

From Signal to Diagnosis: A Systematic Review of Machine Learning and Explainable AI in ECG-Based Cardiovascular Disease Prediction

Supplementary Table 1. PRISMA 2020 Checklist for the Systematic Review.

Section and Topic	Item	PRISMA 2020 Checklist Item	Location in Manuscript
TITLE	1	Identify the report as a systematic review.	Title
ABSTRACT	2	See the PRISMA 2020 for Abstracts checklist.	Abstract
INTRODUCTION	3	Describe the rationale for the review in the context of existing knowledge.	Introduction
	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Introduction; Section 2
METHODS	5	Specify the inclusion and exclusion criteria and how studies were grouped.	Section 2.1
	6	Specify all databases, registers, websites, organizations, reference lists and other sources searched, and the date when each source was last searched.	Section 2.2; Table 1
	7	Present the full search strategies for all databases, including filters and limits used.	Section 2.2; Table 1
	8	Specify the methods used to decide whether a study met the inclusion criteria, including reviewer roles and independence.	Section 2.3
	9	Specify methods used to collect data from reports, including reviewer processes.	Section 2.5
	10a	List and define all outcomes for which data were sought.	Section 2.5; Table 2
	10b	List and define all other variables for which data were sought.	Section 2.5; Table 2
	11	Specify methods used to assess risk of bias or methodological quality.	Section 2.4
	12	Specify effect measures used in the synthesis.	Section 2.5
	13a	Describe the process used to decide which studies were eligible for synthesis.	Sections 2.3–2.5
	13b	Describe methods used to prepare the data.	Section 2.5
	13c	Describe methods used to tabulate or visually display results.	Figures 1–8; Tables 3–4
	13d	Describe methods used to synthesize results.	Section 2.5
	13e	Describe methods used to explore heterogeneity.	Sections 3.2–3.9; Section 4
	13f	Describe sensitivity analyses.	Not applicable
	14	Describe methods used to assess reporting bias.	Sections 2.2 and 4.6
	15	Describe methods used to assess certainty/confidence in the body of evidence.	Section 2.4
RESULTS	16a	Describe results of the search and selection process.	Section 3.1; Figure 1
	16b	Cite studies that appeared eligible but were excluded and explain why.	Section 3.1
	17	Cite each included study and present its characteristics.	Table 4
	18	Present assessments of risk of bias/methodological quality.	Section 2.4; Section 3
	19	Present results of individual studies.	Table 4
	20a	Summarize characteristics and risk of bias among contributing studies.	Sections 3.2–3.9
	20b	Present results of statistical syntheses, if performed.	Narrative synthesis only (no meta-analysis)
	20c	Present results of investigations of heterogeneity.	Sections 3.2–3.9
	20d	Present results of sensitivity analyses.	Not applicable
	21	Present assessments of reporting bias.	Sections 2.2 and 4.6
	22	Present assessments of certainty/confidence in the evidence.	Section 4.6
DISCUSSION	23a	Provide a general interpretation of the results.	Section 4
	23b	Discuss limitations of the evidence included.	Sections 3.9 and 4.6
	23c	Discuss limitations of the review process.	Section 4.6
	23d	Discuss implications for practice, policy, and future research.	Sections 4.7 and 5
OTHER INFORMATION	24a	Provide registration information.	Section 2 (Protocol not registered)
	24b	Indicate where the protocol can be accessed.	Not applicable
	24c	Describe amendments to protocol.	Not applicable
	25	Describe sources of financial or non-financial support.	Funding Statement
	26	Declare competing interests.	Declaration of Competing Interest
	27	Report availability of data, code, and other materials.	Data Availability Statement