

# INPLASY

## The prevalence of gastrointestinal infection in inflammatory bowel disease : A systematic review and meta-analysis

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### ADMINISTRATIVE INFORMATION

**Support** - None.

**Review Stage at time of this submission** - The review has not yet started.

**Conflicts of interest** - None declared.

**INPLASY registration number:** INPLASY202630094

**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 25 March 2026 and was last updated on 25 March 2026.

### INTRODUCTION

**Review question / Objective** This systematic review and meta-analysis aims to investigate the prevalence of gastrointestinal infection in inflammatory bowel disease.

**Rationale** Inflammatory bowel disease is a chronic immune-mediated inflammation with recurrent episodes in gastrointestinal regions, encompassing ulcerative colitis and Crohn disease. Furthermore, relapsing this disease may be triggered by gastrointestinal infection, leading to poor prognosis.

This systematic review and meta-analysis aims to investigate the prevalence of gastrointestinal infection in inflammatory bowel disease.

**Condition being studied** Inflammatory bowel disease, Ulcerative colitis, Crohn disease, gastrointestinal infection.

### METHODS

**Search strategy** Two investigators will meticulously search potential published articles from two databases, MEDLINE and EMBASE, from initiation up to November 2024.

**Participant or population** Patients with inflammatory bowel disease and gastrointestinal infection.

**Intervention** Patients with inflammatory bowel disease receive stool testing for gastrointestinal infection.

**Comparator** None or patients without inflammatory bowel disease.

**Study designs to be included** We will include cross-sectional, prospective, retrospective cohort, or case-control studies.

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**Eligibility criteria** We will include published articles reporting the prevalence of enteric infection in inflammatory bowel disease patients. Eligible study designs are cross-sectional, prospective, retrospective cohort, or case-control studies.

**Information sources** MEDLINE and Embase.

**Main outcome(s)** - the prevalence of enteric infection in inflammatory bowel disease patients.

**Additional outcome(s)** None.

**Data management** The title and abstract screening will evaluate the potential articles, and then the articles will be screened through the full-text through Covidence. After that, the data extraction process from included articles will be performed. The disagreement will be discussed.

**Quality assessment / Risk of bias analysis** We will use the Newcastle-Ottawa Scale (NOS) for the quality assessment.

**Strategy of data synthesis** The random effect model will be analyzed. I<sup>2</sup> statistics and the Cochran's Q test will be analyzed to assess the heterogeneity from our analysis.

**Subgroup analysis** None.

**Sensitivity analysis** None.

**Language restriction** English.

**Country(ies) involved** Thailand.

**Other relevant information** None.

**Keywords** Inflammatory bowel disease; Ulcerative colitis; Crohn disease; gastrointestinal infection.

#### **Contributions of each author**

Author 1 - Suvijak Untaaveesup - conceptualization, methodology, interpretation, validation, resources, data curation, formal analysis, investigation, visualization, project administration, writing-original draft.

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