

Stage: PDR

ಮಾಹಿತಿ ಸಂಗ್ರಹ

ಹೆಸರು: Sebastian

ವಯಸ್ಸು: 89

ಲಿಂಗ: Male

ಸಿಸ್ಟೋಲಿಕ್ (mmHg): 190

ಡಯಾಸ್ಟೋಲಿಕ್ (mmHg): 110

BMI: 30.1

ಗ್ಲೂಕೋಸ್: 190

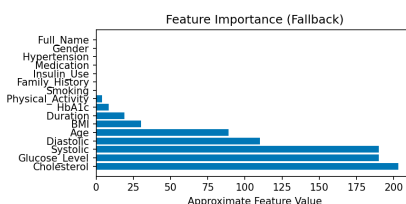
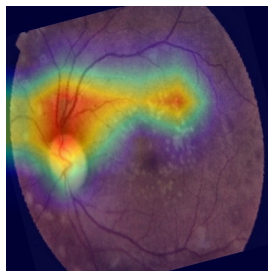
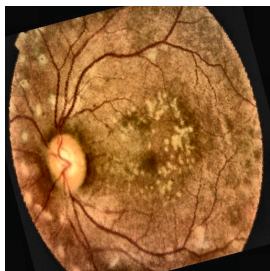
HbA1c: 8.5

ಕೆಪಿಎಸ್‌ಟಿ: 203

ಧೂಮಪಾನ: Yes

ರಕ್ತದೊತ್ತಡ: Yes

ಮಧುಮೇಹ ಅವಧಿ: 19



ಸಾರಾಂಶ

- Clinical Report — Ophthalmologist
- Patient: Name: Sebastian, Age: 89, BMI: 30.1
- Predicted stage: PDR
- Model confidence: 85.74%

- Risk score: 96.05%
- Findings (automated lesion quantification):
 - - Microaneurysms: 20.31%
 - - Exudates: 21.52%
 - - Hemorrhages: 2.56%
 - - Cotton Wool: 0.00%
 - - Neovascularization: 30.00%
 - - Total Lesion Load: 44.39%
- Clinical interpretation:
 - Features consistent with proliferative DR (neovascularization). Immediate retina specialist referral recommended (consider anti-VEGF / PRP).
- Model & Explainability:
 - - Multi-model fusion: CNN ensemble (EfficientNet, ResNet50, ViT) + metadata models (RF, XGBoost, stacked ensemble).
 - - Explainability outputs available: GradCAM++, LIME, SHAP — review heatmaps and overlay masks.
- Performance metrics:
 - - Accuracy: 0.947
 - - F1-score: 0.938
 - - AUC/ROC: 0.971
- Suggested clinical action items:
 1. Correlate with slit-lamp exam and fundus exam.
 2. If macular edema suspected, obtain OCT imaging.
 3. For suspected PDR, arrange urgent retina referral for potential PRP/anti-VEGF.
 4. Document lesion masks if available for audit.

