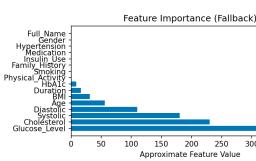
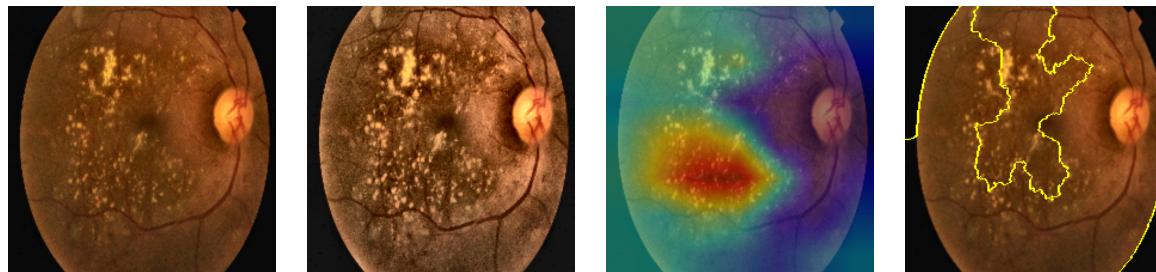


## Metadata Snapshot

Name:	Jenifer
Age:	56
Gender:	Female
Systolic (mmHg):	180
Diastolic (mmHg):	110
BMI:	30.8
Glucose:	376
HbA1c:	8.6
Cholesterol:	230
Smoking:	Yes
Hypertension:	Yes
Diabetes Duration:	16



## ■■■ Patient Summary

- Severe retinal changes present; urgent specialist review needed.
- High risk for progression—seek ophthalmology within days/weeks.
- Key systemic risk factors: Smoking, Hypertension, Obesity (BMI  $\geq 30$ ).
- Lesion coverage: 7.74% (automated estimate).
- Exudates: 0.17%
- Hemorrhages: 7.57%
- Cotton wool: 0.00%
- Suggested actions:
- Urgent retinal referral.
- Prepare for intervention if indicated.

## ■ Clinical Insights

- Severe NPDR with widespread hemorrhages; consider expedited referral.
- Coordinate systemic risk optimization (HbA1c, BP).
- Lesion coverage: 7.74% (automated estimate).
- Exudates: 0.17%
- Hemorrhages: 7.57%
- Cotton wool: 0.00%

- Model metrics:
- Accuracy: 0.947
- F1-score: 0.938
- AUC/ROC: 0.971
- Recommended actions:
- Urgent retinal referral.
- Prepare for intervention if indicated.

## Research Notes

- High confidence severe cases flagged; prioritize in pipeline.
- Stage: SEVERE
- Confidence: 83.6
- Accuracy: 0.947
- F1-score: 0.938
- AUC/ROC: 0.971

## Model Metrics

- Accuracy: 0.947
- F1-score: 0.938
- AUC/ROC: 0.971