Supplementary Table ST1. Description of studies examining the association between farmers and agricultural workers and prostate cancer

Reference	Design	Country	No. of cases	Measure of risk	Risk	95% CI
Andersen 1999[152]	Coh	Scandinavia and Finland	9,617	SIR	0.96	0.94-0.98
Andersson 1996[153]	CC	Sweden	11	OR	0.60	0.30-1.20
Bouchardy 2002[154]	CC	Switzerland	310	OR	1.10	1.00-1.25
Bucchi 2004[155]	Coh	Italy	293	SMR	0.94	0.76-1.16
Ewings 1996[88]	CC	United Kingdom	36	OR	0.74	0.46-1.19
Faustini 1993[156]	Coh	Italy	8	SMR	0.91	0.66-1.25
Fragar 2011[157]	Coh	Australia	200	SMR	2.40	1.70-3.39
Franceschi 1993[158]	CC	Italy	42	OR	0.90	0.59-1.37
Gambini 1997[159]	Coh	Italy	19	SMR	0.96	0.58-1.59
Ilic 1996[160]	CC	Yugoslavia	38	OR	1.09	0.64-1.85
Keller 1994[161]	CC	USA	505	OR	1.15	0.98-1.34
Kristensen 1996[162]	Coh	Norway	277	SIR	0.96	0.85-1.08
Krstev 1998a[163]	CC	USA	30	OR	2.17	1.18-3.99
Mastrangelo 2005[164]	Coh	Italy	16	SMR	0.69	0.39-1.22
Meyer 2003[165]	CC	Brazil	7	OR	0.58	0.25-1.35
Meyer 2007[95]	CC	USA	224	OR	1.4	1.10-1.78
Morrison 1993[166]	Coh	Canada	1,148	SMR	0.92	0.87-0.97
Parker 1999[167]	Coh	USA	30	RR	1.20	0.80-1.80
Pukkala 2009[168]	Coh	5 Nordic countries	41,025	SMR	0.99	0.98-1.00
Rafnsson 2006[169]	Coh	Island	8,514	SIR	0.92	0.85-1.00
Sharma-Wagner 2000[170]	Coh	Sweden	7,826	SIR	1.04	1.02-1.06
Van der Gulden 1995[99]	CC	The Netherlands	37	OR	0.85	0.57-1.27
Wesseling 1996[171]	Coh	Costa Rica	20	SIR	0.61	0.37-1.01
Wigle 1990[172]	Coh	Canada	441	SMR	0.96	0.87-1.05
Wiklund 199[173]	Coh	Sweden	3,987	SIR	0.93	0.90-0.96
Zeegers 2004[174]	CC	The Netherlands	61	RR	0.82	0.53-1.27

CI, confidence interval; Coh, cohort study; CC, case control study; SIR, standardized incidence ratio; OR, odds ratio; SMR, standardized mortality ratio; RR, relative risk.

Supplementary Table ST2. Description of studies examining the association between organophosphate pesticides and prostate cancer

Reference	Design	Country	Exposure	No. of cases	Measure of risk	Risk	95% CI
Alavanja 2003[101]	Coh	USA	Chlorpyrifos	12	OR	0.73	0.41-1.30
Beane-Freeman 2005[175]	CC	USA	Diazinon	26	RR	1.19	0.79-1.79
Christensen 2010[176]	Coh	USA	Organophosphate pesticides	30	RR	0.93	0.62-1.40
De Roos 2005[177]	Coh	USA	Glyphosate	825	RR	1.00	0.80-1.11
Fritschi 2007[92]	CC	Australia	Organophosphate pesticides	38	OR	0.69	0.43-1.11
Greenburg 2008[178]	Coh	USA	Captan	34	RR	1.02	0.73-1.43
Mills 2003[111]	CC	USA	Diazinon	117	OR	0.79	0.52-1.20
			Dichlorvos	139	OR	1.35	0.93-1.96
			Malathion	129	OR	0.96	0.66-1.40

CI, confidence interval; Coh, cohort study; CC, case control study; OR, odds ratio; RR, relative risk.

Supplementary Table ST3. Description of studies examining the association between carbamates and prostate cancer

Reference	Design	Country	Exposure	No. of cases	Measure of risk	Risk	95% CI
Bonner 2005[179]	Coh	USA	Carbofuran	17	RR	0.88	0.53-1.46
Lynch 2009[180]	Coh	USA	Butylat	39	RR	1.44	1.04-1.99
Mahajan 2007[181]	Coh	USA	Carbaryl	29	RR	0.71	0.46-1.10
Mills 2003[111]	CC	USA	Mancozeb	126	OR	0.93	0.63-1.37
			Maneb	116	OR	1.00	0.68-1.47
			Propoxur	132	OR	1.07	0.70-1.64
Van Bemmel 2008[182]	Coh	USA	EPTC	61	RR	1.17	0.89-1.54

CI, confidence interval; Coh, cohort study; CC, case control study; RR, relative risk; OR, odds ratio.

Supplementary Table ST4. Description of studies examining the association between triazines and prostate cancer

Reference	Design	Country	Exposure	No. of cases	Measure of risk	Risk	95% CI
Hessel 2004[183]	CC	USA	Atrazine	12	RR	1.01	0.95-1.07
Koutros 2013[108]	Coh	USA	Atrazine	135	RR	0.98	0.85-1.13
			Cyanazine	168	RR	0.94	0.79-1.12
Mac Lennan 2002[184]	Coh	USA	Chlorotriazine	11	SIR	1.75	0.87-3.52
Mills 2003[111]	CC	USA	Simazine	145	OR	1.53	1.02-2.30

CI, confidence interval; Coh, cohort study; CC, case control study; RR, relative risk; SIR, standardized incidence ratio OR, odds ratio.

Supplementary Table ST5. Description of studies examining the association between cadmium and prostate cancer

Reference	Design	Country	Exposure	No. of cases	Measure of risk	Risk	95% CI
Armstrong 1985[185]	CC	Great Britain	JEM	11	OR	1.55	0.49-4.90
Elghany 1990[186]	CC	Australia	self-reported exposure	12	OR	1.30	0.60-2.82
Järup 1998[187]	Coh	Sweden	battery work	15	SIR	0.77	0.43-1.38
Rooney 1993[188]	CC	Great Britain	expert assessment	12	RR	1.06	0.46-2.44
Seidler 1998[189]	CC	Germany	JEM	5	OR	0.7	0.20-2.20
Sorahan 2004[190]	Coh	Great Britain	battery work	9	SMR	1.16	0.53-2.54
Van der Gulden 1995[99]	CC	The Netherlands	self-reported exposure	7	OR	2.76	1.05-7.25

CI, confidence interval; CC, case control study; Coh, cohort study; OR, odds ratio; SIR, standardized incidence ratio; RR, relative risk; SMR, standardized mortality ratio.

Supplementary Table ST6. Description of studies examining the association between cutting fluids and prostate cancer

References	Design	Country	Exposure	No. of cases	Risk measures	Risk	95% CI
Boers 2005[85]	Coh	The Netherlands	Mineral oils	44	RR	0.99	0.67-1.46
Decoufle 1978[191]	Coh	USA	Cutting oil mists	6	SMR	0.57	0.23-1.41
Fritschi 2007[92]	CC	Australia	Mineral oils	61	OR	0.89	0.59-1.34
Järvholm 1987[192]	Coh	Sweden	Oil mist	6	SIR	0.34	0.10-0.16
Krishnadasan 2007[193]	CC	USA	Mineral oils	66	OR	0.72	0.38-1.36
Ritz 1999[194]	Coh	USA	Cutting fluid	6	RR	0.58	0.22-1.53
Seidler 1998[189]	CC	Germany	Cutting fluid	34	OR	1.10	0.60-1.48
Tolbert 1992[195]	Coh	USA	Mineral oils Cutting fluid and soluble oils Synthetic fluids	72 125 26	SMR SMR SMR	1.16 1.08 1.11	0.91-1.46 0.90-1.30 0.73-1.69

CI, confidence interval; Coh, cohort study; CC, case control study; RR, relative risk; SMR, standardized mortality ratio; OR, odds ratio; SIR, standardized incidence ratio.

Supplementary Table ST7. Description of studies that examined the association between acrylonitrile and prostate cancer

Reference	Design	Country	Exposure	No. of cases	Risk measures	Risk	95% CI
Blair 1998[196]	Coh	USA	Acrylonitrile production	16	SMR	0.90	0.60-1.35
Marsh 2015[197]	Coh	USA	Chemical plant	5	SMR	1.32	0.43-4.05
Swaen 2004[198]	Coh	The Netherlands	Manufacture of acrylonitrile products	8	SMR	0.92	0.40-2.12
Symons 2008[199]	Coh	USA	Acrylonitrile fiber production	25	SMR	0.91	0.59-1.40

CI, confidence interval; Coh, cohort study; SMR, standardized mortality ratio.

Supplementary Table ST8. Description of studies examining the association between exposure in rubber manufacturing and prostate cancer

Reference	Design	Country	Exposure	No. of cases	Measure of risk	Risk	95% CI
Andjelkovic 1976[200]	Coh	USA	Rubber industry	50	SMR	1.09	0.82-1.45
Delzell 1981a[201]	Coh	USA	Rubber industry	121	SMR	1.02	0.85-1.22
Delzell 1981b[202]	Coh	USA	Rubber tire industry	9	SMR	0.88	0.43-1.80
Delzell 2006[203]	Coh	USA	Rubber industry	154	SMR	1.04	0.88-1.23
De Vocht 2009[204]	Coh	Poland	Aromatic amines Inhalable aerosol	NR NR	RR RR	5.22 0.71	0.88-30.96 0.12-4.20
Gustavsson 1986[205]	Coh	Sweden	Rubber industry	34	SIR	0.82	0.57-1.18
McMichael 1974[206]	Coh	USA	Rubber industry	49	SIR	1.42	1.07-1.88
McMichael 1976[207]	Coh	USA	Rubber industry	103	SMR	1.19	0.98-1.45
Monson 1978[208]	Coh	USA	Rubber workers	82	SMR	0.92	0.74-1.14
Norseth 1983[209]	Coh	Norway	Footwear and tire	23	SMR	1.10	0.72-1.68
Sorahan 1989[210]	Coh	Great Britain	Rubber workers	91	SMR	0.71	0.57-0.92
Szeszenia-Dabrowska 1991[211]	Coh	Poland	Rubber industry	9	SMR	0.94	0.46-1.92
Wingren 2007[212]	Coh	Sweden	Rubber tires	84	SIR	0.74	0.59-0.93
Vlaanderen 2013[213]	Coh	Germany	Rubber industry	108	SMR	0.89	0.73-1.09
Zeegers 2004[174]	CC	The Netherlands	Rubber workers	6	RR	4.63	0.28-76.6

CI, confidence interval; Coh, cohort study; CC, case control study; NR, not reported; SMR, standardized mortality ratio; RR, relative risk; SIR, standardized incidence ratio.

Supplementary Table ST9. Description of studies examining the association between whole-body vibration and prostate cancer

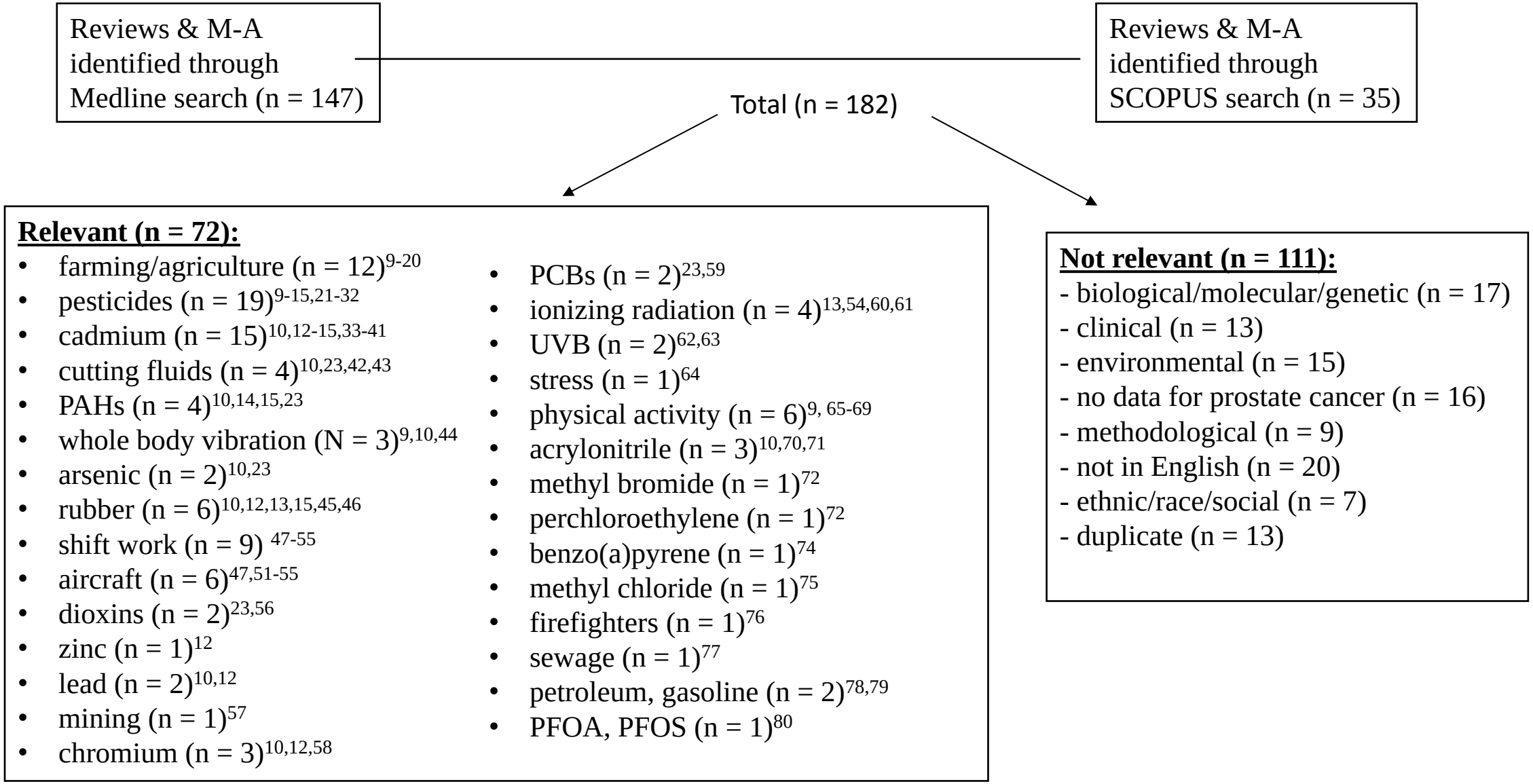
References	Design	Country	Exposure	No. of cases	Measure of risk	Risk	95% CI
Brown 2000[214]	CC	USA	Motor vehicle drivers, railroad work	26	OR	1.90	1.20-3.20
Jones 2014[254]	Coh	Canada	General population, JEM	1,919	HR	0.96	0.91-1.00
Järvholm 2003[216]	Coh	Sweden	Truck drivers	124	SIR	1.24	1.03-1.48
			Heavy construction vehicle	116	SIR	0.93	0.77-1.11
Krstev 1998b[217]	CC	USA	Railroad transportation	65	OR	1.66	1.13-2.58
			Trucking, short and long distance	52	OR	0.87	0.61-1.26
			Excavation, grading	8	OR	3.96	1.03-15.10
Krstev 1998a[163]	CC	USA	Bus drivers	47	OR	1.40	1.00-1.80
			Locomotive drivers	8	OR	2.20	1.10-4.40
			Truck drivers, heavy	1,138	OR	0.8	0.80-0.90
Nadalin 2012[218]	CC	Canada	JEM	NR	OR	1.04	0.76-1.43
Pukkala 2009[168]	Coh	Scandinavia	Transportation workers	399	SIR	1.02	0.99-1.04
			Drivers	993	SIR	0.99	0.98-1.01
Sass-Kortsak 2007[147]	CC	Canada	Expert assessment	112	OR	1.38	1.06-1.78
Sharma-Wagner 2000[170]	Coh	Sweden	Railroad traffic	517	SIR	1.12	1.02-1.22
Zeegers 2004[174]	Coh	The Netherlands	Road transport	700	RR	0.82	0.36-1.84

CI, confidence interval; CC, case control study; Coh, cohort study; JEM, job exposure matrix; OR, odds ratio; HR, hazard ratio; SIR, standardized incidence ratio; RR, relative risk.

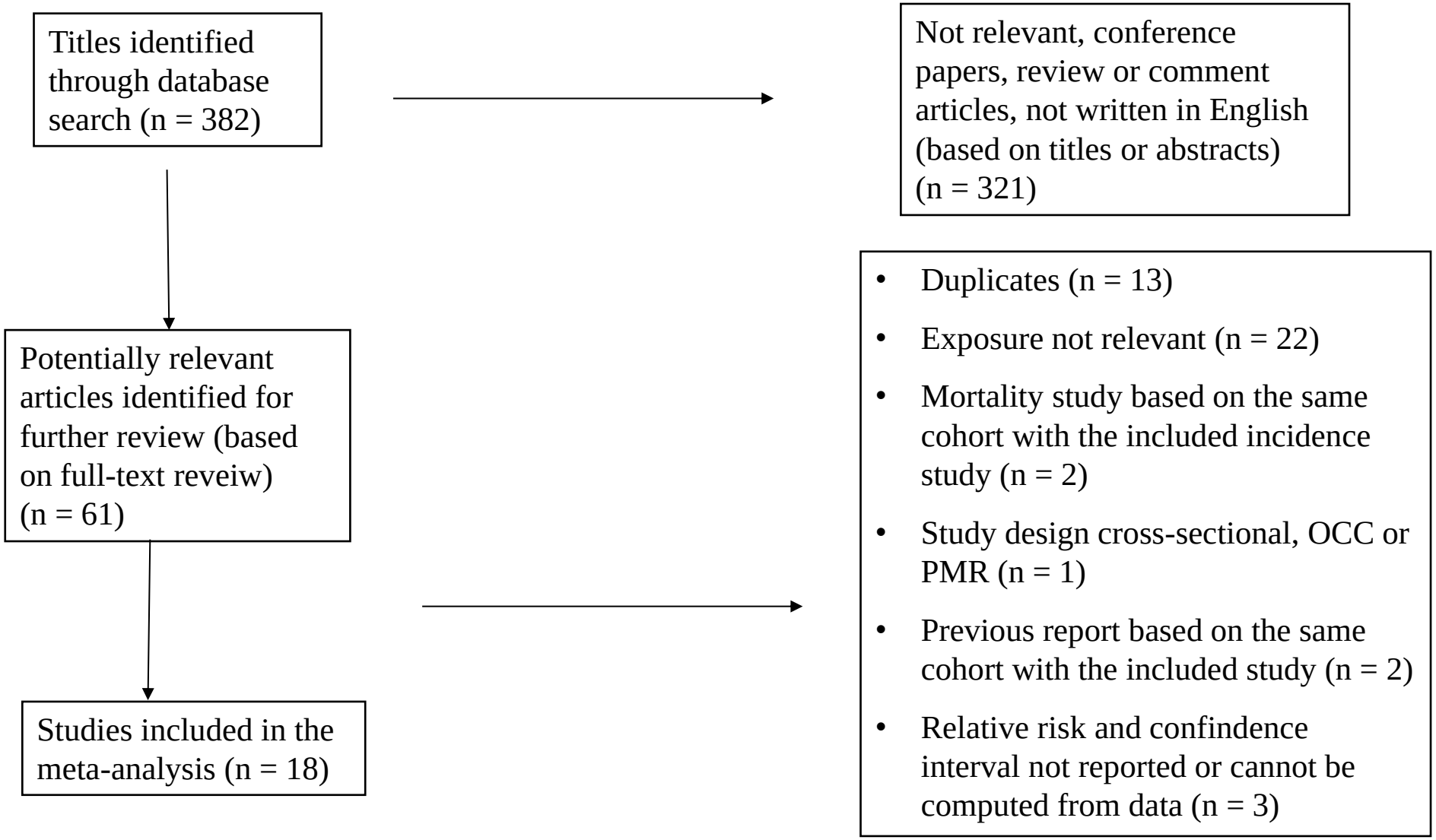
Supplementary Table ST10. Description of studies that examined the association between ionizing radiation and prostate cancer

Reference	Design	Country	Exposure	No. of cases	Measure of risk	Risk	95% CI
Atkinson 2004[219]	Coh	Great Britain	Nuclear research	200	SMR	0.92	0.80-1.06
Boice 2006a[220]	Coh	USA	Nuclear technology development	37	SMR	0.93	0.66-1.31
Cardis 2007[221]	Coh	15 countries	Nuclear plant	301	SMR	1.00	0.89-1.12
Checkoway 1985[222]	Coh	USA	Nuclear research laboratory	14	SMR	1.16	0.66-2.04
Gun 2008[223]	Coh	Australia	Nuclear tests	548	SIR	1.22	1.12-1.33
Loomis 1996[224]	Coh	USA	Nuclear material production	36	SMR	1.31	0.91-1.89
Muirhead 2003[225]	Coh	Great Britain	Nuclear tests	244	RR	1.22	1.04-1.43
Samson 2011[226]	Coh	France	Nuclear plant	22	SMR	0.87	0.59-1.28
Sigurdson 2003[227]	Coh	USA	Radiologic technicians	222	SIR	1.02	0.89-1.17

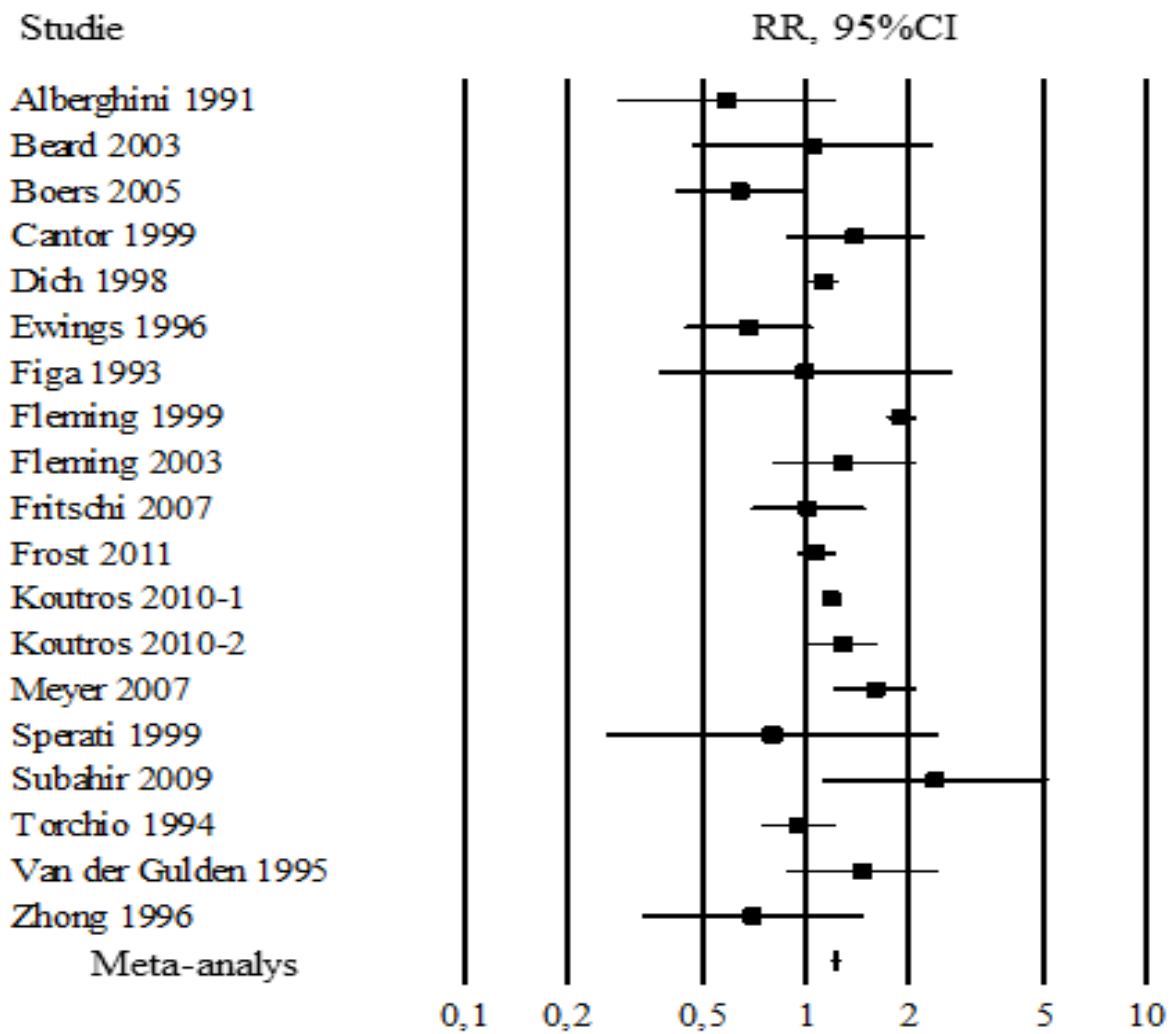
CI, confidence interval; Coh, cohort study; SMR, standardized mortality ratio; SIR, standardized incidence ratio; RR, relative risk.



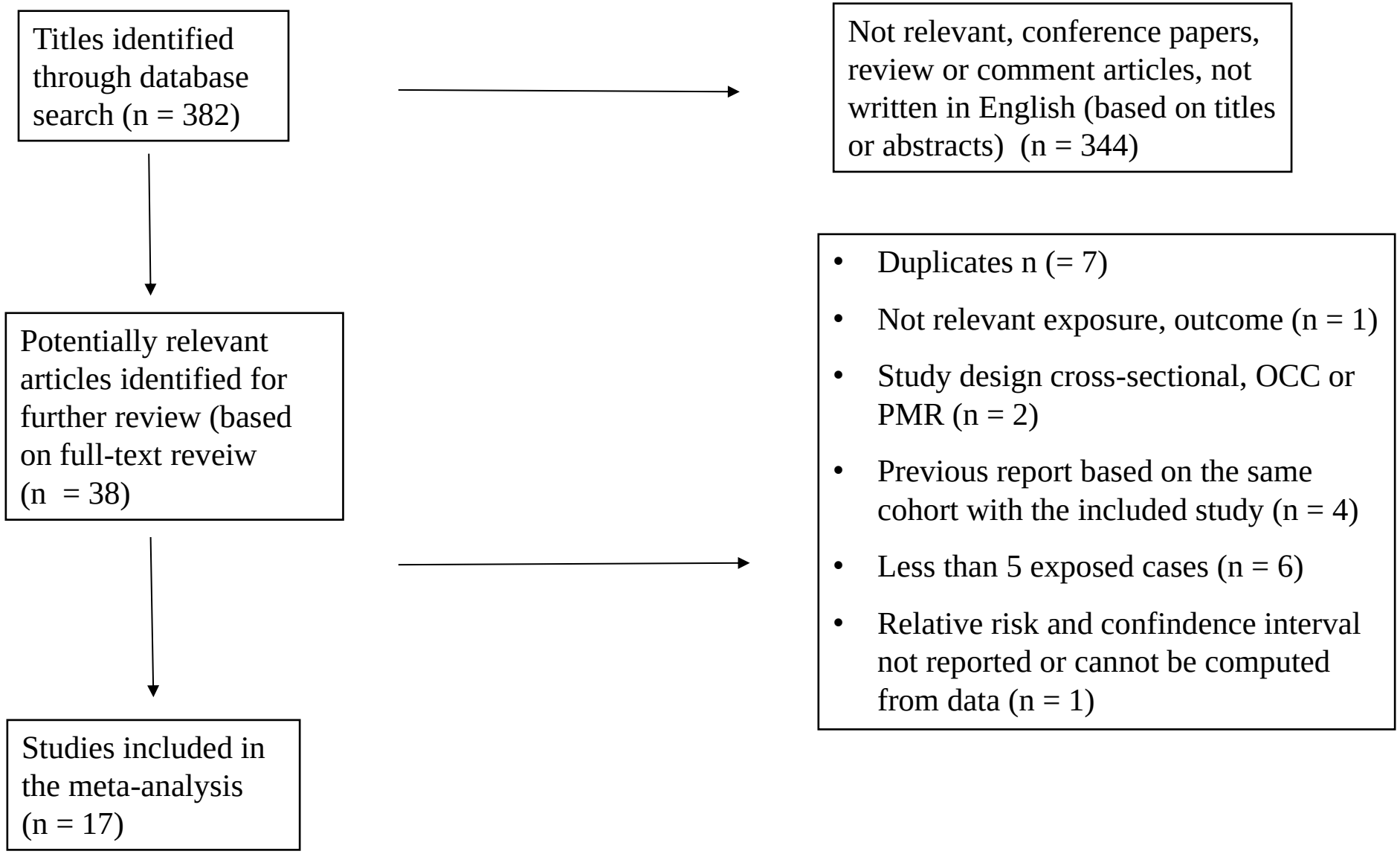
Supplementary Figure SF1. Flowchart of selected articles through the Medline and SCOPUS search for prostate cancer and occupational risk factors 1964 to June 2015.



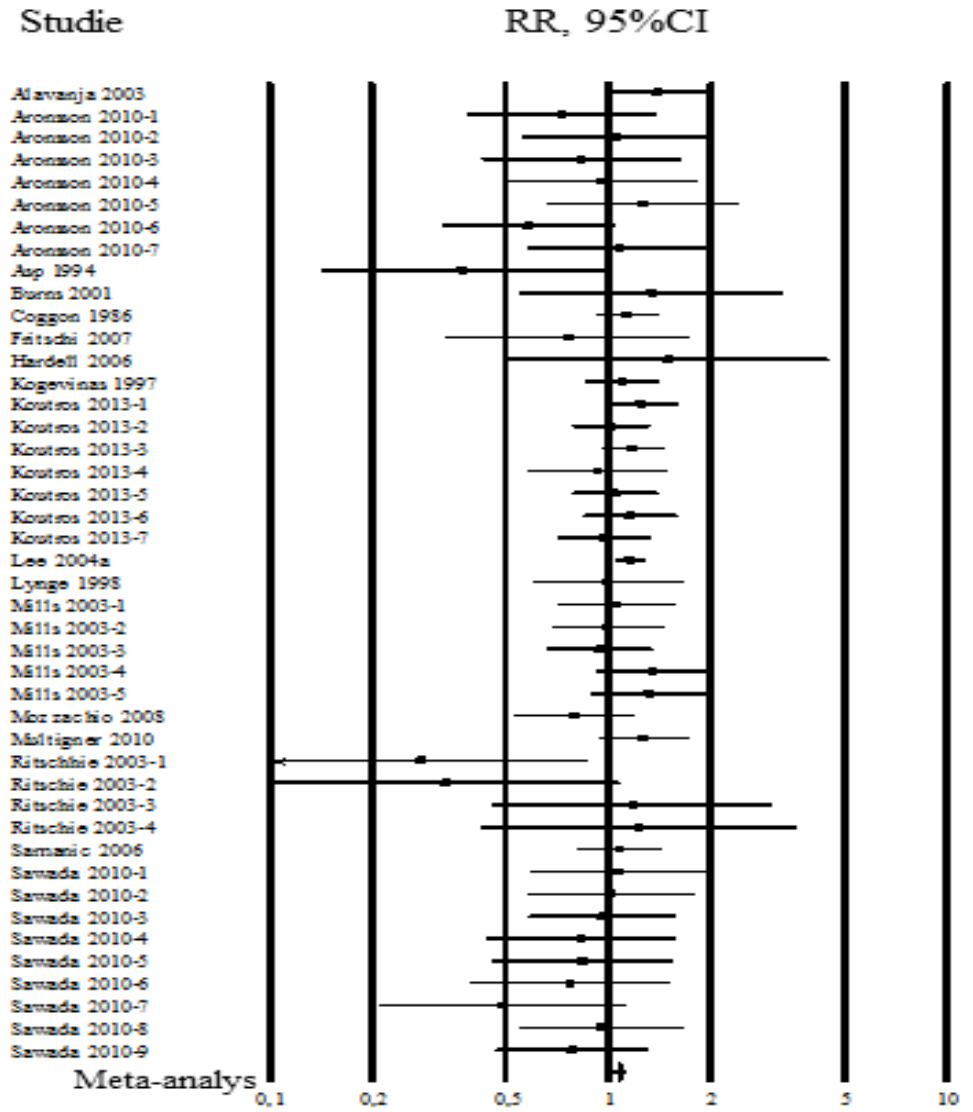
Supplementary Figure SF2. Flowchart for literature search of association between exposure to pesticides and prostate cancer.



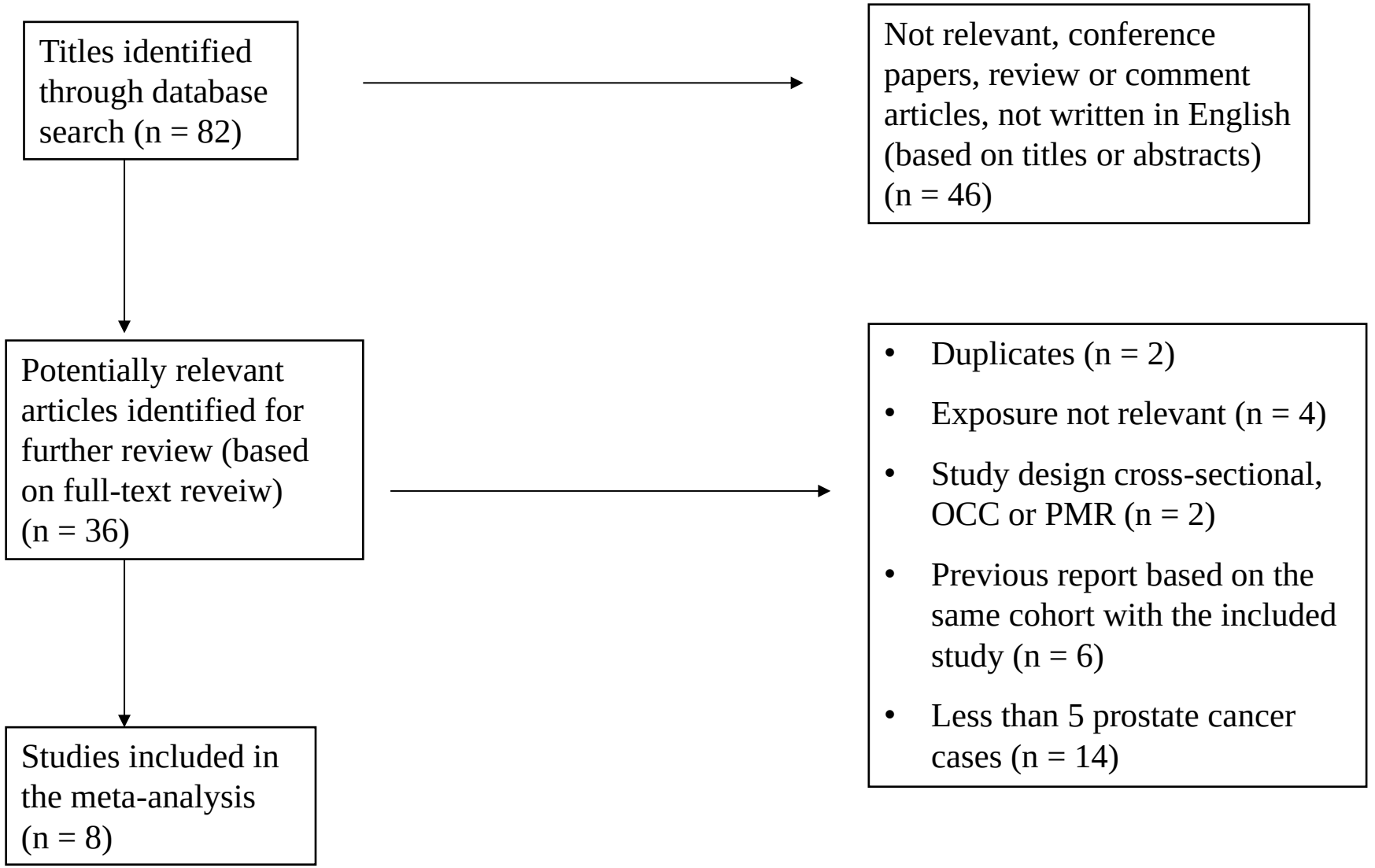
Supplementary Figure SF3. Results of meta-analysis of assocation between exposure to pesticides and prostate cancer.



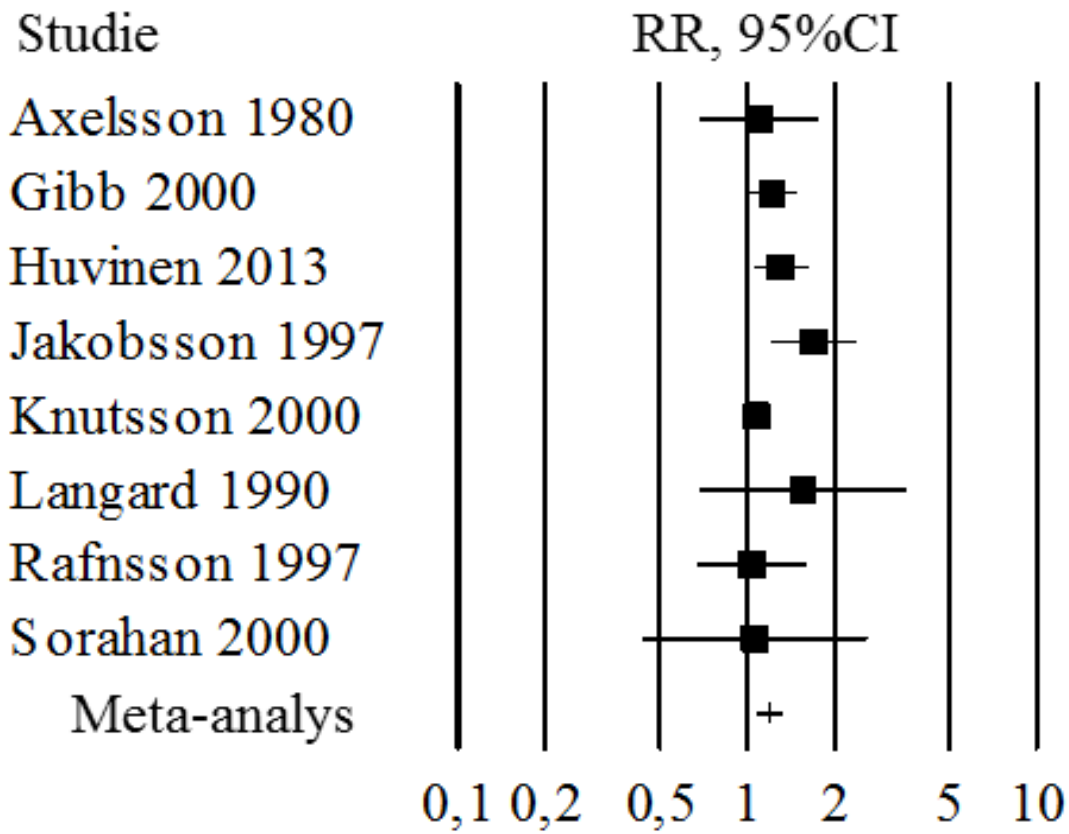
Supplementary Figure SF4. Flowchart for literature search of association between exposure to oganochlorine pesticides and prostate cancer.



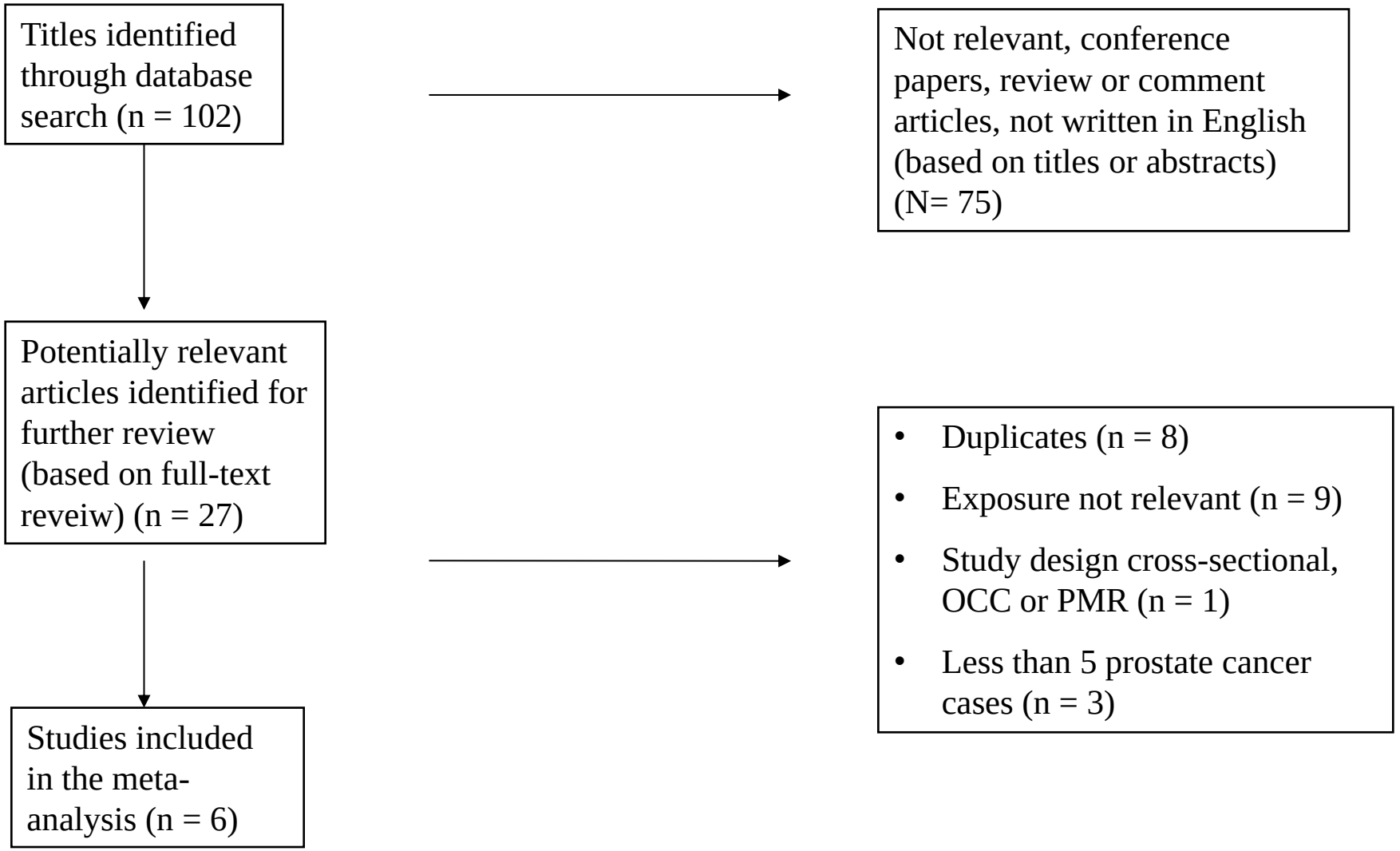
Supplementary Figure SF5. Results of the meta-analysis of the association between organochlorine pesticides and prostate cancer.



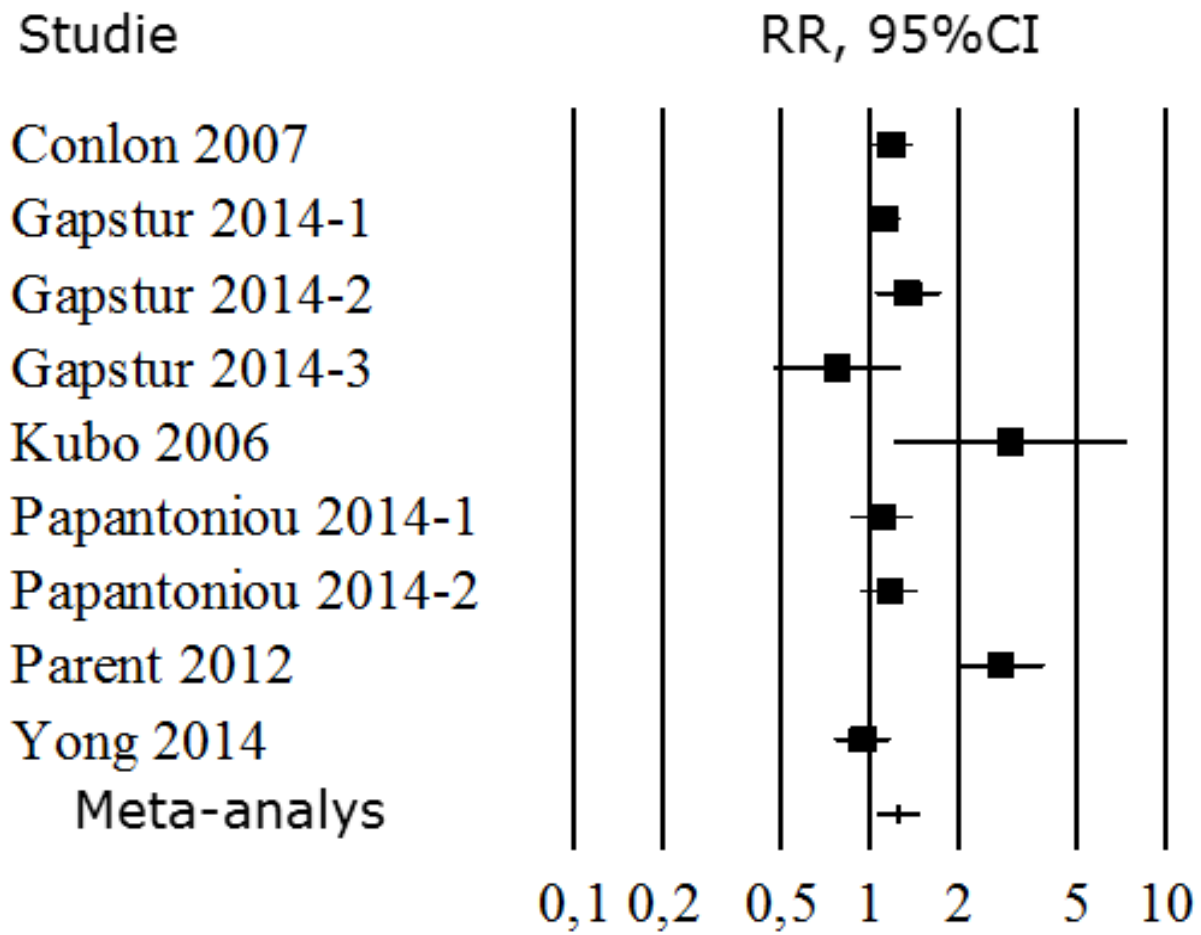
Supplementary Figure SF6. Flowchart for literature search of association between exposure to chromium and prostate cancer.



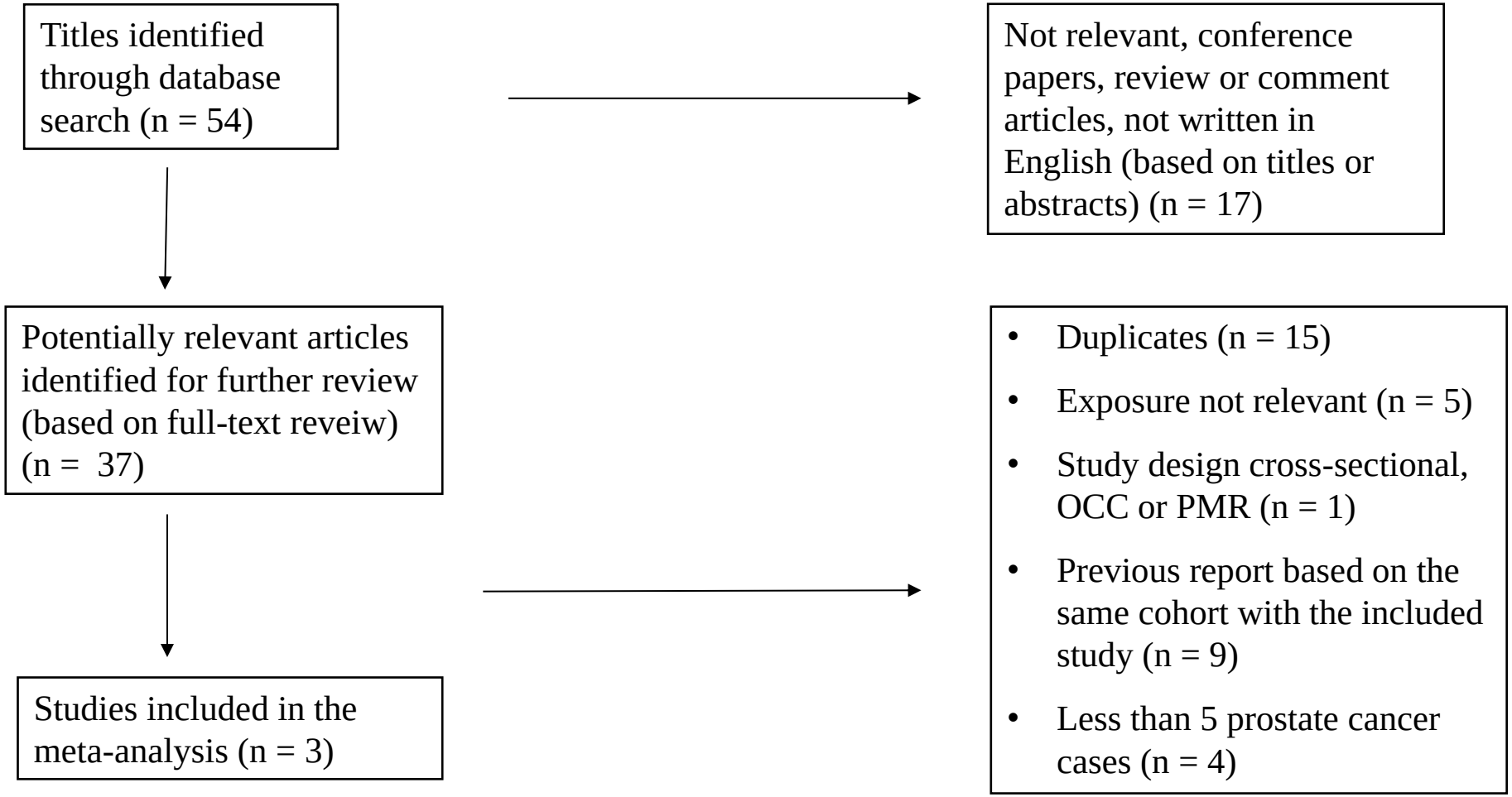
Supplementary Figure SF7. Results of the meta-analysis of the association between chromium and prostate cancer.



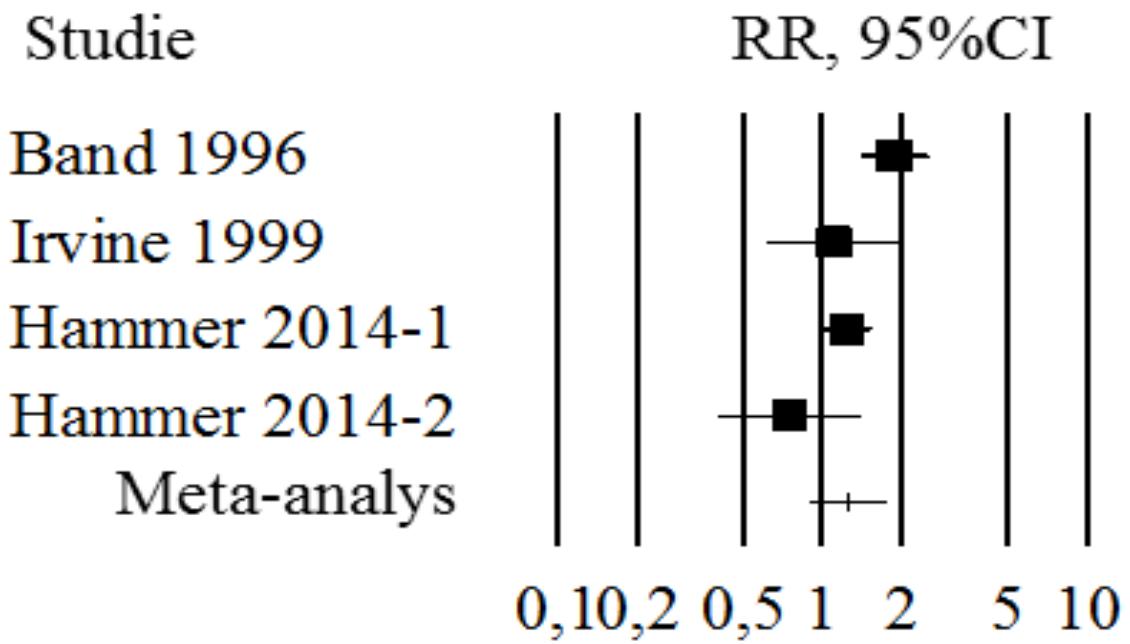
Supplementary Figure SF8. Flowchart for literature search of association between exposure to shift work and prostate cancer.



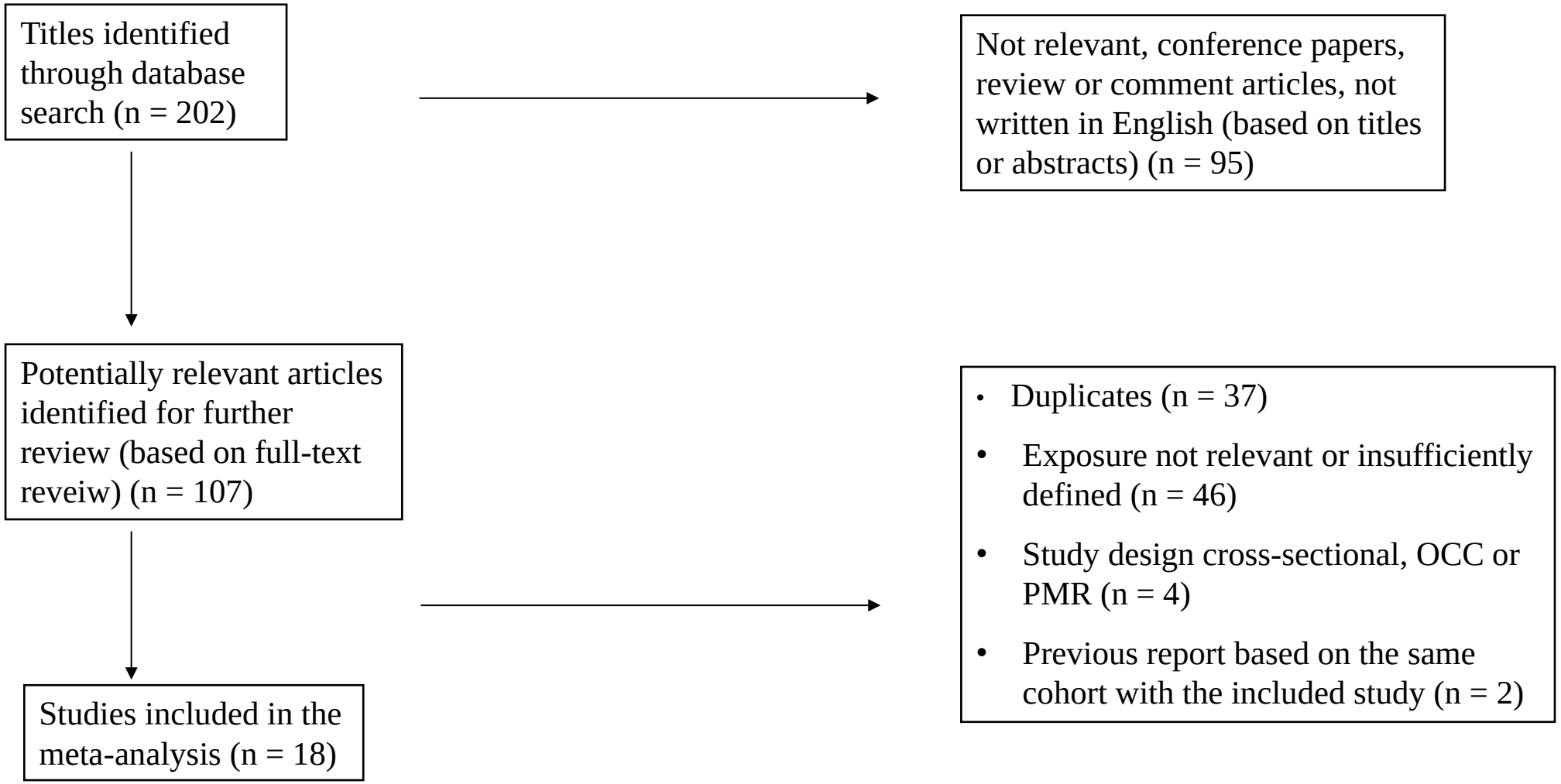
Supplementary Figure SF9. Results of the meta-analysis of the association between shift work and prostate cancer.



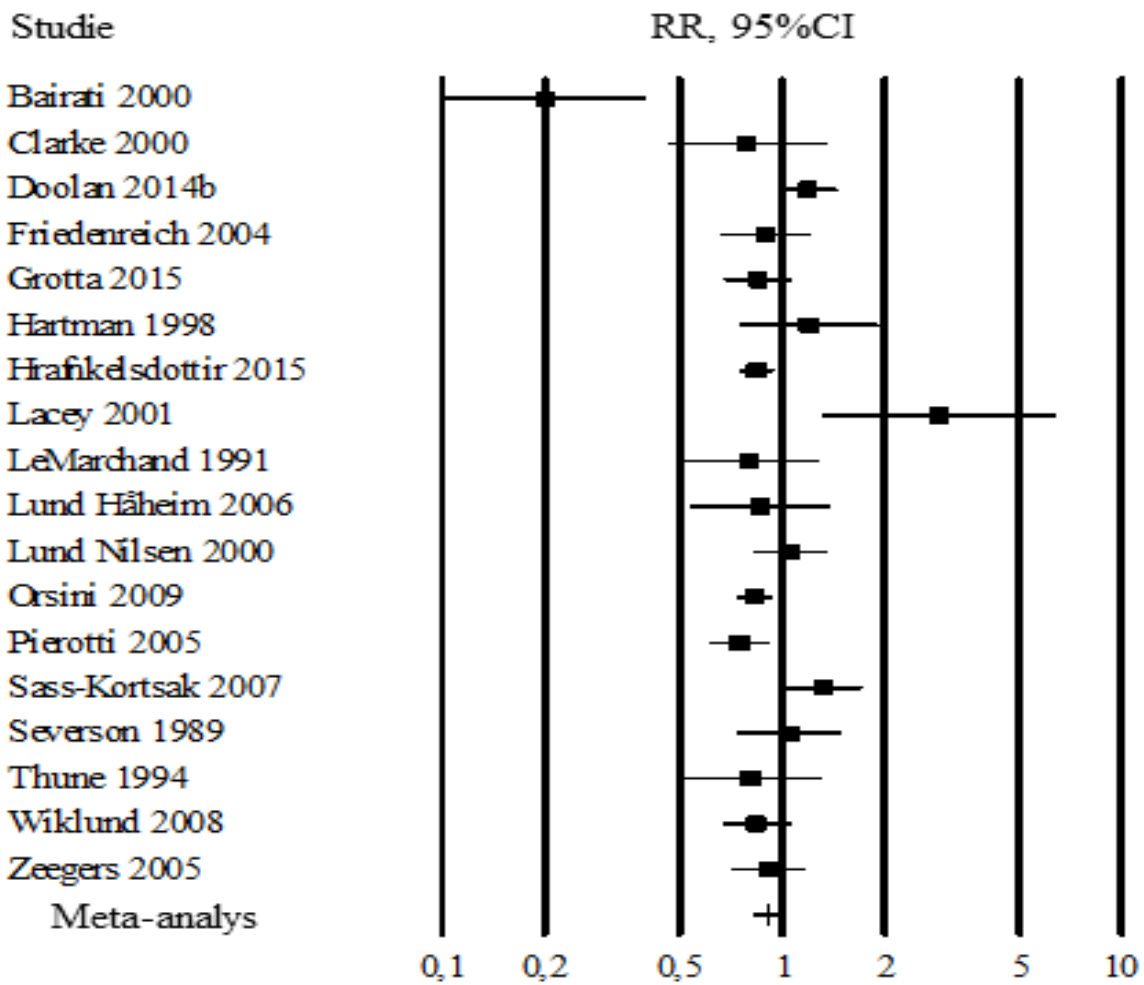
Supplementary Figure SF10. Flowchart for literature search of association between exposure to flight personnel and prostate cancer.



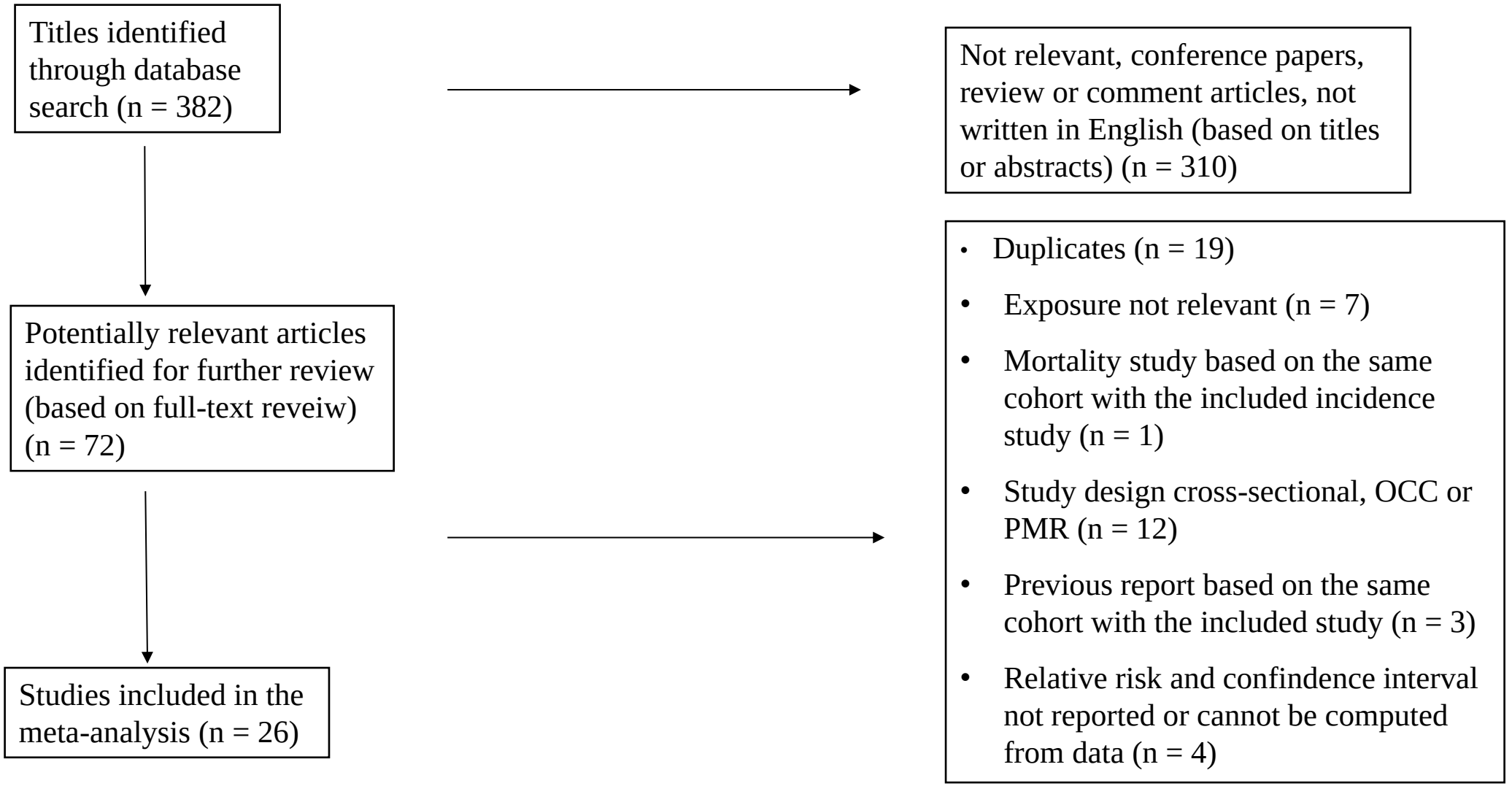
Supplementary Figure SF11. Results of the meta-analysis of the correlation between flight personnel and prostate cancer.



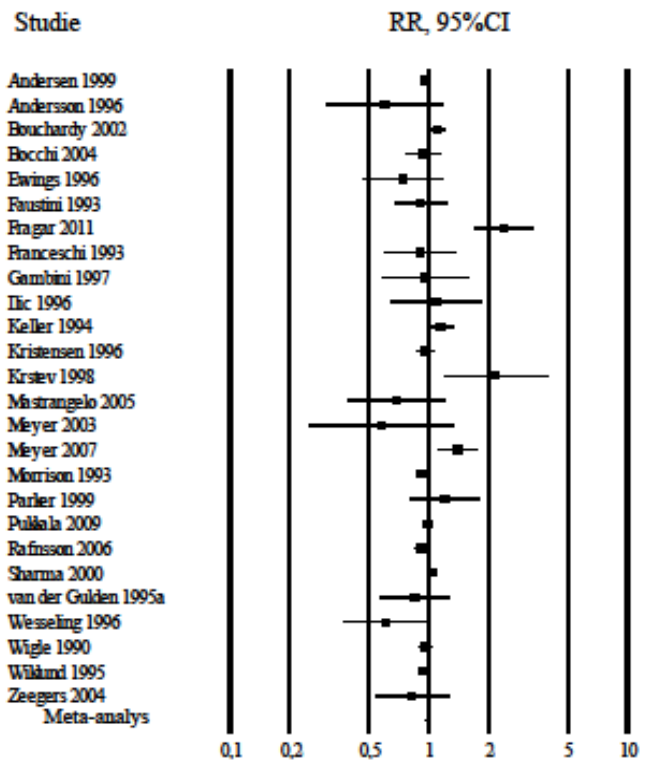
Supplementary Figure SF12. Flowchart for literature of association between physical activity at work and prostate cancer.



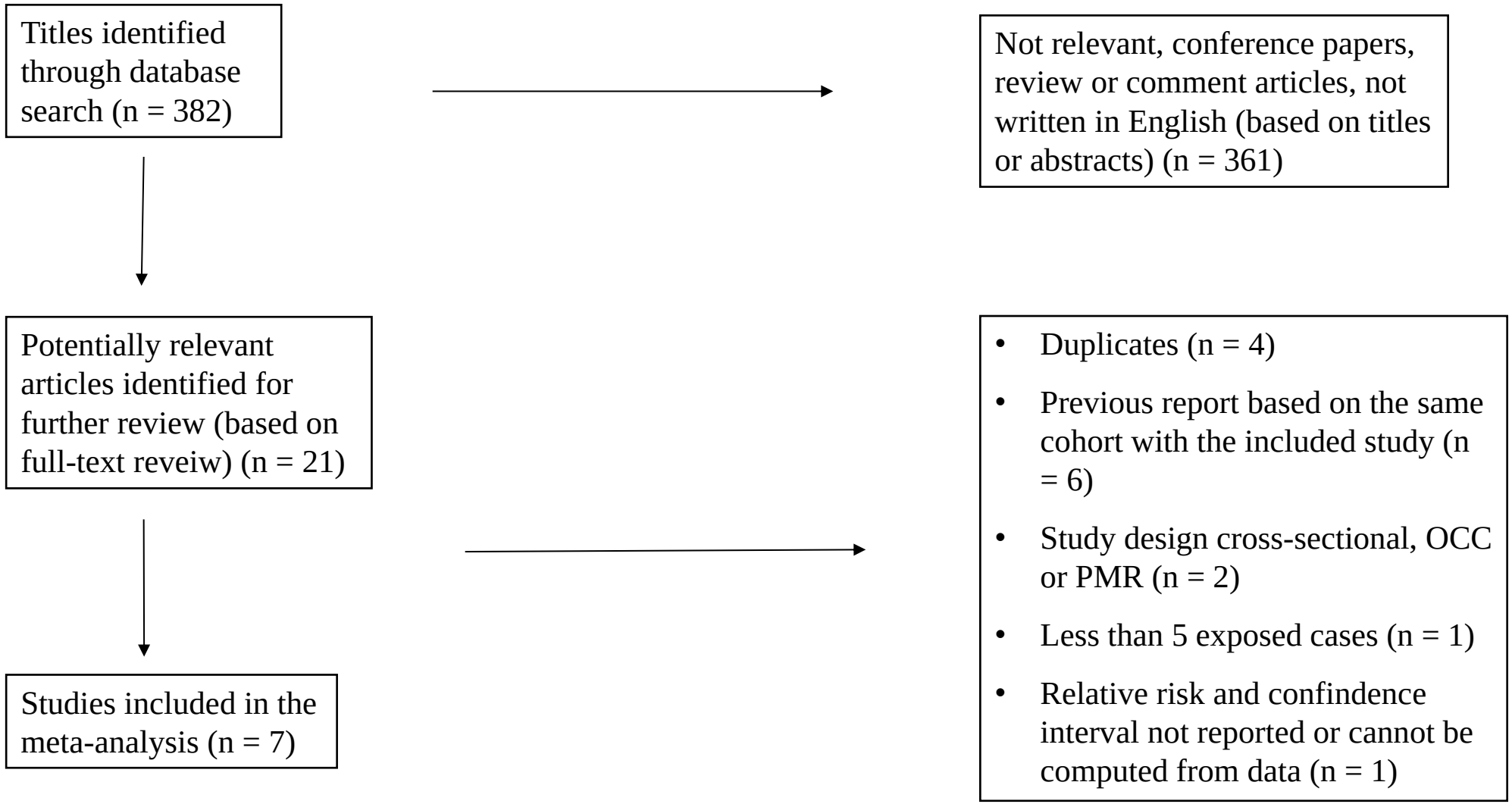
Supplementary Figure SF13. Results of the meta-analysis of the association between physical activity at work and prostate cancer.



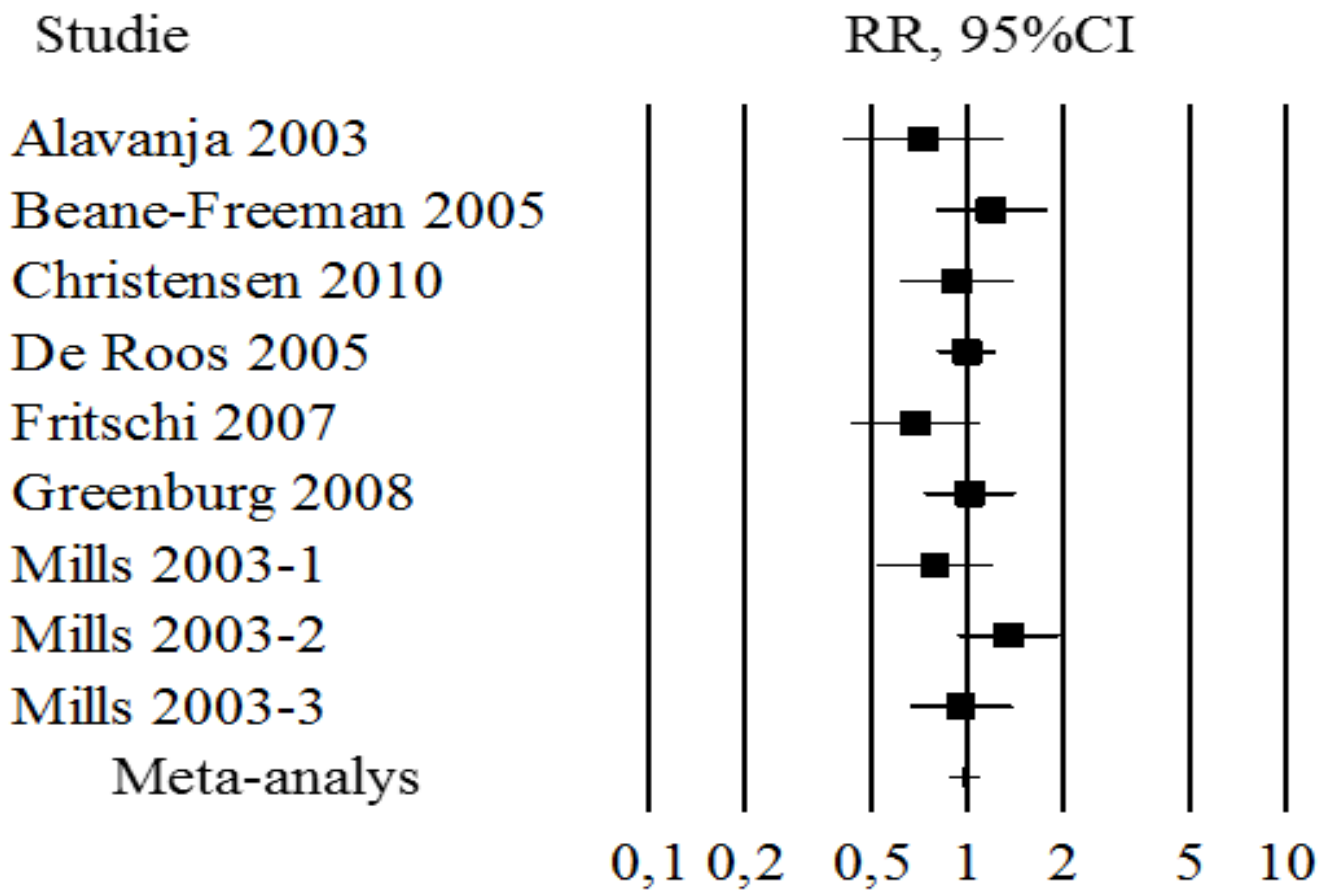
Supplementary Figure SF14. Flowchart for literature search of association between occupation farmers/farm workers and prostate cancer.



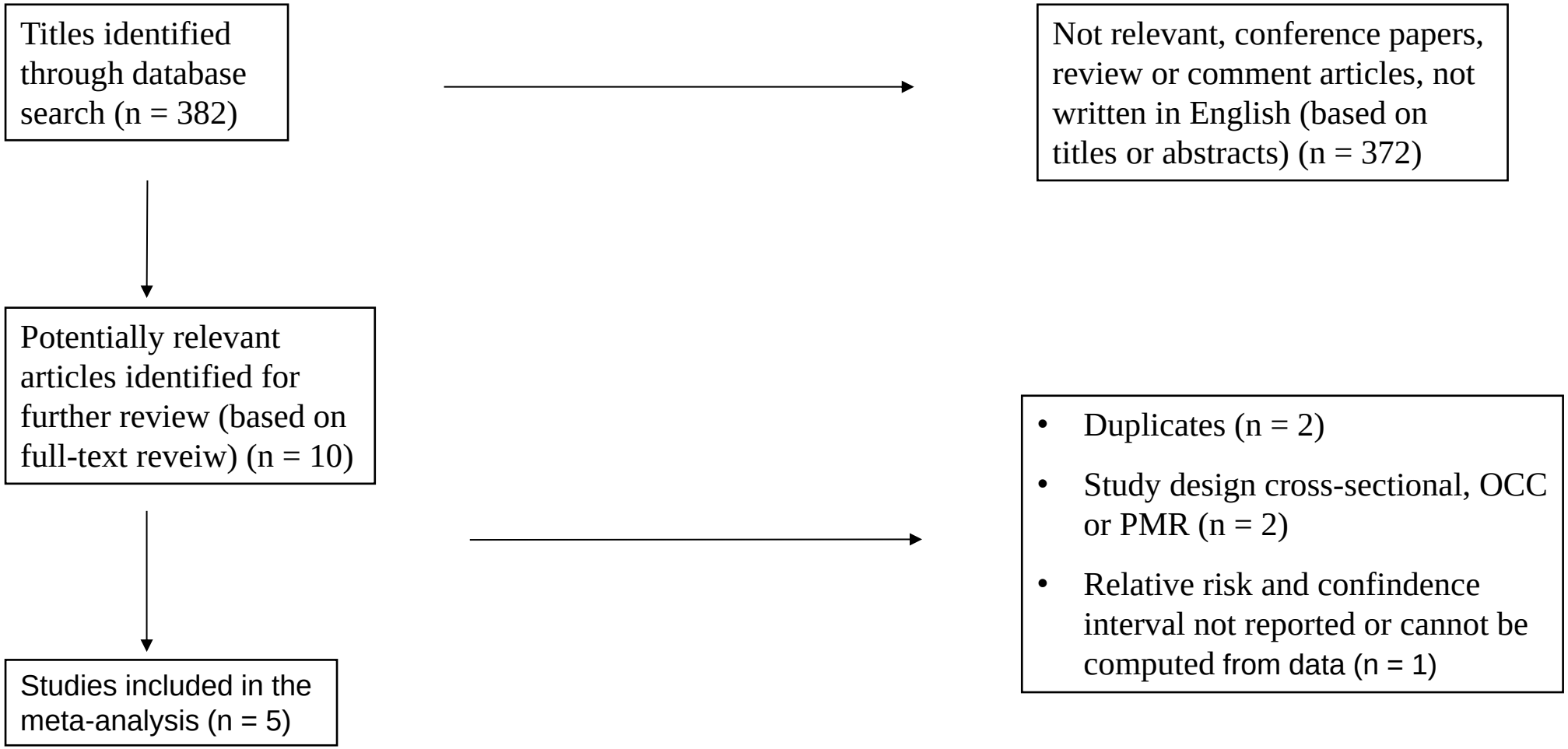
Supplementary Figure SF15. Results of meta-analysis of association between occupation farmers/farm workers and prostate cancer.



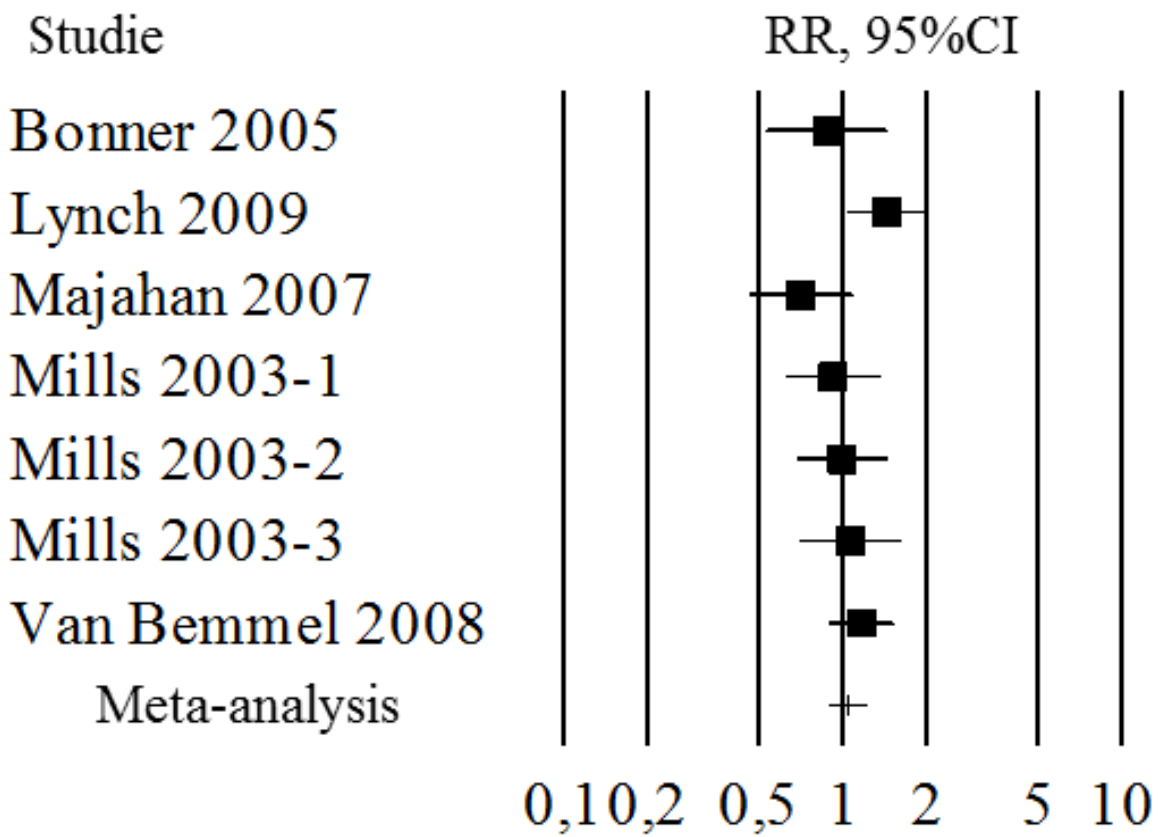
Supplementary Figure SF16. Flowchart for literature search of associations between exposure to organophosphate pesticides and prostate cancer.



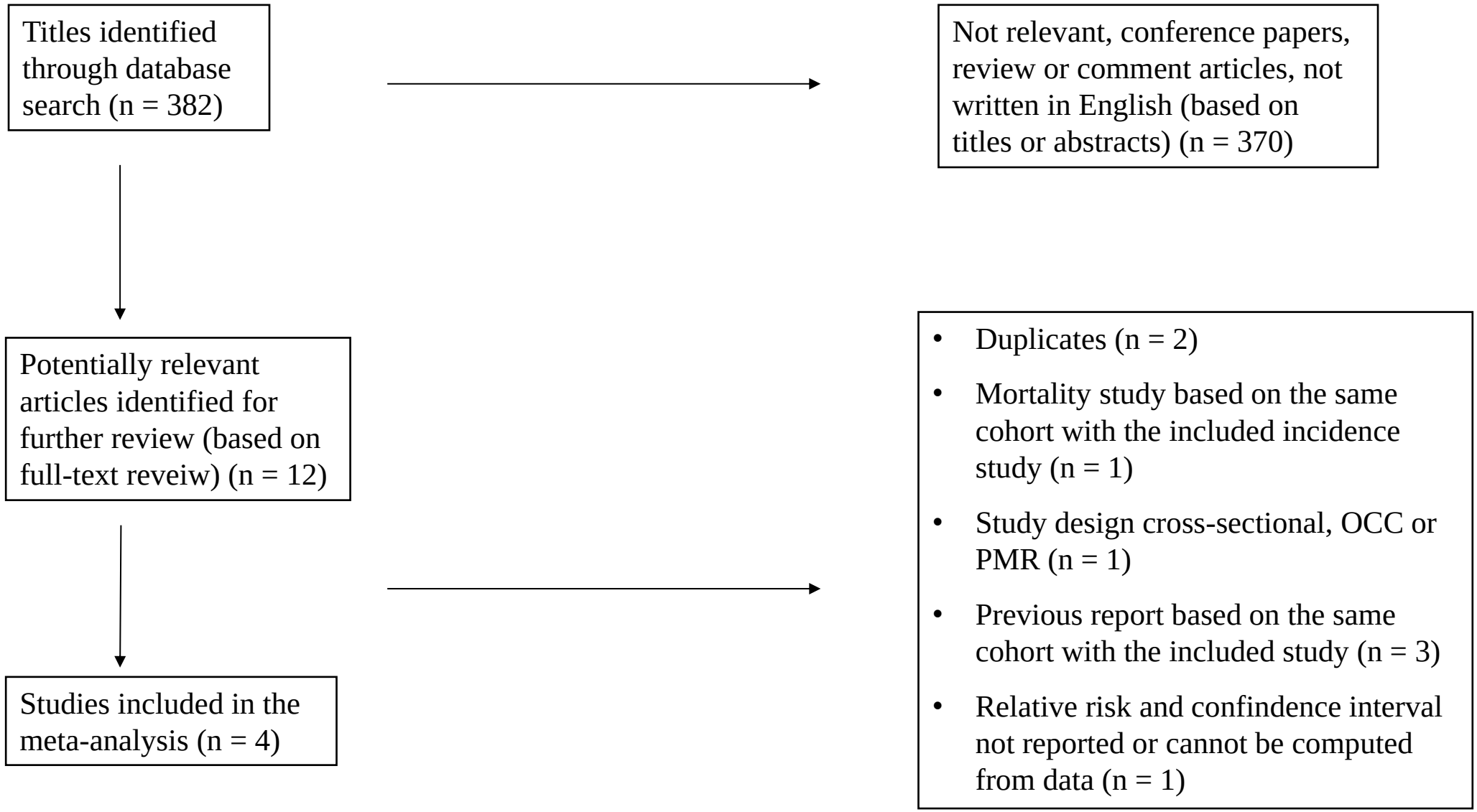
Supplementary Figure SF17. Results of the meta-analysis of the association between organophosphate pesticides and prostate cancer.



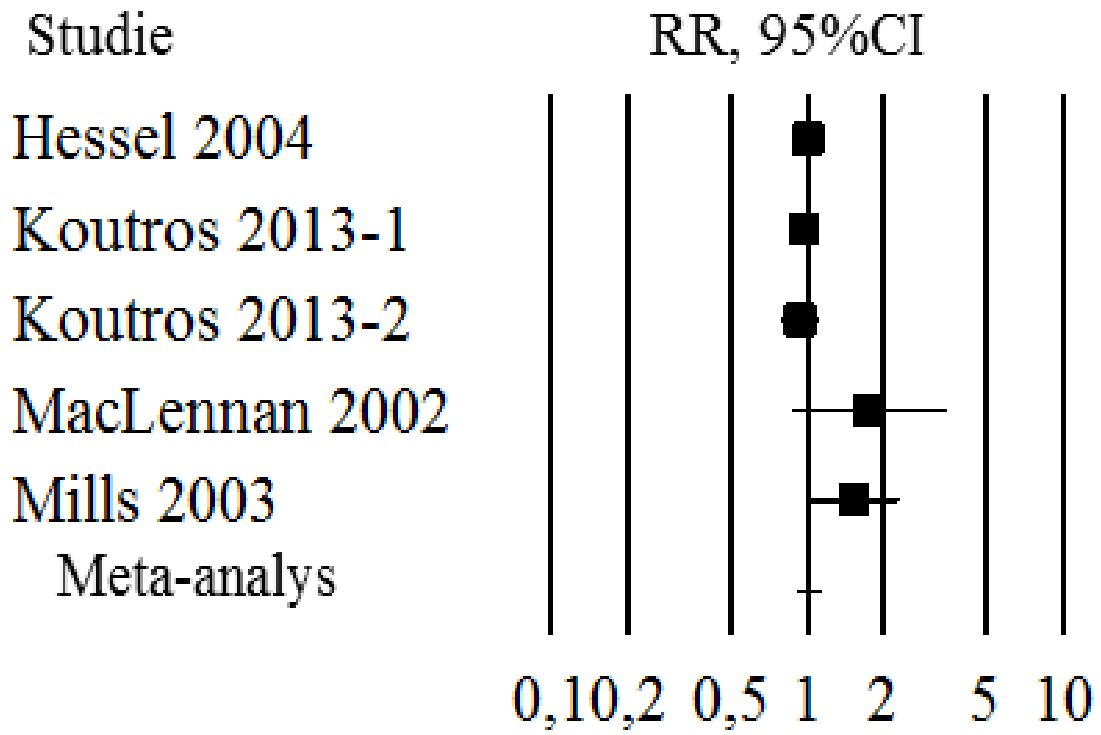
Supplementary Figure SF18. Flowchart for literature search of associations between exposure to carbamates and prostate cancer.



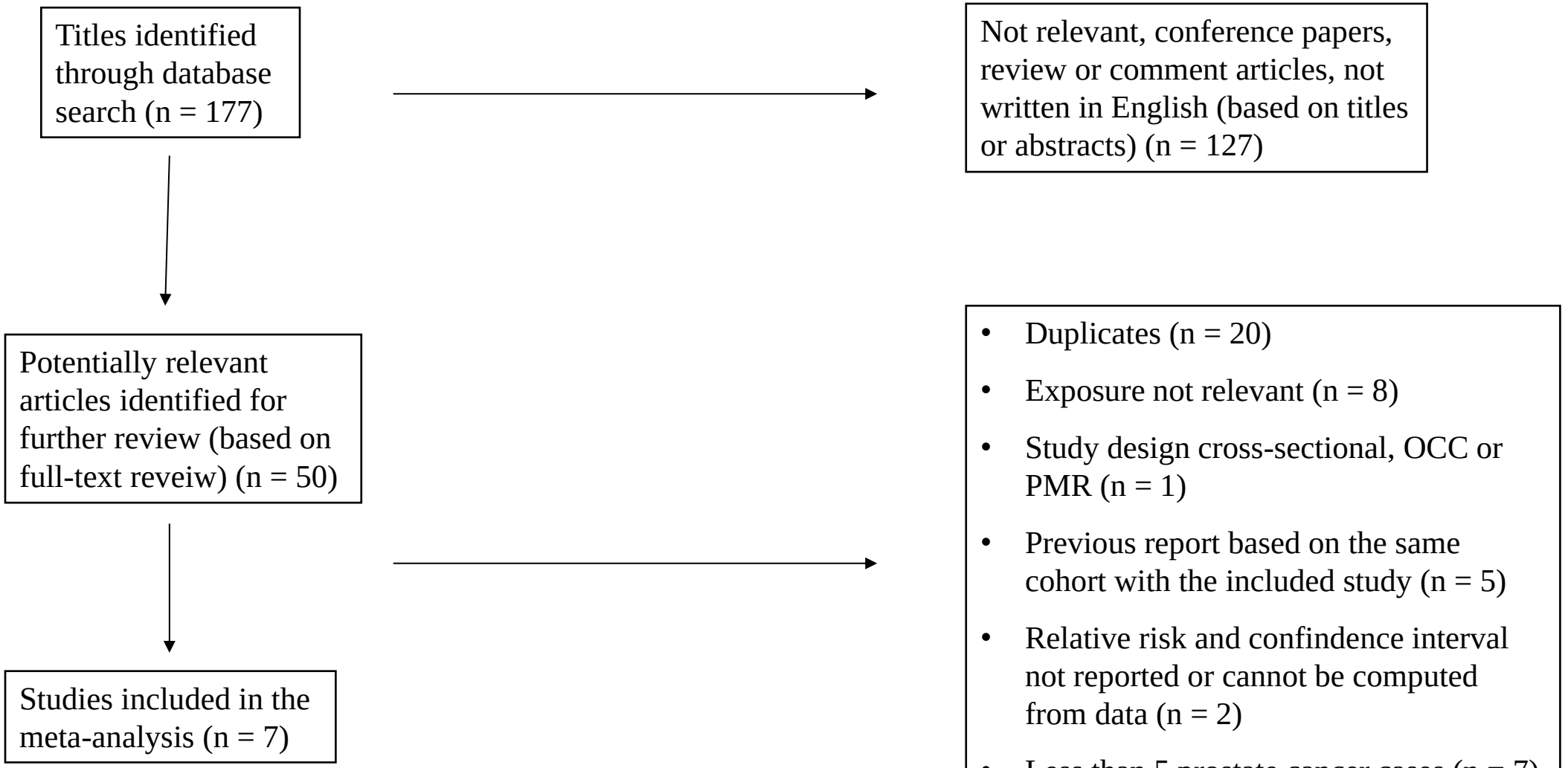
Supplementary Figure SF19. Results of the meta-analysis of the association between carbamates and prostate cancer.



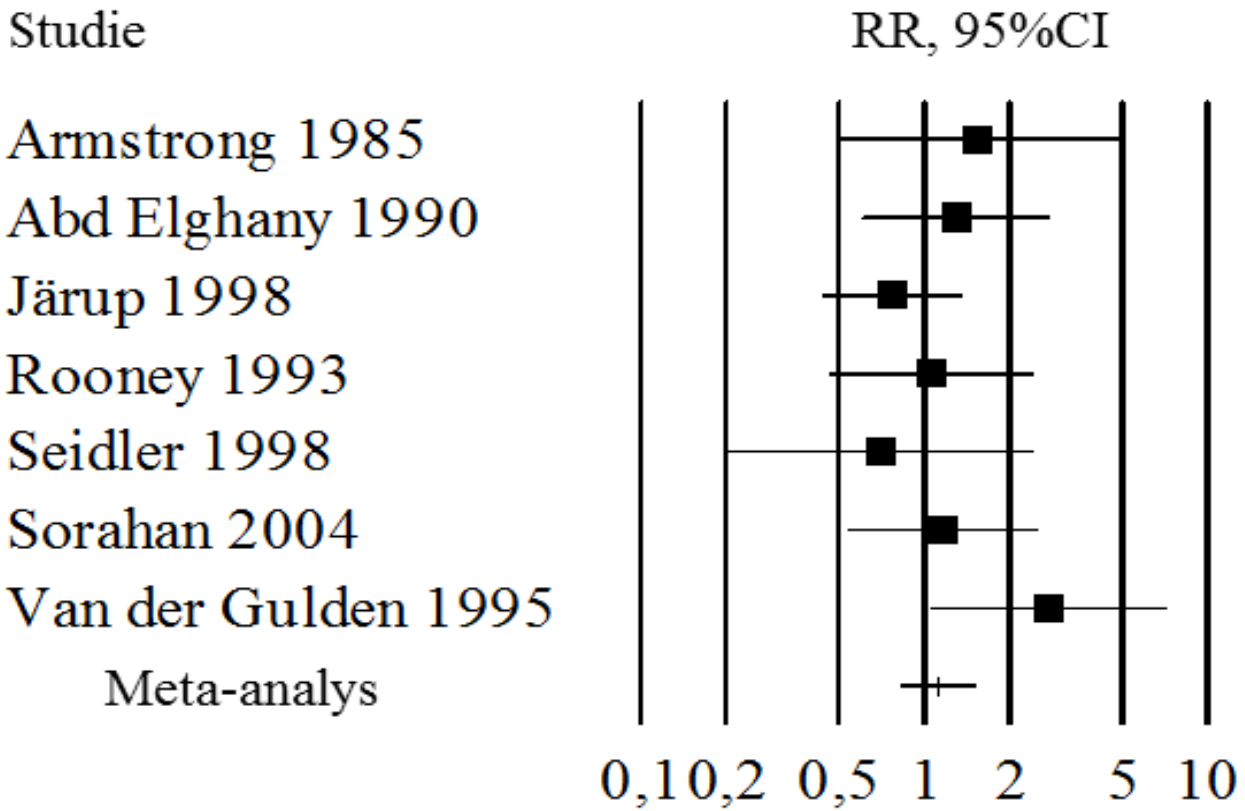
Supplementary Figure SF20. Flowchart for literature search of associations between exposure to triazines and prostate cancer.



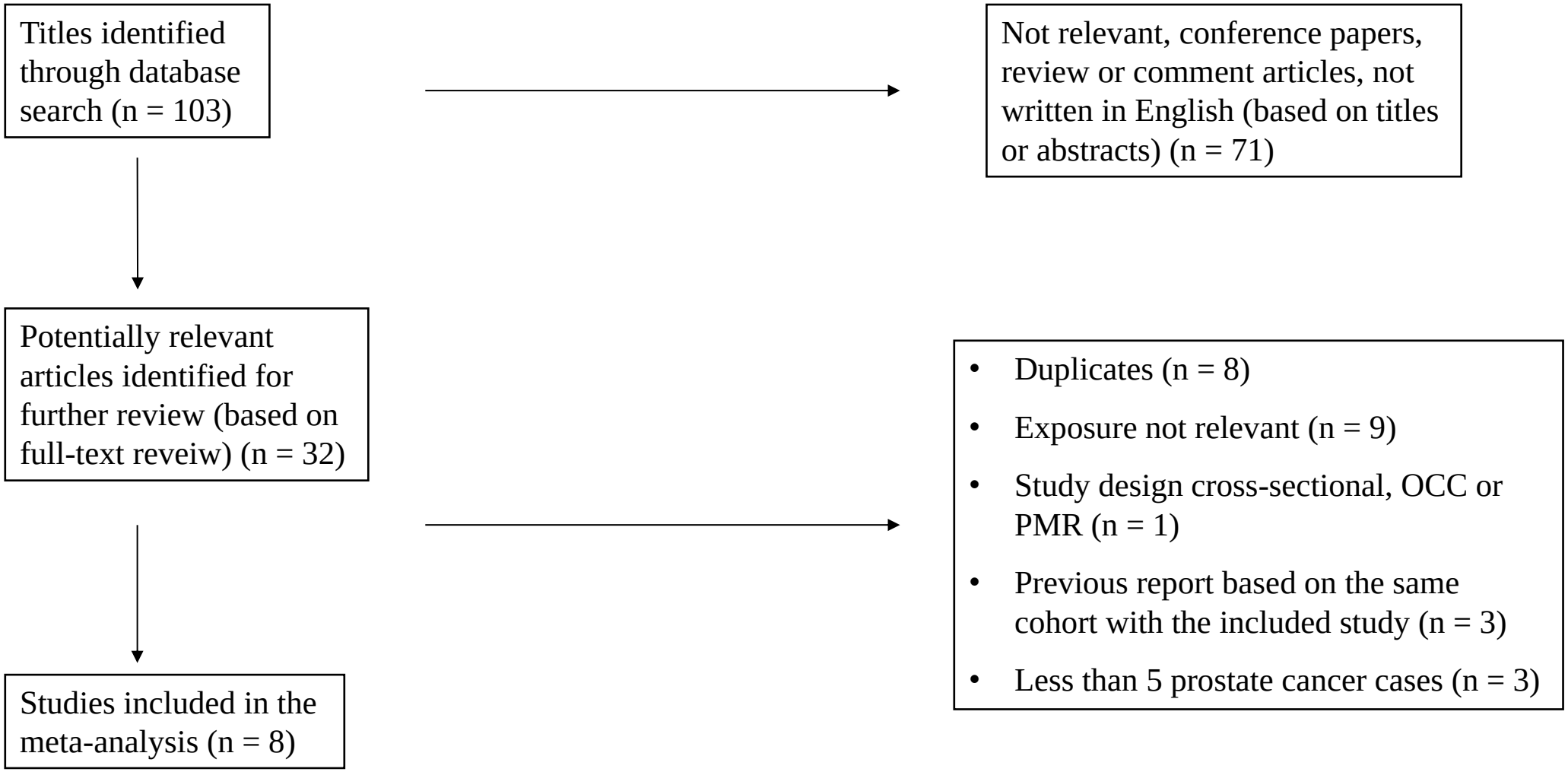
Supplementary Figure SF21. Results of the meta-analysis of the association between triazines and prostate cancer.



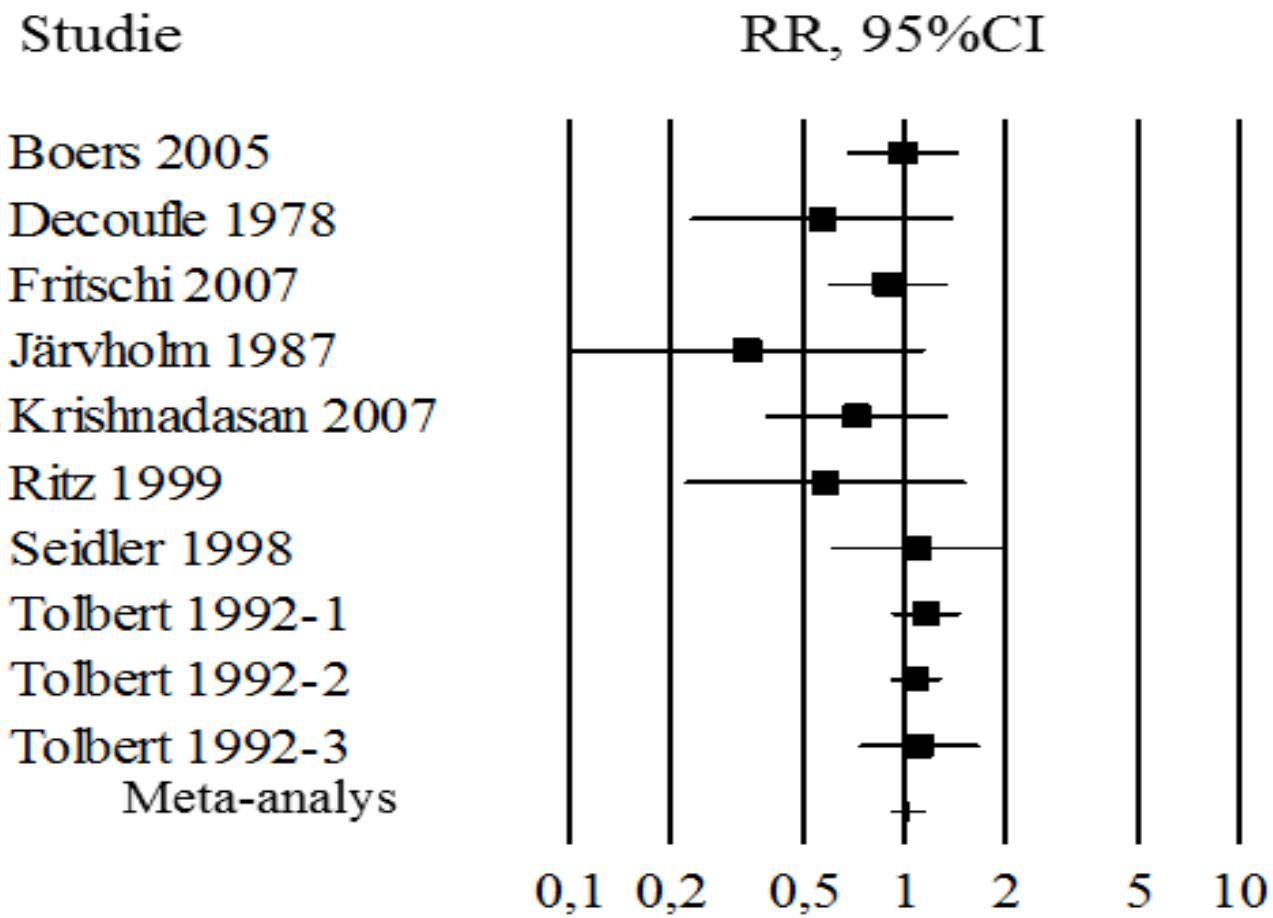
Supplementary Figure SF22. Flowchart for literature search of association between exposure to cadmium and prostate cancer.



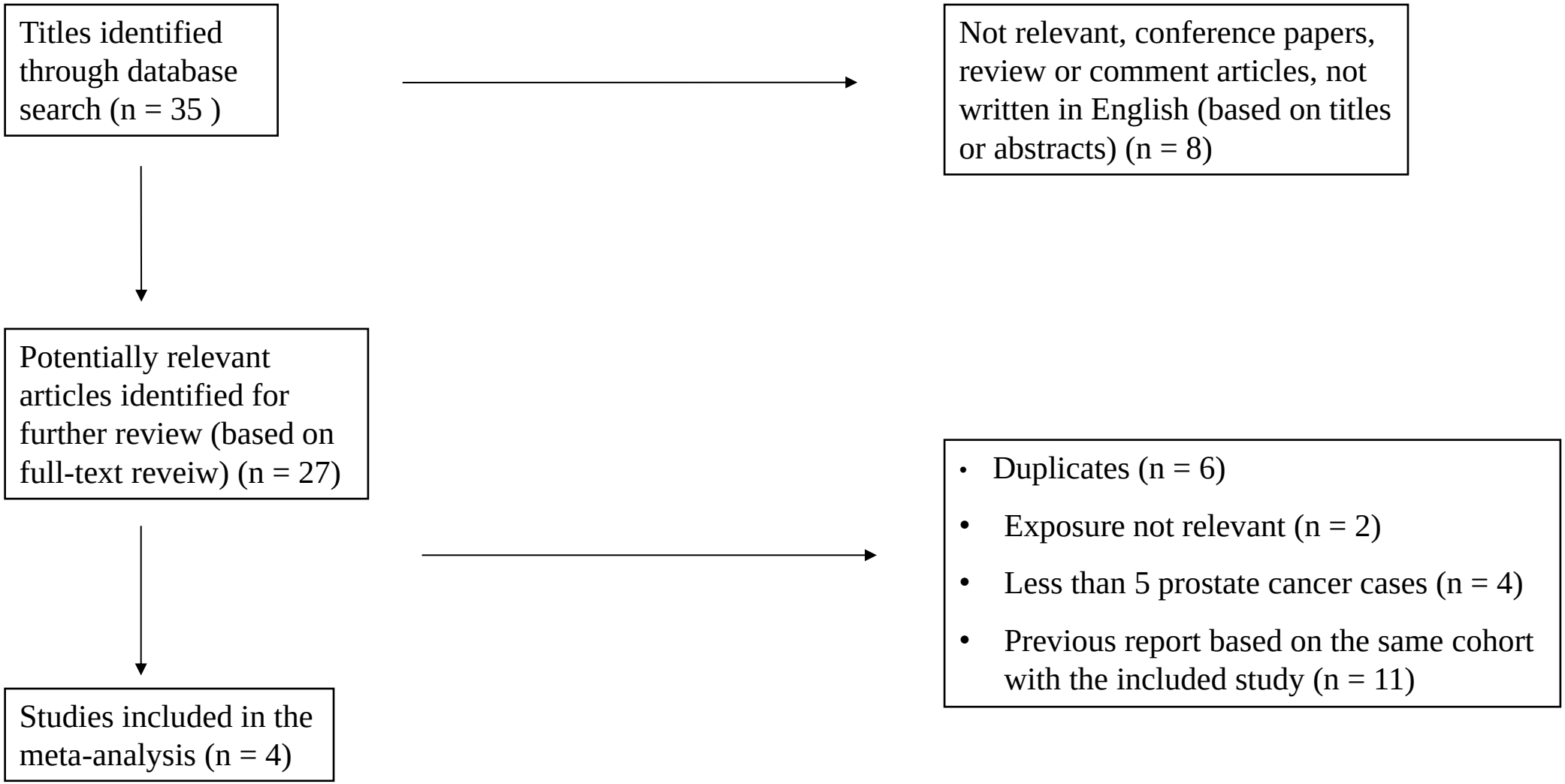
Supplementary Figure SF23. Results of the meta-analysis of the association between cadmium and prostate cancer.



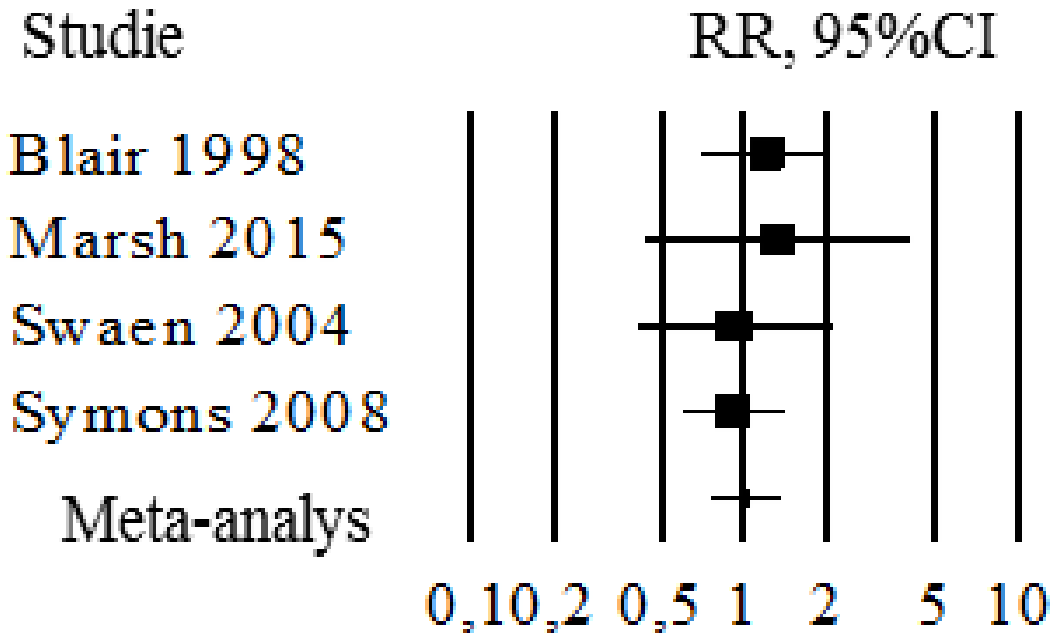
Supplementary Figure SF24. Flowchart for literature search of association between exposure to cutting fluids and prostate cancer.



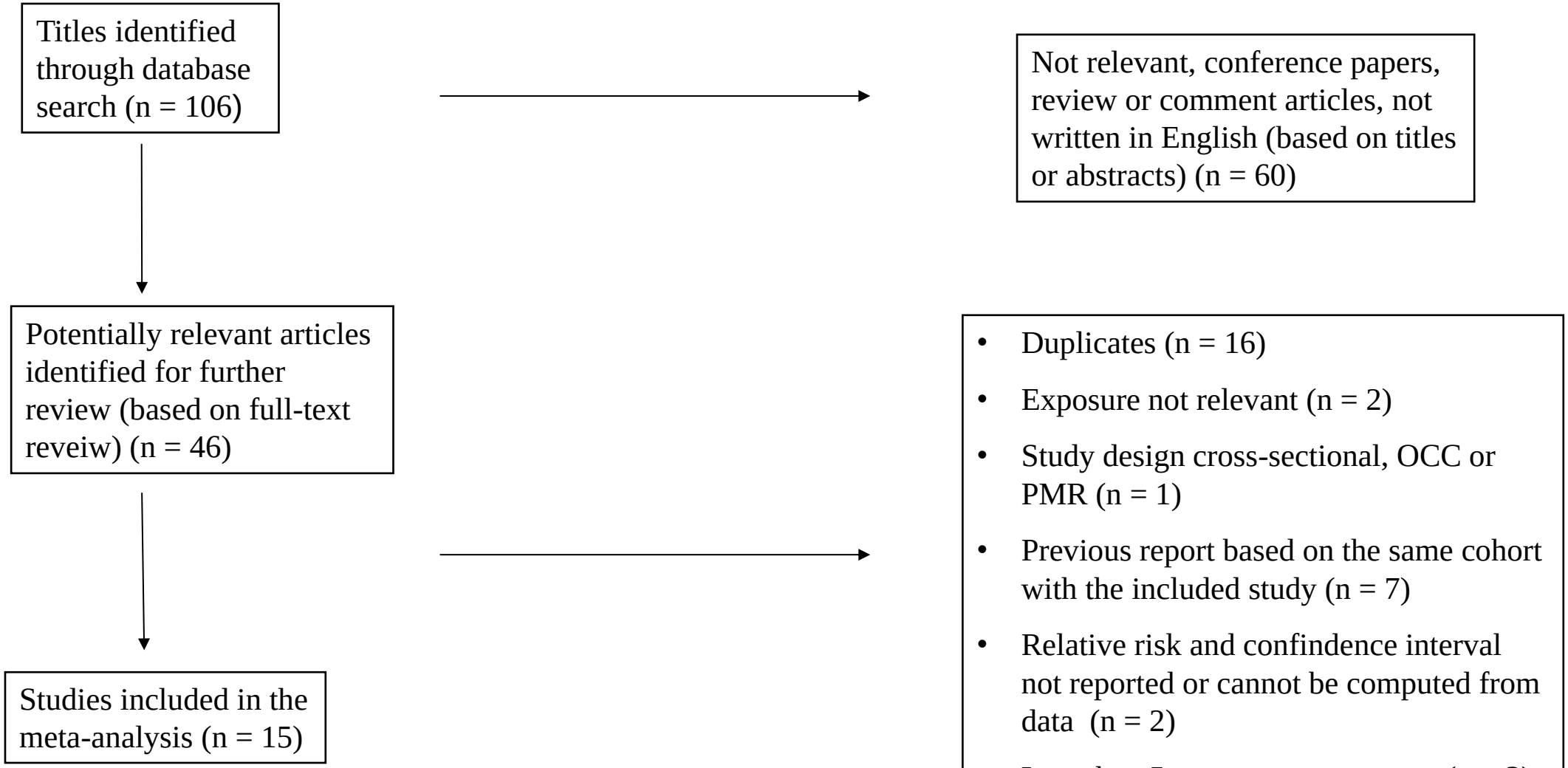
Supplementary Figure SF25. Results of the meta-analysis of the association between cutting fluids and prostate cancer.



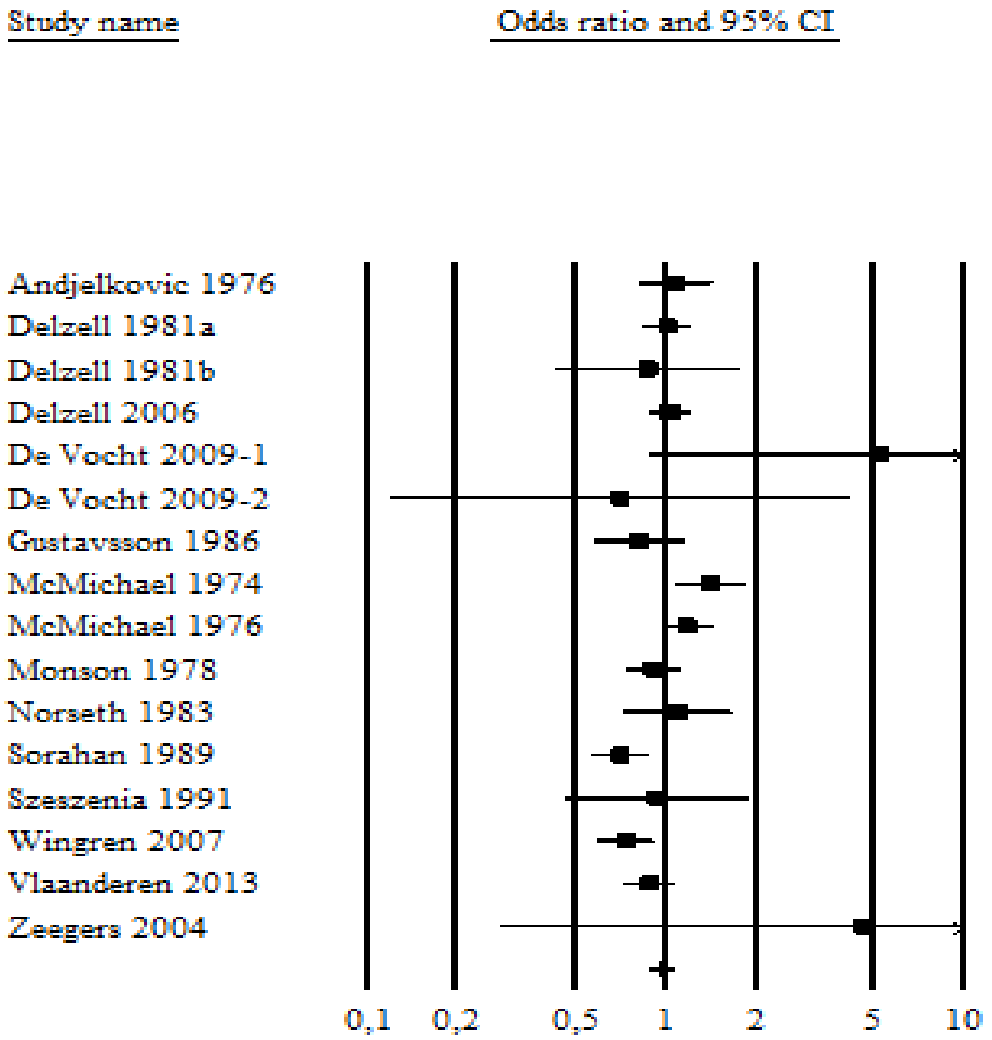
Supplementary Figure SF26. Flowchart for literature search of association between exposure to exposure to acrylonitrile and prostate cancer.



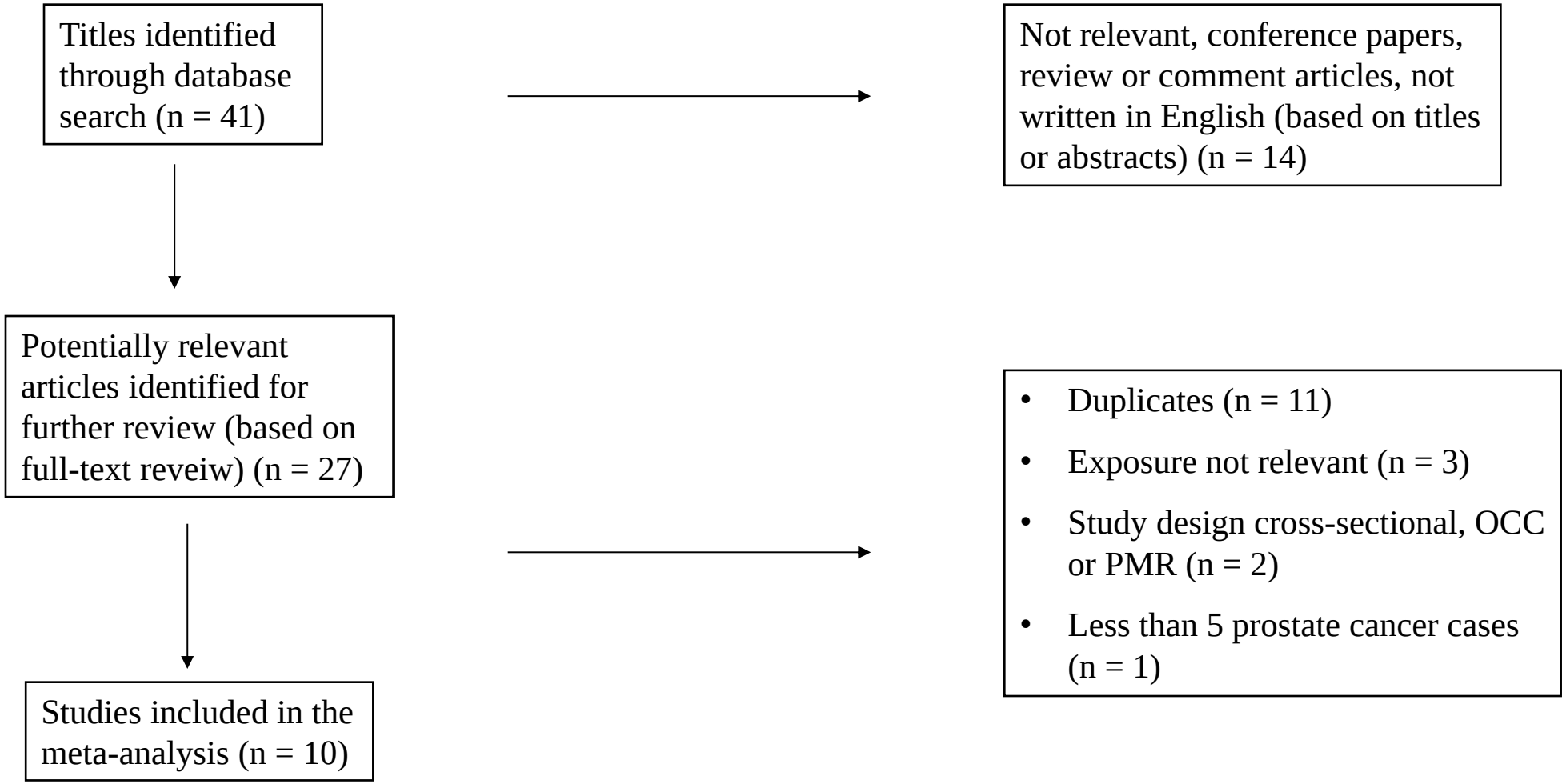
Supplementary Figure SF27. Results of the meta-analysis of the association between acrylonitrile and prostate cancer.



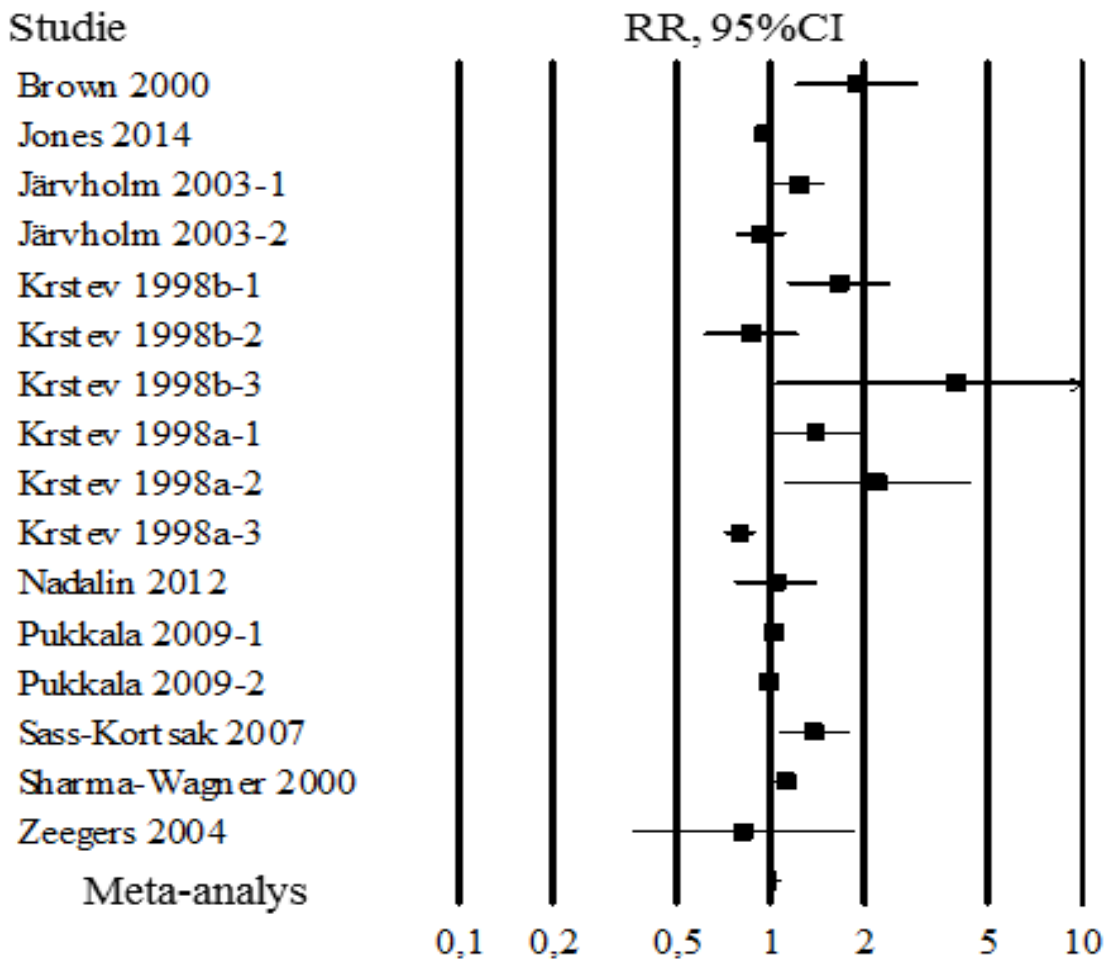
Supplementary Figure SF28. Flowchart for literature search of association between exposure in rubber industry and prostate cancer.



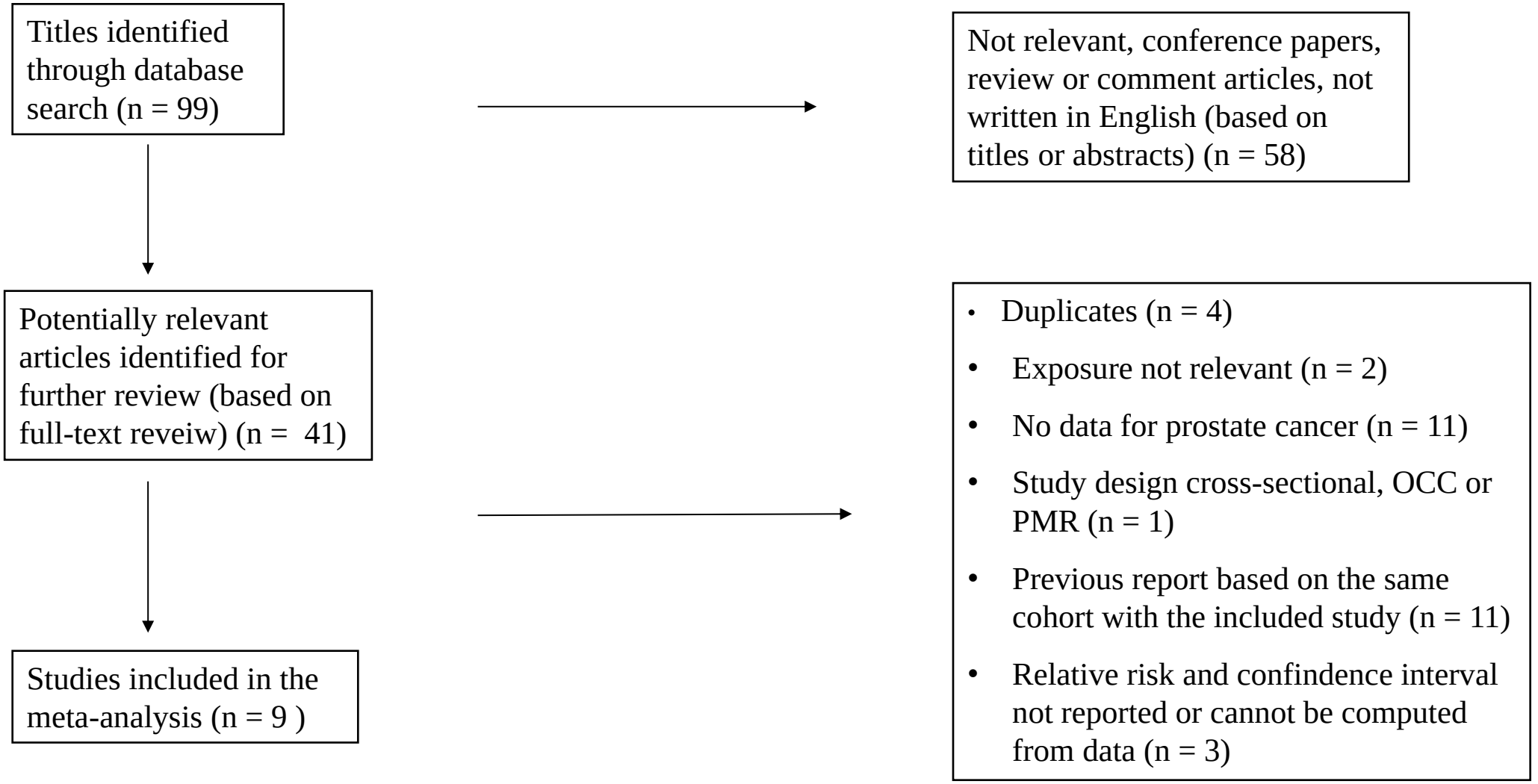
Supplementary Figure S29. Results of the meta-analysis of the association between exposure in rubber industry and prostate cancer.



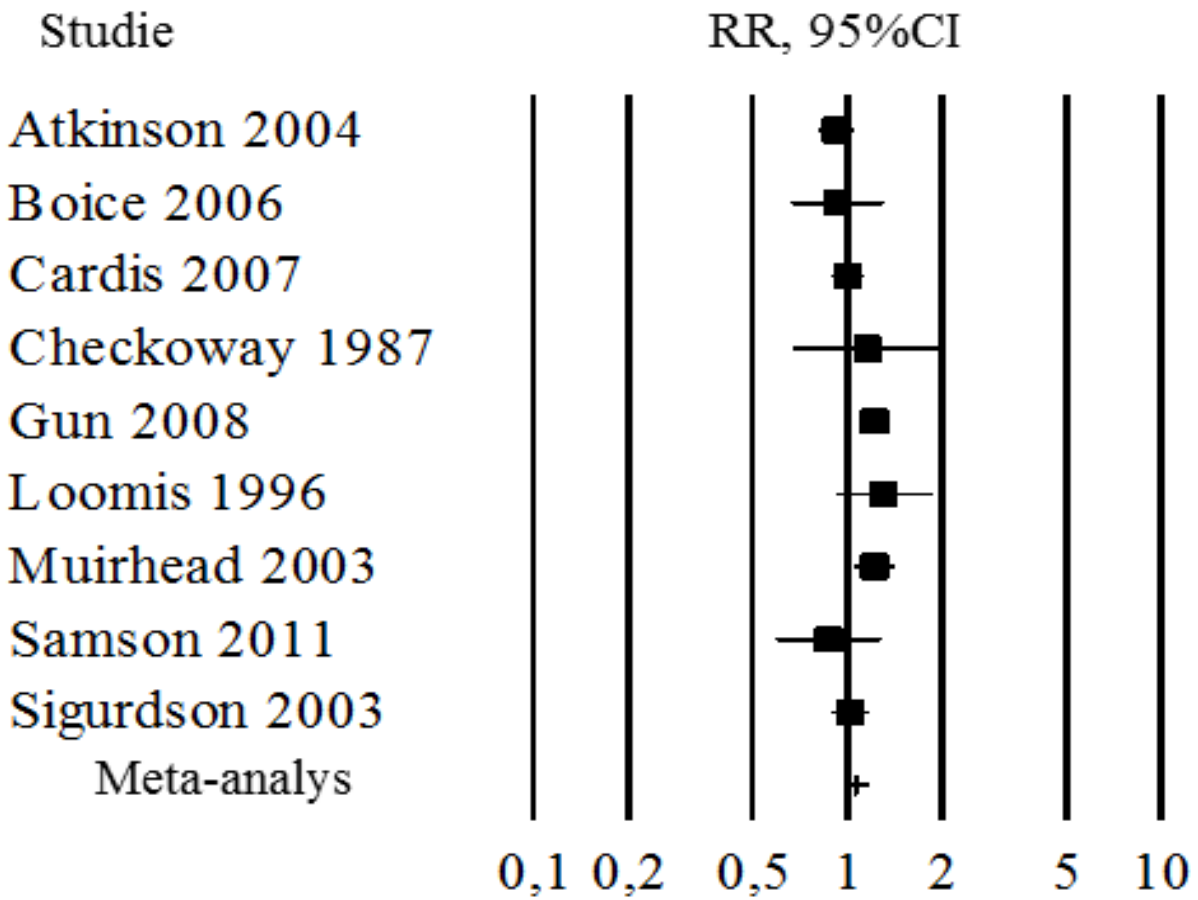
Supplementary Figure SF30. Flowchart for literature search of association between exposure to whole-body vibration and prostate cancer.



Supplementary Figure SF31. Results of the meta-analysis of the association between whole-body vibration and prostate cancer.



Supplementary Figure SF32. Flowchart for literature search of association between exposure to ionizing radiation and prostate cancer.



Supplementary Figure SF33. Results of the meta-analysis of the association between ionizing radiation and prostate cancer.