



## QEEG Clinical Report

BrainLens V0.4

### Report Description

### Personal & Clinical Data

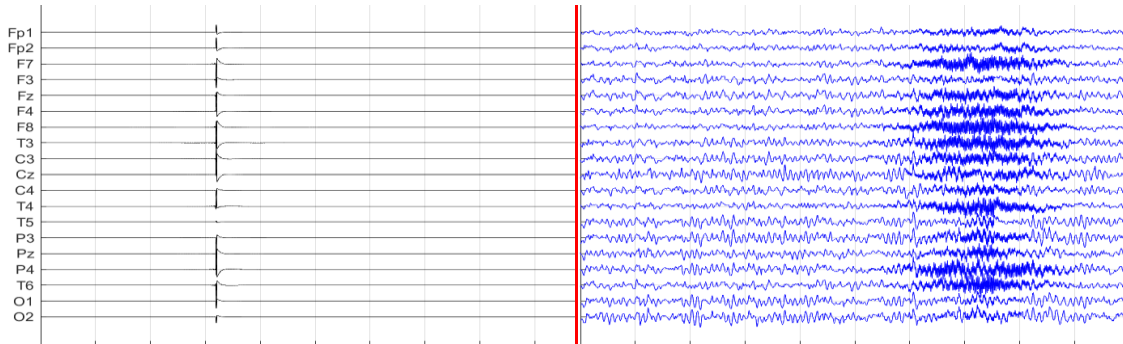
|                     |                                                                                                    |                    |             |
|---------------------|----------------------------------------------------------------------------------------------------|--------------------|-------------|
| Name                | Milad Babaei                                                                                       | Date of Recording  | 06-May-2024 |
| Date of Birth - Age | 30-Jul-2010 - 13.77                                                                                | Gender             | Male        |
| Handedness(R/L)     | Right                                                                                              | Source of Referral | Dr Saemi    |
| Initial Diagnosis   | High mood-Anxiety-OCD-Sexual Obsession-PIC-addiction-Mood swing-High arousal-High HB-Hyperactivity |                    |             |
| Current Medication  | Medication Free                                                                                    |                    |             |

Dr Saemi

## Denoising Information (EC)

Raw EEG

Denoised EEG



Flat Channels

Rejected Channels

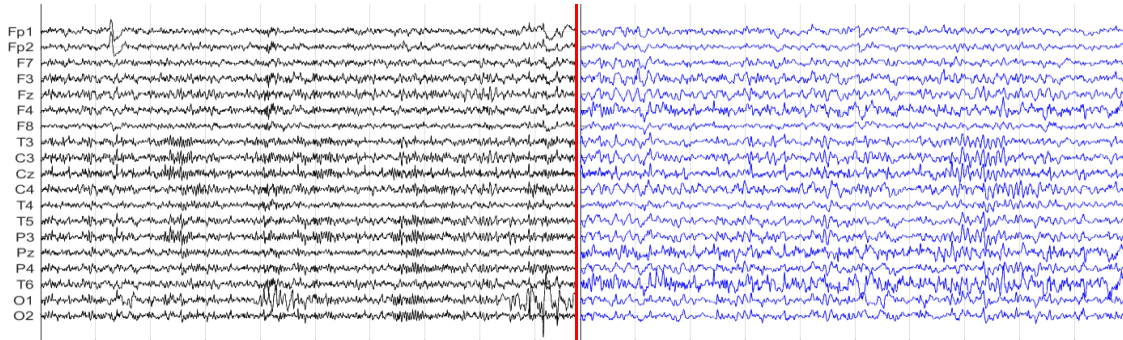


| Number of Eye and Muscle Elements |   |        |   | Low Artifact Percentage        |            |
|-----------------------------------|---|--------|---|--------------------------------|------------|
| Eye                               | 0 | Muscle | 0 |                                |            |
| Total Artifact Percentage         |   |        |   | High Artifact Percentage       |            |
|                                   |   |        |   |                                |            |
| EEG Quality                       |   | bad    |   | Total Recording Time Remaining | 205.08 sec |

## Denoising Information (EO)

Raw EEG

Denoised EEG



Flat Channels

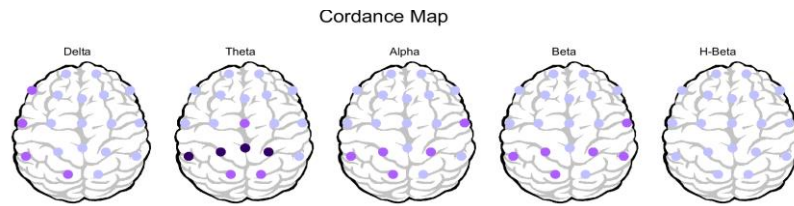
Rejected Channels



| Number of Eye and Muscle Elements |   |        |   | Low Artifact Percentage        |            |
|-----------------------------------|---|--------|---|--------------------------------|------------|
| Eye                               | 0 | Muscle | 1 |                                |            |
| Total Artifact Percentage         |   |        |   | High Artifact Percentage       |            |
|                                   |   |        |   |                                |            |
| EEG Quality                       |   | bad    |   | Total Recording Time Remaining | 237.67 sec |

## Pathological assessment for ADHD

### Compare to ADHD Database

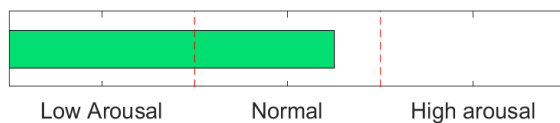


### EEG Compatibility with ADHD Diagnosis

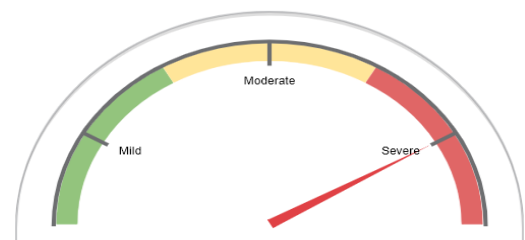
| ADHD Table          | EC        |         | EO        |         |
|---------------------|-----------|---------|-----------|---------|
| Feature Name        | Threshold | Region  | Threshold | Region  |
| Increased rDelta    | 0.00      | NAN     | 0.00      | NAN     |
| Increased rTheta    | 0.50      | frontal | 1.00      | frontal |
| Increased rAlpha    | 0.50      | global  | 0.00      | NAN     |
| Increased rBeta     | 0.50      | frontal | 0.00      | frontal |
| Decreased SMR       | 0.00      | NAN     | 0.00      | NAN     |
| Increased T/B Ratio | 0.50      | Fz      | 0.50      | Fz      |

ADHD Probability

### Arousal Level Detection



### ADHD Severity

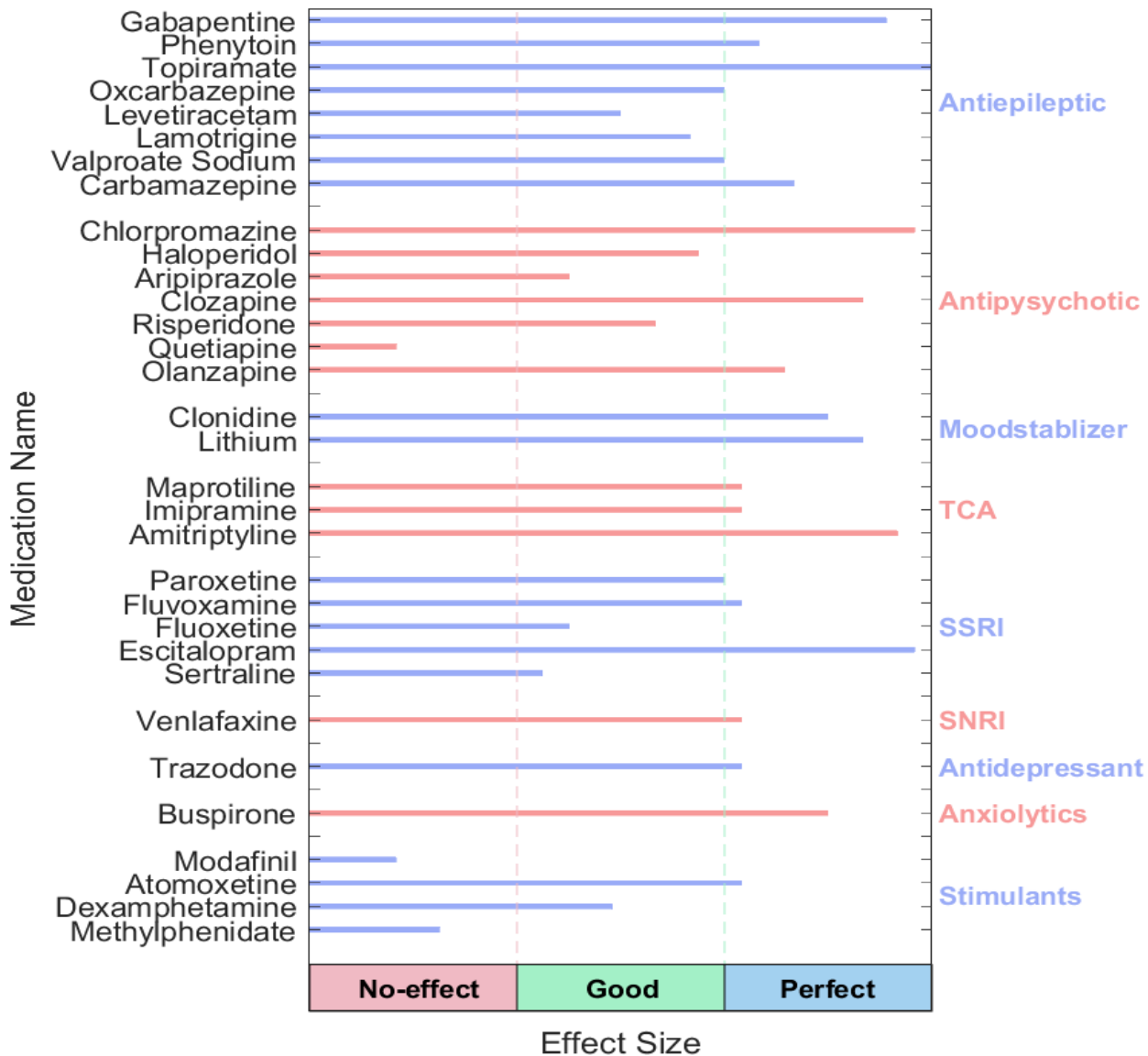


### ADHD Clustering \*

1. Prone to moody, behaviour and temper tantrums. May respond to stimulants, consider anticonvulsants or clonidine, avoid SSRI.
2. May be anxious, may be highly intelligent, need sufficient sleep, and should avoid high carbohydrate intake. Avoid stimulants, benzodiazepines and SNRI. Consider clonidine.

\* If there is Paroxymal epileptic discharge in EEG data, this case needs sufficient sleep and should avoid high carbohydrate intake. You can consider anticonvulsant medications.

## QEEG based predicting medication response



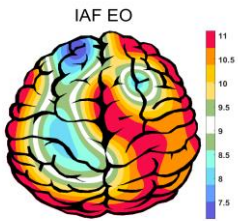
## Explanation

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 Pharmacoe 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

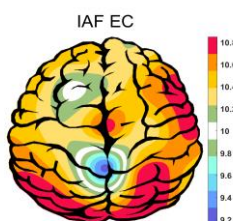
These two charts, calculate response probability to various medications, according only to QEEG indicators. Blue charts favor drug response and red charts favor drug resistance. The longer the bar, the more evidence there is in the articles. Only drugs listed in the articles are listed. These tables present the indicators reviewed in the QEEG studies and are not a substitute for physician selection.

## IAF(EO)



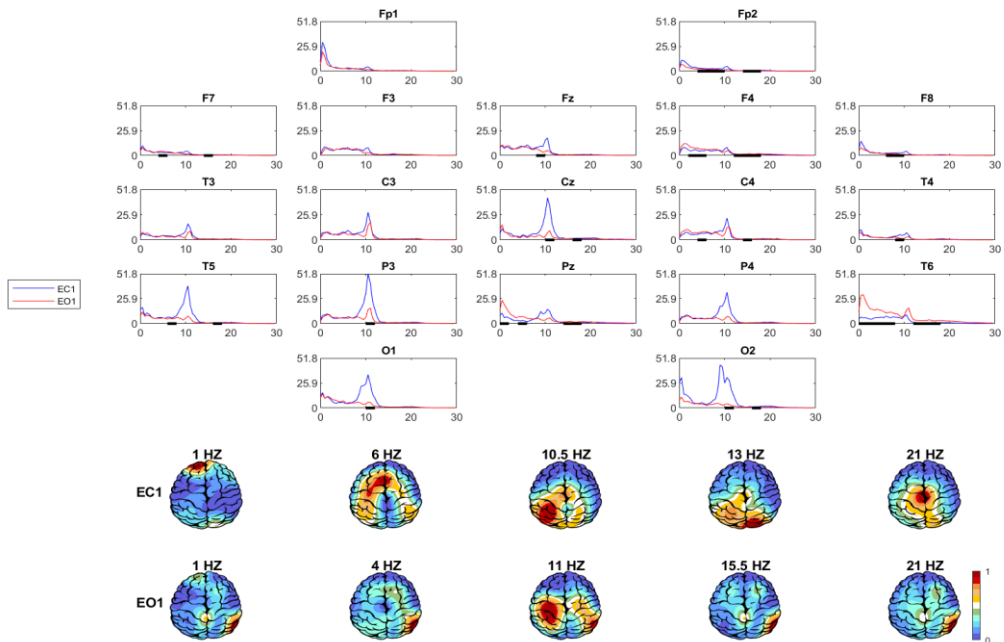
Eye Open IAF= 09.88

## IAF(EC)

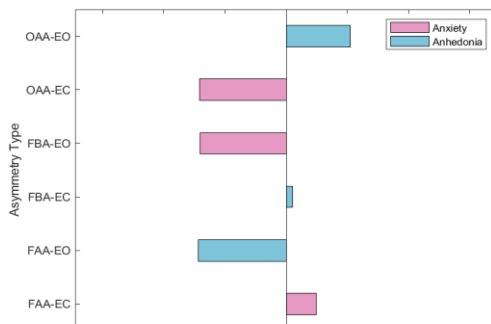


Eye Close IAF= 10.00

## EEG Spectra



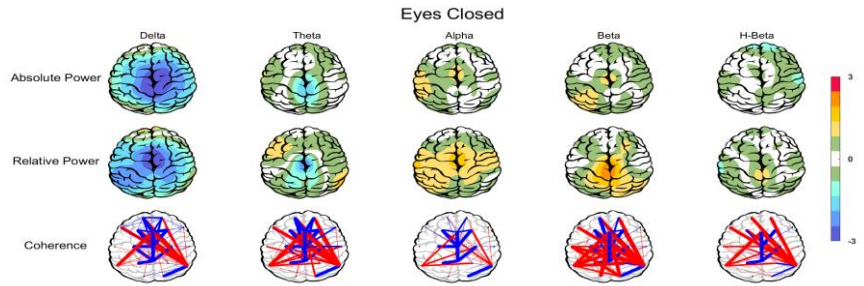
## Alpha Asymmetry(AA)



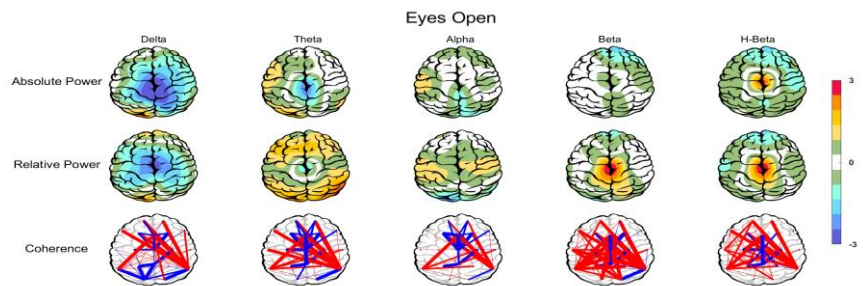
## Alpha Blocking



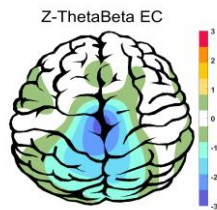
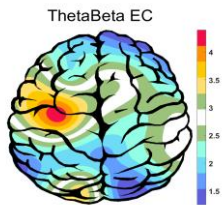
## Z Score Summary Information (EC)



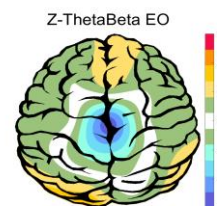
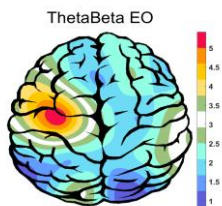
## Z Score Summary Information (EO)



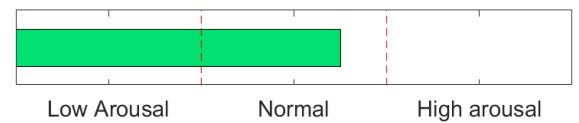
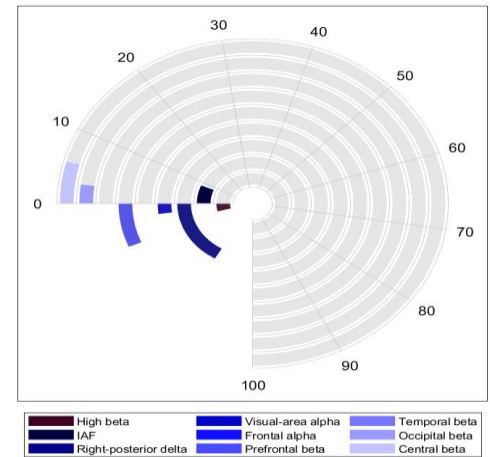
## E.C.T/B Ratio ( Raw- Z Score)



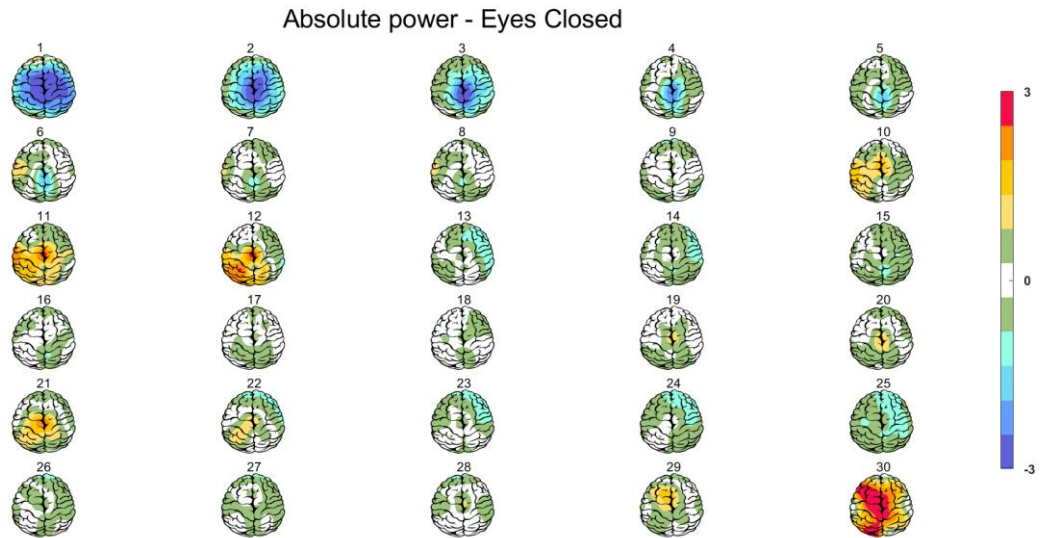
## E.O.T/B Ratio ( Raw- Z Score)



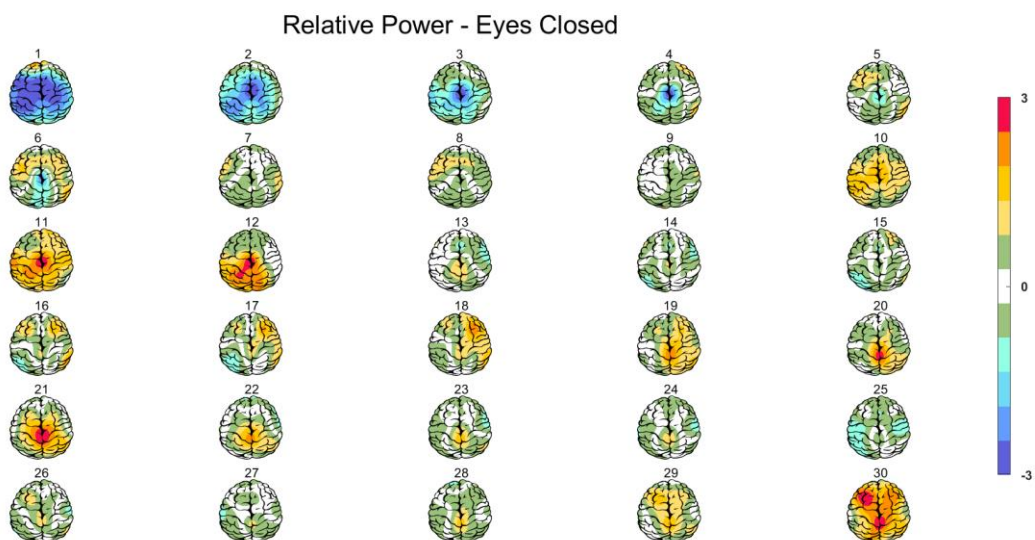
## Arousal Level



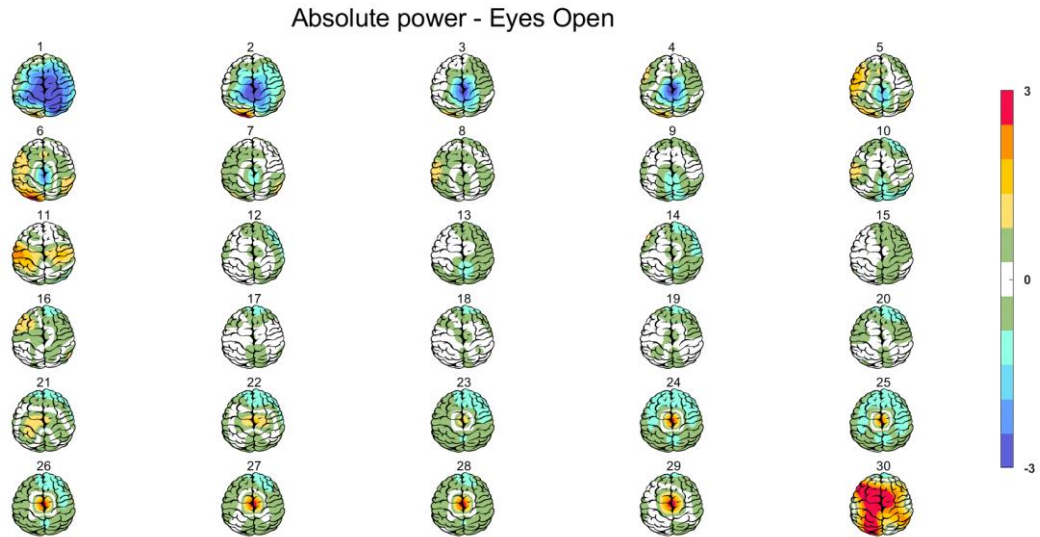
## Absolute Power-Eye Closed (EC)



## Relative Power-Eye Closed (EC)



## Absolute Power-Eye Open (EO)



## Relative Power-Eye Open (EO)

