

### Report Description

### Personal & Clinical Data

Name	Maryam Saadi	Date of Recording	2025-08-27				
Date of Birth - Age	2001-11-10 - 24	Gender	Female				
Handedness(R/L)	Right	Source of Referral	Dr Dinarvand				
Initial Diagnosis	Anxiety-Head Trauma-Lack of Attention and Concentration-Memory Problem-Poor Sleep						
Current Medication	Citalopram-Fluvoxamine-Sertraline-Wellban						

Dr Dinarvand

### Summary Report









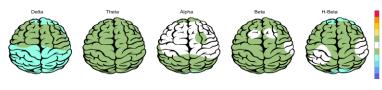




**Absolute Power** 

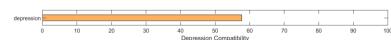
Relative Power

#### Z-score Information

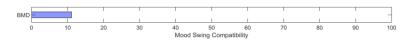




### Compatibility with Depression



### Compatibility with Mood Swing



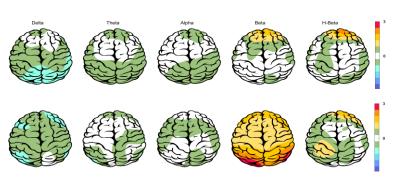
#### Arousal Level



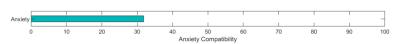
#### APF

Posterior APF-EC= 10.62

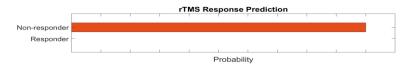
Posterior APF-EO= 11.88



### Compatibility with Anxiety



### TMS Responsibility



### Cognitive Performance

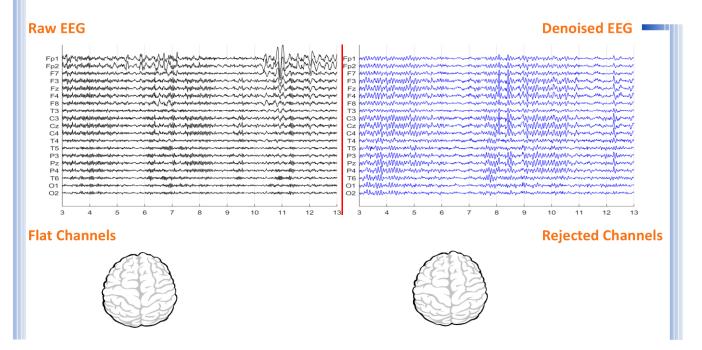


To investigate QEEG-based predicting medication response, please refer to the Report.



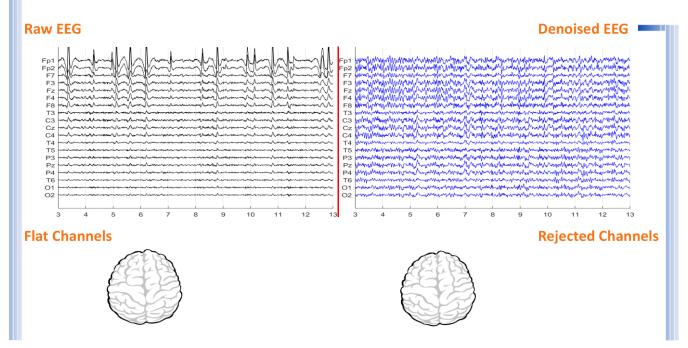


### **Denoising Information (EC)**



Number of Eye and Muscle Elements			Low Artifact Percentage		
Eye	2	Muscle	2	0	
Total Artifact Percentage			High Artifact Percentage		
			0		
<b>EEG Quality</b>		good		Total Recording Time Remaining	246.05 sec

### **Denoising Information (EO)**



Number of Eye and Muscle Elements			Low Artifact Percentage		
Eye	2	Muscle	2	0	
Total Artifact Percentage			High Artifact Percentage		
EEG Quality goo		good		Total Recording Time Remaining	236.43 sec





### Pathological assessment for mood disorders and adult ADHD

#### **Compare to Mood Disorders Database**





















### Compare to Adult ADHD Database













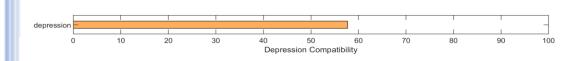


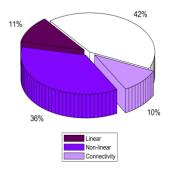




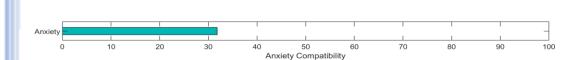


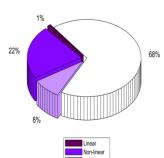
#### **EEG Compatibility with Depression Diagnosis**



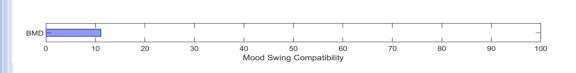


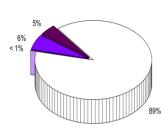
### **EEG Compatibility with Anxiety Diagnosis**





### **EEG Compatibility with Mood Swing Diagnosis \***





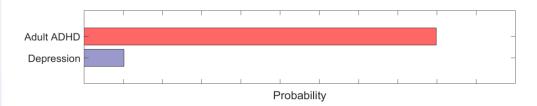
Linear Non-linear Connectivity

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





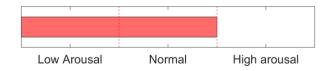
### Depression and Adult ADHD Diagnosis Probabiliy



### Cognitive Functions Assessment



#### Arousal Level Detection





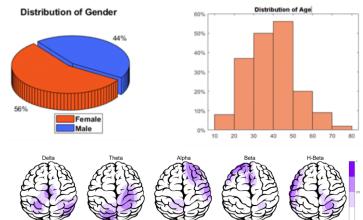


#### rTMS Response Prediction

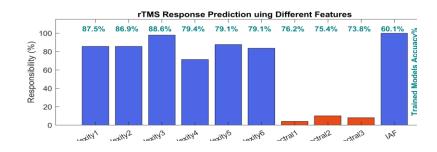
#### Network Performance

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

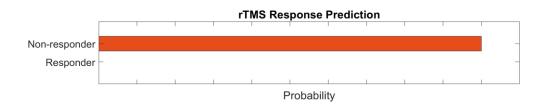
# Participants Information Distribution of Gender



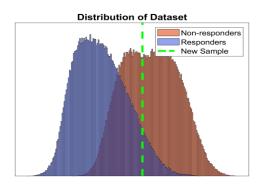
#### Features Information



#### Responsibility



#### Data Distribution



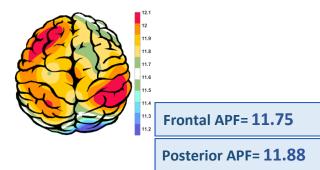
#### About Predicting rTMS Response

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.

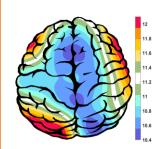




### APF(EO)



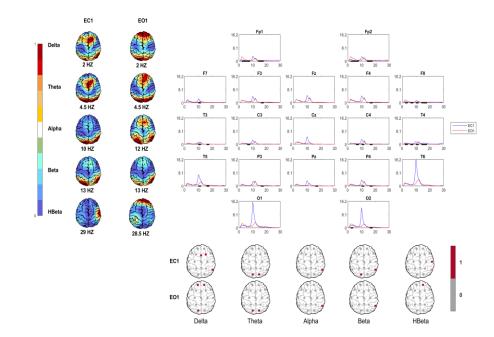
### APF(EC)



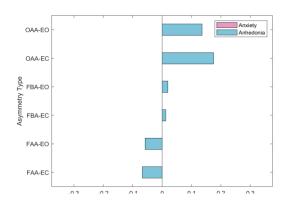
Frontal APF= 10.75

Posterior APF= 10.62

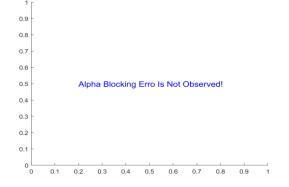
#### EEG Spectra



### Alpha Asymmetry(AA)



### Alpha Blocking







### Z Score Summary Information (EC)



Absolute Power





























### Z Score Summary Information (EO)

Absolute Power

























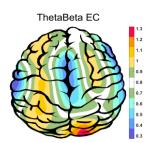


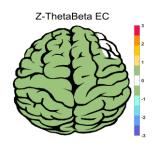




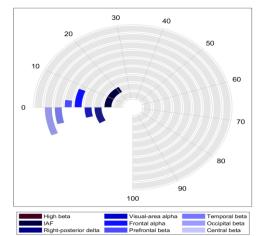


### E.C.T/B Ratio ( Raw- Z Score)

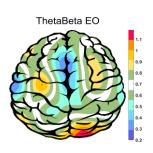


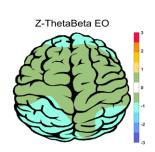


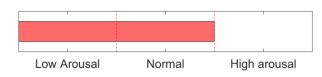
## Arousal Level







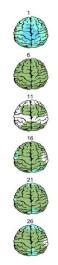


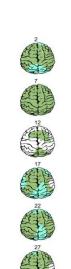


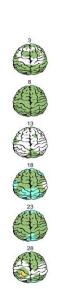


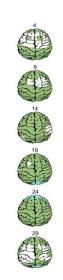


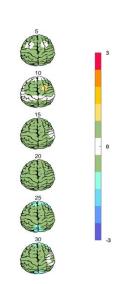
### Absolute Power-Eye Closed (EC) 🤣



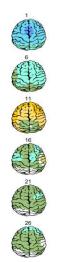


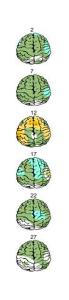


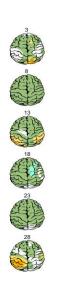


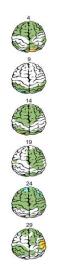


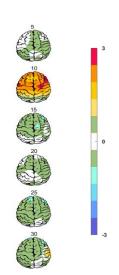
### Relative Power-Eye Closed (EC) 🌮









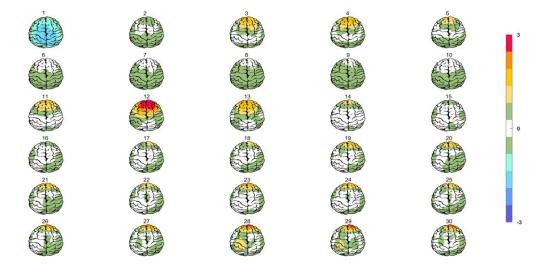






### Absolute Power-Eye Open (EO) 🕢





### Relative Power-Eye Open (EO)

