

**Appendix E: Methodological Quality- Diagnostic test accuracy**

**Diagnostic Test: DSM III-R**

**DSM III-R versus DSM IV**

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<b>Overall Assessment</b>
Cole 2003	Representative? no; case control study: patients with delirium (DSM III-R) and controls without; patients given tests  Selection Criteria Described? unclear; case control study, some details	Is ref std OK? unclear; reference standard appeared to be only given to patients with SPMSQ score ≥3 or delirium symptoms in notes;® Is time between tests short enough? yes; ICD10 and reference standard based on same symptom assessment	All receive ref std? unclear; reference standard appeared to be only given to patients with SPMSQ score ≥3 or delirium symptoms in notes;  Same ref std? yes.	no; ICD10 and reference standard based on same symptom assessment	Is index test well described? no; very unclear - the study gave CAM to patients with SPMSQ score ≥3 or delirium symptoms in notes; then 10 CAM symptoms of delirium appeared	Same clinical data available? unclear® Uninterpretable/ Intermediate reported? no® Withdrawals explained? yes	—
Laurila 2003	Representative? yes  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? yes; criteria from both DSM IV and DSMIIIR included in one questionnaire	All receive ref std? yes; whole sample  Same ref std? yes.	no; criteria from both DSM IV and DSMIIIR included in one questionnaire	Is index test well described? no® Is ref std well described? no	Same clinical data available? unclear® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? N/A	—

## Appendix E: Methodological Quality- Diagnostic test accuracy

### DSM III-R versus DSM IV

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Laurila 2003	Represenatative? yes  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? yes; criteria from both DSM IV and DSMIIIR included in one questionnaire	All receive ref std? yes; whole sample  Same ref std? yes.	no; criteria from both DSM IV and DSMIIIR included in one questionnaire	Is index test well described? no® Is ref std well described? no	Same clinical data available? unclear® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? N/A	-

## Appendix E: Methodological Quality- Diagnostic test accuracy

### Diagnostic Test: DSM III

#### DSM III versus DSM IV

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Cole 2003	<p>Representative? no; case control study: patients with delirium (DSM III-R) and controls without</p> <p>Selection Criteria Described? unclear; case control study, some details</p>	<p>Is ref std OK? unclear; reference standard appeared to be only given to patients with SPMSQ score <math>\geq 3</math> or delirium symptoms in notes<sup>Ⓢ</sup></p> <p>Is time between tests short enough? yes; CAM was part of reference standard</p>	<p>All receive ref std? unclear; reference standard appeared to be only given to patients with SPMSQ score <math>\geq 3</math> or delirium symptoms in notes;</p> <p>Same ref std? yes.</p>	<p>no; reference standard derived from CAM</p>	<p>Is index test well described? yes<sup>Ⓢ</sup></p> <p>Is ref std well described? unclear; the study gave CAM to patients with SPMSQ score <math>\geq 3</math> or delirium symptoms in notes; then 10 CAM symptoms of</p>	<p>Same clinical data available? unclear<sup>Ⓢ</sup></p> <p>Uninterpretable/ Intermediate reported? N/A<sup>Ⓢ</sup></p> <p>Withdrawals explained? yes</p>	-
Laurila 2003	<p>Representative? yes</p> <p>Selection Criteria Described? yes</p>	<p>Is ref std OK? yes<sup>Ⓢ</sup></p> <p>Is time between tests short enough? yes; same data used for both tests</p>	<p>All receive ref std? yes; whole sample</p> <p>Same ref std? yes.</p>	<p>no; criteria for both methods of assessment included in one questionnaire</p>	<p>Is index test well described? no<sup>Ⓢ</sup></p> <p>Is ref std well described? no</p>	<p>Same clinical data available? unclear<sup>Ⓢ</sup></p> <p>Uninterpretable/ Intermediate reported? N/A<sup>Ⓢ</sup></p> <p>Withdrawals explained? N/A</p>	-

## Appendix E: Methodological Quality- Diagnostic test accuracy

### Diagnostic Test: ICD 10

#### ICD 10 versus DSM IV

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Laurila 2003	Representative? yes; patients over 70 years, though  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? yes; same data used for both tests	All receive ref std? yes; whole sample  Same ref std? yes.	no; criteria from both DSM IV and ICD included in one questionnaire	Is index test well described? yes® Is ref std well described? yes	Same clinical data available? unclear® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? N/A	-
Laurila 2004	Representative? yes  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? unclear	All receive ref std? yes; whole sample  Same ref std? yes.	no	Is index test well described? no® Is ref std well described? no	Same clinical data available? unclear® Uninterpretable/ Intermediate reported? unclear® Withdrawals explained? N/A	-

## Appendix E: Methodological Quality- Diagnostic test accuracy

### ICD 10 versus DSM-III-R

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Cole 2003	<p>Representative? no; case control study: patients with delirium (DSM III-R) and controls without; patients given tests</p> <p>Selection Criteria Described? unclear; case control study, some details</p>	<p>Is ref std OK? unclear; reference standard appeared to be only given to patients with SPMSQ score <math>\geq 3</math> or delirium symptoms in notes;®</p> <p>Is time between tests short enough? yes; ICD10 and reference standard based on same symptom assessment</p>	<p>All receive ref std? unclear; reference standard appeared to be only given to patients with SPMSQ score <math>\geq 3</math> or delirium symptoms in notes;</p> <p>Same ref std? yes.</p>	<p>no; ICD10 and reference standard based on same symptom assessment</p>	<p>Is index test well described? no; very unclear - the study gave CAM to patients with SPMSQ score <math>\geq 3</math> or delirium symptoms in notes; then 10 CAM symptoms of delirium appeared</p>	<p>Same clinical data available? unclear®</p> <p>Uninterpretable/ Intermediate reported? no®</p> <p>Withdrawals explained? yes</p>	-

## Appendix E: Methodological Quality- Diagnostic test accuracy

### Diagnostic Test: CAM short version

#### CAM short version versus DSM IV

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Gonzalez 2004	Representative? yes; patients selected to be over 65 years, though; translation of test  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? yes; possibly 30 min between the CAM evaluation and the DSMIV evaluation	All receive ref std? yes; whole sample  Same ref std? yes.	yes	Is index test well described? yes® Is ref std well described? yes	Same clinical data available? yes® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? N/A	+
Hestermann 2009	Representative? yes; Older people (mean age 83 years); all scored 3 points or more on SPMSQ  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? yes; <= 3 hours	All receive ref std? yes; whole sample  Same ref std? yes.	yes	Is index test well described? yes® Is ref std well described? yes	Same clinical data available? yes® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? N/A	+

## Appendix E: Methodological Quality- Diagnostic test accuracy

### CAM short version versus DSM IV

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessment</i>
Laurila 2002	Representative? yes; patients over 70 years, though  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? yes	All receive ref std? yes  Same ref std? yes.	yes	Is index test well described? yes® Is ref std well described? yes	Same clinical data available? yes® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? yes	+
Radtke 2008	Representative? no; Patients were in the recovery room following general anaesthesia. The GDG considered the ordinary version of CAM to be inappropriate for this environment  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? yes; seemed to be carried out at the same time, when patient ready to leave recovery room	All receive ref std? yes; whole sample  Same ref std? yes.	yes	Is index test well described? yes® Is ref std well described? no	Same clinical data available? unclear® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? N/A	-

## Appendix E: Methodological Quality- Diagnostic test accuracy

### CAM short version versus DSM-IIIIR

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessment</i>
Laurila 2002	Representative? yes; patients over 70 years, though  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? yes	All receive ref std? yes  Same ref std? yes.	yes	Is index test well described? yes® Is ref std well described? yes	Same clinical data available? yes® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? yes	+
Pompei 1995	Representative? unclear; patients over 65 years, and about half of those eligible not enrolled  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? no; within 24hour of index test	All receive ref std? no; only those with acute changes in mental status in any of the index tests [CAC, Vigilance A, Digit span test, CAM] were referred to the clinician for the reference standard  Same ref std? yes.	yes	Is index test well described? no® Is ref std well described? no	Same clinical data available? yes; RA conducting the index test had access to medical records and nurses® Uninterpretable/ Intermediate reported? no® Withdrawals explained? no; .9% missing data and were excluded from the analysis	-

## Appendix E: Methodological Quality- Diagnostic test accuracy

### CAM short version versus DSM-III

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK? Is time between tests short enough? yes</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Laurila 2002	Representative? yes; patients over 70 years, though  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? yes	All receive ref std? yes  Same ref std? yes.	yes	Is index test well described? yes® Is ref std well described? yes	Same clinical data available? yes® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? yes	+

## Appendix E: Methodological Quality- Diagnostic test accuracy

### Diagnostic Test: CAM long version

#### CAM long version versus DSM IV

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Fabbri 2001	Representative? yes; Portugese emergency department may not necessarily be representative of UK population; translation of test  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? yes; period between the two assessments was never longer than 2 hours	All receive ref std? yes; whole sample  Same ref std? yes.	yes	Is index test well described? yes® Is ref std well described? yes	Same clinical data available? unclear® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? yes; 41/100 who were enrolled were not included in the study because of length of time btw assessments were >2h.	+
Yates 2009	Representative? yes; patients older: mean age 82 years  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? unclear	All receive ref std? yes; whole sample  Same ref std? yes.	yes	Is index test well described? yes® Is ref std well described? no	Same clinical data available? unclear® Uninterpretable/ Intermediate reported? unclear® Withdrawals explained? yes	-

## Appendix E: Methodological Quality- Diagnostic test accuracy

### CAM long version versus DSM-IIIIR

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessment</i>
Cole 2003	<p>Representative? no; case control study: patients with delirium (DSM IIIIR) and controls without</p> <p>Selection Criteria Described? unclear; case control study, some details</p>	<p>Is ref std OK? unclear; reference standard appeared to be only given to patients with SPMSQ score <math>\geq 3</math> or delirium symptoms in notes<sup>Ⓢ</sup></p> <p>Is time between tests short enough? yes; CAM was part of reference standard</p>	<p>All receive ref std? unclear; reference standard appeared to be only given to patients with SPMSQ score <math>\geq 3</math> or delirium symptoms in notes;</p> <p>Same ref std? yes.</p>	no; reference standard derived from CAM	<p>Is index test well described? yes<sup>Ⓢ</sup></p> <p>Is ref std well described? unclear; the study gave CAM to patients with SPMSQ score <math>\geq 3</math> or delirium symptoms in notes; then 10 CAM symptoms of</p>	<p>Same clinical data available? unclear<sup>Ⓢ</sup></p> <p>Uninterpretable/ Intermediate reported? N/A<sup>Ⓢ</sup></p> <p>Withdrawals explained? yes</p>	-

## Appendix E: Methodological Quality- Diagnostic test accuracy

### CAM long version versus Consensus diagnosis (incl DSM IV and CAM)

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Zou 1998	Representative? yes; all patients cognitively impaired SPMSQ at least 3  Selection Criteria Described? yes	Is ref std OK? unclear; consensus diagnosis® Is time between tests short enough? unclear; time between the assessments varied between 30 min to 8 h	All receive ref std? yes  Same ref std? yes.	no; consensus reference standard was based on DSM IV and index test index test as part of the reference standard; results for DSM IV as a separate reference standard were not	Is index test well described? yes® Is ref std well described? yes	Same clinical data available? yes® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? N/A	-

## Appendix E: Methodological Quality- Diagnostic test accuracy

### Diagnostic Test: CAM

#### CAM versus DSM-IIIR

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Rockwood 1994	Representative? yes  Selection Criteria Described? unclear; sampling not described	Is ref std OK? yes; although only mentioned in the abstract® Is time between tests short enough? unclear; appeared to be done at the same time	All receive ref std? yes; 52 patients [half of whom had a positive result in a previous assessment] were interviewed by the physician  Same ref std? yes.	no; the study reported that physician both completed the CAM and recorded whether the patient was delirious using the DSM IIIR criteria	Is index test well described? no® Is ref std well described? no	Same clinical data available? unclear® Uninterpretable/ Intermediate reported? unclear® Withdrawals explained? unclear	-
Rolfson 1999	Representative? no; Patients were undergoing CABG surgery and had a low proportion with dementia  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? unclear	All receive ref std? yes  Same ref std? yes.	yes	Is index test well described? yes® Is ref std well described? yes; limited details	Same clinical data available? unclear® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? N/A	-

## Appendix E: Methodological Quality- Diagnostic test accuracy

### CAM versus CAM

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessment</i>
Monette 2001	Representative? unclear; Following first stage CAM assessment by the nurse, patients were selected from those classified as having probable delirium and no delirium; the CAM negative group had a higher proportion of cognitively impaired people	Is ref std OK? yes® Is time between tests short enough? yes; geriatrician had to evaluate pt within 3 hours of 1st intv assessment and second assessment was simultaneous	All receive ref std? yes; for 2nd assessment  Same ref std? yes.	unclear; Lay interviewer completed a second CAM checklist [after observing the geriatrician interview] so index test was part of the ref test	Is index test well described? yes® Is ref std well described? unclear	Same clinical data available? unclear® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? N/A	-

## Appendix E: Methodological Quality- Diagnostic test accuracy

### Diagnostic Test: CAM ICU

#### CAM ICU versus DSM IV

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Ely 2001	Representative? unclear; Severely ill, mechanically ventilated patients  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? unclear; possibly 3 hours between ratings but unclear if this is between the 2 nurses or if btw the nurses and the geriatricians	All receive ref std? yes  Same ref std? yes.	yes	Is index test well described? yes® Is ref std well described? yes	Same clinical data available? yes® Uninterpretable/ Intermediate reported? yes® Withdrawals explained? yes; 15 patients excluded because comatose throughout the study period.	+
Ely 2001b	Representative? yes  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? yes; less than or equal to 4 hours between assessments [within 1.5hours average]	All receive ref std? yes; whole sample  Same ref std? yes.	yes	Is index test well described? yes® Is ref std well described? yes	Same clinical data available? yes® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? yes; Of the 48 pts enrolled, 5 remained comatose and 5 died and excluded from analysis	+

## Appendix E: Methodological Quality- Diagnostic test accuracy

### CAM ICU versus DSM IV

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessment</i>
Lin 2004	Representative? yes; pts with severe cog impairment excluded; mechanically ventilated patients  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? yes; conducted within 3h	All receive ref std? yes; whole sample  Same ref std? yes.	yes	Is index test well described? yes® Is ref std well described? no	Same clinical data available? yes® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? N/A	+

## Appendix E: Methodological Quality- Diagnostic test accuracy

### Diagnostic Test: DRS-R- 98

#### DRS-R- 98 versus DSM IV

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Andrew 2009	<p>Represenatative? no; older patients; mean age 81 years; convenience sample; 30% were outpatients of whom 10% were assessed at home</p> <p>Selection Criteria Described? no; Exclusion criteria not reported</p>	<p>Is ref std OK? yes<sup>Ⓢ</sup></p> <p>Is time between tests short enough? no; The study reported 'clinical assessments &amp; DRS-R98 ratings were not necessarily done on the same day' but did not report what proportion of patients did not get assessed the same day</p>	<p>All receive ref std? yes; whole sample</p> <p>Same ref std? yes.</p>	yes	<p>Is index test well described? yes<sup>Ⓢ</sup></p> <p>Is ref std well described? no</p>	<p>Same clinical data available? yes<sup>Ⓢ</sup></p> <p>Uninterpretable/ Intermediate reported? N/A<sup>Ⓢ</sup></p> <p>Withdrawals explained? yes; study reported less than 1% item values were missing and these were replaced with the 1.5 (middle of the 0 to 3 range)</p>	-

## Appendix E: Methodological Quality- Diagnostic test accuracy

### Diagnostic Test: Clock Drawing

#### Clock Drawing versus DSM-IIIR

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Rolfson 1999	<p>Representative? no; Patients were undergoing CABG surgery and had a low proportion with dementia</p> <p>Selection Criteria Described? yes</p>	<p>Is ref std OK? yes<sup>Ⓢ</sup> Is time between tests short enough? unclear</p>	<p>All receive ref std? yes Same ref std? yes.</p>	yes	<p>Is index test well described? yes<sup>Ⓢ</sup> Is ref std well described? yes; limited details</p>	<p>Same clinical data available? unclear<sup>Ⓢ</sup> Uninterpretable/ Intermediate reported? N/A<sup>Ⓢ</sup> Withdrawals explained? N/A</p>	+

## Appendix E: Methodological Quality- Diagnostic test accuracy

### Diagnostic Test: MMSE

#### MMSE versus DSM-III-R

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK? Is time between tests short enough? unclear</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Rolfson 1999	Repreenatative? no; Patients were undergoing CABG surgery and had a low proportion with dementia  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? unclear	All receive ref std? yes  Same ref std? yes.	yes	Is index test well described? yes® Is ref std well described? yes; limited details	Same clinical data available? unclear® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? N/A	-

## Appendix E: Methodological Quality- Diagnostic test accuracy

### MMSE versus CAM + interview by experienced clinician

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
O'Keefe 2005	<p>Representative? yes</p> <p>Selection Criteria Described? yes</p>	<p>Is ref std OK? unclear; CAM and experienced clinician interview<sup>Ⓢ</sup></p> <p>Is time between tests short enough? unclear; conducted on the same days</p>	<p>All receive ref std? yes</p> <p>Same ref std? yes.</p>	yes	<p>Is index test well described? no<sup>Ⓢ</sup></p> <p>Is ref std well described? yes</p>	<p>Same clinical data available? yes<sup>Ⓢ</sup></p> <p>Uninterpretable/ Intermediate reported? no<sup>Ⓢ</sup></p> <p>Withdrawals explained? yes; 17.5% [35/200] pts did not have an assessment on day 6, due to death , discharge or error</p>	+

## Appendix E: Methodological Quality- Diagnostic test accuracy

### Diagnostic Test: AMT

#### AMT versus DSM-III

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Ni Chonchubhair 1995	Representative? yes; age greater than 65 years; surgical population  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? unclear; index test: day before and 3rd day after surgery; on the 3rd post day DAS (on the DSMIII criteria) used; unclear time period between the index tests and reference standard assessments	All receive ref std? yes; whole sample  Same ref std? yes.	yes	Is index test well described? no® Is ref std well described? no	Same clinical data available? unclear® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? N/A	+
	Representative? yes; age greater than 65 years; surgical population  Selection Criteria Described? yes	Is ref std OK? yes® Is time between tests short enough? unclear; unclear time preiod between the index test and reference standard on the 3rd postop day	All receive ref std? yes; whole sample  Same ref std? yes.	yes	Is index test well described? no® Is ref std well described? no	Same clinical data available? unclear® Uninterpretable/ Intermediate reported? N/A® Withdrawals explained? N/A	+

## Appendix E: Methodological Quality- Diagnostic test accuracy

### Diagnostic Test: DI

#### DI versus DSM-III-R

<i>Study</i>	<i>Representative? Selection criteria described?</i>	<i>Reference standard OK?</i>	<i>Verification bias (partial and differential)</i>	<i>Reference Standard independent of index test?</i>	<i>Execution of tests sufficient detail to replicate?</i>	<i>Same Clinical Data? Intermediate tests reported? Withdrawals</i>	<i>Overall Assessem ent</i>
Cole 2003	<p>Representative? no; case control study: patients with delirium (DSM III-R) and controls without</p> <p>Selection Criteria Described? unclear; case control study, some details</p>	<p>Is ref std OK? unclear; reference standard appeared to be only given to patients with SPMSQ score <math>\geq 3</math> or delirium symptoms in notes<sup>⊗</sup></p> <p>Is time between tests short enough? yes; Index test within 24h of reference standard</p>	<p>All receive ref std? unclear; reference standard appeared to be only given to patients with SPMSQ score <math>\geq 3</math> or delirium symptoms in notes</p> <p>Same ref std? yes.</p>	yes	<p>Is index test well described? yes<sup>⊗</sup></p> <p>Is ref std well described? unclear; the study gave CAM to patients with SPMSQ score <math>\geq 3</math> or delirium symptoms in notes; then 10 CAM symptoms of</p>	<p>Same clinical data available? unclear<sup>⊗</sup></p> <p>Uninterpretable/ Intermediate reported? N/A<sup>⊗</sup></p> <p>Withdrawals explained? yes</p>	-