# Supplementary



**Figure S1:** The quality evaluation and risk of bias in included studies.



**Figure S2:** Deek’s funnel plot asymmetry test for publication bias of studies evaluating the value of suPAR for the diagnosis of sepsis.



**Figure S3:** Univariate meta-regression and subgroup analysis of studies evaluating the value of suPAR for the diagnosis of sepsis.



**Figure S4:** Deek’s funnel plot asymmetry test for publication bias of studies evaluating the value of suPAR for the prediction of mortality in sepsis.



**Figure S5:** Univariate meta-regression and subgroup analysis of studies evaluating the value of suPAR for the prediction of mortality in sepsis.

# Search Strategies

1. **pubmed**

Search (((((((((((((((((((((((((((((((((((((((((Infection[Title/Abstract]) OR Infections[Title/Abstract]) OR Systemic Inflammatory Response Syndrome[Title/Abstract]) OR SIRS[Title/Abstract]) OR Inflammatory Response Syndrome, Systemic[Title/Abstract]) OR Sepsis Syndrome[Title/Abstract]) OR Sepsis Syndromes[Title/Abstract]) OR Syndrome, Sepsis[Title/Abstract]) OR Syndromes, Sepsis[Title/Abstract]) OR systemic inflammation[Title/Abstract]) OR Bacteremia[Title/Abstract]) OR Bacteremias[Title/Abstract]) OR Sepsis[Title/Abstract]) OR Severe Sepsis[Title/Abstract]) OR Sepsis, Severe[Title/Abstract]) OR Pyemia[Title/Abstract]) OR Pyemias[Title/Abstract]) OR Pyohemia[Title/Abstract]) OR Pyohemias[Title/Abstract]) OR Pyaemia[Title/Abstract]) OR Pyaemias[Title/Abstract]) OR Septicemia[Title/Abstract]) OR Septicemias[Title/Abstract]) OR Poisoning, Blood[Title/Abstract]) OR Blood Poisoning[Title/Abstract]) OR Blood Poisonings[Title/Abstract]) OR Poisonings, Blood[Title/Abstract]) OR septicaemia[Title/Abstract]) OR Shock, Septic[Title/Abstract]) OR Septic Shock[Title/Abstract]) OR Shock, Toxic[Title/Abstract]) OR Toxic Shock[Title/Abstract]) OR Toxic Shock Syndrome[Title/Abstract]) OR Shock Syndrome, Toxic[Title/Abstract]) OR Shock Syndromes, Toxic[Title/Abstract]) OR Syndrome, Toxic Shock[Title/Abstract]) OR Syndromes, Toxic Shock[Title/Abstract]) OR Toxic Shock Syndromes[Title/Abstract]) OR Shock, Endotoxic[Title/Abstract]) OR Endotoxic Shock[Title/Abstract])) AND (((((((((((((((((((((((((((((((((soluble urokinase receptor[Title/Abstract]) OR Receptors, Urokinase Plasminogen Activator[Title/Abstract]) OR CD87 Antigen[Title/Abstract]) OR Antigen, CD87[Title/Abstract]) OR Plasminogen Activator Receptor, Urokinase Type[Title/Abstract]) OR Plasminogen Activator, Urokinase Receptor[Title/Abstract]) OR Urokinase-Type Plasminogen Activator Receptors[Title/Abstract]) OR Urokinase Type Plasminogen Activator Receptors[Title/Abstract]) OR Receptor, Pro-Urokinase[Title/Abstract]) OR Pro-Urokinase Receptor[Title/Abstract]) OR Receptor, Pro Urokinase[Title/Abstract]) OR Receptor, Urokinase Plasminogen Activator[Title/Abstract]) OR U-PA Receptor[Title/Abstract]) OR Receptor, U-PA[Title/Abstract]) OR U PA Receptor[Title/Abstract]) OR Upar Receptor[Title/Abstract]) OR Receptor, Upar[Title/Abstract]) OR Urokinase Plasminogen Activator Receptors[Title/Abstract]) OR Antigens, CD87[Title/Abstract]) OR CD87 Antigens[Title/Abstract]) OR Plasminogen Activator, Urokinase Receptors[Title/Abstract]) OR urokinase plasminogen activator receptor[Title/Abstract]) OR suPAR[Title/Abstract]) OR soluble uPAR[Title/Abstract]) OR soluble uPA receptor[Title/Abstract]) OR soluble urokinase plasminogen activator receptor[Title/Abstract]) OR soluble urokinase PA receptor[Title/Abstract]) OR cleaved urokinase plasminogen activator receptor[Title/Abstract]) OR cleaved uPAR[Title/Abstract]) OR cleaved uPA receptor[Title/Abstract]) OR cleaved urokinase PA receptor[Title/Abstract]) OR cleaved CD87[Title/Abstract]) OR soluble CD87[Title/Abstract])

1. **The Cochrane Library**

#1 MeSH descriptor: [Infection] explode all trees 22099

#2 (Infections):ti,ab,kw 45702

#3 MeSH descriptor: [Systemic Inflammatory Response Syndrome] explode all trees 4224

#4 (Syndrome, Sepsis):ti,ab,kw 1242

#5 (Syndromes, Sepsis):ti,ab,kw 69

#6 (Sepsis Syndrome):ti,ab,kw 1242

#7 (Inflammatory Response Syndrome, Systemic):ti,ab,kw 981

#8 (Sepsis Syndromes):ti,ab,kw 69

#9 MeSH descriptor: [Inflammation] explode all trees 9270

#10 (systemic inflammation):ti,ab,kw 3906

#11 (inflammations):ti,ab,kw 108

#12 MeSH descriptor: [Bacteremia] explode all trees 865

#13 (Bacteremias):ti,ab,kw 162

#14 MeSH descriptor: [Sepsis] explode all trees 3898

#15 (Septicemia):ti,ab,kw 795

#16 (Septicemias):ti,ab,kw 59

#17 (Poisonings, Blood):ti,ab,kw 16

#18 (Poisoning, Blood):ti,ab,kw 440

#19 (Blood Poisoning):ti,ab,kw 440

#20 (Blood Poisonings):ti,ab,kw 16

#21 (Pyemias):ti,ab,kw 0

#22 (Pyohemias):ti,ab,kw 0

#23 (Pyemia):ti,ab,kw 5

#24 (Pyaemias):ti,ab,kw 0

#25 (Pyaemia):ti,ab,kw 5

#26 (Pyohemia):ti,ab,kw 0

#27 (Severe Sepsis):ti,ab,kw 1990

#28 (Sepsis, Severe):ti,ab,kw 1990

#29 MeSH descriptor: [Shock, Septic] explode all trees 733

#30 (Shock Syndromes, Toxic):ti,ab,kw 3

#31 (Toxic Shock Syndrome):ti,ab,kw 34

#32 (Syndrome, Toxic Shock):ti,ab,kw 34

#33 (Shock Syndrome, Toxic):ti,ab,kw 34

#34 (Shock, Toxic):ti,ab,kw 87

#35 (Syndromes, Toxic Shock):ti,ab,kw 3

#36 (Toxic Shock Syndromes):ti,ab,kw 3

#37 (Toxic Shock):ti,ab,kw 87

#38 (Endotoxic Shock):ti,ab,kw 11

#39 (Shock, Endotoxic):ti,ab,kw 11

#40 (Septic Shock):ti,ab,kw 2191

#41 #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19 or #20 or #21 or #22 or #23 or #24 or #25 or #26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35 or #36 or #37 or #38 or #39 or #40 66517

#42 MeSH descriptor: [Receptors, Urokinase Plasminogen Activator] explode all trees 21

#43 (Antigen, CD87):ti,ab,kw 0

#44 (CD87 Antigen):ti,ab,kw 0

#45 (Plasminogen Activator Receptor, Urokinase Type):ti,ab,kw 35

#46 (Receptor, Urokinase Plasminogen Activator):ti,ab,kw 78

#47 (Pro-Urokinase Receptor):ti,ab,kw 0

#48 (Urokinase-Type Plasminogen Activator Receptors):ti,ab,kw 12

#49 (Receptor, Upar):ti,ab,kw 21

#50 (Plasminogen Activator, Urokinase Receptor):ti,ab,kw 78

#51 (Urokinase Plasminogen Activator Receptors):ti,ab,kw 26

#52 (Urokinase Type Plasminogen Activator Receptors):ti,ab,kw 16

#53 (CD87 Antigens):ti,ab,kw 0

#54 (U-PA Receptor):ti,ab,kw 18

#55 (Antigens, CD87):ti,ab,kw 0

#56 (Receptor, Pro-Urokinase):ti,ab,kw 0

#57 (Plasminogen Activator, Urokinase Receptors):ti,ab,kw 26

#58 (Receptor, Pro Urokinase):ti,ab,kw 9

#59 (Upar Receptor):ti,ab,kw 21

#60 (Receptor, U-PA):ti,ab,kw 18

#61 (U PA Receptor):ti,ab,kw 48

#62 (soluble urokinase receptor):ti,ab,kw 53

#63 (suPAR):ti,ab,kw 49

#64 (soluble uPAR):ti,ab,kw 8

#65 (soluble uPA receptor):ti,ab,kw 4

#66 (soluble urokinase plasminogen activator receptor):ti,ab,kw 52

#67 (soluble urokinase PA receptor):ti,ab,kw 9

#68 (cleaved urokinase plasminogen activator receptor):ti,ab,kw 3

#69 (cleaved uPAR):ti,ab,kw 3

#70 (cleaved uPA receptor):ti,ab,kw 0

#71 (cleaved urokinase PA receptor):ti,ab,kw 1

#72 (cleaved CD87):ti,ab,kw 0

#73 (soluble CD87):ti,ab,kw 0

#74 #42 or #43 or #44 or #45 or #46 or #47 or #48 or #49 or #50 or #51 or #52 or #53 or #54 or #55 or #56 or #57 or #58 or #59 or #60 or #61 or #62 or #63 or #64 or #65 or #66 or #67 or #68 or #69 or #70 or #71 or #72 or #73 120

#75 #41 and #74 21

**3.Web of Science (WOS)**

# 1 TOPIC: (Infection) OR TOPIC: (Infections) OR TOPIC: (Systemic Inflammatory Response Syndrome) OR TOPIC: (SIRS) OR TOPIC: (Inflammatory Response Syndrome, Systemic) OR TOPIC: (Sepsis Syndrome) OR TOPIC: (Sepsis Syndromes) OR TOPIC: (Syndrome, Sepsis) OR TOPIC: (Syndromes, Sepsis) OR TOPIC: (systemic inflammation) OR TOPIC: (inflammation) OR TOPIC: (Bacteremia) OR TOPIC: (Bacteremias) OR TOPIC: (Sepsis) OR TOPIC: (Severe Sepsis) OR TOPIC: (Sepsis, Severe) OR TOPIC: (Pyemia) OR TOPIC: (Pyemias) OR TOPIC: (Pyohemia) OR TOPIC: (Pyohemias) OR TOPIC: (Pyaemia) OR TOPIC: (Pyaemias) OR TOPIC: (Septicemia) OR TOPIC:(Septicemias) OR TOPIC: (Poisoning, Blood)

Doc Type=All document types; Language=All languages;

# 2 TOPIC: (Poisoning, Blood) OR TOPIC: (Blood Poisoning) OR TOPIC: (Blood Poisonings) OR TOPIC: (Poisonings, Blood) OR TOPIC: (septicaemia) OR TOPIC: (Shock, Septic) OR TOPIC: (Septic Shock) OR TOPIC: (Shock, Toxic) OR TOPIC: (Toxic Shock) OR TOPIC: (Toxic Shock Syndrome) OR TOPIC: (Shock Syndrome, Toxic) OR TOPIC:(Shock Syndromes, Toxic) OR TOPIC: (Syndrome, Toxic Shock) OR TOPIC: (Syndromes, Toxic Shock) OR 主题: (Toxic Shock Syndromes) OR TOPIC: (Shock, Endotoxic) OR TOPIC: (Endotoxic Shock)

Doc Type=All document types; Language=All languages;

# 3 TOPIC: (soluble urokinase receptor) OR TOPIC: (Receptors, Urokinase Plasminogen Activator) OR TOPIC: (CD87 Antigen) OR TOPIC: (Antigen, CD87) OR TOPIC:(Plasminogen Activator Receptor, Urokinase Type) OR TOPIC: (Plasminogen Activator, Urokinase Receptor) OR TOPIC: (Urokinase-Type Plasminogen Activator Receptors) OR TOPIC: (Urokinase Type Plasminogen Activator Receptors) OR TOPIC: (Receptor, Pro-Urokinase) OR TOPIC: (Pro-Urokinase Receptor) OR TOPIC:(Receptor, Pro Urokinase) OR TOPIC: (Receptor, Urokinase Plasminogen Activator) OR TOPIC: (U-PA Receptor) OR TOPIC: (Receptor, U-PA) OR TOPIC: (U PA Receptor) OR TOPIC: (Upar Receptor) OR TOPIC: (Receptor, Upar) OR TOPIC: (Urokinase Plasminogen Activator Receptors) OR TOPIC: (Antigens, CD87) OR TOPIC: (CD87 Antigens) OR TOPIC: (Plasminogen Activator, Urokinase Receptors) OR TOPIC: (urokinase plasminogen activator receptor) OR TOPIC: (suPAR) OR TOPIC: (soluble uPAR) OR TOPIC: (soluble uPA receptor)

Doc Type=All document types; Language=All languages;

# 4 TOPIC: (soluble uPA receptor) OR TOPIC: (soluble urokinase plasminogen activator receptor) OR TOPIC: (soluble urokinase PA receptor) OR TOPIC: (cleaved urokinase plasminogen activator receptor) OR TOPIC: (cleaved uPAR) OR TOPIC: (cleaved uPA receptor) OR TOPIC: (cleaved urokinase PA receptor) OR TOPIC: (cleaved CD87) OR TOPIC: (soluble CD87)

Doc Type=All document types; Language=All languages;

# 5 #4 OR #3

# 6 #2 OR #1

# 7 #6 AND #5

1. **Embase**

#18. #14 AND #17

#17. #15 OR #16

#16. 'antigen cd87':ab,ti OR 'cd87 antigen':ab,ti OR 'receptors, urokinase plasminogen activator':ab,ti OR 'urokinase plasminogen activator receptor':ab,ti OR 'urokinase plasminogen activator receptors':ab,ti OR 'urokinase receptors':ab,ti OR 'urokinase type plasminogen activator receptor':ab,ti OR 'urokinase type plasminogen activator receptors':ab,ti

#15. 'urokinase receptor'/exp

#14. #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13

#13. 'bacteremic shock':ab,ti OR 'bacterial shock':ab,ti OR 'bacteriemic shock':ab,ti OR 'endotoxic shock':ab,ti OR 'endotoxin shock':ab,ti OR 'endotoxine shock':ab,ti OR 'endotoxinic shock':ab,ti OR 'forward failure, toxic':ab,ti OR 'septicaemic shock':ab,ti OR 'septicemic shock':ab,ti OR 'shock, endotoxin':ab,ti OR 'shock, septic':ab,ti OR 'shock, toxic':ab,ti OR 'toxic forward failure':ab,ti OR 'toxic shock':ab,ti

#12. 'septic shock'/exp

#11. 'abdominal sepsis':ab,ti OR 'focal sepsis':ab,ti OR 'intraabdominal sepsis':ab,ti OR 'sepsis syndrome':ab,ti OR 'septic disease':ab,ti

#10. 'sepsis'/exp

#9. 'bacillaemia':ab,ti OR 'bacillemia':ab,ti OR 'bacteraemia':ab,ti OR 'bacteriemia':ab,ti OR 'haemorrhagic bacteremia':ab,ti OR 'hemorrhagic bacteremia':ab,ti

#8. 'bacteremia'/exp

#7. 'acute inflammation':ab,ti OR 'bacterial inflammation':ab,ti OR 'inflammation reaction':ab,ti OR 'inflammation response':ab,ti OR 'inflammatory condition':ab,ti OR 'inflammatory lesion':ab,ti OR 'inflammatory process':ab,ti OR 'inflammatory reaction':ab,ti OR 'inflammatory response':ab,ti OR 'inflammatory syndrome':ab,ti OR 'reaction, inflammation':ab,ti OR 'response, inflammatory':ab,ti OR 'serositis':ab,ti OR 'sterile inflammation':ab,ti

#6. 'inflammation'/exp

#5. 'systemic inflammation':ab,ti

#4. 'sirs (systemic inflammatory response syndrome)':ab,ti

#3. 'systemic inflammatory response syndrome'/exp

#2. 'accidental infection':ab,ti OR 'acute infection':ab,ti OR 'autoinfection':ab,ti OR ('bacterial infections':ab,ti AND 'mycoses':ab,ti) OR 'bacteroid infection':ab,ti OR 'chronic infection':ab,ti OR 'dormant infection':ab,ti OR 'focal infection':ab,ti OR 'inapparent infection':ab,ti OR 'infection mechanism':ab,ti OR 'infection route':ab,ti OR 'infection, focal':ab,ti OR 'infectious disease':ab,ti OR 'infectivity':ab,ti OR 'latent infection':ab,ti OR 'prosthesis-related infections':ab,ti OR 'route of infection':ab,ti OR 'silent infection':ab,ti OR 'simultaneous infection':ab,ti

#1. 'infection'/exp