NEUROIMAGING ANALYSIS REPORT

AI-Assisted Brain Tumor Detection and Analysis

Report ID:	RPT-PT001-20250825
Generated On:	August 25, 2025 at 11:28:25
System:	AI Brain Tumor Detection System v2.0
Status:	PRELIMINARY - REQUIRES RADIOLOGIST REVIEW

PATIENT INFORMATION

Patient ID:	PT001
Name:	John Doe
Age:	45 years
Gender:	Male
Scan Date:	2024-01-15
Referring Physician:	Dr. Smith
Institution:	City Medical Center

CLINICAL SUMMARY

Primary Finding: Glioblastoma
Confidence Level: 89.0%
Location: Left frontal lobe
Estimated Size: Approximately 3.2cm x 2.8cm
Severity Assessment: High

Key Characteristics:

• Irregular borders

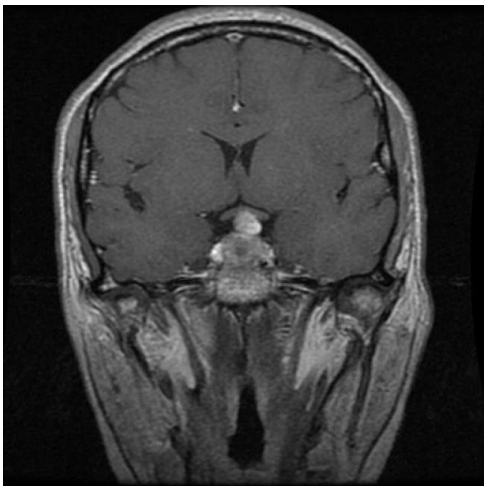
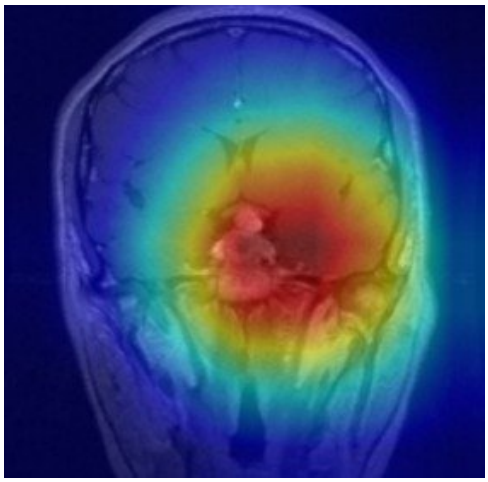
• Heterogeneous enhancement pattern

• Surrounding edema present

• Mass effect on adjacent structures

IMAGING STUDIES

Original MRI Scan	GradCAM Visualization

	
Standard brain MRI showing anatomical structures	AI attention map highlighting regions of interest

AI RADIOLOGICAL INTERPRETATION

AI analysis unavailable. Manual interpretation required.

TECHNICAL DETAILS

AI Model Confidence:	89.0%
Processing Method:	Deep Learning + GradCAM Visualization
LLM Analysis Status:	fallback
Analysis Timestamp:	2025-08-25T11:28:25.452610
Tokens Used:	0

RECOMMENDATIONS

- ■■ URGENT: High-priority finding requires immediate medical attention
- Urgent radiologist review required for confirmation of AI findings
- Clinical correlation with patient symptoms and history recommended
- Consider additional imaging modalities (contrast-enhanced MRI, CT, PET) as clinically indicated
- Multidisciplinary team consultation for treatment planning
- Follow-up imaging as per institutional protocols

Generated by AI Brain Tumor Detection System