

Appendix 1: Search terms and strategies

MEDLINE, MEDLINE Epubs Ahead of Print and In Process (OVIDSP)

Searched 1946 – 23rd April 2018

1. exp Prostate-Specific Antigen/
2. exp Antigens, Neoplasm/
3. exp Antigens/
4. PSA.tw.
5. PCA.tw.
6. (prostat* adj2 antigen*).tw.
7. exp Digital Rectal Examination/
8. exp Palpation/
9. DRE.tw.
10. (rect* adj2 examin*).tw.
11. (transrectal adj4 ultraso*).tw.
12. TRUS.tw.
13. exp Endoscopic Ultrasound-Guided Fine Needle Aspiration/
14. or/1-13
15. exp Mass Screening/
16. exp "Early Detection of Cancer"/
17. ((mass or public or population*) adj3 screen*).tw.
18. ((prostat* or cancer or psa or pca) adj3 screen*).tw.
19. or/15-18
20. exp Prostatic Neoplasms/
21. exp Prostatic Intraepithelial Neoplasia/
22. (prostat* adj3 (cancer* or carcinoma* or malignan* or tumo?r* or neoplas* or adeno*)).tw.
23. exp prostate/
24. or/20-23
25. 14 and 19 and 24
26. randomized controlled trial.pt.
27. controlled clinical trial.pt.
28. randomized.ab.
29. placebo.ab.
30. drug therapy.fs.
31. randomly.ab.
32. trial.ab.
33. groups.ab.
34. or/26-33
35. exp animals/ not humans.sh.
36. 34 not 35
37. 25 and 36

EMBASE (OVIDSP)

Searched 1947 – 23rd April 2018

1. exp prostate antigen/
2. exp tumor antigen/
3. PSA.tw.
4. PCA.tw.
5. (prostat* adj2 antigen*).tw.
6. exp digital rectal examination/
7. exp palpation/
8. DRE.tw.
9. (rect* adj2 examin*).tw.
10. (transrectal adj4 ultraso*).tw.
11. TRUS.tw.
12. exp transrectal ultrasonography/
13. or/1-12
14. exp screening/
15. exp early diagnosis/
16. ((mass or public or population*) adj3 screen*).tw.
17. ((prostat* or cancer or psa or pca) adj3 screen*).tw.
18. or/14-17
19. exp prostate tumor/
20. (prostat* adj3 (cancer* or carcinoma* or malignan* or tumo?r* or neoplas* or adeno*)).tw.
21. exp prostate/
22. or/19-21
23. 13 and 18 and 22
24. crossover procedure/
25. double blind procedure/
26. randomized controlled trial/
27. single blind procedure/
28. (random* or factorial* or crossover* or cross over* or cross-over* or placebo* or assign* or allocate* or volunteer*).mp.
29. ((doubl* or singl*) adj blind*).mp.
30. or/24-29
31. 23 and 30

PubMed Search Strategy (National Library of Medicine)

Searched for the latest year only to capture Epubs ahead of print.

#35,"Search (#23 and #33) Latest year only
#34,Search (#23 and #33)
#33,Search (#31 not #32)
#32,Search (animals [mh] NOT humans [mh])
#31,Search (#24 or #25 or #26 or #27 or #28 or #29 or #30)
#30,Search trial [ti]
#29,Search randomly [tiab]
#28,Search clinical trials as topic [mesh: noexp]
#27,Search placebo [tiab]
#26,Search randomized [tiab]
#25,Search controlled clinical trial [pt]
#24,Search randomized controlled trial [pt]
#23,Search (#12 and #17 and #22)
#22,Search (#18 or #19 or #20 or #21)
#21,Search prostate[MeSH Terms]
#20,Search ((prostat*[Text Word]) AND (cancer*[Text Word] OR carcinoma*[Text Word] OR
malignan*[Text Word] OR tumor*[Text Word] OR tumour*[Text Word] OR neoplas*[Text
Word] OR adeno*[Text Word]))
#19, Search prostatic Intraepithelial Neoplasia [MeSH Terms]
#18,Search prostatic neoplasms[MeSH Terms]
#17,Search (#13 or #14 or #15 or #16)
#16,Search ((mass[Text Word] OR public[Text Word] OR population*[Text Word]) AND
(screen*[Text Word]))
#15, "Search ((prostat*[Text Word] OR cancer[Text Word] OR psa[Text Word] OR pca[Text
Word] AND (screen*[Text Word]))
#14,Search early detection of cancer[MeSH Terms]
#13,Search mass screening[MeSH Terms]
#12,Search (#1 or #2 or #3 or #4 or #5 or #6 or #7 or #8 or #9 or #10 or #11)
#11,Search endoscopic ultrasound-guided fine needle aspiration[MeSH Terms]
#10,Search TRUS[Text Word]
#9,Search (transrectal[Text Word]) AND (ultraso*[Text Word])
#8,Search (rect*[Text Word]) AND (examin*[Text Word])
#7,Search DRE[Text Word]
#6,Search palpation[MeSH Terms]
#5,Search digital rectal examination[MeSH Terms]
#4,Search (prostat*[Text Word]) AND (antigen*[Text Word])
#3,Search PCA[Text Word]
#2,Search PSA[Text Word]
#1,Search prostate specific antigen[MeSH Terms]

Cochrane Library Search Strategy (Wiley)

Searched Issue 4 - 23rd April 2018

- #1 MeSH descriptor: [Prostate-Specific Antigen] explode all trees
- #2 MeSH descriptor: [Antigens, Neoplasm] explode all trees
- #3 MeSH descriptor: [Antigens] explode all trees
- #4 PSA:ti,ab,kw
- #5 PCA:ti,ab,kw
- #6 (prostat* near/2 antigen*):ti,ab,kw
- #7 MeSH descriptor: [Digital Rectal Examination] explode all trees
- #8 MeSH descriptor: [Palpation] explode all trees
- #9 DRE:ti,ab,kw
- #10 (rect* near/2 examin*):ti,ab,kw
- #11 (transrectal near/4 ultraso*):ti,ab,kw
- #12 TRUS:ti,ab,kw
- #13 MeSH descriptor: [Endoscopic Ultrasound-Guided Fine Needle Aspiration] explode all trees
- #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
- #15 MeSH descriptor: [Mass Screening] explode all trees
- #16 MeSH descriptor: [Early Detection of Cancer] explode all trees
- #17 ((mass or public or population*) near/3 screen*):ti,ab,kw
- #18 ((prostat* or cancer or psa or pca) near/3 screen*):ti,ab,kw
- #19 #15 or #16 or #17 or #18
- #20 MeSH descriptor: [Prostatic Neoplasms] explode all trees
- #21 MeSH descriptor: [Prostatic Intraepithelial Neoplasia] explode all trees
- #22 (prostat* near/3 (cancer* or carcinoma* or malignan* or tumo?r* or neoplas* or adeno*)):ti,ab,kw
- #23 MeSH descriptor: [Prostate] explode all trees
- #24 #20 or #22 or #23
- #25 #14 and #19 and #24

Web of Science Core Collection: Science Citation Index Expanded and Conference Proceedings Citation Index- Science (Thomson Reuters)

Searched 1900 - 23rd April 2018.

#29 #27 AND #15
#28 #27 AND #15
#27 #26 OR #25 OR #24 OR #23 OR #22 OR #21 OR #20 OR #19 OR #18 OR #17 OR #16
#26 TS=double blind*
#25 TS=single blind*
#24 TS=placebo*
#23 TS=random*
#22 TS=prospective stud*
#21 TS=follow up stud*
#20 TS=controlled trial*
#19 TS=evaluation stud*
#18 TS=comparative stud*
#17 TS=research design*
#16 TS=clinical trial*
#15 #14 AND #11 AND #8
#14 #13 OR #12
#13 TS=prostat*
#12 TS=(prostat* NEAR/3 (cancer* or carcinoma* or malignan* or tumo?r* or neoplas* or adeno*))
#11 #10 OR #9
#10 TS=((prostat* or cancer or psa or pca) NEAR/3 screen*)
9 TS=((mass or public or population*) NEAR/3 screen*)
8 #7 OR #6 OR #5 OR #4 OR #3 OR #2 OR #1
7 TS=TRUS
6 TS=(transrectal NEAR/4 ultraso*)
5 TS=DRE
4 TS=(rect* NEAR/2 examin*)
3 TS=PCA
2 TS=PSA
1 TS=(prostat* NEAR/2 antigen*)

LILACS Search Strategy (Virtual Health Library)

Searched 1982 - 23rd April 2018

((tw:(prostat\$)) AND (tw:(cancer\$ or carcinoma\$ or neoplas\$ or adenocarcinoma\$ or tumor\$ or tumour\$)) AND (tw:(screen\$ or tela or pantalla or deteccion)) AND (tw:(PCA or PSA or APE or antigen or DRE or TRUS or Recta\$ examin\$ or transret\$ ultraso\$ or transrectal ultraso\$)))

Scopus Search Strategy (Elsevier)

Searched 1960 - 23rd April 2018

((((TITLE-ABS-KEY((Prostat* W/2 antigen*))) or (TITLE-ABS-KEY(PSA)) or (TITLE-ABS-KEY(PCA)) or (TITLE-ABS-KEY((rect* W/2 examin*))) or (TITLE-ABS-KEY(DRE)) or (TITLE-ABS-KEY(transrectal W/4 ultraso*)) or (TITLE-ABS-KEY(TRUS))) and ((TITLE-ABS-KEY(((mass or public or population*) W/3 screen*))) or (TITLE-ABS-KEY(((prostat* or cancer or psa or pca) W/3 screen*))) and ((TITLE-ABS-KEY((prostat* W/3 (cancer* or carcinoma* or malignan* or tumo?r* or neoplas* or adeno*))) or (TITLE-ABS-KEY(prostat*))) and (((TITLE-ABS-KEY(clinical trial*) or (TITLE-ABS-KEY(research design*) or (TITLE-ABS-KEY(comparative stud*) or (TITLE-ABS-KEY(evaluation stud*) or (TITLE-ABS-KEY(controlled trial*) or (TITLE-ABS-KEY(follow up stud*) or (TITLE-ABS-KEY(prospective stud*))) or ((TITLE-ABS-KEY(random*) or (TITLE-ABS-KEY(placebo*)) or (TITLE-ABS-KEY(single blind*)) or (TITLE-ABS-KEY(double blind*))))))

OpenGrey (Native Interface), WHO International Clinical Trials Registry Search Portal Search Strategy (World Health Organisation) and ClinicalTrials.gov Search Strategy (U.S. National Institutes of Health).

Searched OpenGrey 1980 – 23rd April 2018

Searched ICTRP 2009 – 23rd April 2018

Searched Clinical Trials 2008 – 23rd April 2018.

Basic keyword searching: Prostat* and Screen* (truncated where applicable).