

# AI DOCTOR ASSISTANT

Advanced Clinical Decision Support System

Patient Name: History Test User 9b10		MRN: TEST-HIST-3ca991
Age: 45	Gender: Female	Assessment Date: 2026-01-17 10:24
Overall Risk: Critical		Risk Score: 59.61/100

## Clinical Assessment (SOAP Notes)

### CLINICAL DECISION SUPPORT REPORT

Patient: History Test User 9b10

Assessment Date: January 17, 2026

Report Type: AI-Assisted Risk Stratification

### Clinical Summary

Overall Risk Stratification: Critical (59.6%)

High-Priority Concerns: Heart Disease, Kidney Disease

### Multi-System Risk Stratification

#### Critical Risk Conditions

Heart Disease (Risk Score: 76.02%)

- Risk Factors:

Elevated blood pressure increases cardiovascular risk.

Kidney Disease (Risk Score: 85.0%)

- Risk Factors:

Elevated creatinine may indicate reduced kidney function.

#### Low Risk Conditions

Diabetes (Risk Score: 17.8%)

- Risk Factors:

Increased BMI is a known risk factor for insulin resistance.

### Clinical Recommendations

#### Priority Actions:

Comprehensive clinical evaluation recommended

Consider specialist referral based on risk profile

# AI DOCTOR ASSISTANT

*Advanced Clinical Decision Support System*

Initiate appropriate diagnostic workup  
Discuss risk modification strategies with patient

General Clinical Approach:

- Review patient's complete medical history
- Perform focused physical examination
- Order confirmatory laboratory/imaging studies as indicated
- Develop individualized care plan
- Schedule appropriate follow-up intervals
- Provide patient education on risk factors

Suggested Further Investigations

Complete metabolic panel, urinalysis, eGFR, kidney ultrasound  
ECG, echocardiogram, stress test, cardiac biomarkers

AI Model Information

Models Used:

- Heart Disease: Machine Learning Risk Prediction Model
- Diabetes: Machine Learning Risk Prediction Model
- Kidney Disease: Machine Learning Risk Prediction Model

Confidence Level: Based on available clinical data and model training

Professional Disclaimer

Clinical Decision Support Tool - Professional Use Only

This report is generated by machine learning models trained on clinical datasets. The risk scores and assessments are intended to support, not replace, clinical judgment.

Limitations:

- Models may not capture all clinical nuances
- Risk scores are probabilistic, not deterministic
- Individual patient factors may not be fully represented
- Models require validation against clinical findings

Recommendations:

# AI DOCTOR ASSISTANT

*Advanced Clinical Decision Support System*

Use this report as one component of comprehensive clinical assessment

Correlate AI findings with clinical examination and patient history

Order confirmatory tests as clinically indicated

Apply professional judgment in all diagnostic and treatment decisions

**Liability:** This tool provides decision support only. Final diagnostic and treatment decisions remain the responsibility of the attending physician.

## Patient Care Summary

---

### HEALTH SCREENING REPORT

Patient: History Test User 9b10

Report Date: January 17, 2026

#### Executive Summary

This health screening has identified critical risk areas that require prompt medical attention. 2 condition(s) show elevated risk levels. We strongly recommend scheduling a consultation with your healthcare provider for comprehensive evaluation and personalized care planning.

#### Overall Health Risk Assessment

Risk Level: Critical

Risk Score: 59.6%

Primary Areas of Concern: Heart Disease, Kidney Disease

#### Detailed Risk Analysis

##### Heart Disease

Risk Level: Critical (76.02%)

##### What This Means:

The screening indicates a significantly elevated risk for Heart Disease. This means several risk factors are present that warrant immediate medical attention and further testing.

##### Why This Risk Exists (Contributing Factors):

1. Elevated blood pressure increases cardiovascular risk.

# AI DOCTOR ASSISTANT

*Advanced Clinical Decision Support System*

## Clinical Context:

Moderate likelihood of Heart Disease. Further clinical evaluation may be required.

## Recommended Actions:

Blood pressure and lipid management

Guidelines suggest considering antiplatelet or statin therapy where appropriate

Stress testing or cardiology referral if clinically indicated

---

## Diabetes

Risk Level: Low (17.8%)

## What This Means:

The screening shows a low risk for Diabetes based on current indicators. Continue maintaining healthy habits and regular check-ups.

## Why This Risk Exists (Contributing Factors):

1. Increased BMI is a known risk factor for insulin resistance.

## Clinical Context:

Low likelihood of Diabetes at present.

## Recommended Actions:

Lifestyle modification including diet and regular physical activity

Guidelines suggest considering Metformin as first-line therapy

Regular monitoring of HbA1c and blood glucose levels

---

## Kidney Disease

Risk Level: Critical (85.0%)

## What This Means:

The screening indicates a significantly elevated risk for Kidney Disease. This means several risk factors are present that warrant immediate medical attention and further testing.

## Why This Risk Exists (Contributing Factors):

1. Elevated creatinine may indicate reduced kidney function.

# AI DOCTOR ASSISTANT

*Advanced Clinical Decision Support System*

## Clinical Context:

High likelihood of Kidney Disease based on current clinical indicators.

## Recommended Actions:

- Monitoring serum creatinine and eGFR
- Blood pressure optimization
- Nephrology consultation recommended for progressive risk

---

## General Health Recommendations

### Lifestyle Modifications:

- Maintain a balanced diet rich in fruits, vegetables, whole grains, and lean proteins
- Engage in regular physical activity (at least 150 minutes of moderate exercise per week)
- Maintain a healthy weight (BMI 18.5-24.9)
- Limit alcohol consumption and avoid tobacco products
- Manage stress through relaxation techniques, adequate sleep, and social support

### Monitoring:

- Schedule regular health check-ups with your healthcare provider
- Monitor your blood pressure, blood sugar, and cholesterol levels as recommended
- Keep track of any new or changing symptoms

### Prevention:

- Stay up-to-date with recommended health screenings
- Take prescribed medications as directed
- Maintain good sleep hygiene (7-9 hours per night)
- Stay hydrated and limit processed foods

## Next Steps

### Immediate Actions Required:

1. Schedule an appointment with your healthcare provider within the next 1-2 weeks
2. Bring this report to your appointment for discussion
3. Be prepared to discuss your symptoms, medical history, and lifestyle
4. Your doctor may order additional tests or imaging studies
5. Do not make any medication changes without consulting your doctor

# AI DOCTOR ASSISTANT

*Advanced Clinical Decision Support System*

## When to Seek Emergency Care:

- Severe chest pain or pressure
- Difficulty breathing or shortness of breath at rest
- Sudden severe headache or vision changes
- Loss of consciousness or severe confusion
- Any symptoms that feel life-threatening

## Important Medical Disclaimer

This report is generated by an AI-powered health screening tool and is intended for informational and educational purposes only.

### Important:

- This is NOT a medical diagnosis
- This tool does not replace professional medical advice
- All findings must be reviewed and interpreted by a licensed healthcare provider
- Do not make any treatment decisions based solely on this report
- Seek immediate medical attention for any emergency symptoms

Accuracy Note: AI models are trained on large datasets but may not account for all individual variations. Clinical judgment by a qualified healthcare professional is essential for accurate diagnosis and treatment planning.

***DISCLAIMER: This report is generated by an artificial intelligence system for clinical decision support. All findings must be reviewed and validated by a licensed physician before clinical application.***