**Appendix S1 Search terms**

**Pneumococcal carriage in Sub Saharan Africa: a systematic review**

Medline

. exp Africa/ or Africa\*.mp.

2. (Algeria\* or Benin or Burkina\* or "Cote?d'ivoire" or Ivory?coast or Ivorian\* or Gambia\* or Ghana\* or Guinea\* or Liberia\* or Mali or Malians or Mauritania\* or Niger\* or Nigeria\* or Senegal\* or Sierra?leone\* or Togo\*).mp.

3. (Angola\* or Botswana\* or Batswana\* or Lesotho\* or Malawi\* or Mozambi\* or Namibia\* or South?Africa\* or Swazi\* or Zambia\* or Zimbabwe\*).mp.

4. (Burundi\* or Ethiopia\* or Eritrea\* or Kenya\* or Rwanda\* or Tanzania\* or Uganda\*).mp.

5. (Cameron\* or Chad\* or Congo\* or Gabon\*).mp.

6. 4 or 1 or 3 or 2 or 5

7. Disease carrier/ or carrier.mp.

8. (carriage\* or carrier\*).mp.

9. (Nasopharyn\* or oropharyn\*).mp.

10. 8 or 7 or 9

11. ("streptococcus pneumoniae" or pneumoc\*).mp.

12. exp streptococcus pneumoniae/

13. streptococcus pneumoniae.mp. or exp streptococcus pneumoniae/

14. pneumococcal infections.mp. or exp streptococcus infection/

15. (streptococcus pneumoniae or pneumococcus vaccine).mp.

16. exp Streptococcus Pneumoniae/ or exp Antibiotic Resistance/

17. 11 or 13 or 12 or 15 or 14

18. (serotyp\* or serolog\* or immuno\*).mp.

19. immunologic tests.mp. or exp immunological procedures/

20. bacterial proteins.mp. or exp bacterial protein/

21. polysaccharide/ or exp Bacterial Polysaccharide/ or exp pneumococcus polysaccharide/ or polysaccharide.mp.

22. antigens.mp. or exp antigen/

23. 22 or 21 or 18 or 19 or 20

24. 6 and 23 and 10 and 17

25. limit 24 to human

26. 16 or 17

27. 6 and 26 and 23 and 10

28. limit 27 to humans

Embase

1. (Algeria\* or Benin or Burkina\* or "Cote?d'ivoire" or Ivory?coast or Ivorian\* or Gambia\* or Ghana\* or Guinea\* or Liberia\* or Mali or Malians or Mauritania\* or Niger\* or Nigeria\* or Senegal\* or Sierra?leone\* or Togo\*).mp. [mp=title, original title, abstract, name of substance word, subject heading word]

2. africa\*.mp. or exp Africa/

3. (Angola\* or Botswana\* or Batswana\* or Lesotho\* or Malawi\* or Mozambi\* or Namibia\* or South?Africa\* or Swazi\* or Zambia\* or Zimbabwe\*).mp. [mp=title, original title, abstract, name of substance word, subject heading word]

4. (Burundi\* or Ethiopia\* or Eritrea\* or Kenya\* or Rwanda\* or Tanzania\* or Uganda\*).mp. [mp=title, original title, abstract, name of substance word, subject heading word]

5. (Cameron\* or Chad\* or Congo\* or Gabon\*).mp. [mp=title, original title, abstract, name of substance word, subject heading word]

6. ("Sao tome" or Principe\* or Mauritius\* or Madagascar\* or Comoros\* or Seycelles\*).mp. [mp=title, original title, abstract, name of substance word, subject heading word]

7. 6 or 4 or 1 or 3 or 2 or 5

8. exp Carrier State/

9. (carriage\* or carrier\*).mp. [mp=title, original title, abstract, name of substance word, subject heading word]

10. (nasopharyn\* or oropharyn\*).mp. [mp=title, original title, abstract, name of substance word, subject heading word]

11. 8 or 10 or 9

12. ("streptococcus pneumoniae" or "S.pneumoniae" or pneumoc\*).mp. [mp=title, original title, abstract, name of substance word, subject heading word]

13. ("streptococcus pneumoniae" or "pneumococcal infections").mp. [mp=title, original title, abstract, name of substance word, subject heading word]

14. 13 or 12

15. 11 and 7 and 14

16. limit 15 to humans

17. (serotyp\* or serolog\* or immunologi\*).mp. [mp=title, original title, abstract, name of substance word, subject heading word]

18. exp Immunologic Tests/

19. (bacterial proteins or polysaccharide or antigens).mp. [mp=title, original title, abstract, name of substance word, subject heading word]

20. 18 or 19 or 17

21. 11 and 7 and 20 and 14

22. limit 21 to humans