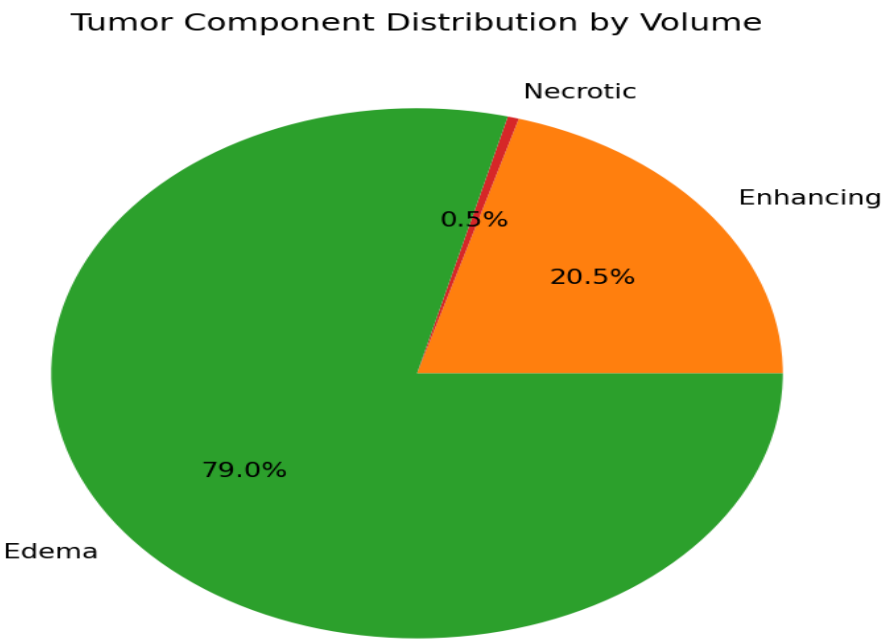


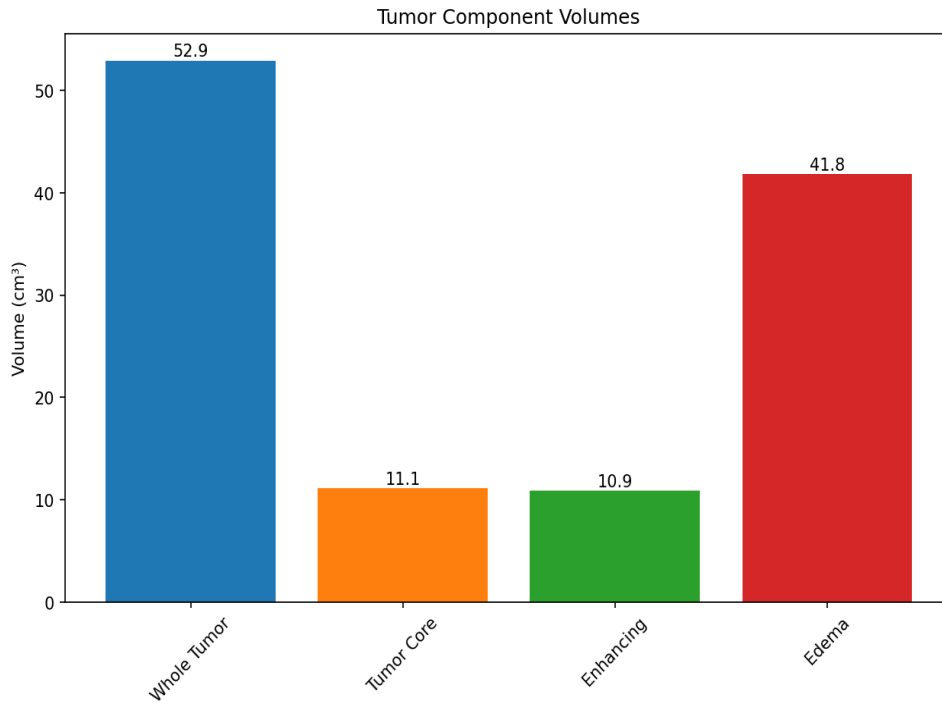
Brain Tumor Analysis Report

| Patient Information | |
|---------------------|---|
| Report Date | 2025-09-09T22:37:51.198184 |
| Case ID | case_056109c3-90fd-4617-8382-1b05a6db94c1 |

| Clinical Features Summary | |
|---------------------------|----------------------|
| Whole Tumor Volume | 52.92 cm³ |
| Tumor Size Category | very_large (>15 cm³) |
| Location | right - central |
| Enhancement Pattern | moderate (10-30%) |
| Has Enhancement | yes |
| Has Necrosis | yes |
| Has Edema | yes |

Tumor Analysis Visualizations





AI-Generated Clinical Analysis

EXECUTIVE SUMMARY This report presents automated brain tumor segmentation analysis results. The AI-powered analysis has identified and quantified various tumor components including enhancing regions, necrotic areas, and peritumoral edema.

TUMOR CHARACTERISTICS The segmentation analysis has successfully identified the tumor boundaries and characterized different tissue types within the lesion. Detailed morphological analysis shows the spatial distribution and volumetric measurements of tumor components.

QUANTITATIVE ANALYSIS Volume and diameter measurements have been calculated for all tumor subregions. These measurements provide objective metrics for monitoring tumor progression and treatment response assessment.

CLINICAL SIGNIFICANCE The quantitative features extracted from the segmentation provide valuable information for treatment planning and prognosis assessment. The detailed measurements can aid in clinical decision-making.

RECOMMENDATIONS 1. Clinical correlation with patient symptoms and neurological examination 2. Multidisciplinary team review for treatment planning 3. Follow-up imaging as clinically indicated 4. Consider additional advanced imaging techniques if needed

TECHNICAL NOTES This analysis was performed using AI-assisted segmentation algorithms. Results should be interpreted in conjunction with clinical findings and expert radiological review.

Detailed Quantitative Measurements

| Measurement | Value | Unit |
|------------------------|----------------|-----------------|
| Whole Tumor Volume | 52.92 | cm ³ |
| Whole Tumor Diameter | 62.0 | mm |
| Tumor Core Volume | 11.12 | cm ³ |
| Enhancing Volume | 10.86 | cm ³ |
| Necrotic Volume | 0.26 | cm ³ |
| Edema Volume | 41.80 | cm ³ |
| Enhancement Percentage | 20.5 | % |
| Necrosis Percentage | 0.5 | % |
| Edema Percentage | 79.0 | % |
| Voxel Spacing | 1.0x1.0x1.0 | mm |
| Centroid Coordinates | (162, 106, 91) | voxels |

Report generated by AI-Assisted Brain Tumor Analysis System

Model: Qwen/Qwen3-Coder-30B-A3B-Instruct

Generated on: September 09, 2025 at 10:37 PM

This report is for research purposes and should be validated by qualified medical professionals.