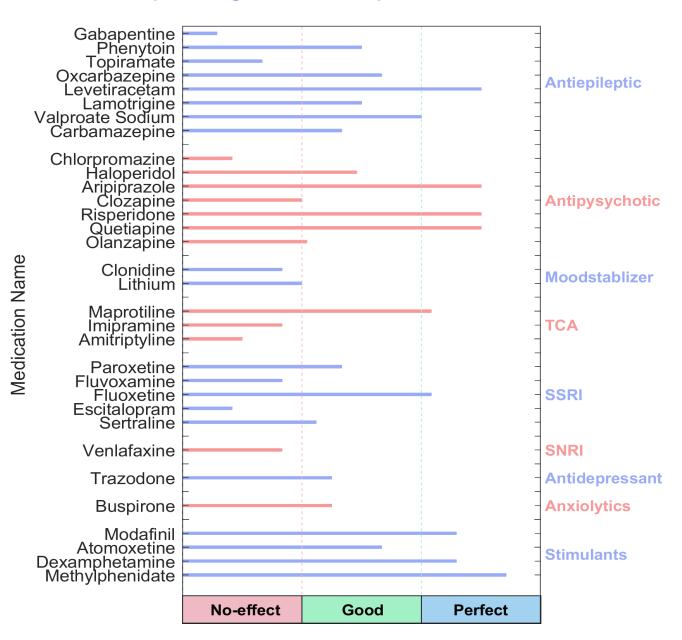
Alpha Blocking







QEEG based predicting medication response



Explanation

Medication Recommendation

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.

two charts, calculate 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
نتايج تشخيد
1



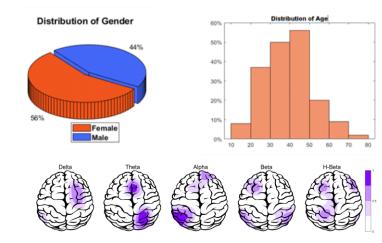


rTMS Response Prediction

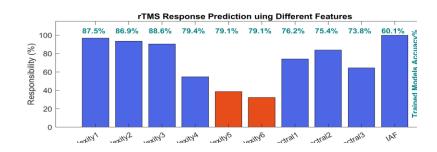
Network Performance

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

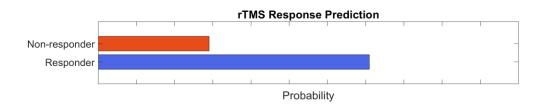
Participants Information



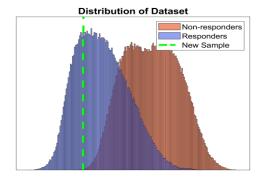
Features Information



----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.





Pathological assessment for mood disorders and adult ADHD

Compare to Mood Disorders Database





















Compare to adult ADHD Database





















EEG Compatibility with Depression Diagnosis

Depression Table		EC	EO		
Feature Name	Threshold	Region	Threshold	Region	
Increased Global rAlpha	0.00	NAN	0.00	NAN	
Increased global rTheta	0.00	NAN	0.00	NAN	
Decreased rDelta	0.00	NAN	0.00	NAN	
Increased rBeta	0.50	RT-O-	0.50	0	
Left FAA	0.00	NAN	0.00	NAN	
Right OAA	ht OAA 0.01 Right OAA		0.02	Right OAA	
Decreased Coherence (D, T) 0.00 N		NAN	0.00	NAN	
Increased Coherence (A, B)	1.00	Increased Coherence	1.00	Increased Coherence	
depression 0 10	20	1 1 1 1 1 3 30 40 50 60 Depression Compatibility	I I 0 70	80 90 100	
Depression Probability					





EEG Compatibility with Anxiety Diagnosis

Anxiety Table		EC		EO	
Feature Name	Threshold	Region	Threshold	Region	
Decreased rAlpha	-1.00	LF-RF-MF-LT-RT-C-P-O-	-0.50	LF-RF-MF-LT-RT-	
Increased rBeta	0.50	RT-O-	0.50	0	
Right FAA	0.09	Right FAA	0.16	Right FAA	
Left OAA 0.00		NAN	0.00	NAN	
Increased IAF > 10.6	Increased IAF > 10.6 1.50 Increased IAF 1.00 Incre		Increased IAF		
Anxiety 0 10 20 30 40 50 60 30 Anxiety Compatibility				80 90 100	
Anxiety Probability					

EEG Compatibility with Mood Swings Diagnosis

Mood Swings Table		EC	EO			
Feature Name	Threshold Region		Threshold	Region		
Decreased rAlpha	-1.00 LF-RF-MF-LT-RT-C-P-O-		-0.50	LF-RF-MF-LT-RT-		
Increased (rDelta+rTheta)	1.00	LF-RF-MF-RT-C-P-O-	0.50	Р		
Increased rBeta	0.50	RT-O-	0.50	0		
Decreased Alpha Coherence 0.0		NAN	0.00	NAN		
Right FAA	0.09	Right FAA	0.16	Right FAA		
BMD 10	20 3	1	T 70	80 90 100		
Mood Swings Probability						

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

Cognitive Functions



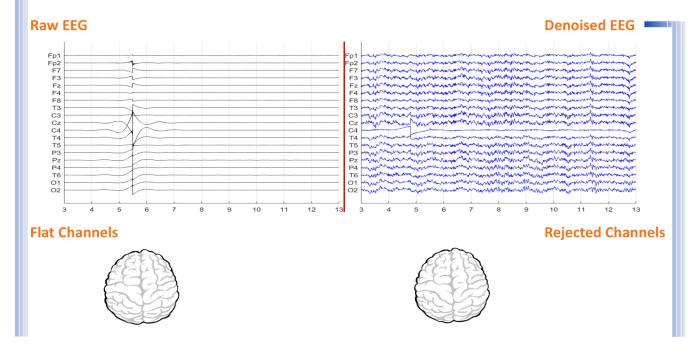
Arousal Level Detection





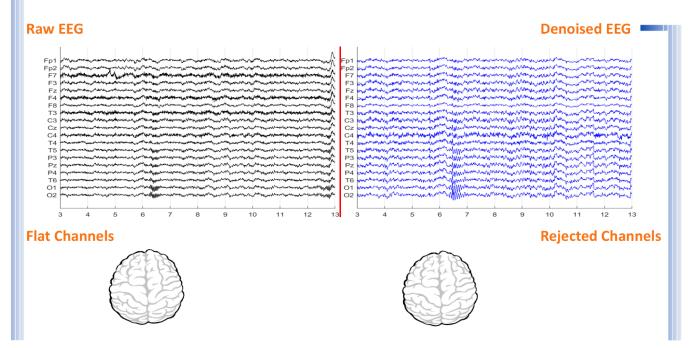


Denoising Information (EC)



Number of Eye and Muscle Elements			Low Artifact Percentage		
Eye 3 Muscle 4		0			
Total Artifact Percentage			High Artifact Percentage		
			0		
EEG Quality	1	bad		Total Recording Time Remaining 157.45 sec	

Denoising Information (EO)



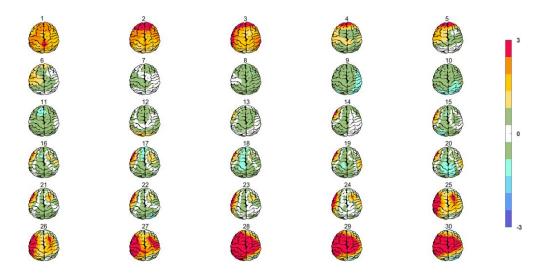
Number of Eye and Muscle Elements		Low Artifact Percentage		
Eye	Eye 3 Muscle 3			
Total Artifact Percentage		High Artifact Percentage		
EEG Quality		bad		Total Recording Time Remaining 189.17 sec



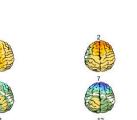


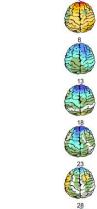
Absolute Power-Eye Closed (EC) 🌮

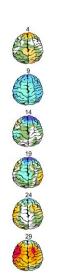


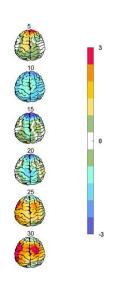


Relative Power-Eye Closed (EC) 🤣







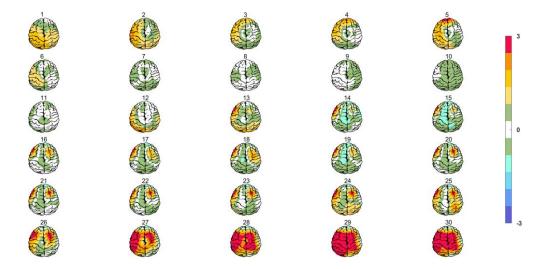






Absolute Power-Eye Open (EO) 🕢





Relative Power-Eye Open (EO) 🕢

