

Supplementary Table S6. Reasons for exclusion

SI no.	Author, Year	Title	Reasons for exclusion
1	Abascal et al. (2023)	A Predictive Model for Cardiovascular Disease based on Artificial Intelligence in Primary Health Care	Written in spanish
2	Abdullah et al. (2021)	Assessment and evaluation of CHD risk factors using weighted ranked correlation and regression with data classification	Patients with pre-existing CVD were included
3	Afridi et al. (2024)	Comparative Analysis of Machine Learning Algorithms for Predicting Heart Disease: A Comprehensive Study	Binary prediction of CVD based on the risk factors
4	Akter et al. (2022)	Utilization of Five-Distinct Dataset to Diagnose and Predict Heart Disease: A Machine Learning Approach	Cardiac Disease prediction, not its risk
5	Akter et al. (2025)	Fair and explainable Myocardial Infarction (MI) prediction: Novel strategies for feature selection and class imbalance correction	Patients with pre-existing CVD were included
6	Ali et al (2021)	An Approach Based on Mutually Informed Neural Networks to Optimize the Generalization Capabilities of Decision Support Systems Developed for Heart Failure Prediction	Heart failure is not a cardiovascular disease
7	Almatari et al. (2024)	Cardiovascular disease risk factors prediction using deep learning convolutional neural networks	Patients with pre-existing CVD were included
8	Alqulaity et al. (2023)	Advanced Machine-Learning Technologies for Coronary Artery Disease Prediction Using Heterogeneous Data	No ML models were used
9	Anitha et al. (2023)	Cardio Vascular Disease Prediction based on ANN Algorithm	Outcome does not include CVD risk prediction
10	Arasan et al. (2019)	Predicting the Symptoms of Cardio Vascular Disease using Machine Learning Technique	Ranking of risk factors for an individual
11	Arora et al. (2024)	Structured Implementation of ML Algorithms for Cardiovascular Disease Detection	Binary prediction of CVD based on the risk factors
12	Arunachalam et al. (2022)	A novel approach for cardiovascular disease prediction using machine learning algorithms	Cardiac Disease prediction, not its risk
13	Babu et al. (2023)	Deep Learning Enabled Early Predicting Cardiovascular Status Using Highly Sensitive Piezoelectric Sensor of Solution-Processable Nylon-11	CVD detection using piezoelectric sensors
14	Baddah et al. (2023)	Predicting Heart Disease Using Machine Learning Techniques on Electronic Health Records Data	Patients with pre-existing CVD were included
15	Bagadi et al. (2023)	Cardiovascular Disease Prediction Using Machine Learning Algorithms	Patients with pre-existing CVD were included
16	Bagawati et al. (2024)	Generative Adversarial Network-based Deep Learning Framework for Cardiovascular Disease Risk Prediction	Patients with pre-existing CVD were included
17	Bajaj et al. (2023)	Heart Disease Prediction using Ensemble ML	Patients with pre-existing CVD were included
18	Bernard et al. (2024)	Coronary Heart Disease Prediction Models Using Machine Learning and Deep Learning Algorithms	Patients with pre-existing CVD were included

19	Bhardwaj et al. (2024)	Effective Risk Prediction of Cardiovascular Disease Using Machine Learning Classifiers	Data source not included
20	Bhardwaz et al. (2024)	Advancing Cardiovascular Health Risk Assessment: A Comprehensive Study on Heart Attack Prediction Using XGBoost Models and Cross-Validation	Data source not included
21	Bihri et al. (2022)	An Artificial Neural Network-Based System to Predict Cardiovascular Disease	Patients with pre-existing CVD were included
22	Biju et al. (2024)	Prediction of Cardiovascular Disease based on Lipid Profiles	Data source not included
23	Boudali et al. (2024)	A predictive approach for myocardial infarction risk assessment using machine learning and big clinical data	Patients with pre-existing CVD were included
24	Burugadda et al. (2023)	Personalized Cardiovascular Disease Risk Prediction Using Random Forest: An Optimized Approach	Patients with pre-existing CVD were included
25	Chanchal et al (2021)	A Modern Comparison of ML Algorithms for Cardiovascular Disease Prediction	Cardiac Disease prediction, not its risk
26	Changala et al. (2024)	Enhancing Early Heart Disease Prediction through Optimized CNN-GRU Algorithms: Advanced Techniques and Applications	Cardiac Disease prediction, not its risk
27	Chen et al. (2022)	Using AI Algorithm to Establish the CVD Risk Assessment Model	Patients with pre-existing CVD were included
28	Cheng et al. (2024)	Using machine learning-based algorithms to construct cardiovascular risk prediction models for Taiwanese adults based on traditional and novel risk factors	Patients with pre-existing CVD were included
29	Chole et al. (2024)	Enhancing heart disease risk prediction with GdHO fused layered BiLSTM and HRV features: A dynamic approach	Patients with pre-existing CVD were included
30	Cui et al. (2023)	Addressing Racial Bias in Cardiovascular Disease Risk Prediction with Fair Data Augmentation	Patients with pre-existing CVD were included
31	Dahia & Szabo (2023)	Implementing Machine Learning to Predict the 10-Year Risk of Cardiovascular Disease	Patients with pre-existing CVD were included
32	Darrab et al. (2024)	Exploring the predictive factors of heart disease using rare association rule mining	Patients with pre-existing CVD were included
33	Das et al. (2024)	Probable Risk Factors of Heart Disease with Accuracy Performance by Various Machine Learning Approaches	Patients with pre-existing CVD were included
34	David et al. (2024)	Cardiovascular Disease Prediction using Patient History and Real Time Monitoring	Patients with pre-existing CVD were included
35	Deepika et al. (2021)	Coronary Heart Disease Prediction Using Voting Classifier Ensemble Learning	Patients with pre-existing CVD were included
36	Desai et al. (2023)	Predicting Risk of Cardiac Arrest in Young Asian Americans: Insights from an Artificial Neural Network Analysis of the Nationwide Cohort	Patients with pre-existing CVD were included
37	Dinesh et al. (2024)	Advancing Heart Disease Prediction: A Hybrid Approach Integrating Machine Learning and Clinical Expertise	Patients with pre-existing CVD were included

38	Dorraki et al. (2024)	Improving Cardiovascular Disease Prediction With Machine Learning Using Mental Health Data: A Prospective UK Biobank Study	Patients with pre-existing CVD were included
39	Dritsas et al. (2022)	Cardiovascular Disease Risk Prediction with Supervised Machine Learning Techniques	Patients with pre-existing CVD were included
40	Dritsas et al. (2023)	Efficient Data-Driven Machine Learning Models for Cardiovascular Diseases Risk Prediction	Patients with pre-existing CVD were included
41	Duan et al. (2024)	Machine learning aided non-invasive diagnosis of coronary heart disease based on tongue features fusion	Patients with pre-existing CVD were included
42	Duraisamy et al. (2024)	Heart disease prediction using support vector machine	Dataset not mentioned
43	Emam et al (2019)	An Adaptive Heart Disease Behavior-Based Prediction System	Patients with pre-existing CVD were included
44	Faizal et al. (2023)	A biomarker discovery of acute myocardial infarction using feature selection and machine learning	Patients with pre-existing CVD were included
45	Gangwar et al. (2024)	Improved Random Forest Classifier for Predicting Heart Disease	Cardiac Disease prediction, not its risk
46	García-Ordás et al. (2023)	Heart disease risk prediction using deep learning techniques with feature augmentation	Patients with pre-existing CVD were included
47	Garcia-Vicente et al. (2022)	Clinical Synthetic Data Generation to Predict and Identify Risk Factors for Cardiovascular Diseases	Patients with pre-existing CVD were included
48	Garg et al. (2024)	A Machine Learning Approach to Cardiovascular Disease Prevention in Smart Healthcare	Patients with pre-existing CVD were included
49	Ghosh et al (2021)	Efficient Prediction of Cardiovascular Disease Using Machine Learning Algorithms With Relief and LASSO Feature Selection Techniques	Patients with pre-existing CVD were included
50	Gongade et al. (2023)	A Comparison of Neural Networks and Machine Learning Methods for Prediction of Heart Disease	Patients with pre-existing CVD were included
51	Gracious et al. (2024)	ML based Age Related Heart Disease Prediction	Dataset not mentioned
52	Guarneros-Nolasco et al (2021)	Identifying the Main Risk Factors for Cardiovascular Diseases Prediction Using Machine Learning Algorithms	Identifies the risk factors only
53	Harshitha et al. (2022)	Comparison of Different Classification Algorithms for Prediction of Heart Disease by Machine Learning Techniques	Cardiac Disease prediction, not its risk
54	Hasan et al. (2023)	Cardiovascular Disease Prediction Through Comparative Analysis of Machine Learning Models	Patients with pre-existing CVD were included
55	Hassan et al. (2021)	A Compassion of Three Data Mining Algorithms for Heart Disease Prediction	Cardiac Disease prediction, not its risk
56	Hosur et al. (2024)	Comparative Analysis for Prediction of Coronary Artery Disease Using Machine Learning Algorithms	Cardiac Disease prediction, not its risk
57	Hou et al. (2024)	Predicting Cardiovascular Risk with Artificial Intelligence and Deep Learning	Patients with pre-existing CVD were included
58	Huang et al. (2021)	Prediction of Heart Disease based on Enhanced Random Forest	Cardiac Disease prediction, not its risk

59	Ibrahim et al. (2022)	Preliminary analysis of the development of an artificial intelligence-based cardiovascular disease risk prediction model in an Asian population	Detection of lifestyle-related cardiovascular risk factors
60	Islam et al (2019)	Intelligent Healthcare Platform: Cardiovascular Disease Risk Factors Prediction Using Attention Module Based LSTM	Presents an algorithm to predict the risk factors rather than predicting CVD risk
61	Islam et al (2020)	Cardiovascular Disease Forecast using Machine Learning Paradigms	Predicts the risk factors of CVD
62	Islam et al. (2021)	A Performance Based Study on Deep Learning Algorithms in the Efficient Prediction of Heart Disease	Cardiac Disease prediction, not its risk
63	Javeed et al (2020)	Heart Risk Failure Prediction Using a Novel Feature Selection Method for Feature Refinement and Neural Network for Classification	Heart failure is not a cardiovascular disease
64	Jayasudha et al (2021)	Machine Learning Techniques for Cardiovascular Risk Score-Prediction	Dataset not mentioned
65	Johri et al. (2021)	Role of artificial intelligence in cardiovascular risk prediction and outcomes: comparison of machine-learning and conventional statistical approaches for the analysis of carotid ultrasound features and intra-plaque neovascularization	Patients with pre-existing CVD were included
66	Joshi et al. (2203)	An Accurate Prediction of Coronary Heart Disease Using Ensemble Algorithms	Patients with pre-existing CVD were included
67	Junwei et al (2019)	Dynamic prediction of cardiovascular disease using improved LSTM	Patients with pre-existing CVD were included
68	Kangarathinam et al. (2022)	Machine learning-based risk prediction model for cardiovascular disease using a hybrid dataset	Patients with pre-existing CVD were included
69	Karsakov et al (2019)	Deep and machine learning models to improve risk prediction of cardiovascular disease using data extraction from electronic health records	Poster
70	Karthik et al. (2024)	Enhanced Machine Learning Model for Heart Disease Prediction with Naive Bayes, Warm, and Personalized Health Recommendations	Cardiac Disease prediction, not its risk
71	Kavitha et al (2019)	Heart disease with risk prediction using machine learning algorithms	Binary prediction of CVD based on the risk factors
72	Kavitha et al. (2021)	Heart Disease Prediction using Hybrid machine Learning Model	Binary prediction of CVD based on the risk factors
73	Kedr et al (2021)	An Efficient Association Rule Mining From Distributed Medical Databases for Predicting Heart Diseases	Binary prediction of CVD based on the risk factors
74	Kensarin et al. (2023)	Prediction of Cardiovascular Disease Risk using Machine Learning Models	Patients with pre-existing CVD were included
75	Khan et al. (2024)	Predictive Modeling for Heart Disease Detection using Machine Learning Algorithms	Patients with pre-existing CVD were included
76	Khanna et al. (2024)	Predictive Analytics for Cardiovascular Health: A Machine Learning Approach	Dataset not mentioned
77	Khedkar et al. (2024)	Coronary Artery Disease Prediction Using Facial Features	Includes CAD patients and AI-generated images
78	Kim et al. (2021)	Machine Learning-Based Cardiovascular Disease Prediction Model: A Cohort Study on the Korean National Health Insurance Service Health Screening Database	Patients with pre-existing CVD were included

79	Kirboga et al. (2023)	Identifying Cardiovascular Disease Risk Factors in Adults with Explainable Artificial Intelligence	Algorithms were developed to determine the relationship between CVD patients and risk factors.
80	Kumar (2024)	Enhancing Heart Disease Prediction through Optimized Ensemble Machine Learning Models: A Hyperparameter Tuning Approach	Optimized ensemble for diagnosis
81	Kumar et al. (2023)	A study of Cardiovascular disease Risk factors using ML techniques	Uses diagnostic biomarkers; no indication of risk prediction in asymptomatic population.
82	Kumar et al. (2024)	Optimized feature fusion-based modified cascaded kernel extreme learning machine for heart disease prediction in E-healthcare	Patients with pre-existing CVD were included
83	Kumari et al (2021)	A Novel Approach for Prediction of Heart Disease using Machine Learning Algorithms	Cardiac Disease prediction, not its risk
84	Kusuma et al. (2021)	Cardiovascular Disease Prediction and Comparative Analysis of Varied Classifier Techniques	Cardiac Disease prediction, not its risk
85	L,K (2021)	Heart Disease Detection using Machine Learning Technique	Cardiac Disease prediction, not its risk
86	Labana et al. (2023)	Coronary Heart Disease Prediction Through Machine Learning Using Non-Laboratory Risk Factors	Patients with pre-existing CVD were included
87	Lin et al. (2022)	Acute coronary syndrome risk prediction based on gradient boosted tree feature selection and recursive feature elimination: A dataset-specific modeling study	Study focused on the follow-up of ACS patients after surgery
88	M. A (2021)	Earlier Prediction on the heart disease based on supervised machine learning techniques	Binary prediction of CVD based on the risk factors
89	Mamabolo et al (2020)	Heart Disease Risk Level Prediction: Knitting Machine Learning Classifiers	Patients with pre-existing CVD were included
90	Marathe et al. (2024)	Optimized Feature Selection based approach for Predicting Cardiovascular Disease Risk in Indian Population	Binary prediction of CVD based on the risk factors
91	Maxuvota et al. (2024)	Assessing risk factors for heart disease using machine learning methods	Binary prediction of CVD based on the risk factors
92	Maydanchi et al. (2023)	Comparative Study of Decision Tree, AdaBoost, Random Forest, Naïve Bayes, KNN, and Perceptron for Heart Disease Prediction	Patients with pre-existing CVD were included
93	Mishkin et al. (2024)	Development and testing of new methodical approaches for predicting cardiovascular events in healthy people using machine learning technology based on the «INTEREPID» international research	Written in Russian
94	Mohammed et al. (2024)	Snake Optimization of Multiclass SVM for Efficient Diagnosis of Heart Disease Risk Prediction	Patients with pre-existing CVD were included
95	Mohan et al. (2021)	Heart Disease Prediction Using Supervised Machine Learning Algorithms	Cardiac Disease prediction, not its risk
96	Murugesan et al. (2024)	Cardiovascular Disease Prediction Using Machine Learning and Deep Learning Algorithms	Cardiac Disease prediction, not its risk
97	Naderian et al. (2024)	Development and Evaluation of a Comprehensive Prediction Model for Incident Coronary Heart Disease Using Genetic, Social, and Lifestyle-Psychological Factors: A Prospective Analysis of the UK Biobank	The model here refers to a statistical model and not an ML one

98	Nayak et al. (2022)	Prediction Of Heart Disease and Identification of Severity Level Using Machine Learning Classifier with Android App	Cardiac Disease prediction, not its risk
99	Oiullah et al. (2023)	Analyzing the Effectiveness of Several Machine Learning Methods for Heart Attack Prediction	Patients with pre-existing CVD were included
100	Owusu et al. (2021)	Computer-Aided Diagnostics of Heart Disease Risk Prediction Using Boosting Support Vector Machine	Patients with pre-existing CVD were included
101	Padmaja et al. (2022)	Analysis to Predict Coronary Thrombosis Using Machine Learning Techniques	Patients with pre-existing CVD were included
102	Pal et al. (2022)	Risk prediction of cardiovascular disease using machine learning classifiers	Patients with pre-existing CVD were included
103	Panda et al. (2023)	The Effectiveness of Machine Learning Systems' Accuracy in Predicting Heart Stroke Using Socio-Demographic and Risk Factors - A Comparative Analysis of Various Models	Patients with pre-existing CVD were included
104	Panda et al. (2024)	A Machine Learning Approach for Risk Prediction of Cardiovascular Disease	Cardiac Disease prediction, not its risk
105	Pandiaraj et al (2021)	Effective Heart Disease Prediction Using Hybridmachine Learning	Cardiac Disease prediction, not its risk
106	Panwar et al (2020)	CardioNet: Deep Learning Framework for Prediction of CVD Risk Factors	Study population is not mentioned clearly.
107	Paranthaman et al. (2022)	Cardiovascular Disease Prediction using Deep Learning	Cardiac Disease prediction, not its risk
108	Parmar et al. (2022)	Cardio-Vascular Risk Detection System using different Machine Learning Techniques	Cardiac Disease prediction, not its risk
109	Patel et al. (2024)	RNN and PSO Based Evaluation of Weights of Cardiac Affecting Risk Factors	Risk factor analysis
110	Pathak et al. (2024)	Enhancing Cardiovascular Risk Prediction Using Support Vector Machines and Advanced Machine Learning Algorithms	Binary prediction of CVD based on the risk factors
111	Patil et al. (2020)	Machine Learning Based Algorithm for Risk Prediction of Cardio Vascular Disease (Cvd)	Dataset not mentioned
112	Patro et al (2020)	Ambient assisted living predictive model for cardiovascular disease prediction using supervised learning	Patients with pre-existing CVD were included
113	Patro et al (2021)	Heart disease prediction by using novel optimization algorithm: A supervised learning prospective	Cardiac Disease prediction, not its risk
114	Polat et al. (2023)	Machine Learning Based Risk Prediction for Major Adverse Cardiovascular Events for ELGA-Authorized Clinics ¹	Cardiac Disease prediction, not its risk
115	Polero et al. (2020)	A machine learning algorithm for risk prediction of acute coronary syndrome (Angina)	Patients with pre-existing CVD were included
116	Prajwal et al. (2022)	Cardiovascular Disease Prediction Using Machine Learning	Cardiac Disease prediction, not its risk
117	Prasanna et al. (2022)	Building an Efficient Heart Disease Prediction System by using Clustering Techniques	Patients with pre-existing CVD were included

118	Prasath et al. (2023)	Cardiovascular Disease Prediction Using Extreme Gradient Boosting Algorithm	Cardiac Disease prediction, not its risk
119	Praveen et al. (2023)	Cardiovascular Disease Prediction in Retinal Fundus Images Using ERNN Technique	Patients with pre-existing CVD were included
120	Princy et al. (2020)	Prediction of Cardiac Disease using Supervised Machine Learning Algorithms	Binary prediction of CVD based on the risk factors
121	Priyanga et al (2020)	A hybrid recurrent neural network-logistic chaos-based whale optimization framework for heart disease prediction with electronic health records	Patients with pre-existing CVD were included
122	Pushpavati et al. (2021)	Heart Failure Prediction by Feature Ranking Analysis in Machine Learning	Predicts risk factors
123	Qiu et al. (2024)	A robust framework for enhancing cardiovascular disease risk prediction using an optimized category boosting model	Analysis of the risk factors
124	Rachh et al. (2021)	Machine learning algorithms for prediction of heart disease	Cardiac Disease prediction, not its risk
125	Raihan et al (2019)	Risk Prediction of Ischemic Heart Disease Using Artificial Neural Network	Subjects aged 15 are also included
126	Raja et al. (2021)	Machine Learning Based Heart Disease Prediction System	Cardiac Disease prediction, not its risk
127	Reddy et al. (2021)	Heart Disease Risk Prediction Using Machine Learning Classifiers with Attribute Evaluators	Patients with pre-existing CVD were included
128	Reddy et al. (2021)	Heart Disease Risk Prediction using Machine Learning with Principal Component Analysis	Patients with pre-existing CVD were included
129	Reddy et al. (2021)	Rotation Forest Ensemble Classifier to Improve the Cardiovascular Disease Risk Prediction Accuracy	Patients with pre-existing CVD were included
130	Reddy et al. (2021)	Prediction of Heart Disease Risk Using Machine Learning with Correlation-based Feature Selection and Optimization Techniques	Cardiac Disease prediction, not its risk
131	Reddy et al. (2022)	Cardiovascular Disease Prediction using Machine Learning and Deep Learning	Cardiac Disease prediction, not its risk
132	Reddy et al. (2024)	Ensemble Stacking Classifier for Cardiovascular Risk Prediction	Patients with pre-existing CVD were included
133	Riyadi et al. (2024)	Early Detection of Coronary Heart Disease Using Exploration Data Analysis and Gradient Boosting Method	Patients with pre-existing CVD were included
134	Rojek et al. (2022)	AI-Based Prediction of Myocardial Infarction Risk as an Element of Preventive Medicine	Binary prediction of CVD based on the risk factors
135	Ryu et al. (2022)	An artificial intelligence framework for improving predictive performance of left ventricular hypertrophy using electrocardiography	Uses a statistical model
136	Sajeev et al (2019)	Deep Learning to Improve Heart Disease Risk Prediction	Patients with pre-existing CVD were included
137	Sajid et al. (2021)	Nonclinical Features in Predictive Modeling of Cardiovascular Diseases: A Machine Learning Approach	Risk factor analysis
138	Sajja et al. (2021)	Towards Application of Machine Learning in Classification and Prediction of Heart Disease	Patients with pre-existing CVD were included
139	Saju et al. (2022)	Heart Disease Prediction Model using Machine Learning	Binary prediction of CVD based on the risk factors

140	Sathwik et al. (2023)	Cardiovascular Disease Prediction Using Hybrid-Random-Forest- Linear-Model (HRFLM)	Hybrid model for heart disease detection; features are from symptomatic patients.
141	Schrempf et al (2021)	Machine Learning Based Risk Prediction for Major Adverse Cardiovascular Events	Patients with pre-existing CVD were included
142	Seto et al. (2020)	Prediction of Personal Cardiovascular Risk using Machine Learning for Smartphone Applications	An app that predicts if the subject is at risk of developing hypertension
143	Shafri et al. (2024)	Risk of Cardiovascular Heart Disease Using Data Mining Approach	Patients with pre-existing CVD were included
144	Shah et al (2021)	Smart Cardiac Framework for an Early Detection of Cardiac Arrest Condition and Risk	Study population isn't clearly mentioned
145	Shanbag et al (2021)	Heart Attack Probability Analysis Using Machine Learning	Patients with pre-existing CVD were included
146	Shen et al (2019)	Multilevel Risk Prediction of Cardiovascular Disease based on Adaboost+RF Ensemble Learning	Uses ensemble learning for detection, not risk prediction.
147	Shimizu et al. (2024)	External validation and interpretability of machine learning-based risk prediction for major adverse cardiovascular events	Includes MACE and non-MACE patients
148	Shimizu et al. (2024)	Machine learning-based risk prediction for major adverse cardiovascular events in a Brazilian hospital: Development, external validation, and interpretability	Includes MACE and non-MACE patients
149	Singh et al. (2021)	Prediction of Heart Disease using Machine Learning Techniques	Cardiac Disease prediction, not its risk
150	Singh et al. (2023)	Comparative Analysis of Machine Learning Models for Prediction of Heart Attacks	ML for heart attack diagnosis
151	Singirikonda et al. (2022)	An Approach to Prediction of Cardiovascular Diseases using Machine and Deep Learning Models	Cardiac Disease prediction, not its risk
152	Skouteli et al. (2024)	Explainable AI Modeling in the Prediction of Cardiovascular Disease Risk	Binary prediction of CVD based on the risk factors
153	Soni et al. (2024)	Cardiac Disease Prediction: A Deep Learning Approach using Convolutional Neural Network	Cardiac Disease prediction, not its risk
154	Stonier et al. (2024)	Cardiac disease risk prediction using machine learning algorithms	ML for heart attack diagnosis; not built for risk estimation in general population.
155	Sugavaneshwari & Saranya (2023)	A Study on Machine Learning Techniques for Precision Medicine Recommendation	Did not use AI models for CVD risk prediction
156	Susitha et al. (2023)	Comparative Analysis of Machine Learning Techniques for Heart Disease Prediction	Patients with pre-existing CVD were included
157	Tamal et al (2019)	Heart Disease Prediction based on External Factors: A Machine Learning Approach	Participants' ages ranged from 10 to 95.
158	Tangprasert et al. (2023)	Data-Driven Heart Disease Risk Prediction with Machine Learning on Healthcare Datasets	Patients with pre-existing CVD were included
159	Theerthagiri et al. (2022)	Cardiovascular disease prediction using recursive feature elimination and gradient boosting classification techniques	Binary prediction of CVD based on the risk factors

160	Tripathi et al. (2023)	Enhancing Cardiovascular Health: A Machine Learning Approach to Predicting Heart Disease	Cardiac Disease prediction, not its risk
161	Trisal et al. (2022)	Cardiac Disease Prediction using Machine Learning Algorithms	Cardiac Disease prediction, not its risk
162	Tsarapatsani et al. (2022)	Machine Learning Models for Cardiovascular Disease Events Prediction	Patients with pre-existing CVD were included
163	Wang et al. (2021)	Development and Validation of a Predictive Model for Coronary Artery Disease Using Machine Learning	Patients with pre-existing CVD were included
164	Wei et al. (2023)	Risk assessment of cardiovascular disease based on SOLSSA-CatBoost model	Data source not included
165	Wiharto et al. (2024)	Early detection of coronary heart disease based on risk factors using interpretable machine learning	Patients with pre-existing CVD were included
166	Wu et al. (2021)	Application of artificial intelligence ensemble learning model in early prediction of atrial fibrillation	Patients with pre-existing CVD were included
167	Xie et al (2025)	Sex-specific proteomic signatures improve cardiovascular risk prediction for the general population without cardiovascular disease or diabetes	Did not use AI models for CVD risk prediction
168	Yacaman Mendez et al. (2025)	Risk Stratification for Cardiovascular Disease: A Comparative Analysis of Cluster Analysis and Traditional Prediction Models	Did not use AI models for CVD risk prediction
169	Yang et al. (2016)	Predicting the 10-Year Risks of Atherosclerotic Cardiovascular Disease in Chinese Population: The China-PAR Project (Prediction for ASCVD Risk in China)	Did not use AI models for CVD risk prediction
170	Yang et al. (2021)	Artificial Intelligence-Assisted Identification of Genetic Factors Predisposing High-Risk Individuals to Asymptomatic Heart Failure	Heart failure
171	Yatsuya et al. (2016)	Development of a Risk Equation for the Incidence of Coronary Artery Disease and Ischemic Stroke for Middle-Aged Japanese - Japan Public Health Center-Based Prospective Study	Did not use AI models for CVD risk prediction
172	Yelakkala (2021)	A Novel Approach for Heart Disease Prediction Using Genetic Algorithm and Ensemble Classification	Patients with pre-existing CVD were included
173	Yi et al. (2023)	Cardiovascular disease risk assessment using a deep-learning-based retinal biomarker: a comparison with existing risk scores	Diagnostic framing, validates a biomarker's ability to identify intermediate/high-risk groups
174	Yu et al. (2025)	Coronary Heart Disease Risk Prediction Model Based on Machine Learning	Written in Chinese