Supplementary Files

Legends

- -Supplementary File S1. Literature search strategy
- -Supplementary File S2: Summary of information required for each prognostic scoring system discussed
- **-Supplementary File S3**: Summary for risk of bias of included studies and risk of bias graph for the included studies
- -Supplementary File S4. List of rejected articles
- -Supplementary File S5: Funnel plots assessing publication bias. A: qSOFA funnel plot; B: SIRS funnel plot; C: MEWS funnel plot; D: UVA funnel plot

Supplementary File S1. Literature search strategy

a) Science Direct

"sequential organ failure assessment "OR "systemic inflammatory response syndrome" OR "universal vital assessment" OR "early warning score" AND (mortality OR diagnostic) AND "sepsis"

- b) Cochrane: qSOFA OR sirs OR early warning score OR "universal vital assessment"
- c) Pubmed

(qsofa OR sofa OR sirs OR UVA OR, EWS OR news OR news OR mews OR "sequential organ failure assessment" OR "systemic inflammatory response syndrome" OR "universal vital assessment" OR "early warning score") AND infect* AND sepsis

Additional filter

#1 - ((qsofa OR sofa OR sirs OR UVA OR, EWS OR news OR news OR mews OR "sequential organ failure assessment" OR "systemic inflammatory response syndrome" OR "universal vital assessment" OR "early warning score")AND infect* AND sepsis) AND(afghanistan OR albania OR algeria OR "american samoa" OR angola OR "antigua and barbuda" OR antigua OR barbuda OR argentina OR armenia OR armenian OR aruba OR azerbaijan OR bahrain OR bangladesh OR barbados OR "republic of belarus" OR belarus OR byelarus OR belorussia OR byelorussian OR belize OR "british honduras" OR benin OR dahomey OR bhutan OR bolivia OR "bosnia and herzegovina" OR bosnia OR herzegovina OR botswana OR bechuanaland OR brazil OR brasil OR bulgaria OR "burkina faso" OR "burkina faso" OR "upper volta" OR burundi OR urundi OR "cabo verde" OR "cape verde" OR cambodia OR kampuchea OR "khmer republic" OR cameroon OR cameron OR cameroun OR "central african republic" OR "ubangi shari" OR chad OR chile OR china OR colombia OR comoros OR "comoro islands" OR "iles comores" OR mayotte OR "democratic republic of the congo" OR "democratic republic congo" OR congo OR zaire OR "costa rica" OR "cote d'ivoire" OR "cote d'ivoire" OR "cote divoire" OR "cote d ivoire" OR "ivory coast" OR croatia OR cuba OR cyprus OR "czech republic" OR czechoslovakia OR djibouti OR "french somaliland" OR dominica OR "dominican republic" OR ecuador OR egypt OR "united arab republic" OR "el salvador" OR "equatorial guinea" OR "spanish guinea" OR eritrea OR estonia OR eswatini OR swaziland OR ethiopia OR fiji OR gabon OR "gabonese republic" OR gambia OR "georgia (republic)" OR georgia OR georgian OR ghana OR "gold coast" OR gibraltar OR greece OR grenada OR guam OR guatemala OR guinea OR "guinea bissau" OR guyana OR "british guiana" OR haiti OR hispaniola OR honduras OR hungary OR india OR indonesia OR timor OR iran OR iraq OR "isle of man" OR jamaica OR jordan OR kazakhstan OR kazakh OR kenya OR "democratic people's republic of korea" OR "republic of korea" OR north korea OR south korea OR korea OR kosovo OR kyrgyzstan OR kirghizia OR kirgizstan OR "kyrgyz republic" OR kirghiz OR laos OR "lao pdr" OR "lao people's democratic republic" OR latvia OR lebanon OR "lebanese republic" OR lesotho OR basutoland OR liberia OR libya OR "libyan arab jamahiriya"

OR lithuania OR macau OR macao OR "macedonia (republic)" OR macedonia OR madagascar OR "malagasy republic" OR malawi OR nyasaland OR malaysia OR "malay federation" OR "malaya federation" OR maldives OR "indian ocean islands" OR "indian ocean" OR mali OR malta OR micronesia OR "federated states of micronesia" OR kiribati OR "marshall islands" OR nauru OR "northern mariana islands" OR palau OR tuvalu OR mauritania OR mauritius OR mexico OR moldova OR moldovian OR mongolia OR montenegro OR morocco OR ifni OR mozambique OR "portuguese east africa" OR myanmar OR burma OR namibia OR nepal OR "netherlands antilles" OR nicaragua OR niger OR nigeria OR oman OR muscat OR pakistan OR panama OR "papua new guinea" OR paraguay OR peru OR philippines OR philipines OR phillippines OR philippines OR poland OR "polish people's republic" OR portugal OR "portuguese republic" OR "puerto rico" OR romania OR russia OR "russian federation" OR ussr OR "soviet union" OR "union of soviet socialist republics" OR rwanda OR ruanda OR samoa OR "pacific islands" OR polynesia OR "samoan islands" OR "navigator island" OR "navigator islands" OR "sao tome and principe" OR "saudi arabia" OR senegal OR serbia OR seychelles OR "sierra leone" OR slovakia OR "slovak republic" OR slovenia OR melanesia OR "solomon island" OR "solomon islands" OR "norfolk island" OR "norfolk islands" OR somalia OR "south africa" OR "south sudan" OR "sri lanka" OR ceylon OR "saint kitts and nevis" OR "st. kitts and nevis" OR "saint lucia" OR "st. lucia" OR "saint vincent and the grenadines" OR "saint vincent" OR "st. vincent" OR grenadines OR sudan OR suriname OR surinam OR "dutch guiana" OR "netherlands guiana" OR syria OR "syrian arab republic" OR tajikistan OR tadjikistan OR tadzhikistan OR tadzhik OR tanzania OR tanganyika OR thailand OR siam OR "timor leste" OR "east timor" OR togo OR "togolese republic" OR tonga OR "trinidad and tobago" OR trinidad OR tobago OR tunisia OR turkey OR "turkey (republic)" OR turkmenistan OR turkmen OR uganda OR ukraine OR uruguay OR uzbekistan OR uzbek OR vanuatu OR "new hebrides" OR venezuela OR vietnam OR "viet nam" OR "middle east" OR "west bank" OR gaza OR palestine OR yemen OR yugoslavia OR zambia OR zimbabwe OR "northern rhodesia" OR "global south" OR "africa south of the sahara" OR "sub saharan africa" OR "subsaharan africa" OR "africa, central" OR "central africa" OR "africa, northern" OR "north africa" OR "northern africa" OR magreb OR maghrib OR sahara OR "africa, southern" OR "southern africa" OR "africa, eastern" OR "east africa" OR "eastern africa" OR "africa, western" OR "west africa" OR "western africa" OR "west indies" OR "indian ocean islands" OR caribbean OR "central america" OR "latin america" OR "south and central america" OR "south america" OR "asia, central" OR "central asia" OR "asia, northern" OR "north asia" OR "northern asia" OR "asia, southeastern" OR "southeastern asia" OR "south eastern asia" OR "southeast asia" OR "southeastern" OR "southeastern asia" east asia" OR "asia, western" OR "western asia" OR "europe, eastern" OR "east europe" OR "eastern europe" OR "developing country" OR "developing countries" OR "developing nation" OR "developing nations" OR "developing population" OR "developing populations" OR "developing world" OR "less developed country" OR "less developed countries" OR "less developed nation" OR "less developed nations" OR "less developed population" OR "less developed populations" OR "less developed world" OR "lesser developed country" OR "lesser developed countries" OR "lesser developed nation" OR "lesser developed nations" OR "lesser developed population" OR "lesser developed populations" OR "lesser developed world" OR "under developed country" OR "under developed countries" OR "under developed nation" OR "under developed nations" OR "under developed population" OR "under developed populations" OR "under developed world" OR "underdeveloped country" OR "underdeveloped countries" OR "underdeveloped nation" OR "underdeveloped nations" OR "underdeveloped population" OR "underdeveloped populations" OR "underdeveloped world" OR "middle income country" OR "middle income countries" OR "middle income nation" OR "middle income nations" OR

"middle income population" OR "middle income populations" OR "low income country" OR "low income countries" OR "low income nation" OR "low income nations" OR "low income population" OR "low income populations" OR "lower income country" OR "lower income countries" OR "lower income nation" OR "lower income nations" OR "lower income population" OR "lower income populations" OR "underserved country" OR "underserved countries" OR "underserved nation" OR "underserved nations" OR "underserved population" OR "underserved populations" OR "underserved world" OR "under served country" OR "under served countries" OR "under served nation" OR "under served nations" OR "under served population" OR "under served populations" OR "under served world" OR "deprived country" OR "deprived countries" OR "deprived nation" OR "deprived nations" OR "deprived population" OR "deprived populations" OR "deprived world" OR "poor country" OR "poor countries" OR "poor nation" OR "poor nations" OR "poor population" OR "poor populations" OR "poor world" OR "poorer country" OR "poorer countries" OR "poorer nation" OR "poorer nations" OR "poorer population" OR "poorer populations" OR "poorer world" OR "developing economy" OR "developing economies" OR "less developed economy" OR "less developed economies" OR "lesser developed economy" OR "lesser developed economies" OR "under developed economy" OR "under developed economies" OR "underdeveloped economy" OR "underdeveloped economies" OR "middle income economy" OR "middle income economies" OR "low income economy" OR "low income economies" OR "lower income economy" OR "lower income economies" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR lmic OR lmics OR "third world" OR "lami country" OR "lami countries" OR "transitional country" OR "transitional countries" OR "emerging economies" OR "emerging nation" OR "emerging nations")"

d) Web of science: ("sequential organ failure assessment "OR "systemic inflammatory response syndrome" OR "universal vital assessment" OR "early warning score" AND (mortality OR diagnostic) AND "sepsis")

Supplementary File S2: Summary of information required for each prognostic scoring system discussed

Score	qSOFA:	Point	MEWS:	Point	UVA:	Point	SIRS	Point			
Respiratory	> 22		15-20	1	≥30	1	. 20				
Rate	≥22	1	21-29 or <9	2			>20	1			
			≥30	3							
D. 1			81-100	1							
Blood pressure	≤100	1	71-80 or ≥200	2	<90	1					
			≤70	3							
			A	0							
GCS or			V	1							
AVPU	GCS<15	1	P	2	GCS<15	4					
			U	3							
Temperature			≥38.5	1	<36	2	>38°C or < 36°C	1			
			<35	2			30 C	1			
			101-110 or 41-50	1				1			
Heart Rate			111-129 or <40	2	≥120	1	1	1	1	>90	
			≥130	3							
White cell							>12,000/mm ³ , < 4,000/mm ³	1			
Oxygen saturation					<92	2					
HIV status					Present	2					
Interpretation	≥2: high risk of mortality >4: high risk				0-1 low ri 2-4 mediu >4 high ris	m risk,	>2 and source of infection meets s criteria				

Supplementary File S3: Summary for risk of bias of included studies and risk of bias graph for the included studies

	Risk of Bias					Applicability Concerns			
	Patient Selection	Index Test	Reference Standard	Flow and Timing	Patient Selection	IndexTest	Reference Standard		
Aluisio2019	?	•	•	•	?	•	•		
Boillat-Blanco et al 2018	?	•	•	•	•	•	•		
Ergun et al [a] 2013	•	•	•	•	•	•	•		
Ergun et al [b] 2013	•	•	•	•		•	•		
Fernandes2020	•	•	•	•	•	•	•		
Huson et al 2017	•	•	•	?	•	•	•		
Husson et al 2017	•	•	•		•	•	•		
Khwannimit et al 2018		•	•	?	•	•	•		
Klinger2021	•	•	•	•	•	•	•		
Kristina E.et al 2018	•	•	•	?	•	•	•		
Luo et al 2019	•	•	•	•	•	•	•		
Minn2021	•	•	•	•	•	•	•		
Moore et al 2017	?	•	•	•	•	•	•		
Muhammad et al [a] 2018	•	•	•	•	•	•	•		
Muhammad et al [b] 2018	•	•	•	•	?	•	•		
Pairattanakorn2020	•	•	•	•	•	•	•		
Phetsinee et al 2020	•	•	•	•	•	•	•		
Prangsai et al2020	•	•	•	•	•	•	•		
Raphael Kazidule et al 2020	•	•	•	?	•	•	•		
Robert Sinto 2019	•	•	•	•	•	•	•		
Ruangsomboon2021	•	•	•	•	•	•	•		
Schmedding et al 2019	•	•	•	•	•	•	•		
Tian et al 2019	?	?	•	?	•	•	•		
Toker2021	•	•	?	?	•	•	•		
Weietal 2019	•	•	•	•	•	•	•		
Xie et al 2018	•	•	•	•	•	•	•		
Yuetal 2019	?	?	•	•	•	•	•		
High ?	Bligh Place								

Supplementary File S4. List of rejected articles

	Authors	year	Tilles	Reason
1	Lane et al	2020	Epidemiology and patient predictors of infection and sepsis in the prehospital setting	Score performance not reported or insufficient data
2	Daniel et al	2020	comparison of different steroid regimes in critically ill adult patients of COVID-19	Score performance not reported or insufficient data
3	Hope et al	2017	Factors associated with vulnerability after hospitalization in critically ill adults at high risk of acute respiratory distress syndrome	Score performance not reported or insufficient data
4	Huerta et al	2018	Validation of an electronic sequential organ failure assessment score in intensive care unit patients	Score performance not reported or insufficient data
5	Barton et al	2018	Predicting patient mortality: using machine learning to identify atrisk patients and improve outcomes	Study performed in not LMIC
6	Kelly et al	2016	Combined biomarkers discriminate a low likelihood of bacterial infection among surgical intensive care unit patients with suspected sepsis.	Score performance not reported or insufficient data
7	Jones et al	1998	Assessment criteria in identifying the sick sepsis patient.	Review
8	Forward et al	2017	Predictive validity of the qSOFA criteria for sepsis in non-ICU inpatients.	Study performed in not LMIC
9	Micek et al	2003	Management of severe sepsis: integration of multiple pharmacologic interventions.	Score performance not reported or insufficient data

10	GarcÃa-Gigorro et al	2019	Application of the new Sepsis-3 definition in a cohort of patients with severe sepsis and septic shock admitted to Intensive Care Unit from the Emergency Department.	Study performed in not LMIC
11	Kashefi et al	2019	Comparison of sequential organ failure assessment and acute physiology and chronic health evaluation III scoring systems on detection prognosis of mortality in patients with trauma admitted to the intensive care unit	Not eligible study population
12	Jaqua et al	2012	Adult-Onset Still's Disease Masquerading as Sepsis in an Asplenic Active-Duty Soldier.	Not eligible study population
13	Franchini et al	2019	SIRS or qSOFA? Is that the question? Clinical and methodological observations from a meta-analysis and critical review on the prognostication of patients with suspected sepsis outside the ICU	Review
14	Schlichting et al	2007	Recognizing and managing severe sepsis: a common and deadly threat.	Review
15	Rey et al	2007	Procalcitonin and C-reactive protein as markers of systemic inflammatory response syndrome severity in critically ill children.	Score performance not reported or insufficient data
16	van et al	2016	Epidemiology of Sepsis and Its Recognition by Emergency Medical Services Personnel in the Netherlands.	Score performance not reported or insufficient data
17	Salomão et al	2019	Sepsis: evolving concepts and challenges.	Review
18	Tai et al	2019	Utilization of systemic inflammatory response syndrome criteria in predicting mortality among geriatric patients with influenza in the emergency department	Not eligible study population
19	Wang et al	2017	The authors respond to qSOFA predicting outcomes in patients with infection some lingering doubts	Not original article

Teparrukkul et al	2019	Utility of qSOFA and modified SOFA in severe malaria presenting as sepsis.	Score performance not reported or insufficient data
Schlattmann et al	2014	Procalcitonin as a diagnostic marker for sepsis.	Score performance not reported or insufficient data
Kim et al	2019	Sepsis: early recognition and optimized treatment	Not original article
Choi et al	2019	Prognostic performance of disease severity scores in patients with septic shock presenting to the emergency department.	Study performed in not LMIC
Francisco et al	2018	Risk factors for long-term mortality in patients admitted with severe infection.	Score performance not reported or insufficient data
Wade et al	1998	[Epidemiology of systemic inflammatory response syndrome infection and septic shock in surgical intensive care patients].	Not eligible study population
Wu et al	2019	Accuracy Comparison Between Age-Adapted SOFA and SIRS in Predicting in-Hospital Mortality of Infected Children at China's PICU.	Not eligible study population
Gille-Johnson et al	2013	Severe sepsis and systemic inflammatory response syndrome in emergency department patients with suspected severe infection.	Study performed in not LMIC
Routsi et al	2007	Application of the sequential organ failure assessment (SOFA) score to bacteremic ICU patients.	Score performance not reported or insufficient data
Silva et al	2004	Brazilian Sepsis Epidemiological Study (BASES study).	Score performance not reported or insufficient data
Wanner et al	2000	Relationship between procalcitonin plasma levels and severity of injury sepsis organ failure and mortality in injured patients.	Score performance not reported or insufficient data
Jekarl et al	2015	Diagnosis and evaluation of severity of sepsis via the use of biomarkers and profiles of 13 cytokines: a multiplex analysis.	Score performance not reported or insufficient data
	Schlattmann et al Kim et al Choi et al Francisco et al Wade et al Wu et al Gille-Johnson et al Routsi et al Silva et al Wanner et al	Schlattmann et al 2014 Kim et al 2019 Choi et al 2019 Francisco et al 2018 Wade et al 1998 Wu et al 2019 Gille-Johnson et al 2013 Routsi et al 2007 Silva et al 2004 Wanner et al 2000	sepsis. Schlattmann et al 2014 Procalcitonin as a diagnostic marker for sepsis. Kim et al 2019 Sepsis: early recognition and optimized treatment Choi et al 2019 Prognostic performance of disease severity scores in patients with septic shock presenting to the emergency department. Francisco et al 2018 Risk factors for long-term mortality in patients admitted with severe infection. Wade et al 1998 [Epidemiology of systemic inflammatory response syndrome infection and septic shock in surgical intensive care patients]. Wu et al 2019 Accuracy Comparison Between Age-Adapted SOFA and SIRS in Predicting in-Hospital Mortality of Infected Children at China's PICU. Gille-Johnson et al 2013 Severe sepsis and systemic inflammatory response syndrome in emergency department patients with suspected severe infection. Routsi et al 2007 Application of the sequential organ failure assessment (SOFA) score to bacteremic ICU patients. Silva et al 2004 Brazilian Sepsis Epidemiological Study (BASES study). Wanner et al 2000 Relationship between procalcitonin plasma levels and severity of injury sepsis organ failure and mortality in injured patients.

32	Bewersdorf et al	2017	The SPEED (sepsis patient evaluation in the emergency department)	Score performance not reported
			score: a risk stratification and outcome prediction tool.	or insufficient data
33	Amland et al	2018	Quick Sequential [Sepsis-Related] Organ Failure Assessment (qSOFA) and St. John Sepsis Surveillance Agent to Detect Patients at Risk of Sepsis: An Observational Cohort Study.	Study performed in not LMIC
34	Jones et al	2016	The Sepsis Early Recognition and Response Initiative (SERRI).	Not original article
35	Cecconi et al	2018	Sepsis and septic shock.	Not original article
36	MartÃnez et al	2001	[Sepsis and bacteremia].	Not original article
37	Bhattacharjee et al	2017	Detecting Sepsis: Are Two Opinions Better Than One?	Score performance not reported or insufficient data
38	Umemura et al	2017	Assessment of mortality by qSOFA in patients with sepsis outside ICU: A post hoc subgroup analysis by the Japanese Association for Acute Medicine Sepsis Registry Study Group.	Study performed in not LMIC
39	Ramos-Rincón et al	2019	The quick Sepsis-related Organ Failure Assessment (qSOFA) is a good predictor of in-hospital mortality in very elderly patients with bloodstream infections: A retrospective observational study	Study performed in not LMIC
40	King et al	2007	Sepsis in critical care.	Not original article
41	Camm et al	2018	Sepsis recognition tools in acute ambulatory care: associations with process of care and clinical outcomes in a service evaluation of an Emergency Multidisciplinary Unit in Oxfordshire.	Study performed in not LMIC
42	Lamontagne et al	2017	qSOFA for Identifying Sepsis Among Patients With Infection.	Study performed in not LMIC

43	Kang et al	2011	Risk factors and pathogenic significance of severe sepsis and septic shock in 2286 patients with gram-negative bacteremia.	Score performance not reported or insufficient data
4.4	We at al	2014		
44	Yu et al	2014	Comparison of risk prediction scoring systems for ward patients: a retrospective nested case-control study.	Study performed in not LMIC
45	Moskowitz et al	2017	Quick Sequential Organ Failure Assessment and Systemic Inflammatory Response Syndrome Criteria as Predictors of Critical Care Intervention Among Patients With Suspected Infection.	Study performed in not LMIC
46	Hamed et al	2017	Diagnostic value of Pentraxin-3 in patients with sepsis and septic shock in accordance with latest sepsis-3 definitions	Score performance not reported or insufficient data
47	TrancÄf et al	2016	Can APACHE II SOFA ISS and RTS Severity Scores be used to Predict Septic Complications in Multiple Trauma Patients?	Score performance not reported or insufficient data
48	Singh et al	2020	Epidemiology and Management Trends of Patients With Sepsis and Septic Shock in the Intensive Care Unit: A Prospective Trial in the Caribbean.	Score performance not reported or insufficient data
49	Stephen et al	2020	Sepsis and Septic Shock in Low- and Middle-Income Countries.	Review
50	Hofer et al	2012	Definitions of SIRS and sepsis in correlation with early and late onset neonatal sepsis.	Not eligible study population
51	Serafim et al	2018	A Comparison of the Quick-SOFA and Systemic Inflammatory Response Syndrome Criteria for the Diagnosis of Sepsis and Prediction of Mortality: A Systematic Review and Meta-Analysis	Review
52	McLymont et al	2016	Scoring systems for the characterization of sepsis and associated outcomes.	Not original article

53	Mayr et al	2014	Epidemiology of severe sepsis.	Score performance not reported or insufficient data
54	Hill et al	2018	Predictors for Identifying Burn Sepsis and Performance vs Existing Criteria.	Not eligible study population
55	Christensen et al	2007	[Sepsis in the critically-ill patient].	Score performance not reported or insufficient data
56	Hryckiewicz et al	2006	Procalcitonin as a diagnostic marker in systemic inflammatory response syndrome (SIRS) and sepsis	Score performance not reported or insufficient data
57	Bossink et al	1998	Prediction of mortality in febrile medical patients: How useful are systemic inflammatory response syndrome and sepsis criteria?	Study performed in not LMIC
58	Bloos et al	2015	Clinical diagnosis of sepsis and the combined use of biomarkers and culture- and non-culture-based assays.	Score performance not reported or insufficient data
59	Gao et al	2020	Prognostic value of the combined variability of mean platelet volume and neutrophil percentage for short-term clinical outcomes of sepsis patients.	Score performance not reported or insufficient data
60	Lindner et al	2016	An Algorithm for Systemic Inflammatory Response Syndrome Criteria-Based Prediction of Sepsis in a Polytrauma Cohort.	Not eligible study population
61	Falsetti et al	2020	SOFA and qSOFA usefulness for in-hospital death prediction of elderly patients admitted for suspected infection in internal medicine.	Study performed in not LMIC
62	Mark et al	2017	QSOFA Outperforms CRB CRB-65 and CRB-65 plus: a multicenter US observational study	Study performed in not LMIC
63	Gando et al	2020	The SIRS criteria have better performance for predicting infection than qSOFA scores in the emergency department.	Study performed in not LMIC

Fernando et al	2018	Sepsis-3 Septic Shock Criteria and Associated Mortality Among Infected Hospitalized Patients Assessed by a Rapid Response Team.	Study performed in not LMIC
Jaimes et al	2003	The systemic inflammatory response syndrome (SIRS) to identify infected patients in the emergency room.	Study performed in not LMIC
Yousef et al	2013	The predictive prognostic values of serum TNF-α in comparison to SOFA score monitoring in critically ill patients.	Score performance not reported or insufficient data
Vaittinada et al	2019	Prognostic value of prehospital quick sequential organ failure assessment score among patients with suspected infection.	Study performed in not LMIC
Poeze et al	2000	Decreased organ failure in patients with severe SIRS and septic shock treated with the platelet-activating factor antagonist TCV-309: a prospective multicenter double-blind randomized phase II trial. TCV-309 Septic Shock Study Group	Score performance not reported or insufficient data
Mak et al	2019	A prospective validation of Sepsis-3 guidelines in acute hepatobiliary sepsis: qSOFA lacks sensitivity and SIRS criteria lacks specificity (Cohort Study).	Not eligible study population
Liu et al	2021	Predictive value of immune cell counts and neutrophil-to- lymphocyte ratio for 28-day mortality in patients with sepsis caused by intra-abdominal infection.	Score performance not reported or insufficient data
Gustot et al	2011	Multiple organ failure in sepsis: prognosis and role of systemic inflammatory response.	Score performance not reported or insufficient data
Wong et al	2015	Systemic inflammatory response syndrome (SIRS) is a major determinant of treatment response to terlipressin for hepatorenal syndrome type 1 (HRS-1)	Score performance not reported or insufficient data
	Jaimes et al Yousef et al Vaittinada et al Poeze et al Mak et al Liu et al	Jaimes et al 2003 Yousef et al 2013 Vaittinada et al 2019 Poeze et al 2000 Mak et al 2019 Liu et al 2021 Gustot et al 2011	Infected Hospitalized Patients Assessed by a Rapid Response Team. Jaimes et al 2003 The systemic inflammatory response syndrome (SIRS) to identify infected patients in the emergency room. Yousef et al 2013 The predictive prognostic values of serum TNF-í± in comparison to SOFA score monitoring in critically ill patients. Vaittinada et al 2019 Prognostic value of prehospital quick sequential organ failure assessment score among patients with suspected infection. Poeze et al 2000 Decreased organ failure in patients with severe SIRS and septic shock treated with the platelet-activating factor antagonist TCV-309: a prospective multicenter double-blind randomized phase II trial. TCV-309 Septic Shock Study Group Mak et al 2019 A prospective validation of Sepsis-3 guidelines in acute hepatobiliary sepsis: qSOFA lacks sensitivity and SIRS criteria lacks specificity (Cohort Study). Liu et al 2021 Predictive value of immune cell counts and neutrophil-to-lymphocyte ratio for 28-day mortality in patients with sepsis caused by intra-abdominal infection. Gustot et al 2011 Multiple organ failure in sepsis: prognosis and role of systemic inflammatory response. Wong et al 2015 Systemic inflammatory response syndrome (SIRS) is a major determinant of treatment response to terlipressin for hepatorenal

73	Lo et al	2019	qSOFA is a Poor Predictor of Short-Term Mortality in All Patients: A Systematic Review of 410000 Patients.	Review
74	Zeigler et al	2021	Sepsis and Mortality Prediction in Very Low Birth Weight Infants: Analysis of HeRO and nSOFA.	Not eligible study population
75	Schlapbach et al	2018	Prognostic accuracy of age-adapted SOFA SIRS PELOD-2 and qSOFA for in-hospital mortality among children with suspected infection admitted to the intensive care unit.	Not eligible study population
76	Li et al	2021	Prediction of median survival time in sepsis patients by the SOFA score combined with different predictors	Score performance not reported or insufficient data
77	Jones et al	2009	The Sequential Organ Failure Assessment score for predicting outcome in patients with severe sepsis and evidence of hypoperfusion at the time of emergency department presentation.	Score performance not reported or insufficient data
78	Estella et al	2018	Prognostic accuracy of qsofa according to the site of infection in older patient attended in Emergency Department.	Study performed in not LMIC
79	Sen et al	2019	Diagnostic and prognostic value of new bioscore in critically ill septic patients.	Score performance not reported or insufficient data
80	Javed et al	2017	Clinical predictors of early death from sepsis	Score performance not reported or insufficient data
81	Jacobson et al	2012	Sequential organ failure assessment (SOFA) scores differ between genders in a sepsis cohort: cause or effect?	Score performance not reported or insufficient data
82	Yu et al	2017	Performance assessment of the SAPS II and SOFA scoring systems in Hanta virus Hemorrhagic Fever with Renal Syndrome.	Score performance not reported or insufficient data

83	Kesselmeier et al	2020	Validation of the qSOFA score compared to the CRB-65 score for risk prediction in community-acquired pneumonia.	Study performed in not LMIC
84	Chu et al	2020	Prognostic accuracy of SIRS criteria and qSOFA score for in-hospital mortality among influenza patients in the emergency department.	Not eligible study population
85	Pandey et al	2019	Quick Sequential (Sepsis Related) Organ Failure Assessment: A high performance rapid prognostication tool in patients having acute pyelonephritis with upper urinary tract calculi.	Not eligible study population
86	Otani et al	2021	Clinical prediction rule is more useful than qSOFA and the Sepsis-3 definition of sepsis for screening bacteremia.	Score performance not reported or insufficient data
87	Karakike et al	2019	The early change of SOFA score as a prognostic marker of 28-day sepsis mortality: analysis through a derivation and a validation cohort	Score performance not reported or insufficient data
88	Lind et al	2021	Predictive Value of 3 Clinical Criteria for Sepsis (Quick Sequential Organ Failure Assessment Systemic Inflammatory Response Syndrome and National Early Warning Score) With Respect to Short-term Mortality in Al	Study performed in not LMIC
89	Canet et al	2018	qSOFA as predictor of mortality and prolonged ICU admission in Emergency Department patients with suspected infection.	Study performed in not LMIC
90	Devia et al	2021	Quick Sequential Organ Failure Assessment Sequential Organ Failure Assessment and Procalcitonin for Early Diagnosis and Prediction of Death in Elderly Patients with Suspicion of Sepsis in the Emergency Department	Not eligible study population

91	Yeh et al	2020	Quick-SOFA score ≥ 2 predicts prolonged hospital stay in geriatric patients with influenza infection.	Not eligible study population
92	Zhou et al	2018	It is SOFA score rather than quick SOFA (qSOFA) score that constitutes the clinical criteria of sepsis.	Not original article
93	Hassan et al	2016	Validation of a modified sequential organ failure assessment cardiovascular score	Not eligible study population
94	Abdullah et al	2020	qSOFA is a useful prognostic factor for 30-day mortality in infected patients fulfilling the SIRS criteria for sepsis.	Study performed in not LMIC
95	Guarino et al	2021	Predicting in-hospital mortality for sepsis: a comparison between qSOFA and modified qSOFA in a 2-year single-centre retrospective analysis.	Study performed in not LMIC
96	Agnello et al	2021	A new tool for sepsis screening in the Emergency Department.	Score performance not reported or insufficient data
97	Boonmee et al	2020	Predictors of Mortality in Elderly and Very Elderly Emergency Patients with Sepsis: A Retrospective Study.	Not eligible study population
98	Pjević et al	2001	[Prevention of multiple organ dysfunction syndrome in severely injured patientsâ€"current approach].	Score performance not reported or insufficient data
99	Paary et al	2016	Clinical profile and outcome of patients with severe sepsis treated in an intensive care unit in India.	Score performance not reported or insufficient data
100	Sohn et al	2019	Validation of quick sequential organ failure assessment score for poor outcome prediction among emergency department patients with suspected infection.	Study performed in not LMIC

101	Lai et al	2018	Comparing AIMS65 Score With MEWS qSOFA Score Glasgow-Blatchford Score and Rockall Score for Predicting Clinical Outcomes in Cirrhotic Patients With Upper Gastrointestinal Bleeding.	Not eligible study population
102	Greenberg et al	2016	Sequential Organ Failure Assessment Score Modified for Recent Infection in Patients With Hematologic Malignant Tumors and Severe Sepsis.	Not eligible study population
103	Huang et al	2015	Epidemiology and Outcome of Severe Sepsis and Septic Shock in Surgical Intensive Care Units in Northern Taiwan.	Score performance not reported or insufficient data
104	Rannikko et al	2018	Plasma cell-free DNA and qSOFA score predict 7-day mortality in 481 emergency department bacteraemia patients.	Study performed in not LMIC
105	Bossi et al	2004	[Diagnosis of sepsis severe sepsis and septic shock].	Score performance not reported or insufficient data
106	Knaus et al	1996	Use of predicted risk of mortality to evaluate the efficacy of anticytokine therapy in sepsis. The rhIL-1ra Phase III Sepsis Syndrome Study Group	Score performance not reported or insufficient data
107	Pawar et al	2020	Variation in SOFA (Sequential Organ Failure Assessment) Score Performance in Different Infectious States.	Score performance not reported or insufficient data
108	Valik et al	2020	Validation of automated sepsis surveillance based on the Sepsis-3 clinical criteria against physician record review in a general hospital population: observational study using electronic health records data.	Study performed in not LMIC
109	Kishihara et al	2016	A study of patients with sepsis who have discrepancy between lactate levels and ScvO2	Score performance not reported or insufficient data
110	Balk et al	2014	Systemic inflammatory response syndrome (SIRS): where did it come from and is it still relevant today?	Not original article

111	Schmidt et al	2014	Sepsis survivors monitoring and coordination in outpatient health care (SMOOTH): study protocol for a randomized controlled trial	Not eligible study population
112	Askim et al	2017	Poor performance of quick-SOFA (qSOFA) score in predicting severe sepsis and mortality - a prospective study of patients admitted with infection to the emergency department.	Study performed in not LMIC
113	Georgescu et al	2014	Predicting scores correlations in patients with septic shock - a cohort study.	Score performance not reported or insufficient data
114	Petersen et al	2016	Frequency of early warning score assessment and clinical deterioration in hospitalized patients: a randomized trial	Study performed in not LMIC
115	Kim et al	2019	Quick Sepsis-related Organ Failure Assessment score is not sensitive enough to predict 28-day mortality in emergency department patients with sepsis: a retrospective review.	Study performed in not LMIC
116	Kotani et al	2019	Modification of sequential organ failure assessment score using acute kidney injury classification	Not eligible study population
117	Heljić et al	1999	[Septic conditions: a syndrome of multiorgan dysfunction].	Not eligible study population
118	Prabhakar et al	2019	Combining quick sequential organ failure assessment score with heart rate variability may improve predictive ability for mortality in septic patients at the emergency department.	Study performed in not LMIC
119	Sharma et al	2020	Quick sequential organ failure assessment score and systemic infl ammatory response syndrome in community acquired pneumonia.	Not eligible study population
120	Lane et al	2020	Classification versus Prediction of Mortality Risk using the SIRS and qSOFA Scores in Patients with Infection Transported by Paramedics.	Study performed in not LMIC

121	Parks et al	2019	Predictive Accuracy of Quick Sequential Organ Failure Assessment for Hospital Mortality Decreases With Increasing Comorbidity Burden Among Patients Admitted for Suspected Infection.	Study performed in not LMIC
122	Vosylius et al	2004	Sequential organ failure assessment score as the determinant of outcome for patients with severe sepsis.	Score performance not reported or insufficient data
123	Hao et al	2021	[Combined prognostic value of serum lactic acid procalcitonin and severity score for short-term prognosis of septic shock patients].	Score performance not reported or insufficient data
124	Yoon et al	2018	Comparative Usefulness of Sepsis-3 Burn Sepsis and Conventional Sepsis Criteria in Patients With Major Burns.	Not eligible study population
125	Qin et al	2020	Predictive value of the sequential organ failure assessment (SOFA) score for prognosis in patients with severe acute ischemic stroke: a retrospective study.	Not eligible study population
126	González et al	2017	Prognostic accuracy of SIRS criteria qSOFA score and GYM score for 30-day-mortality in older non-severely dependent infected patients attended in the emergency department	Study performed in not LMIC
127	Brabrand et al	2016	Validation of the qSOFA score for identification of septic patients: A retrospective study.	Study performed in not LMIC
128	Zhang et al	2020	Validation of prognostic accuracy of the SOFA score SIRS criteria and qSOFA score for in-hospital mortality among cardiac- thoracic- and vascular-surgery patients admitted to a cardiothoracic intensive care unit	Not eligible study population

129	Koch et al	2020	Comparison of qSOFA score SOFA score and SIRS criteria for the prediction of infection and mortality among surgical intermediate and intensive care patients.	Not eligible study population
130	Park et al	2017	Quick sequential organ failure assessment compared to systemic inflammatory response syndrome for predicting sepsis in emergency department	Study performed in not LMIC
131	Mellhammar et al	2019	NEWS2 is Superior to qSOFA in Detecting Sepsis with Organ Dysfunction in the Emergency Department	Study performed in not LMIC
132	Fortini et al	2021	Prevalence and in-hospital outcome of patients with sepsis in an internal medicine ward.	Score performance not reported or insufficient data
133	Quinten et al	2018	Sepsis patients in the emergency department: stratification using the Clinical Impression Score Predisposition Infection Response and Organ dysfunction score or quick Sequential Organ Failure Assessment score?	Study performed in not LMIC
134	Goulden et al	2018	qSOFA SIRS and NEWS for predicting in hospital mortality and ICU admission in emergency admissions treated as sepsis	Study performed in not LMIC
135	Green et al	2018	Comparison of the Between the Flags calling criteria to the MEWS NEWS and the electronic Cardiac Arrest Risk Triage (eCART) score for the identification of deteriorating ward patients	Not eligible study population
136	Raju et al	2013	Modified early warning score (MEWS) as a prediction tool for intensive care unit (ICU) admissions	Not original article
137	van et al	2018	Classifying sepsis patients in the emergency department using SIRS qSOFA or MEWS	Study performed in not LMIC

138	Almutary et al	2020	National Early Warning Score (NEWS) as Prognostic Triage Tool for Septic Patients.	Score performance not reported or insufficient data
139	Kang et al	2019	Machine learning algorithm to predict mortality in patients undergoing continuous renal replacement therapy	Not eligible study population
140	Williams et al	2017	Systemic Inflammatory Response Syndrome Quick Sequential Organ Function Assessment and Organ Dysfunction: Insights from a Prospective Database of ED Patients with Infection	Study performed in not LMIC
141	Kayani et al	2021	A prospective randomized controlled trial comparing the systemic inflammatory response in conventional jig-based total knee arthroplasty versus robotic-arm assisted total knee arthroplasty	Score performance not reported or insufficient data
142	Lemachatti et al	2019	Early variation of quick sequential organ failure assessment score to predict in-hospital mortality in emergency department patients with suspected infection.	Study performed in not LMIC
143	Poutsiaka et al	2019	Prospective Observational Study Comparing Sepsis-2 and Sepsis-3 Definitions in Predicting Mortality in Critically III Patients.	Study performed in not LMIC
144	Shafik et al	2019	The utility of systemic inflammatory response syndrome (SIRS) for diagnosing sepsis in the immediate postpartum period	Not eligible study population
145	Geier et al	2013	Severity illness scoring systems for early identification and prediction of in-hospital mortality in patients with suspected sepsis presenting to the emergency department.	Study performed in not LMIC
146	Laura et al	2020	Implementing a quick Sequential [Sepsis-Related] Organ Failure Assessment sepsis screening tool: an interrupted times series	Not eligible study population

147	Meghan et al	2020	Prevalence Aetiology and Outcome of Sepsis among Critically III Patients in Malawi	Score performance not reported or insufficient data
148	Chen et al	2019	Predictive accuracy of Sepsis-3 definitions for mortality among adult critically ill patients with suspected infection	Score performance not reported or insufficient data
149	Rosa et al	2017	Does SOFA predict outcomes better than SIRS in Brazilian ICU patients with suspected infection? A retrospective cohort study	Score performance not reported or insufficient data
150	Xiaoyun et al	2021	Clinical observation and analysis on the significance of quick sequential organ failure assessment in 74 non-ICU patients with sepsis	Score performance not reported or insufficient data

Supplementary File S5: Funnel plots assessing publication bias. A: qSOFA funnel plot; B: SIRS funnel plot; C: MEWS funnel plot; D: UVA funnel plot







