

## 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

### Jackson et al. 2002

#### Selection 3/4

- 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 – Those with first MI
  - 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 2/2

- 1) Comparability of cohorts on the basis of the design or analysis
  - ✓a) study controls for \_\_ previous MI\_\_ (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.) adjusts for smoking

#### Outcome 3/3

- 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

### Hung et al. 2010

#### Selection 3/4

- 1) Representativeness of the exposed cohort
  - a) truly representative of the average \_\_\_\_\_ (describe) in the community \*
  - ✓b) somewhat representative of the average vaccinated elderly in the community \* **Most**

**patients belonged to the lower socioeconomic strata of HK and had similar levels of education**

- 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 0/2 (did not adjust for previous ischaemia or smoking)**

- 1) Comparability of cohorts on the basis of the design or analysis
- a) study controls for \_\_ischemia\_\_ (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.) smoking

**Outcome 2/3**

- 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

**Tseng et al. 2010**

**Selection 3/4**

- 1) Representativeness of the exposed cohort
- ✓a) truly representative of the average \_\_exposed men 45-69\_\_ (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 2/2**

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

✓a) study controls for ischemia in propensity adjusted (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.) smoking in propensity score adjusted

**Outcome 2/3**

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 < \_84\_% (select an adequate %) and no description of those lost

d) no statement

**Eurich et al. 2012**

**Selection 2/4**

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 – CAP patients who present to hospital

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 2/2**

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

✓a) study controls for \_\_IHD\_\_ (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.) smoking

**Outcome 3/3**

- 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

### **Vila-Corcoles et al. 2014 & Ochoa-Gondar et al. 2014**

#### **Selection 3/4**

- 1) Representativeness of the exposed cohort
  - ✓a) truly representative of the average \_\_exposed elderly\_\_\_\_ (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 2/2**

- 1) Comparability of cohorts on the basis of the design or analysis
  - ✓a) study controls for \_\_ischemia\_\_\_\_ (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.) smoking

#### **Outcome 3/3**

- 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

## **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.

**Meyers et al. 2004**

#### **Selection 3/4**

- 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 1/2**

- 1) Comparability of cases and controls on the basis of the design or analysis
  - ✓a) study controls for smoking only (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.) Unsure if ischaemic history captured or adjusted for

#### **Exposure 2/3**

- 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

**Lamontagne et al . 2008**

#### **Selection 2/4**

- 1) Is the case definition adequate?
  - a) yes, with independent validation \*
  - ✓b) yes, eg record linkage or based on self reports – ICD9 code in medical record
  - 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 1/2**

- 1) Comparability of cases and controls on the basis of the design or analysis
  - ✓a) study controls for \_nil ischemic history\_\_\_\_ (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.) smoking not captured

## **Exposure 3/3**

- 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

**Siriwardena et al. 2010**

## **Selection 2/4**

- 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 2/2**

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

- ✓a) study controls for \_\_ ischaemic history \_\_\_\_ (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.) smoking

## **Exposure 3/3**

### **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

**Siriwardena et al. 2014**

## **Selection 3/4**

### **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 2/2**

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

- ✓a) study controls for \_\_ Stroke or TIA \_\_\_\_ (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.) smoking

## **Exposure 3/3**

### **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