

SUPPLEMENTARY MATERIAL

Supplementary Table 1. Evaluation of individual study quality with The Newcastle-Ottawa Scale (NOS) for assessing the quality of non-randomized studies in meta-analyses

	Halg <i>et al.</i> , 2008	Romeo <i>et al.</i> , 2003	Brosky <i>et al.</i> , 2003	Koutouzis & Wennstrom 2007	Krekmanov <i>et al.</i> ,2007	Jemt & Book 1997
Selection						
1) Representativeness of the exposed cohort a) Truly representative* b) Somewhat representative * c) Selected group d) No description of the derivation of the cohort	b	b	c	b	b	a
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	a	a	c	a	a	a
3) Ascertainment of exposure a) Secure record (e.g., surgical record)* b) Structured interview * c) Written self report d) No description e) Other	a	a	a	a	a	a
4) Demonstration that outcome of interest was not present at start of study a) Yes * b) No	a	a	a	b	a	b
Comparability						
1) Comparability of cohorts on the basis of the design or analysis controlled for confounders a) The study controls for main confounders * b) Study controls for other factors * c) Cohorts are not comparable on the basis of the design or analysis controlled for confounders	-	x	-	-	-	-
Outcome						
1) Assessment of outcome a) Independent blind assessment *b) Record linkage * c) Self report d) No description e) Other	a	a	b	b	d	b
2) Was follow-up long enough for outcomes to occur a) Yes *b) No	a	a	a	a	a	a
3) Adequacy of follow-up of cohorts a) Complete follow up- all subject accounted for* b) Subjects lost to follow up unlikely to introduce bias-number lost less than or equal to 20% or description of those lost suggested no different from those followed.* c) Follow up rate less than 80% and no description of those lost d) No statement	a	a	a	a	a	a
Total number of stars	7	8	6	6	6	6
Quality rating according to guideline†	Good	Good	Fair	Poor	Poor	Poor

†Thresholds for converting the Newcastle-Ottawa scales to AHRQ standards (good, fair, and poor): **Good quality:** 3 or 4 stars in selection domain AND 1 or 2 stars in comparability domain AND 2 or 3 stars in outcome/exposure domain **Fair quality:** 2 stars in selection domain AND 1 or 2 stars in comparability domain AND 2 or 3 stars in outcome/exposure domain **Poor quality:** 0 or 1 star in selection domain OR 0 stars in comparability domain OR 0 or 1 stars in outcome/exposure domain

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