Machine Learning Prediction Report

| Patient ID:	UCSF-PDGM-0536	Patient Age:	58.0
Report Date:	2026-01-07 02:12:27	Model Used:	GradientBoosting

Final Prediction: *IDH-wildtype*

Clinical Interpretation

original_firstorder_Minimum which is very low (relative value : 1) compared to the training dataset moved the prediction toward IDH-Wildtype; The first-order minimum in radiomics is the lowest voxel intensity within a tumor ROI, often reflecting necrotic or non-enhancing regions. Lower values are more common in aggressive IDH-wildtype gliomas compared to IDH-mutant tumors.

Original GLDM Large Dependence High Gray Level Emphasis which is very low (relative value : 1) compared to the training dataset moved the prediction toward IDH-Wildtype; It quantifies the joint distribution of gray-level intensities and the size of dependencies in the image, with lower values indicating less emphasis on large dependencies with high gray-level intensities, a pattern that is more frequently observed in IDH-wildtype glioblastomas.

Prediction Explanation (SHAP Analysis) & Tumor Segmentation Slices
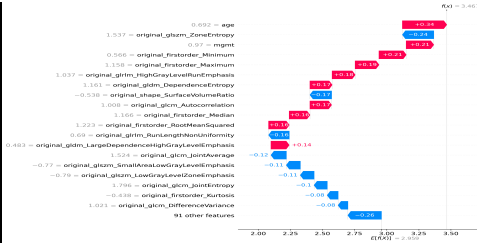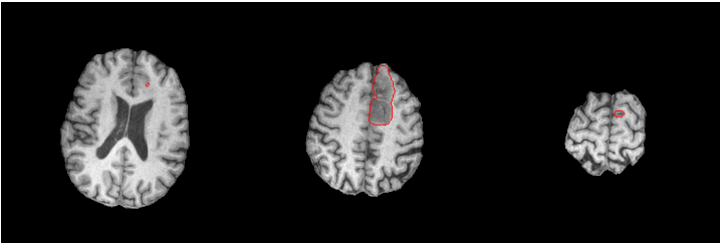
Features pushing the prediction higher (towards IDH-wildtype) are red; lower (towards IDH-mutant) are blue.

References

Current Advances and Challenges in Radiomics of Brain Tumors.

Molecular heterogeneity in glioblastoma: potential clinical implications.