A Systematic review and meta-analysis of risk factors for Sjögren's syndrome

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**Review question / Objective:** Population/problem: Sjögren's syndrome patients; Comparison: Healthy people; Outcome: Factors; Study Type: Observational studies (Cohort, Case Control and Cross-Sectional).

**Condition being studied:** Primary Sjögren's syndrome (pSS) is a chronic, inflammatory, autoimmune disease characterized by focal lymphocytic infiltration and progressive functional impairment of the exocrine glands. A large number of patients with pSS suffer from mild to moderate disease, which manifests as ocular and/or oral dryness, profound fatigue, myalgia and joint pain. Some patients with pSS also have other serious extraglandular complications, such as systemic injury of kidney, liver and lung. Despite increased understanding of pSS, its pathogenesis has not been confirmed.

**INPLASY registration number:** This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 01 March 2022 and was last updated on 01 March 2022 (registration number INPLASY202230005).

**INTRODUCTION**

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METHODS


Participant or population: Sjogren's syndrome patients.

Intervention: Factors.

Comparator: Healthy people.

Study designs to be included: Cohort, Case Control and Cross-Sectional.

Eligibility criteria: Observational studies that studied the risk factors of Sjögren's syndrome.

Information sources: Electronic databases: Pubmed, Embase, Web of science, Cochrane library, Clinical Trails, CNKI and so on; contact with authors; trial registers; conference papers.

Main outcome(s): Sjogren's syndrome, irrespective of the diagnostic criteria used.

Quality assessment / Risk of bias analysis: Cochrane Risk of Bias Assessment Tool.

Strategy of data synthesis: Grouping data will be based on study design, population characteristics and studies' risk measures (relative risk and odds ratio). Descriptive summaries of studies will be entered into tables and a narrative synthesis of evidence will be performed. A summary measure will be calculated using a random-effects model. Meta-analysis will not be conducted if clinical heterogeneity is high.

Subgroup analysis: If data permits, we will perform a subgroup analysis: such as smoking/non-smoking.

Sensitivity analysis: If sufficient available data are extracted, we will conduct sensitivity analysis to check the stability for the outcome results by excluding studies with high risk of bias.

Country(ies) involved: China.

Keywords: Sjogren's syndrome; risk; risk factors.

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