

MEDLEY

Medical AI Ensemble Clinical Decision Report

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Primary Diagnostic Consensus

Diagnosis	ICD-10	Agreement	Confidence	Status
ST-Elevation Myocardial Infarction (STEMI) <i>Evidence: ST elevation in leads II, III, aVF indicating inferior wall MI, Elevated troponin I (0.8), Elevated CK-MB, Classic crushing substernal chest pain</i>	I21.0	0.0%	Very Low	PRIMARY

Alternative & Minority Diagnoses

Diagnosis	ICD-10	Support	Type
Unstable Angina <i>Evidence: Chest pain pattern, Cardiovascular risk factors</i>	I20.0	25.9%	Alternative (10-29%)
Aortic Dissection <i>Evidence: Severe chest pain, Hypertension, Sudden onset</i>	I71.0	22.2%	Alternative (10-29%)
Pulmonary Embolism <i>Evidence: Chest pain, Shortness of breath, Cardiovascular risk factors</i>	I26.99	18.5%	Alternative (10-29%)
Acute Pericarditis <i>Evidence: Chest pain, ECG changes</i>	I30.9	14.8%	Alternative (10-29%)
Non-ST-Elevation Myocardial Infarction (NSTEMI) <i>Evidence: Elevated cardiac enzymes, Chest pain</i>	I21.4	7.4%	Minority (<10%)
Acute Coronary Syndrome <i>Evidence: Chest pain, Elevated cardiac markers</i>	I20.1	7.4%	Minority (<10%)
Esophageal Spasm <i>Evidence: Chest pain mimicking cardiac pain</i>	K22.8	3.7%	Minority (<10%)
Angina Pectoris <i>Evidence: Chest pain, Cardiovascular risk factors</i>	I20.0	3.7%	Minority (<10%)

Diagnosis	ICD-10	Support	Type
Acute Inferior Wall Myocardial Infarction <i>Evidence: ST elevation in inferior leads, Elevated cardiac enzymes</i>	I21.1	7.4%	Minority (<10%)
Acute Myocardial Infarction <i>Evidence: Elevated cardiac enzymes, Classic presentation</i>	I21.9	7.4%	Minority (<10%)

Analysis Overview
Models Queried: 23
Successful Responses: 23
Consensus Level: High
Total Estimated Cost: \$0.286

Critical Decision Points & Evidence Synthesis

Critical Decision Points

Key areas where models showed significant divergence in diagnostic or management approach:

Evidence Synthesis & Clinical Correlation

Symptom-Diagnosis Correlation Matrix

Symptom	STEMI	Unstable	Aortic D
crushing chest	Strong	-	-
ST elevation	Strong	-	-
elevated tropon	Strong	-	-

Legend: +++ Strong association, ++ Moderate, + Weak, - Not typical

Diagnostic Decision Tree

Step	Action	If Positive	If Negative
1	Initial Laboratory Tests	→ Confirm suspicion	→ Broaden differential
2	Imaging Studies	→ Identify pathology	→ Consider specialized tests
3	Specialized Testing	→ Definitive diagnosis	→ Empiric treatment
4	Treatment Trial	→ Continue if effective	→ Reconsider diagnosis

Executive Summary

Case Description

A 45-year-old male presents to the emergency department with sudden onset chest pain that started 2 hours ago. The pain is described as crushing, substernal, and radiates to the left arm. He has been sweating profusely and feels nauseous.

Past Medical History:

- Hypertension (diagnosed 5 years ago, on amlodipine)
- Type 2 Diabetes Mellitus (diagnosed 3 years ago, on metformin)
- Hyperlipidemia (on atorvastatin)
- 20 pack-year smoking history, quit 2 years ago
- Family history of coronary artery disease (father had MI at age 55)

Physical Examination:

- BP: 150/90 mmHg
- HR: 95 bpm, regular
- RR: 22/min
- O2 Sat: 94% on room air
- Temperature: 37.2°C
- Diaphoretic, appears anxious
- Cardiovascular: Normal S1/S2, no murmurs or gallops
- Lungs: Clear bilaterally
- Abdomen: Soft, non-tender

Initial Tests:

- ECG: ST elevation in leads II, III, and aVF
- Troponin I: 0.8 ng/mL (elevated)
- CK-MB: 25 ng/mL (elevated)

Key Clinical Findings

- Positive family history of similar episodes

Primary Recommendations

- Consider ST-Elevation Myocardial Infarction (STEMI) among differential diagnoses
- Activate cardiac catheterization lab for primary PCI
- Administer dual antiplatelet therapy (aspirin + P2Y12 inhibitor)
- Obtain IV access and continuous cardiac monitoring
- Obtain 12-lead ECG for diagnostic confirmation

Primary Diagnosis Clinical Summaries

■ Key Clinical Findings

Finding	Supporting Evidence	Clinical Reasoning
ST elevation in leads II, III, aVF	Clinical presentation	Key diagnostic indicator
Elevated troponin I (0.8 ng/mL)	Clinical presentation	Key diagnostic indicator
Elevated CK-MB	Clinical presentation	Key diagnostic indicator
Crushing substernal chest pain	Clinical presentation	Key diagnostic indicator
Pain radiating to left arm	Clinical presentation	Key diagnostic indicator

■ Recommended Tests

Test Name	Type	Priority	Rationale
12-lead ECG	Laboratory	Urgent	Diagnostic confirmation
Cardiac troponin levels	Laboratory	Urgent	Diagnostic confirmation
Complete blood count with platelets	Laboratory	Urgent	Diagnostic confirmation
Basic metabolic panel	Laboratory	Urgent	Diagnostic confirmation
PT/PTT/INR	Laboratory	Urgent	Diagnostic confirmation

■ Immediate Management

Intervention	Category	Urgency	Clinical Reasoning
Activate cardiac catheterization lab for primary PCI	Medical	Immediate	Critical intervention
Administer dual antiplatelet therapy (aspirin + P2Y12 inhibitor)	Medical	Immediate	Critical intervention
Obtain IV access and continuous cardiac monitoring	Medical	Immediate	Critical intervention
Administer oxygen if SpO2 < 90%	Medical	Immediate	Critical intervention

Intervention	Category	Urgency	Clinical Reasoning
Pain management with morphine if needed	Medical	Immediate	Critical intervention

■ Medications

Medication	Dosage	Route/Frequency	Indication
Aspirin	325mg	PO / once	antiplatelet therapy for STEMI
Clopidogrel	600mg	PO / once	P2Y12 inhibition for STEMI
Atorvastatin	80mg	PO / daily	high-intensity statin therapy
Metoprolol	25mg	PO / twice daily	beta-blocker for cardioprotection

Diagnostic Landscape Analysis

Detailed Diagnostic Analysis

The ensemble analysis identified **ST-Elevation Myocardial Infarction (STEMI)** as the primary diagnosis with 0.0% consensus among 11 models.

Detailed Alternative Analysis

Diagnosis	Support	Key Evidence	Clinical Significance
Unstable Angina <i>Evidence: Chest pain pattern, Cardiovascular risk factors</i>	25.9%	7 models	Less likely
Aortic Dissection <i>Evidence: Severe chest pain, Hypertension, Sudden onset</i>	22.2%	6 models	Less likely
Pulmonary Embolism <i>Evidence: Chest pain, Shortness of breath, Cardiovascular risk factors</i>	18.5%	5 models	Less likely
Acute Pericarditis <i>Evidence: Chest pain, ECG changes</i>	14.8%	4 models	Less likely
Non-ST-Elevation Myocardial Infarction (NSTEMI) <i>Evidence: Elevated cardiac enzymes, Chest pain</i>	7.4%	2 models	Unlikely
Acute Coronary Syndrome <i>Evidence: Chest pain, Elevated cardiac markers</i>	7.4%	2 models	Unlikely
Esophageal Spasm <i>Evidence: Chest pain mimicking cardiac pain</i>	3.7%	1 models	Unlikely
Angina Pectoris <i>Evidence: Chest pain, Cardiovascular risk factors</i>	3.7%	1 models	Unlikely

Minority Opinions

All alternative diagnoses suggested by any models with their clinical rationale:

- **Non-ST-Elevation Myocardial Infarction (NSTEMI)** (ICD-10: Unknown) - 7.4% agreement (2 models)

Supporting Models: Model1, Model15

- **Acute Coronary Syndrome** (ICD-10: Unknown) - 7.4% agreement (2 models)

Supporting Models: Model10, Model19

- **Esophageal Spasm** (ICD-10: Unknown) - 3.7% agreement (1 models)

Supporting Models: Model9

- **Angina Pectoris** (ICD-10: Unknown) - 3.7% agreement (1 models)

Supporting Models: Model10

- **Acute Inferior Wall Myocardial Infarction** (ICD-10: Unknown) - 7.4% agreement (2 models)

Supporting Models: Model13, Model15

- **Acute Myocardial Infarction** (ICD-10: Unknown) - 7.4% agreement (2 models)

Supporting Models: Model19, Model22

Additional Diagnoses Considered:

- **Unstable Angina** (ICD-10: I20.0) - 34.8% (8 models)

Evidence: Chest pain pattern, Cardiovascular risk factors

- **Aortic Dissection** (ICD-10: I71.0) - 21.7% (5 models)

Evidence: Severe chest pain, Hypertension, Sudden onset

- **Pulmonary Embolism** (ICD-10: I26.99) - 21.7% (5 models)

Evidence: Chest pain, Shortness of breath, Cardiovascular risk factors

- **Acute Pericarditis** (ICD-10: I30.9) - 17.4% (4 models)

Evidence: Chest pain, ECG changes

Management Strategies & Clinical Pathways

Immediate Actions Required

Priority	Action	Rationale	Consensus
1	Activate cardiac catheterization lab for primary PCI	Clinical indication	50%
2	Administer dual antiplatelet therapy (aspirin + P2Y12 inhibitor)	Clinical indication	50%
3	Obtain IV access and continuous cardiac monitoring	Clinical indication	50%
4	Administer oxygen if SpO2 < 90%	Clinical indication	50%
5	Pain management with morphine if needed	Clinical indication	50%

Recommended Diagnostic Tests

Test	Purpose	Priority	Timing
12-lead ECG	Diagnostic confirmation	Routine	As indicated
Cardiac troponin levels	Diagnostic confirmation	Routine	As indicated
Complete blood count with platelets	Diagnostic confirmation	Routine	As indicated
Basic metabolic panel	Diagnostic confirmation	Routine	As indicated
PT/PTT/INR	Diagnostic confirmation	Routine	As indicated
Chest X-ray	Diagnostic confirmation	Routine	As indicated

Treatment Recommendations

Treatment recommendations pending diagnostic confirmation.

Model Diversity & Bias Analysis

Model Response Overview & Cost Analysis

Model	Origin	Tier	Cost	Diagnosis	Training Profile
gpt-4o	USA	Premium	\$0.018	Inferior ST-Elevation Myocardial Infarction (STEMI)	Comprehensive
gpt-4o-mini	USA	Budget	<\$0.01	Acute Myocardial Infarction (ST-Elevation)	General
gpt-oss-120b	USA	Mid-Range	<\$0.01	Acute inferior ST-elevation myocardial infarction (STEMI)	Standard
claude-3-opus-2	USA	Premium	\$0.109	Acute ST-elevation myocardial infarction (STEMI)	Comprehensive
gemini-2.5-pro	USA	Premium	\$0.029	Not specified	General
gemini-2.5-flas	USA	Budget	<\$0.01	ST-Elevation Myocardial Infarction (STEMI)	General
gemini-2.5-flas	USA	Budget	<\$0.01	ST-Elevation Myocardial Infarction (STEMI)	General
gemma-2-9b-it	USA	Budget	<\$0.01	Acute Myocardial Infarction (STEMI)	Standard
gemma-3-12b-it	USA	Unknown	<\$0.01	Acute ST-Elevation Myocardial Infarction (STEMI)	Standard
llama-3.2-3b-in	USA	Budget	<\$0.01	Acute Coronary Syndrome	General
mistral-large-2	France	Premium	\$0.015	ST-Elevation Myocardial Infarction (STEMI)	Standard
mistral-7b-inst	France	Budget	<\$0.01	Acute Myocardial Infarction	General
deepseek-chat	China	Budget	<\$0.01	Acute Inferior Wall Myocardial Infarction	Regional
deepseek-r1	China	Budget	<\$0.01	ST-Elevation Myocardial Infarction (Inferior Wall)	Regional
deepseek-chat-v	China	Unknown	<\$0.01	Acute Inferior Wall Myocardial Infarction	Regional
qwen-2.5-coder-	China	Mid-Range	<\$0.01	Acute Myocardial Infarction (STEMI)	Regional
command-r-plus	Canada	Premium	\$0.020	Acute Myocardial Infarction (Heart Attack)	Standard
command-r	Canada	Mid-Range	<\$0.01	Acute Myocardial Infarction (STEMI)	Standard
jamba-large-1.7	Israel	Premium	\$0.012	Acute Myocardial Infarction (AMI)	Standard
sonar-deep-rese	USA	Premium	\$0.012	ST elevation myocardial infarction of inferior wall	Standard
wizardlm-2-8x22	USA	Mid-Range	<\$0.01	ST-Elevation Myocardial Infarction (STEMI)	Standard
grok-2-1212	USA	Premium	\$0.012	Acute Myocardial Infarction	Standard

Model	Origin	Tier	Cost	Diagnosis	Training Profile
grok-4	USA	Premium	\$0.040	ST-Elevation Myocardial Infarction (STEMI)	Alternative

Total Estimated Cost: \$0.286

Understanding Training Profiles

Training profiles indicate the type and depth of medical knowledge in each model:

Comprehensive: Extensive medical literature training with broad clinical knowledge

Standard: Standard medical knowledge base with general clinical training

Regional: Region-specific medical training reflecting local practices and conditions

General: Broad general knowledge, not specifically trained on medical literature

Alternative: Alternative medical perspectives and non-conventional approaches

AI Model Bias Analysis

AI model bias analysis is generated during orchestration (Step 2). This comprehensive analysis examines cultural, geographic, and training data biases across the AI models used.

Detailed Model Responses

Complete diagnostic assessments from each model:

1. gpt-4o (USA, Released: 2024-05-13)

Primary Diagnosis: Inferior ST-Elevation Myocardial Infarction (STEMI) (ICD-10: I21.19) - Confidence: 0.95

Differential Diagnoses:

- Unstable Angina (ICD: I20.0) - 0.6
- Non-ST-Elevation Myocardial Infarction (NSTEMI) (ICD: I21.4) - 0.5
- Aortic Dissection (ICD: I71.01) - 0.4

Key Clinical Findings:

- Sudden onset crushing chest pain
- Radiating pain to left arm
- Profuse sweating
- ST elevation in leads II, III, and aVF

2. gpt-4o-mini (USA, Released: 2024-07-18)

Primary Diagnosis: Acute Myocardial Infarction (ST-Elevation) (ICD-10: I21.01) - Confidence: 0.95

Differential Diagnoses:

- Unstable Angina (ICD: I20.0) - 0.75
- Aortic Dissection (ICD: I71.0) - 0.5
- Pulmonary Embolism (ICD: I26.99) - 0.4

Key Clinical Findings:

- Crushing substernal chest pain
- Radiation to left arm
- ST elevation in leads II, III, and aVF
- Elevated Troponin I and CK-MB levels

3. gpt-oss-120b (USA, Released: 2025-08-05)

4. claude-3-opus-2 (USA, Released: 2024-02-29)

Primary Diagnosis: Acute ST-elevation myocardial infarction (STEMI) (ICD-10: I21.3) - Confidence: 0.95

Differential Diagnoses:

- Unstable angina (ICD: I20.0) - 0.4
- Acute pericarditis (ICD: I30.0) - 0.2
- Aortic dissection (ICD: I71.0) - 0.1

Key Clinical Findings:

- Sudden onset chest pain (crushing, substernal, radiating to left arm)
- Diaphoresis and nausea
- ST elevation on ECG in leads II, III, and aVF
- Elevated troponin I and CK-MB

5. gemini-2.5-pro (USA, Released: 2024-12-19)**6. gemini-2.5-flas (USA, Released: 2024-12-19)**

Primary Diagnosis: ST-Elevation Myocardial Infarction (STEMI) (ICD-10: I21.0) - Confidence: 0.98

Differential Diagnoses:

- Unstable Angina (ICD: I20.0) - 0.7
- Acute Pericarditis (ICD: I30.9) - 0.4
- Aortic Dissection (ICD: I71.0) - 0.3

Key Clinical Findings:

- Sudden onset crushing substernal chest pain radiating to left arm
- Profuse sweating and nausea
- Hypertension, Type 2 Diabetes Mellitus, Hyperlipidemia
- 20 pack-year smoking history, family history of CAD

7. gemini-2.5-flas (USA, Released: 2024-12-19)

Primary Diagnosis: ST-Elevation Myocardial Infarction (STEMI) (ICD-10: I21.19) - Confidence: 0.95

Differential Diagnoses:

- Unstable Angina (ICD: I20.0) - 0.05
- Pulmonary Embolism (ICD: I26.99) - 0.02
- Aortic Dissection (ICD: I71.00) - 0.01

Key Clinical Findings:

- Sudden onset crushing substernal chest pain radiating to left arm
- Diaphoresis and nausea
- ST elevation in leads II, III, and aVF on ECG
- Elevated Troponin I

8. gemma-2-9b-it (USA, Released: 2024-06-27)

Primary Diagnosis: Acute Myocardial Infarction (STEMI) (ICD-10: I21.0) - Confidence: 0.95

Differential Diagnoses:

- Aortic Dissection (ICD: I71.0) - 0.05
- Pericarditis (ICD: I30.0) - 0.05
- Severe Angina (ICD: I20.9) - 0.03

Key Clinical Findings:

- Crushing substernal chest pain radiating to left arm
- Diaphoresis and nausea
- ST elevation in leads II, III, and aVF on ECG
- Elevated Troponin I and CK-MB levels

9. gemma-3-12b-it (USA, Released: 2024-12-11)

Primary Diagnosis: Acute ST-Elevation Myocardial Infarction (STEMI) (ICD-10: I21.0) - Confidence: 0.95

Differential Diagnoses:

- Unstable Angina (ICD: I20.0) - 0.2
- Esophageal Spasm (ICD: K22.8) - 0.1
- Pericarditis (ICD: I30.0) - 0.05

Key Clinical Findings:

- Crushing substernal chest pain radiating to the left arm
- Profuse sweating (diaphoresis)
- Nausea
- ST elevation in leads II, III, and aVF on ECG

10. llama-3.2-3b-in (USA, Released: 2024-09-25)

Primary Diagnosis: Acute Coronary Syndrome (ICD-10: I21.0) - Confidence: 0.9

Differential Diagnoses:

- Myocardial Infarction (ICD: I21.0) - 0.8
- Angina Pectoris (ICD: I20.0) - 0.7
- Pericarditis (ICD: K89.0) - 0.6

Key Clinical Findings:

- Sudden onset chest pain radiating to the left arm
- Elevated troponin and CK-MB
- ECG changes (ST elevation in leads II, III, and aVF)

- Hypertension

11. mistral-large-2 (France, Released: 2024-11-01)

Primary Diagnosis: ST-Elevation Myocardial Infarction (STEMI) (ICD-10: I21.02) - Confidence: 0.9

Differential Diagnoses:

- Unstable Angina (ICD: I20.0) - 0.7
- Aortic Dissection (ICD: I71.0) - 0.3
- Pulmonary Embolism (ICD: I26.9) - 0.2

Key Clinical Findings:

- Crushing substernal chest pain radiating to the left arm
- Diaphoresis and nausea
- ST elevation in leads II, III, and aVF
- Elevated Troponin I and CK-MB

12. mistral-7b-inst (France, Released: 2023-09-27)

Primary Diagnosis: Acute Myocardial Infarction (ICD-10: I21.9 (Acute coronary heart disease, unspecified, without mention of acute MI, not in acute stage)) - Confidence: 0.95

Differential Diagnoses:

- Atypical Angina Pectoris (ICD: I20.0 (Angina pectoris, stable angina pectoris)) - 0.05
- Pericarditis (ICD: I30.0 (Acute pericarditis)) - 0.03
- Esophageal Spasm (ICD: K21.3 (Esophageal spasm without obstruction)) - 0.02

Key Clinical Findings:

- Sudden onset chest pain, crushing, substernal, radiating to the left arm, diaphoresis, nausea

13. deepseek-chat (China, Released: 2024-12-20)

Primary Diagnosis: Acute Inferior Wall Myocardial Infarction (ICD-10: I21.1) - Confidence: 0.95

Differential Diagnoses:

- Aortic Dissection (ICD: I71.00) - 0.2
- Pulmonary Embolism (ICD: I26.99) - 0.15
- Pericarditis (ICD: I30.9) - 0.1

Key Clinical Findings:

- Sudden onset crushing substernal chest pain radiating to the left arm
- ST elevation in leads II, III, and aVF on ECG
- Elevated Troponin I and CK-MB
- Hypertension, diabetes, hyperlipidemia, and smoking history

14. deepseek-r1 (China, Released: 2025-01-20)

15. deepseek-chat-v (China, Released: 2024-12-26)

Primary Diagnosis: Acute Inferior Wall Myocardial Infarction (ICD-10: I21.4) - Confidence: 0.98

Differential Diagnoses:

- Aortic Dissection (ICD: I71.01) - 0.15
- Pericarditis (ICD: I30.9) - 0.1
- Pulmonary Embolism (ICD: I26.99) - 0.08

Key Clinical Findings:

- ST elevation in leads II, III, aVF (inferior wall pattern)
- Elevated troponin I (0.8 ng/mL)
- Elevated CK-MB (25 ng/mL)
- Crushing substernal chest pain radiating to left arm

16. qwen-2.5-coder- (China, Released: 2024-11-12)

Primary Diagnosis: Acute Myocardial Infarction (STEMI) (ICD-10: I21.0) - Confidence: 0.95

Differential Diagnoses:

- Unstable Angina (ICD: I20.1) - 0.03
- Pulmonary Embolism (ICD: I26.9) - 0.01
- Pneumothorax (ICD: J93.0) - 0.005

Key Clinical Findings:

- Sudden onset chest pain, crushing, substernal, radiating to left arm
- Profuse sweating, nausea
- ST elevation in leads II, III, and aVF on ECG
- Elevated Troponin I (0.8 ng/mL)

17. command-r-plus (Canada, Released: 2024-04-04)

Primary Diagnosis: Acute Myocardial Infarction (Heart Attack) (ICD-10: I21.0) - Confidence: 0.9

Differential Diagnoses:

- Unstable Angina (ICD: I20.0) - 0.7
- Aortic Dissection (ICD: I71.0) - 0.4
- Pulmonary Embolism (ICD: I26.9) - 0.3

Key Clinical Findings:

- Chest pain with radiation to left arm
- Diaphoresis and nausea
- Elevated troponin and CK-MB levels
- ST elevation on ECG

18. command-r (Canada, Released: 2024-03-11)

Primary Diagnosis: Acute Myocardial Infarction (STEMI) (ICD-10: I21.1) - Confidence: 0.95

Differential Diagnoses:

- Anginal Syndrome (ICD: I20.9) - 0.08
- Non-ST Elevation Myocardial Infarction (NSTEMI) (ICD: I21.2) - 0.05
- Acute Coronary Syndrome (ACS) (ICD: I25.1) - 0.05

Key Clinical Findings:

- Chest pain: Crushing, substernal, radiates to left arm
- Elevated cardiac enzymes: Troponin I - 0.8 ng/mL, CK-MB - 25 ng/mL
- ST elevation on ECG in leads II, III, and aVF
- History of cardiovascular risk factors: Hypertension, Diabetes, Hyperlipidemia, Smoking, Family Hx of CAD

19. jamba-large-1.7 (Israel, Released: 2025-07-01)

Primary Diagnosis: Acute Myocardial Infarction (AMI) (ICD-10: I21.9) - Confidence: 0.95

Differential Diagnoses:

- Acute Coronary Syndrome (ICD: I20.1) - 0.85
- Pulmonary Embolism (ICD: I26.90) - 0.7
- Aortic Dissection (ICD: I71.00) - 0.65

Key Clinical Findings:

- Substernal chest pain radiating to left arm
- ST elevation in leads II, III, and aVF on ECG
- Elevated troponin I and CK-MB
- Hypertension and diabetes mellitus as risk factors

20. sonar-deep-rese (USA, Released: 2025-03-07)

21. wizardlm-2-8x22 (USA, Released: 2024-04-15)

Primary Diagnosis: ST-Elevation Myocardial Infarction (STEMI) (ICD-10: I21.3) - Confidence: 0.9

Differential Diagnoses:

- Unstable Angina (ICD: I20.0) - 0.6
- Acute Pericarditis (ICD: I30.9) - 0.2
- Pulmonary Embolism (ICD: I26.99) - 0.1

Key Clinical Findings:

- Sudden onset crushing substernal chest pain
- Chest pain radiating to the left arm
- Diaphoresis and nausea
- ST elevation in leads II, III, and aVF on ECG

22. grok-2-1212 (USA, Released: 2024-12-12)

Primary Diagnosis: Acute Myocardial Infarction (ICD-10: I21.1) - Confidence: 0.95

Differential Diagnoses:

- Unstable Angina (ICD: I20.0) - 0.7
- Pulmonary Embolism (ICD: I26.99) - 0.5
- Aortic Dissection (ICD: I71.0) - 0.4

Key Clinical Findings:

- Sudden onset crushing chest pain
- Pain radiates to left arm
- Profuse sweating and nausea
- ST elevation in leads II, III, and aVF

23. grok-4 (USA, Released: 2024-12-26)

Primary Diagnosis: ST-Elevation Myocardial Infarction (STEMI) (ICD-10: I21.19) - Confidence: 0.95

Differential Diagnoses:

- Aortic Dissection (ICD: I71.00) - 0.2
- Pulmonary Embolism (ICD: I26.99) - 0.15
- Pericarditis (ICD: I30.9) - 0.1

Key Clinical Findings:

- Sudden onset crushing substernal chest pain radiating to left arm
- Profuse sweating and nausea
- ST elevation in leads II, III, aVF on ECG
- Elevated troponin I (0.8 ng/mL) and CK-MB (25 ng/mL)