Search strategy Cochrane

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| ID | Keyword | Result |
| #1 | MeSH descriptor: [Prostatic Neoplasms] explode all trees | 5939 |
| #2 | ("Prostate cancer"):ti,ab,kw | 13771 |
| #3 | ("Prostate neoplasm\*"):ti,ab,kw | 6059 |
| #4 | ("Prostatic cancer"):ti,ab,kw | 13770 |
| #5 | ("Cancer of prostate"):ti,ab,kw | 14 |
| #6 | ("Indolent prostate cancer"):ti,ab,kw | 13 |
| #7 | #1 OR #2 OR #3 OR #4 OR #5 OR #6 | 14642 |
| #8 | MeSH descriptor: [Prostate-Specific Antigen] explode all trees | 1356 |
| #9 | ("PSA"):ti,ab,kw | 7587 |
| #10 | ("Prostate-specific antigen"):ti,ab,kw | 4078 |
| #11 | #8 OR #9 OR #10 | 8996 |
| #12 | MeSH descriptor: [Mass Screening] explode all trees | 4005 |
| #13 | (Screening):ti,ab,kw | 81153 |
| #14 | ("Early diagnosis"):ti,ab,kw | 2447 |
| #15 | #12 OR #13 OR #14 | 83255 |
| #16 | #7 AND #11 AND #15 | 989 |
| #17 | #7 AND #11 AND #15 in Cochrane Reviews, Publication Date 27.07.2011-27.07.2021 | 5 |

Search strategy Medline (via PubMed)

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| ID | Keyword | Result |
| #1 | Search: Prostatic Neoplasms[MeSH Terms] | 137764 |
| #2 | Search: "Prostate cancer"[Title/Abstract] | 127951 |
| #3 | Search: "Prostate neoplasm\*"[Title/Abstract] | 1912 |
| #4 | Search: "Prostatic cancer"[Title/Abstract] | 6940 |
| #5 | Search: "Cancer of prostate"[Title/Abstract] | 123 |
| #6 | Search: "Indolent prostate cancer"[Title/Abstract] | 113 |
| #7 | Search: (((((Prostatic Neoplasms[MeSH Terms]) OR ("Prostate cancer"[Title/Abstract])) OR ("Prostate neoplasm\*"[Title/Abstract])) OR ("Prostatic cancer"[Title/Abstract])) OR ("Cancer of prostate"[Title/Abstract])) OR ("Indolent prostate cancer"[Title/Abstract]) | 171714 |
| #8 | Search: Prostate-Specific Antigen[MeSH Terms] | 27109 |
| #9 | Search: "PSA"[Title/Abstract] | 39002 |
| #10 | Search: "Prostate-specific antigen"[Title/Abstract] | 29449 |
| #11 | Search: ((Prostate-Specific Antigen[MeSH Terms]) OR ("PSA"[Title/Abstract])) OR ("Prostate-specific antigen"[Title/Abstract]) | 55766 |
| #12 | Search: Mass Screening[MeSH Terms] | 137424 |
| #13 | Search: Screening[Title/Abstract] | 595087 |
| #14 | Search: "Early diagnosis"[Title/Abstract] | 91462 |
| #15 | Search: ((Mass Screening[MeSH Terms]) OR (Screening[Title/Abstract])) OR ("Early diagnosis"[Title/Abstract]) | 722968 |
| #16 | Search: (((((((Prostatic Neoplasms[MeSH Terms]) OR ("Prostate cancer"[Title/Abstract])) OR ("Prostate neoplasm\*"[Title/Abstract])) OR ("Prostatic cancer"[Title/Abstract])) OR ("Cancer of prostate"[Title/Abstract])) OR ("Indolent prostate cancer"[Title/Abstract])) AND (((Prostate-Specific Antigen[MeSH Terms]) OR ("PSA"[Title/Abstract])) OR ("Prostate-specific antigen"[Title/Abstract]))) AND (((Mass Screening[MeSH Terms]) OR (Screening[Title/Abstract])) OR ("Early diagnosis"[Title/Abstract])) | 6560 |
| #17 | Search: (((((((systematic[Title]) AND ((Review[Title/Abstract]) OR "Review" [Publication Type]))))))) | 178429 |
| #18 | Search: ((((((((metaanalysis[Title/Abstract]) OR Meta-Analysis[Title/Abstract]) OR "Meta-Analysis" [Publication Type])))))) | 219854 |
| #19 | Search: ((((((((systematic[Title]) AND ((Review[Title/Abstract]) OR "Review" [Publication Type])))))))) OR (((((((((metaanalysis[Title/Abstract]) OR Meta-Analysis[Title/Abstract]) OR "Meta-Analysis" [Publication Type]))))))) | 313640 |
| #21 | Search: ((((((((Prostatic Neoplasms[MeSH Terms]) OR ("Prostate cancer"[Title/Abstract])) OR ("Prostate neoplasm\*"[Title/Abstract])) OR ("Prostatic cancer"[Title/Abstract])) OR ("Cancer of prostate"[Title/Abstract])) OR ("Indolent prostate cancer"[Title/Abstract])) AND (((Prostate-Specific Antigen[MeSH Terms]) OR ("PSA"[Title/Abstract])) OR ("Prostate-specific antigen"[Title/Abstract]))) AND (((Mass Screening[MeSH Terms]) OR (Screening[Title/Abstract])) OR ("Early diagnosis"[Title/Abstract]))) AND (((((((((systematic[Title]) AND ((Review[Title/Abstract]) OR "Review" [Publication Type])))))))) OR (((((((((metaanalysis[Title/Abstract]) OR Meta-Analysis[Title/Abstract]) OR "Meta-Analysis" [Publication Type])))))))) Filters: from 2011/7/27 - 2021/7/27 | 77 |

Search strategy Embase (via Ovid)

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| ID | Keyword | Result |
| 1 | exp prostate tumor/ | 255284 |
| 2 | "Prostate cancer".ab,kw,ti. | 196381 |
| 3 | "Prostate neoplasm\* ".ab,kw,ti. | 1482 |
| 4 | "Prostatic cancer".ab,kw,ti. | 5693 |
| 5 | "Cancer of prostate".ab,kw,ti. | 6517 |
| 6 | "Indolent prostate cancer".ab,kw,ti. | 196 |
| 7 | 1 or 2 or 3 or 4 or 5 or 6 | 273859 |
| 8 | exp prostate specific antigen/ | 62790 |
| 9 | "PSA".ab,kw,ti. | 76064 |
| 10 | "Prostate-specific antigen".ab,kw,ti. | 37361 |
| 11 | 8 or 9 or 10 | 106915 |
| 12 | exp screening/ | 678890 |
| 13 | Screening.ab,kw,ti. | 793347 |
| 14 | "Early diagnosis".ab,kw,ti. | 119714 |
| 15 | 12 or 13 or 14 | 1192657 |
| 16 | 7 and 11 and 15 | 11953 |
| 17 | limit 16 to ((meta analysis or "systematic review") and yr="2011 - 2021") | 189 |

**Identification of studies via databases and registers**

Records removed *before screening*:

Duplicate records removed (n = 51)

Records identified from:

Medline (n = 77)

Embase (n = 189)

Cochrane Library (n = 5)

**Identification**

Records screened

(n = 220)

Records excluded

(n = 204)

Reports sought for retrieval

(n = 16)

Reports not retrieved

(n = 0)

**Screening**

Reports assessed for eligibility

(n = 16)

Reports excluded:

(n = 11)

Studies included in review

(n = 5)

**Included**

|  |  |  |
| --- | --- | --- |
| **Lp.** | **Authors, Title, Journal** | **Full text status** |
| **1** | **Paschen U, Strutz S, Fleer D, et al. Assessment of Prostate-Specific Antigen Screening: An evidence-based report by the German Institute for Quality and Efficiency in Health Care. BJU Int. 2021; doi: 10.1111/bju.15444.** | **included** |
| **2** | **Fenton JJ, Weyrich MS, Durbin S, et al. Prostate-Specific Antigen-Based Screening for Prostate Cancer: Evidence Report and Systematic Review for the US Preventive Services Task Force. JAMA. 2018; 319(18): 1914-1931, doi: 10.1001/jama.2018.3712.** | **included** |
| **3** | **Ilic D, Djulbegovic M, Jung JH, et al. Prostate cancer screening with prostate-specific antigen (PSA) test: a systematic review and meta-analysis. BMJ. 2018; 362: k3519, doi: 10.1136/bmj.k3519.** | **included** |
| **4** | **Rahal AK, Badgett RG, Hoffman RM. Screening coverage needed to reduce mortality from prostate cancer: A living systematic review. PLoS One. 2016; 11(4): e0153417, doi: 10.1371/journal.pone.0153417.** | **included** |
| **5** | **Lumen N, Fonteyne V, Meerleert G, et al. Population screening for prostate cancer: an overview of available studies and meta-analysis. Int J Urol. 2012; 19(2): 100-108, doi: 10.1111/j.1442-2042.2011.02912.x.** | **included** |
| 6 | Loeb S, Carter HB, Catalona WJ, et al. Baseline prostate-specific antigen testing at a young age. Eur Urol. 2012 Jan;61(1):1-7. doi: 10.1016/j.eururo.2011.07.067. | excluded |
| 7 | Louie KS, Seigneurin A, Cathcart P, et al. Do prostate cancer risk models improve the predictive accuracy of PSA screening? A meta-analysis. Ann Oncol. 2015 May;26(5):848-864. doi: 10.1093/annonc/mdu525. | excluded |
| 8 | Lee YJ, Park JE, Jeon BR, et al. Is prostate-specific antigen effective for population screening of prostate cancer? A systematic review. Ann Lab Med. 2013 Jul;33(4):233-41. doi: 10.3343/alm.2013.33.4.2 | excluded |
| 9 | Lumen N, Fonteyne V, De Meerleert et al. Population screening for prostate cancer: an overview of available studies and meta-analysis. Int J Urol. 2012 Feb;19(2):100-8. doi: 10.1111/j.1442-2042.2011.02912.x. | excluded |
| 10 | Castañeda-Millán DA, Capera-López CA, Ramos-Ulloa G, et al. Population screening for early detection of prostate cancer: What have we learned in the last decade? Colombian Urology Journal 2019; 28(03): 209-215. doi: 10.1055/s-0039-1693136. | excluded |
| 11 | Wallner LP, Jacobsen SJ. Prostate-specific antigen and prostate cancer mortality: A systematic review. Am J Prev Med. 2013 Sep;45(3):318-26. doi: 10.1016/j.amepre.2013.04.015. | excluded |
| 12 | Pron G. Prostate-specific antigen (Psa)-based population screening for prostate cancer: An evidence-based analysis. Ont Health Technol Assess Ser. 2015 May 1;15(10):1-64. eCollection 2015. | excluded |
| 13 | Javaeed A, Ghauri SK, Ibrahim A. Prostate-specific antigen velocity in diagnosis and prognosis of prostate cancer - a systematic review. Oncol Rev. 2020 Apr 30;14(1):449. doi: 10.4081/oncol.2020.449. eCollection 2020 Feb 18. | excluded |
| 14 | Luckmann R. ACP Journal Club. Review: Prostate cancer screening using PSA does not decrease mortality. Ann Intern Med. 2011 Jan 18;154(2):JC1-2. | excluded |
| 15 | Dahm P. ACP Journal Club. Review: PSA-based screening does not reduce prostate cancer mortality or all-cause mortality. Ann Intern Med. 2012 Apr 17;156(8):JC4-02. doi: 10.7326/0003-4819-156-8-201204170-02002. | excluded |
| 16 | Crawford-Faucher A. Screening for prostate cancer does not affect mortality rates. Am Fam Physician. 2011 May 1;83(9):1103. | excluded |