

Risk of bias (quality) assessment

All the literature retrieved was critically appraised using common variables on an individual basis. Independent reviewers appraised methodological quality and risk of bias according to the Newcastle-Ottawa Scale (NOS) that has validity for use in cohort studies Wells et al. An eight-item scale with three quality parameters (i) selection, (ii) comparability and (iii) outcome. We rated the quality of the studies (good, fair, and poor) by allocating each domain with stars in this manner:

- A **Good** quality score was awarded 3 or 4 stars in selection, 1 or 2 in comparability and 2 or 3 stars in outcomes.
- A **Fair** quality score was awarded 2 stars in selection, 1 or 2 stars in comparability, and 2 or 3 stars in outcomes.
- A **Poor** quality score was awarded 0 or 1 star(s) in selection, 0 stars in comparability, and 0 or 1 star(s) in outcomes domain (Wells et al., 2000)

Newcastle-Ottawa Scale Quality Assessment of included studies (TABLE X)

Author(s)	Selection				Comparability		Outcome		
	Representativeness of cohort	Selection of non-exposed	Ascertainment of exposure	Outcome of interest not present at start	Control for age and sex	For additional factors	Assessment of outcome	Length of follow-up	Adequacy of follow up
Jinnin, R et al (2016)	*	-	*	*		**	-	*	*
Leikanger, E & Larsson, B (2012)	*	-	-	*		*	-	*	*
Goodyer, I.M & Herbert, J (2003)	*	-	*	*		**	-	*	*
Fan, F et al (2016)	*	-	*	*		*	-	*	*
Yang, H-J et al (2008)	*	-	-	*		**	-	*	*

Wells, G., Shea, B., O'Connell, D., Peterson, J, Welch, V., Loso, M., Tugwell, P. (2000). The Newcastle-ottawa scale (NOS) for assessing the quality of nonrandmoised studies in meta-analyses. Ottawa, ON, Canada: Ottawa Hospital Research Institute.