Table S2. Quality scores of case-control and cohort studies using Newcastle-Ottawa Scale.

Methodological quality of studies included in the final analysis based on the Newcastle-Ottawa Scale for assessing the quality of Casecontrol studies and Prospective Cohort studies

	Selection				Comparability	Exposure			
Case-control studies(n=12)	Adequate definition of cases	Representat iveness of cases	Selection of controls	Definition of controls	Control for important factor or additional factor	Ascertainment of exposure(blinding)	Same method of ascertainment for participants	Nonresponse rate	Total
Persson GR et al., 2003	1	1	1	1	2	1	1	1	9
Cueto A et al., 2005	0	1	0	0	2	1	1	1	6
Andriankaja OM et al., 2006	1	0	1	1	2	1	1	1	8
Andriankaja OM et al., 2007(Male)	1	1	1	1	2	1	1	1	9
Andriankaja OM et al., 2007(Female)	1	1	1	1	2	1	1	1	9
Renvert S et al.,2010	1	1	1	1	2	1	1	1	9
Holmlund A et al., 2011	1	1	1	1	2	1	1	1	9

Khosravi Samani M et al., 2013	1	1	0	0	2	1	1	1	7
Li P et al., 2013	1	1	1	1	2	1	1	1	9
Willershausen I et al.,2014	1	1	1	1	2	1	1	1	9
Kodovazenitis G, et al., 2014	1	1	0	1	2	1	1	1	8
Rydén L et al., 2016	1	1	1	1	2	1	1	1	9
	Selection				Comparability		Outcome		
Prospective Cohort studies(n=4)	Representativeness of the exposed cohort	Selection of non-exposed cohort	Ascertainment of exposure	Outcome of interest was not present at start of study	Control for important factor or additional factor	Assessment of outcome	Follow-up long enough for outcomes to occur	Adequacy of follow-up of cohorts	Total
Cohort	of the exposed	non-exposed		interest was not present at	important factor or		enough for outcomes to	follow-up of	Total
Cohort studies(n=4) Joshipura KJ	of the exposed cohort	non-exposed	of exposure	interest was not present at	important factor or additional factor		enough for outcomes to occur	follow-up of	
Cohort studies(n=4) Joshipura KJ et al., 1996 Howell TH et	of the exposed cohort	non-exposed	of exposure	interest was not present at start of study	important factor or additional factor		enough for outcomes to occur	follow-up of	7