Supplementary material:

Table S1. Quality assessment of studies using the Newcastle–Ottawa Quality Assessment Scale for cohort studies.

	Selection				Comparability	Outcome			
Author, year	**Representativeness of the exposed cohort**	**Selection of the non-exposed cohort**	**Ascertainment of exposure**	**No outcome of interest at start of study**	**A: Study controls for age and/or BMI B: Study controls for other confounders**	**A: doctor's diagnosis OR objective measurements B: parent/self-reported doctor's diagnosis OR use of medication**	**Follow-up long enough for outcomes**	**Adequacy of follow up of cohorts**	**Total scores**
Capula et al. 2013	*	*	*	*	**	*	*	*	9*
Karmon et al. 2009	*	*	*	*		*	*	*	7*
Moses et al. 1995	*	*	*	*		*	*	*	7*
Waters et al. 2016	*	*	*	*	**	*	*	*	9*
Gu et al. 2019	*	*		*	**	*	*	*	8*
Anderberg et al. 2010	*	*		*	**	*	*	*	8*
Avalos et al. 2013	*	*	*	*		*	*	*	7*
Wahabi et al. 2017	*	*	*	*	**	*	*	*	9*
Meek et al. 2015	*	*	*	*	**	*	*	*	9*
Boghossian et al. 2014	*	*	*	*	**	*	*	*	9*
Kawakita et al. 2017	*	*	*	*		*	*	*	7*
Brand et al. 2018	*	*	*	*	**	*	*	*	9*
Kaul et al. 2014	*	*	*	*	**	*	*	*	9*

	Selection				Comparability	Outcome			
Author, year	**Representativeness of the exposed cohort**	**Selection of the non-exposed cohort**	**Ascertainment of exposure**	**No outcome of interest at start of study**	**A: Study controls for age and/or BMI B: Study controls for other confounders**	**A: doctor's diagnosis OR objective measurements B: parent/self-reported doctor's diagnosis OR use of medication**	**Follow-up long enough for outcomes**	**Adequacy of follow up of cohorts**	**Total scores**
Kgosidialwa et al. 2015	*	*	*	*		*	*	*	7*
Donovan et al. 2017	*	*	*	*	*	*	*	*	8*
Kieffer et al., 1999	*	*	*	*	*	*	*	*	8*
Ekeroma et al. 2014	*	*	*	*	*	*	*	*	8*
Aung et al. 2015	*		*	*		*	*	*	6*
Gortazar et al. 2018	*	*	*	*	**	*	*	*	9*
Zamstein et al. 2018	*	*	*	*	**	*	*	*	9*
Hedderson et al. 2003	*	*	*	*	*	*	*	*	8*
Hosseini et al. 2018	*	*	*	*	*	*	*	*	8*
Hosseini et al. 2018	*	*	*	*	**	*	*	*	9*
Jain et al. 2016	*	*		*		*	*	*	6*
Kun et al. 2010	*	*	*	*		*	*	*	7*
Leybovitz et al. 2018	*	*	*	*	*	*	*	*	8*
Jacobson et al. 1989	*	*	*	*		*	*	*	7*
Pan et al. 2015	*	*	*	*	*	*	*	*	8*

	Selection				Comparability	Outcome			
Author, year	**Representativeness of the exposed cohort**	**Selection of the non-exposed cohort**	**Ascertainment of exposure**	**No outcome of interest at start of study**	**A: Study controls for age and/or BMI B: Study controls for other confounders**	**A: doctor's diagnosis OR objective measurements B: parent/self-reported doctor's diagnosis OR use of medication**	**Follow-up long enough for outcomes**	**Adequacy of follow up of cohorts**	**Total scores**
Son et al. 2014	*	*	*	*	**	*	*	*	9*
Katterfeld et al. 2011	*	*	*	*	**	*	*	*	9*
Sacks et al. 2015	*	*	*	*	**	*	*	*	9*
Oster et al. 2014	*	*		*	*	*	*	*	7*
Soliman et al. 2018	*	*		*		*	*	*	6*
Xiong et al. 2001	*	*	*	*	*	*	*	*	8*
Sugaya et al., 2000	*	*	*	*		*	*	*	7*
Nerenberg et al. 2013	*	*	*	*	**	*	*	*	9*
Edith et al. 2006	*	*	*	*	*	*	*	*	8*
Goswami et al. 2014	*	*		*		*	*	*	6*
Ellerbe et al. 2013	*	*	*	*	*	*	*	*	8*
Sletner et al. 2017	*	*	*	*	*	*	*	*	8*
Zeki et al. 2018	*	*		*	**	*	*	*	8*
Hoorn et al. 2002	*	*	*	*		*	*	*	7*
Su et al. 2019	*	*	*	*	**	*	*	*	9*
Metcalfe et al. 2017	*	*	*	*	*	*	*	*	8*

	Selection				Comparability	Outcome			
Author, year	Representativeness of the exposed cohort	Selection of the non-exposed cohort	Ascertainment of exposure	No outcome of interest at start of study	A: Study controls for age and/or BMI B: Study controls for other confounders	A: doctor's diagnosis OR objective measurements B: parent/self-reported doctor's diagnosis OR use of medication	Follow-up long enough for outcomes	Adequacy of follow up of cohorts	Total scores
Car et al. 2011	*	*	*	*	*	*	*	*	8*
Lamminpää et al. 2014	*	*	*	*	*	*	*	*	8*
Black et al. 2010	*	*	*	*	**	*	*	*	9*

Table **S2.** Quality assessment of included studies using the Newcastle–Ottawa Quality Assessment Scale for cross-sectional study.

	Selection				Comparability	Outcome		
Author, year	Representativeness of the samples	Sample size	Non-responders	Ascertainment of the exposure (risk factor)	A: study controls for age and/or BMI B: control for any additional factor	Assessment of the outcome a) Independent blind assessment. ** b) Record linkage. ** c) Self report. *	Statistical test	Total scores
Erjavec et al. 2016	*		*	*		**	*	6*
Shand et al. 2008	*		*	*	**	**	*	8*

A:

Author, year	Bias in assessment of exposure (Risk factor)	Bias in development of outcome of interest in case and controls	Bias in selection of cases	Bias in selection of controls	Bias in control of prognostic variable (without case and control matching or adjustment in statistical methods)
Erjavec et al., 2016	●	●	●	●	●
Shand et al., 2008	●	●	●	●	●

● Definitely No (low risk of bias) ● Probably no

● Definitely yes (high risk of bias) ● Probably Yes

B:.

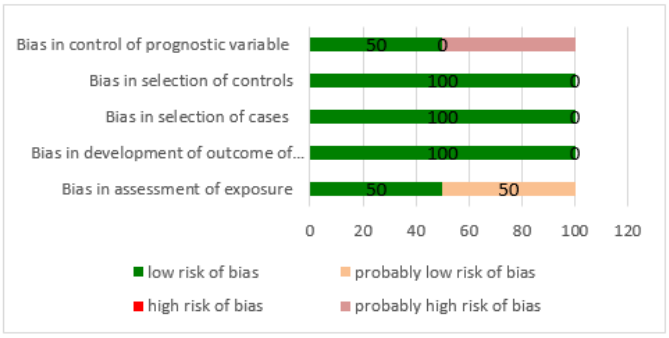

Figure S1. (A and B) Risk of bias in cross-sectional studies.

A:

First Author, year	Bias in selection of exposed and non-exposed cohorts	Bias in assessment of exposure	Bias in present of outcome of interest at start of study	Bias in control of prognostic variables (with matching or adjusting)	Bias in the assessment of the presence or absence of prognostic factors	Bias in the assessment of outcome	Bias in adequacy about follow up of cohorts
Capula et al. 2013	+	+	+	+	+	+	+
Karmon et al., 2009	+	+	+	?	+	+	+
Moses et al., 1995	+	+	+	?	+	?	+
Waters et al., 2016	+	?	+	+	+	+	+
Gu et al., 2019	+	+	+	+	+	+	+
Anderberg et al., 2010	+	?	+	+	+	+	+
Avalos et al., 2013	+	+	+	-	+	+	+
Wahabi et al., 2017	+	+	+	+	+	+	+
Meek et al., 2015	+	+	+	+	+	+	+
Boghossian et al., 2014	+	+	+	+	+	+	+
Kawakita et al., 2017	+	?	+	+	+	+	+
Brand et al.,2018	+	+	+	+	+	+	+
Kaul et al., 2014	+	+	+	+	+	+	+

First Author, year	Bias in selection of exposed and non-exposed cohorts	Bias in assessment of exposure	Bias in present of outcome of interest at start of study	Bias in control of prognostic variables (with matching or adjusting)	Bias in the assessment of the presence or absence of prognostic factors	Bias in the assessment of outcome	Bias in adequacy about follow up of cohorts
Kgosidialwa et al., 2015	+	+	+	?	+	+	+
Donovan et al., 2017	+	+	+	?	+	+	+
Kieffer et al., 1999	+	+	+	?	+	+	+
Ekeroma et al., 2014	+	+	+	?	+	+	+
Aung et al., 2015	+	?	+	-	+	+	+
Gortazar et al., 2018	+	+	+	+	+	+	+
Zamstein et al., 2018	+	+	+	+	+	+	+
Hedderson et al., 2003	+	+	+	?	+	+	+
Hosseini et al., 2018	+	+	+	?	+	+	+
Hosseini et al., 2018	+	+	+	+	+	+	+
Jain et al., 2016	+	?	+	?	+	+	+
Kun et al., 2010	+	+	+	?	+	+	+
Leybovitz-Haleluya et al., 2018	+	+	+	?	+	+	+
Jacobson et al., 1989	+	+	+	?	+	+	+

First Author, year	Bias in selection of exposed and non-exposed cohorts	Bias in assessment of exposure	Bias in present of outcome of interest at start of study	Bias in control of prognostic variables (with matching or adjusting)	Bias in the assessment of the presence or absence of prognostic factors	Bias in the assessment of outcome	Bias in adequacy about follow up of cohorts
Pan et al., 2015							
Son et al., 2014							
Katterfeld et al., 2011							
Sacks et al., 2015							
Soliman et al., 2018							
Xiong et al., 2001							
Oster et al., 2014							
Sugaya et al., 2000							
Nerenberg et al., 2013							
Edith et al., 2006							
Goswami Mahantaet al, 2014							
Ellerbe et al. 2013							
Sletner et al., 2017							

First Author, year	Bias in selection of exposed and non-exposed cohorts	Bias in assessment of exposure	Bias in present of outcome of interest at start of study	Bias in control of prognostic variables (with matching or adjusting)	Bias in the assessment of the presence or absence of prognostic factors	Bias in the assessment of outcome	Bias in adequacy about follow up of cohorts
Zeki et al., 2018							
Hoorn et al., 2002							
Su et al., 2019							
Metcalfe et al., 2017							
Car et al., 2011							
Lamminpää et al., 2014							
Black et al., 2010							

Definitely No (low risk of bias) — Probably no

Definitely yes (high risk of bias) — Probably Yes

B:

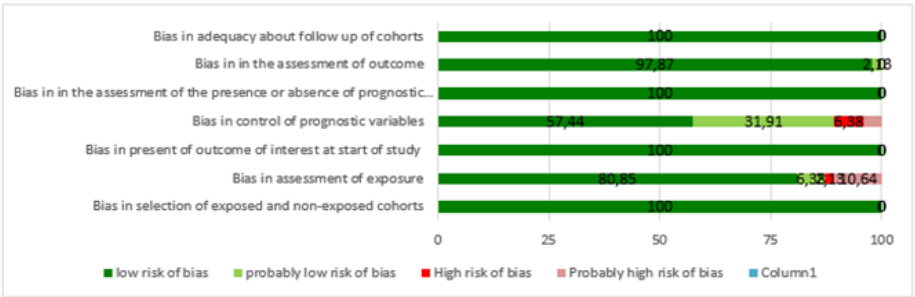

Figure S2. (A and B). Risk of bias in cohort studies.