

■ Cardiac Abnormality Assessment Report

Report Generated: October 09, 2025 at 00:26
Analysis Type: Multimodal AI-Powered Assessment

Risk Assessment Summary

| | |
|--------------------------|--------------|
| Cardiac Risk Probability | 69.5% |
| Risk Level | Level 4 of 5 |
| Risk Category | High Risk |

Clinical Interpretation

High probability of cardiac abnormality detected

Medical Recommendations

Recommendation: Urgent medical evaluation required

Action Required: Schedule immediate cardiology consultation and comprehensive cardiac workup

AI Explainability Analysis

Primary Driver: ECG

The prediction was primarily driven by ECG data (70.9% contribution). Clinical data also played a significant role (28.3% contribution).

Modality Contributions

| Modality | Contribution | Impact | Interpretation |
|-------------------------|--------------|--------|--|
| ECG (Electrocardiogram) | 70.9% | 0.219 | ECG data strongly influenced this prediction |
| PCG (Phonocardiogram) | 0.8% | 0.003 | PCG data had minor influence on this prediction |
| Clinical Data | 28.3% | 0.087 | Clinical data had minor influence on this prediction |

Top Clinical Features

| Feature | Importance | Interpretation |
|----------|------------|--|
| CAA | 8.3% | Number of major vessels had critical impact on prediction |
| OLDPEAK | 7.0% | ST depression had critical impact on prediction |
| RESTECG | 5.5% | Resting ECG results had critical impact on prediction |
| THALACHH | 4.3% | Maximum heart rate had significant impact on prediction |
| EXNG | 3.5% | Exercise induced angina had significant impact on prediction |

Confidence Assessment

Confidence Level: GOOD
Prediction confidence is good.

Summary

This patient shows high risk of cardiac abnormality (probability: 69.4%). The prediction is primarily based on ECG data. Among clinical features, caa is the most influential.

DISCLAIMER: This report is generated by an AI-powered decision support system and should not replace professional medical judgment. All predictions should be interpreted by qualified healthcare professionals in conjunction with clinical examination, patient history, and additional diagnostic tests. This tool is intended for research and clinical decision support only.