Supplementary material

**APPENDIX**

**Appendix 1**. Search terms

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| OVID (Medline and EMBASE) |
| Clinical decision support systems |
| 1. Clinical? decision? support? systems\* |
| 1. Algor#thm |
| 1. Diagnos\* |
| 1. Diagnos\* adj(accuracy or differential\* or decision\* or tool\*) |
| 1. Predict\* |
| 1. Clinical? adj(pathway? or tool? or decision?) |
| 1. Triage.mp |
|  |
| Pre-Hospital |
| 1. Pre-hospital\* |
| 1. Pre?hospital\* |
| 1. Emergency care.mp |
| 1. Point of care test\* |
| 1. Point-of-care systems/ |
| 1. Early?diagnosis.mp |
| 1. Out?of?hospital\* |
| 1. Emergency Medical Services/ |
|  |
| Myocardial infarction |
| 1. exp.Acute coronary syndrome\* |
| 1. acs.mp |
| 1. coronary adj(event\* or disease\* or arter\*) |
| 1. myocard\* infarct\* |
| 1. myocard\* isch?emia.mp |
| 1. STEMI.mp |
| 1. ST elevation adj(acute coro\* syndrome or myocard\* infarc\*) |
| 1. NSTEMI.mp |
| 1. Non-ST elevation adj(acute coro\* syndrome or myocard\* infarc\*) |
| 1. Steacs.mp |
| 1. Nsteacs.mp |
| 1. Heart adj(attack or pain or arrest) |
| 1. Heart arrest\* |
| 1. Chest pain.mp |
| 1. Unstable angina.mp |
| 1. UA.mp |
| 1. Cardiac\* |
| 1. Ischaem\* |

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| Web of Science search terms |
|  |
| 1. TS=(“acute coronary syndrome\*” OR “acs” OR “coronary adj(event\* OR disease\* OR arter\*)” OR “myocard\* infarct\*” OR “myocard\* isch?emia” OR “STEMI” OR “STEACS” OR “ST elevation adj(acute coro\* syndrome OR myocard\* infarc\*)” OR “NSTEMI” OR “Non-ST elevation adj(acute coro\* syndrome OR myocard\* infarc\*)” OR “NSTEACS” OR “heart attack”) |
| AND |
| 1. TS=(“Clinical? decision? support? systems\*” OR “Algor$thm” OR “Diagnos\* adj(accuracy OR differential\* OR decision\* OR tool\*)” OR “Predict\* adj(tool? OR pathway?)” OR “Clinical? adj(pathway? OR tool? or decision?))” |
| AND |
| 1. TS=(“Pre-hospital\*” OR “Pre?hospital\*” OR “Emergency care” OR “Point of care test\*” OR “Point-of-care systems/” OR “Early?diagnosis” OR “Out?of?hospital\*” OR “Emergency Medical Services/”) |
|  |
| REFINE: English language, WEB of Science Core Collection, Research areas ( CARDIOVASCULAR SYSTEMS CARDIOLOGY, HEALTH CARE SCIENCES SERVICES, EMERGENCY MEDICINE, GENERAL INTERNAL MEDICINE, CRITICAL CARE MEDICINE, AUTOMATION CONTROL SYSTEMS) |

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| CINAHL Search terms |
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| Myocardial Infarction |
| 1. TX Acute coronary syndrome\* |
| 1. TX acs |
| 1. TX coronary N1 event\* or disease\* or arter\* |
| 1. TX myocard\* infarct\* |
| 1. TX myocard\* isch?emia |
| 1. TX stemi |
| 1. TX st elevation N1 acute coro\* syndrome or myocard\* infarc\* |
| 1. TX nstemi |
| 1. TX non st elevation N1 acute coro\* syndrome or myocard\* infarc\* |
| 1. TX steacs |
| 1. TX nsteacs |
| 1. TX Heart N1 attack or pain |
| 1. TX Chest pain |
| 1. TX Cardiac\* |
| 1. TX Isch#em\* |
|  |
| Pre-hospital |
| 1. TX Prehospital\* |
| 1. TX Pre#hospital\* |
| 1. TX Emergency#care |
| 1. MH point-of-care Testing |
| 1. TX Early$diagnosis |
| 1. TX Out$of$hospital\* |
| 1. MH Emergency Medical Services |
|  |
| Clinical decision support systems |
| 1. MH Decision Support Systems, Clinical |
| 1. MH Algorithms |
| 1. Algor#thm |
| 1. TX Diagnos\* w1 accuracy or differential\* or decision\* or tool\* |
| 1. TX Predict\* n1 tool\* OR pathway\* |
| 1. TX Clinical? n1 pathway\* or tool\* or decision\* |

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| Cochrane Search Terms |
|  |
| Myocardial Infarction |
| 1. “Acute (coronary or cardiac) syndrome?” |
| 1. “Acs” |
| 1. “coronary NEAR(event? or disease? or arter\*)” |
| 1. “myocard\* infarct\*” |
| 1. “myocard\* isch\*emia” |
| 1. “stemi” |
| 1. “st elevation NEAR (acute coro\* syndrome or myocard\* infarc\*)” |
| 1. “Nstemi” |
| 1. “Non st elevation NEAR(acute coro\* syndrome? or myocard\* infarc\*)” |
| 1. “Steacs” |
| 1. “Nsteacs” |
| 1. “Heart NEAR(attack or pain)” |
| 1. “Chest pain” |
| 1. “Cardiac\*” |
| 1. “Ischaem\* heart disease\*” |
|  |
| Pre-Hospital |
| 1. “Pre-hospital\*” |
| 1. “Emergency care” |
| 1. “Point of care test\*” |
| 1. “Point-of-care system?” |
| 1. “Early diagnosi\*” |
| 1. “Out of hospital” |
| 1. “Emergency Medical Services” |
|  |
| Clinical decision support systems |
| 1. “Clinical decision support systems?” |
| 1. “Computeri?ed decision support systems?” |
| 1. “Algor\*thm” |
| 1. “Diagnos\*” |
| 1. “Diagnos\* NEAR(accuracy or differential\* or decision\* or tool\*)” |
| 1. “Predict\*” |
| 1. “Predict \* NEAR (pathway? or tool? or decision?)” |
| 1. “Clinical? NEAR (pathway? or tool? or decision?)” |
| 1. “Triage” |

**Appendix 2.**

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| Data Extraction form template. |
| 1. Study number |
| 1. Date of extraction |
| 1. Extractor name |
| 1. Title |
| 1. First Author |
| 1. Publication type |
| 1. Study type |
| 1. Language |
| 1. Study Year |
| 1. Location |
| 1. Setting |
| 1. Funding |
| 1. Participant location |
| 1. Study length |
| 1. Age greater than 18? |
| 1. Pre-hospital? |
| 1. Clinical decision support systems involved Examination/Vital signs? |
| 1. Clinical decision support systems involved Biomarkers? |
| 1. Clinical decision support systems involved ECG |
| 1. Clinical decision support systems involved patient history |
| 1. Name of clinical decision support systems involved |
| 1. Decision maker (GP/Paramedic/Computer etc.) |
| 1. Myocardial infarction definition |
| 1. Type of ACS examined (e.g. STEMI/NSTEMI/all ACS) |
| 1. Enrolment period |
| 1. Sampling Method |
| 1. Length of time for outcome study |
| 1. Number of Participants |
| 1. Number lost to follow-up |
| 1. Mean age |
| 1. Gender percentage |
| 1. Outcome 1 type |
| 1. Outcome 1 percentage |
| 1. Outcome 1 number |
| 1. Outcome 2 type |
| 1. Outcome 2 percentage |
| 1. Outcome 2 number |
| 1. Independent predictors |
| 1. Sensitivity |
| 1. Specificity |
| 1. Positive Predictive Value |
| 1. Negative predictive Value |
| 1. c-Statistic |
| 1. Validation? |
| 1. Notes |
| 1. Quality of Evidence (QUADAS) |
| 1. Include in study? |
| 1. Reasoning if not |