NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE

CASE CONTROL STUDIES

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Exposure categories. A maximum of two stars can be given for Comparability

Selection

1) Is the case definition adequate?

a) yes, with independent validation*

b) yes, eg record linkage or based on self reports

c) no description

2) Representativeness of the cases

a) consecutive or obviously representative series of cases*

b) potential for selection biases or not stated

3) Selection of Controls

a) community controls*

b) hospital controls

c) no description

4) Definition of Controls

a) no history of disease (endpoint) *

b) no description of source

Comparability

1) Comparability of cases and controls on the basis of the design or analysis

a) study controls for _____(Select the most important factor.) *

b) study controls for any additional factor *(This criteria could be modified to indicate specific control for a second important factor.)

Exposure

1) Ascertainment of exposure

a) secure record (eg surgical records)*

b) structured interview where blind to case/control status*

c) interview not blinded to case/control status

d) written self report or medical record only

e) no description

2) Same method of ascertainment for cases and controls

a) yes *

b) no

3) Non-Response rate

a) same rate for both groups *

b) non respondents described

c) rate different and no designation

NEWCASTLE - OTTAWA QUALITY ASSESSMENT SCALE

COHORT STUDIES

Note: A study can be awarded a maximum of one star for each numbered item within the Selection and Outcome categories. A maximum of two stars can be given for Comparability

Selection

1) Representativeness of the exposed cohort

a) truly representative of the average _____ (describe) in the community*

b) somewhat representative of the average _____ in the community*

c) selected group of users eg nurses, volunteers

d) no description of the derivation of the cohort

2) Selection of the non exposed cohort

a) drawn from the same community as the exposed cohort*

b) drawn from a different source

c) no description of the derivation of the non exposed cohort

3) Ascertainment of exposure

a) secure record (eg surgical records)*

b) structured interview*

c) written self report

d) no description

4) Demonstration that outcome of interest was not present at start of study

a) yes*

b) no

Comparability

1) Comparability of cohorts on the basis of the design or analysis

a) study controls for _____ (select the most important factor)*

b) study controls for any additional factor* (This criteria could be modified to indicate specific control for a second important factor.)

Outcome

1) Assessment of outcome

a) independent blind assessment*

b) record linkage*

c) self report

d) no description

2) Was follow-up long enough for outcomes to occur

a) yes (select an adequate follow up period for outcome of interest)*

b) no

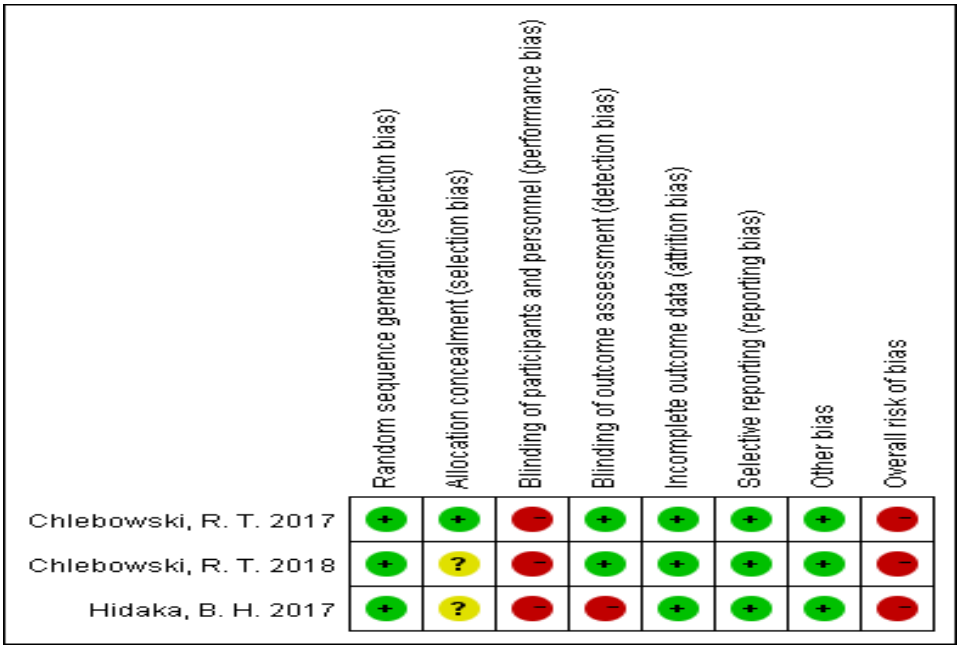
3) Adequacy of follow up of cohorts

a) complete follow up - all subjects accounted for*

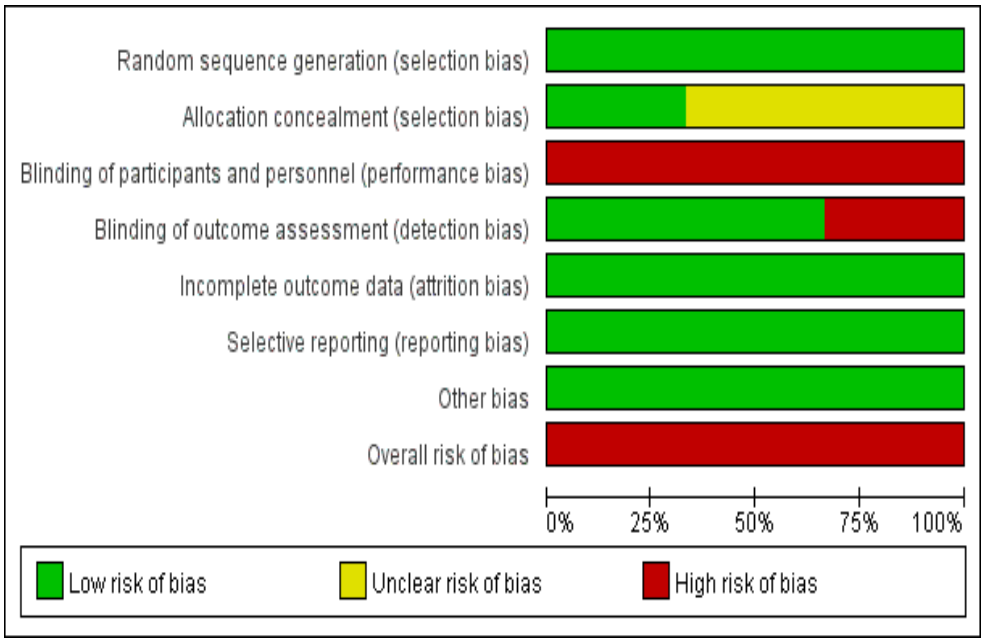
b) subjects lost to follow up unlikely to introduce bias - small number lost - > ____ % (select

an adequate %) follow up, or description provided of those lost)*
c) follow up rate < ____% (select an adequate %) and no description of those lost
d) no statement

Figure 2 Cochrane risk map of bias for three studies generated by RevMan



Methodological Quality of Included Studies



The Distribution of the Methodological Quality of Included Studies

Bias	Low risk	Unclear risk	High risk
Random sequence generation (selection bias)			
Allocation concealment (selection bias)			
Blinding of participants and personnel (performance bias)			
Blinding of outcome assessment (detection bias)			
Incomplete outcome data (attrition bias)			
Selective reporting (reporting bias)			
Other bias			
Overall risk of bias			

Risk of bias table