

Patient Metadata

Full\_Name: Jenifer

Age: 56

Gender: Female

Systolic: 180

Diastolic: 110

Glucose\_Level: 343

BMI: 30.8

Duration: 14

Smoking: Yes

Hypertension: Yes

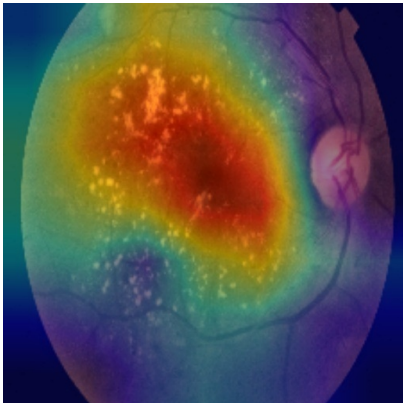
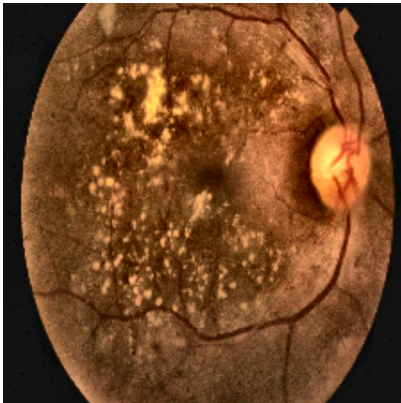
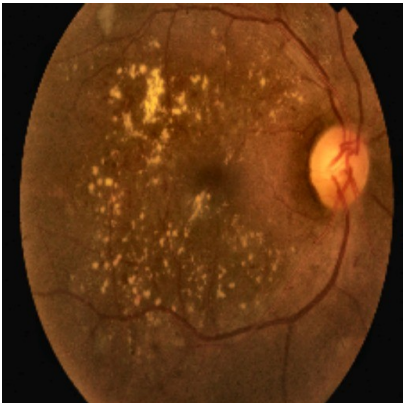
Family\_History: Yes

Diagnostic Summary

Predicted: SEVERE | Confidence: 71.15%  
Composite Risk Score: 50.00  
Original

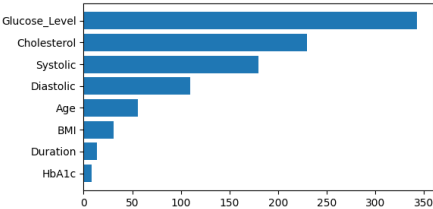
Preprocessed

GradCAM



LIME

SHAP (Feature Importance)



Lesion Analysis & Quantification

Lesion Quantification:  
exudates: 1.035  
hemorrhages: 7.948  
cotton\_wool: 0.0  
lesion\_percentage: 8.983

Clinical Interpretation & Recommendations

- High risk of progression to proliferative disease; urgent review advised.
- If macular edema suspected, order OCT.
- Refer to retina specialist for high hemorrhagic burden.
- Optimize systemic therapy (glycemic, BP, lipid control).
- Consider photographic follow-up and OCT monitoring (1–3 months depending on severity).

Model Evaluation Metrics

Accuracy: N/A  
F1-score: N/A  
AUC/ROC: N/A