

Appendix 1: Search strategy

1 Search strategy for CENTRAL

- #1 MeSH descriptor: [Sepsis] explode all trees
- #2 MeSH descriptor: [Shock, Septic] explode all trees
- #3 MeSH descriptor: [Systemic Inflammatory Response Syndrome] explode all trees
- #4 MeSH descriptor: [Central Nervous System Bacterial Infections] explode all trees and with qualifier(s): [blood - BL, complications - CO, drug therapy - DT]
- #5 MeSH descriptor: [Pneumonia] explode all trees
- #6 MeSH descriptor: [Community-Acquired Infections] explode all trees and with qualifier(s): [complications - CO, drug therapy - DT]
- #7 MeSH descriptor: [Respiratory Distress Syndrome, Adult] explode all trees and with qualifier(s): [complications - CO, drug therapy - DT]
- #8 MeSH descriptor: [Acute Lung Injury] explode all trees and with qualifier(s): [complications - CO, drug therapy - DT]
- #9 sepsis or (septic* NEAR/3 shock*)
- #10 (bacterem* or bacteraem* or pyrexia or septicaem* or septicem*)
- #11 SIRS or (Inflammatory next Response next Syndrome*)
- #12 bacteria* NEAR infect* NEAR (blood* or serum or invas* or severe or systemic)
- #13 ((community next acquired) or severe) NEAR pneumonia
- #14 (acute or adult) NEAR/2 (respiratory NEAR/2 distress)
- #15 (acute or adult) NEAR/2 (lung NEAR/2 injury)
- #16 ARDS
- #17 #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
- #18 MeSH descriptor: [Adrenal Cortex Hormones] explode all trees
- #19 MeSH descriptor: [Hydrocortisone] explode all trees
- #20 MeSH descriptor: [Cortisone] explode all trees

#21 MeSH descriptor: [Steroids] explode all trees

#22 corticosteroid* or steroid* or cortison* or hydrocortison*

#23 methylprednisolon* or (methyl next prednisolon*) or betamethason* or dexamethason* or glucocorticoid* or fludrocortison* or mineralocorticoid*

#24 #18 or #19 or #20 or #21 or #22 or #23

#25 #17 and #24

#26 #25 in Trials

2 Search strategy for MEDLINE (Ovid SP)

1 exp Sepsis/

2 exp Shock, Septic/

3 Systemic Inflammatory Response Syndrome/

4 exp Bacteremia/

5 Bacterial Infections/b1, dt, co

6 Pneumonia/co, dt

7 Community-Acquired Infections/co, dt

8 Respiratory Distress Syndrome, Adult/co, dt

9 Acute Lung Injury/co, dt

10 (sepsis or septic*).mp.

11 (bacter?em* or septic?em* or pyrexia).mp.

12 (SIRS or Inflammatory Response Syndrome*).mp.

13 (bacteria* adj6 infect* adj6 (blood* or serum or invas* or severe or systemic)).mp.

14 ((community-acquired or severe) adj3 pneumonia).mp.

15 ((acute or adult) adj2 (respiratory adj2 distress)).mp.

16 ARDS.mp.

17 ((acute or adult) adj2 (lung adj2 injury)).mp.

18 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

19 exp Adrenal Cortex Hormones/

20 exp Hydrocortisone/

21 (corticosteroid* or steroid* or cortison* or hydrocortison*).mp.

22 (methylprednisolon* or betamethason* or dexamethason* or glucocorticoid* or fludrocortison* or mineralocorticoid*).mp.

23 19 or 20 or 21 or 22

24 18 and 23

25 ((randomized controlled trial or controlled clinical trial).pt. or randomi?ed.ab. or placebo.ab. or clinical trials as topic.sh. or randomly.ab. or trial.ti.) not (animals not (humans and animals)).sh.

26 24 and 25

3 Search strategy for Embase (Ovid SP)

1 exp sepsis/

2 exp septic shock/

3 pneumonia/co, dt [Complication, Drug Therapy]

4 adult respiratory distress syndrome/co, dt [Complication, Drug Therapy]

5 acute lung injury/co, dt [Complication, Drug Therapy]

6 systemic inflammatory response syndrome/co, dt [Complication, Drug Therapy]

7 community acquired infection/co, dt [Complication, Drug Therapy]

8 (sepsis or (septic* adj5 shock) or (bacter?em* or pyrexia or septic?em*) or (SIRS or Inflammatory Response Syndrome)).mp.

9 (bacteria* adj2 infect* adj2 (blood* or serum or invas* or severe or systemic)).mp.

10 (((community-acquired or severe) adj2 pneumonia) or ((acute or adult) adj1 (respiratory adj1 distress)) or ((acute or adult) adj1 (lung adj1 injury)) or ARDS).mp.

11 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10

12 steroid/

13 corticosteroid/

14 cortisone/

15 hydrocortisone/

16 (corticosteroid* or steroid* or cortison* or hydrocortison* or (methylprednisolon* or methyl prednisolon* or betamethason* or dexamethason* or glucocorticoid* or fludrocortison* or mineralocorticoid*)).mp.

17 12 or 13 or 14 or 15 or 16

18 11 and 17

19 ((placebo or randomized controlled trial).sh. or controlled study.ab. or random*.ti.ab. or trial*.ti.ab.) not (animal not human).sh.

20 18 and 19

4 Search strategy for LILACS (via BIREME)

(sepsis OR septic\$ OR SEPSIS OR SEPTIC OR SIRS OR "septic shock" OR "SEPTIC SHOCK/" OR SEPTICEMIA OR PNEUMONIA OR bact* OR "adult respiratory distress syndrome" OR "acute lung injury" OR "systemic inflammatory response syndrome" OR "bacterial infection" OR "community acquired infection") (corticosteroid* OR steroid* OR glucocorticoid* OR CORTCOSTEROID* OR GLUCOCORTICOID/ OR STEROID OR MINERALOCORTICOID OR cortison* OR hydrocortison* OR fludrocortison* OR betamethason* OR methylprednisolon* OR prednison* OR dexamethason*)