## Online Supplementary Tables S1-S3

**Table S1.** Search terms and strategies

**Search term**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Population** |  | **Exposure (risk factor)** | **Comparison** |  | **Outcome** |
|  | AND | Chronic kidney diseaseChronic Kidney FailureChronic Renal insufficiencyUremiaChronic renal failureEnd-stage renal diseaseEnd-stage renal failureRenal impairmentHemodialysisPeritoneal dialysis | AND |  | AND | Macular degeneration |

Representative search strategy

1 PubMed

#1 Search chronic kidney disease

#2 Search chronic renal failure

#3 Search chronic renal insufficiency

#4 Search Uremia

#5 Search chronic kidney failure

#6 Search End-stage renal disease

#7 Search End-stage renal failure

#8 Search Renal impairment

#9 Search Hemodialysis

#10 Search peritoneal dialysis

#11 Search (((((((((chronic kidney disease) OR chronic renal failure) OR chronic renal insufficiency) OR Uremia) OR chronic kidney failure) OR End-stage renal disease) OR End-stage renal failure) OR Renal impairment) OR Hemodialysis) OR peritoneal dialysis

#12 Search macular degeneration

#13 Search (((((((((((chronic kidney disease) OR chronic renal failure) OR chronic renal insufficiency) OR Uremia) OR chronic kidney failure) OR End-stage renal disease) OR End-stage renal failure) OR Renal impairment) OR Hemodialysis) OR peritoneal dialysis)) AND macular degeneration

2. EMBASE

#1 chronic AND ('kidney'/exp OR kidney) AND ('disease'/exp OR disease)

#2 chronic AND ('kidney'/exp OR kidney) AND ('failure'/exp OR failure)

#3 chronic AND renal AND insufficiency

#4 'uremia'/exp OR uremia

#5 chronic AND renal AND ('failure'/exp OR failure)

#6 'end stage' AND renal AND ('disease'/exp OR disease)

#7 'end stage' AND renal AND ('failure'/exp OR failure)

#8 renal AND ('impairment'/exp OR impairment)

#9 'hemodialysis'/exp OR hemodialysis

#10 peritoneal AND ('dialysis'/exp OR dialysis)

#11 #1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10

#12 'macula'/exp OR macula AND ('degeneration'/exp OR degeneration)

#13 #11 AND #12

3. Cochrane

#1 chronic kidney disease:ti,ab,kw (Word variations have been searched)

#2 Chronic Kidney Failure

#3 Chronic Renal Insufficiency

#4 Uremia

#5 Chronic renal failure

#6 End-stage renal disease

#7 End-stage renal failure

#8 Renal impairment

#9 Hemodialysis

#10 peritoneal dialysis

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

#12 macula degeneration

#13 #11 and #12

4. Medline

#1 chronic kidney disease.mp. or exp Renal Insufficiency, Chronic/

#2 Chronic Kidney Failure.mp. or exp Kidney Failure, Chronic/

#3 Chronic Renal Insufficiency.mp. or exp Renal Insufficiency, Chronic/

#4 Uremia.mp. or exp Uremia/

#5 Chronic renal failure.mp. or exp Kidney Failure, Chronic/

#6 End-stage renal disease.mp. or exp Kidney Failure, Chronic/

#7 End-stage renal failure.mp. or exp Kidney Failure, Chronic/

#8 Renal impairment.mp.

#9 Hemodialysis.mp. or exp Renal Dialysis/

#10 peritoneal dialysis.mp. or exp Peritoneal Dialysis/

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

#12 Macular degeneration.mp. or exp Macular Degeneration/

#13 11 and 12

**Table S2.** Quality assessment of cohort and case control studies via Newcastle Ottawa tools

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Author,****year** | **Study design** | **Selection** | **Comparability** | **Outcome** | **Total stars** **(0-9☆)** |
| **1** | **2** | **3** | **4** | **5A** | **5B** | **6** | **7** | **8** |
| Liew 2008 | Prospective cohort | ☆(A) | ☆ | ☆(A) | ☆ | ☆ | ☆ | ☆(A) | ☆(A) | ☆(B) | 9☆ |
| Wang 2016 | Retrospective cohort | ☆(A) | ☆ | ☆(A) | ☆ | ☆ | ☆ | ☆(B) | ☆(A) | ☆(A) | 9☆ |
| Klein 2009 | Prospective cohort | ☆(A) | ☆ | ☆(A) | ☆ | ☆ | ☆ | ☆(B) | ☆(A) | ☆(B) | 9☆ |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Weiner 2011 | Nested case control | ☆(A) | ☆(A) | ☆(A) | ☆(A) | ☆ | ☆ | ☆(A) | ☆(A) | ☆(A) | 9☆ |
| Nitsch 2009 | Case control | ☆(A) | ☆(A) | ☆(A) | ☆(A) |  |  | ☆(A) | ☆(A) | ☆(A) | 7☆ |

For cohort study: 1. Representativeness of the exposed cohort; 2. Selection of the non-exposed cohort; 3. Ascertainment of exposure; 4. Demonstration that outcome of interest was not present at start of study; 5. Comparability of cohorts on the basis of the design or analysis; 6. Assessment of outcome; 7. Whether follow-up was long enough for outcomes to occur; 8. Adequacy of follow up of cohorts.

For case control study: 1. Is the case definition adequate; 2. Representativeness of the cases; 3. Selection of Controls; 4 Definition of Controls; 5. Comparability of cases and controls on the basis of the design or analysis; 6. Ascertainment of exposure; 7 Same method of ascertainment for cases and controls; 8. Non-Response rate.

**Table S3.** Quality assessment of cross sectional studies via JBI checklist

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Author year** | **Q1** | **Q2** | **Q3** | **Q4** | **Q5** | **Q6** | **Q7** | **Q8** | **%** |
| Chong 2014 | Y | Y | Y | Y | Y | Y | Y | Y | 100 |
| Chen 2017 | Y | Y | U | Y | Y | Y | Y | Y | 87.5 |
| Deva 2011 | Y | Y | Y | Y | Y | Y | Y | Y | 100 |
| Choi 2011 | Y | Y | Y | Y | Y | Y | Y | Y | 100 |
| Cheung 2014 | Y | Y | Y | Y | Y | Y | Y | Y | 100 |
| Wong 2016 | Y | Y | Y | Y | Y | Y | Y | Y | 100 |
| Gao 2011 | Y | Y | Y | Y | Y | N | Y | Y | 87.5 |

Note. Q1–criteria for inclusion; Q2–subjects and the setting; Q3–exposure measured; Q4–objective measurement of exposure; Q5–confounding factors identified; Q6–dealing confounding factors; Q7–outcomes measured; Q8–appropriate statistical analysis Y = yes; N = no; U = unclear

Abbreviation: JBI = Joanna Briggs Institute