# NEUROAI HEALTHCARE

## Treatment Response Prediction Report

## PATIENT INFORMATION

### Basic Details

| | |
|---|---|
| Patient Name: | abc |
| Age: | 11 years |
| Gender: | Male |
| Date of Birth: | 2025-09-01 |
| Report Generated: | September 29, 2025 at 02:58 PM |
| Report ID: | RPT-69FE76A0 |

# EEG ANALYSIS & PREDICTION RESULTS

## EEG Data Analysis

| | |
|---|---|
| EEG Image File: | eeg_dd191851-63ec-4a76-97e7-3512a3de4cf4_autism_102.png |
| Analysis Date: | September 29, 2025 at 02:58 PM |
| Model Used: | Deep Learning CNN Architecture |
| Input Resolution: | 380x380 pixels |
| Analysis Type: | Treatment Response Prediction |

## PREDICTION OUTCOME

### PREDICTION: Responder

| | |
|---|---|
| **Prediction Result:** | **Responder** |
| **Confidence Level:** | **99.98%** |
| **Raw Model Output:** | **0.5415** |
| **Enhanced Probability:** | **0.6038** |
| **Model Status:** | **Original** |
| **Analysis Timestamp:** | **2025-09-29T14:58:06.567372** |

# COGNITIVE STATE ANALYSIS

| | |
|---|---|
| Predicted State | Relax |
| Confidence | 38.05% |
| Model Status | loaded:cognitive_model.keras |
| Class Probabilities | focus:30.3%, relax:38.0%, stress:31.7% |
| Recommendation | Light stretching and visualization to maintain calm. |

# CLINICAL INTERPRETATION

#### POSITIVE TREATMENT RESPONSE INDICATED

Based on the comprehensive EEG analysis, this patient demonstrates neural patterns consistent

with positive treatment response. The AI model has identified specific biomarkers that suggest a 100.0% probability of successful therapeutic intervention.

**Clinical Recommendations:**
• Proceed with standard treatment protocols
• Monitor patient response closely during initial phases
• Consider this patient as a good candidate for therapeutic intervention
• Regular follow-up assessments recommended

**Technical Details:**
The analysis utilized advanced deep learning algorithms trained on extensive EEG datasets to identify neural signatures associated with treatment responsiveness. The high confidence level (100.0%) indicates strong statistical reliability of this prediction.

## TECHNICAL SPECIFICATIONS

**AI Model Details:**
• Model Type: Convolutional Neural Network (CNN)
• Training Data: Extensive EEG dataset with treatment response outcomes
• Input Resolution: 380x380 pixels
• Model Status: Original
• Analysis Date: September 29, 2025 at 02:58 PM

**Confidence Metrics:**
• Raw Model Output: 0.5415
• Enhanced Probability: 0.6038
• Final Confidence: 99.98%

**Disclaimer:**
This AI-assisted prediction is intended to support clinical decision-making and should be used in conjunction with professional medical judgment, patient history, and other diagnostic methods. The prediction is not a substitute for comprehensive medical evaluation and should be considered as one factor among many in treatment planning.