

Supplementary Table 1. Quality Assessments of the Case-control Studies Included in the Meta-analysis According to the Newcastle-Ottawa Scale

Study	Selection			Comparability	Exposure			
	Is the case definition adequate?	Representativeness of the cases	Selection of controls	Definition of controls	Comparability of cases and controls on the basis of the design or analysis	Ascertainment of exposure	Same method of ascertainment for cases and controls	Non-response rate
Yang et al ³⁶ (2015)	*	*		*	**	*	*	*
Javadi and Shafikhani ³⁷ (2017)	*	*		*	*	*	*	*
Denver et al ³⁸ (2013)	*	*		*	**	*	*	
Kim et al ³⁹ (2018)	*	*	*	*	**	*	*	*

In the Newcastle-Ottawa Scale, if the study meets the option with star, it is denoted as a star. A study can be awarded a maximum of 1 star for each numbered item within the selection and exposure categories. A maximum of 2 stars can be given for comparability.

Supplementary Table 2. Quality Assessments of the Cohort Studies Included in the Meta-analysis According to the Newcastle-Ottawa Scale

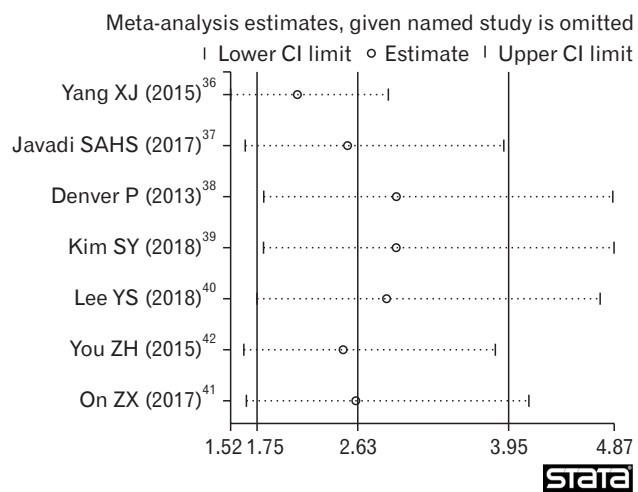
Study	Selection				Comparability	Outcome		
	Representativeness of the exposed cohort	Selection of the non- exposed cohort	Ascertainment of exposure	Demonstration that outcome of interest was not present at start of study	Comparability of cohorts on the basis of the design or analysis	Assessment of outcome	Was follow-up long enough for outcomes to occur	Adequacy of follow-up of cohorts
Lee et al ⁴⁰ (2018)	*	*	*		*	*		*
On et al ⁴¹ (2017)	*	*	*		**	*		*
You et al ⁴² (2015)	*	*	*	*	**	*	*	*

In the Newcastle-Ottawa Scale, if the study meets the option with star, it is denoted as a star. A study can be awarded a maximum of 1 star for each numbered item within the selection and outcome categories. A maximum of 2 stars can be given for comparability.

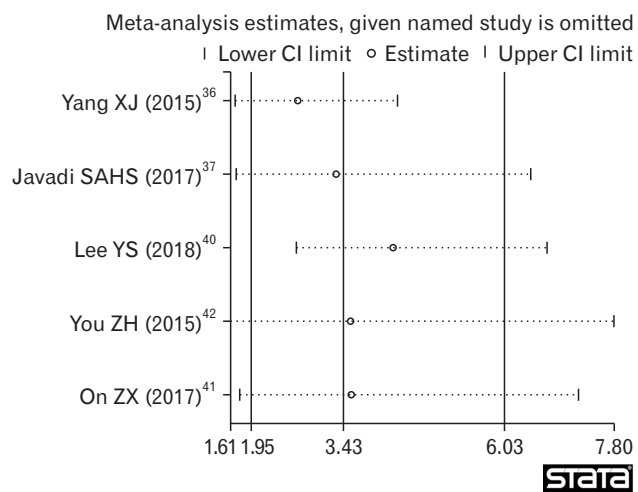
Supplementary Table 3. Quality Assessments of the Cross-sectional Studies Included in the Meta-analysis Based on the Agency for Healthcare Research and Quality Criteria

Study	Define the source of information (survey, record review)	List inclusion and exclusion criteria for exposed and unexposed subjects (cases and controls) or refer to previous publications	Indicate time period used for identifying patients	Indicate whether the subjects were consecutive if not population-based	Indicate if evaluators of subjective components of study were masked to other aspects of the status of the participants	Describe any assessments undertaken for quality assurance purposes (eg, test/retest of primary outcome measurements)	Explain any patient exclusions from analysis	Describe how confounding was assessed and/or controlled	If applicable, explain how missing data were handled in the analysis	Summarize patient response rates and completeness of data collection	Clarify what follow-up, if any, was expected and the percentage of patients for which incomplete data or follow-up was obtained
Song et al ^{†3} (2013)	*	*		*		*				*	*
Chou et al ^{†4} (2014)	*	*		*		*				*	*

In this table of Agency for Healthcare Research and Quality, if the study meets the option, it is denoted as a star. If a study does not match this option, no star is given.



Supplementary Figure 1. Sensitivity analysis of the associations between gastroesophageal reflux disease and depression.



Supplementary Figure 2. Sensitivity analysis of the associations between gastroesophageal reflux disease and anxiety.