

The Implications of Using Monoclonal Antibodies for Ulcerative Colitis in Adult Patients with Diabetes: A Scoping Review

Amulya Surakanti, OMS-3; Sanjana Bhargava, OMS-3; Lindsay Trigg, OMS-3; Mallory Towe, OMS-3; Geethika Reddi, OMS-3; Nithya Devanathan, OMS-3; Karina Wang, OMS-3; Yiqun Sun, OMS-3; Brenda Isabel Nava, OMS-3; Luke Sampiere, OMS-3; Robin Jacobs, PhD, M.S.W, M.S, M.P.H

Background

- Ulcerative colitis (UC), a chronic inflammatory bowel disease (IBD) affecting the colon, is shown to have an increasing comorbidity with diabetes mellitus (DM)
- UC is often treated with corticosteroids and immunosuppressive agents, including monoclonal antibodies/biologics
- There is limited literature on the implications of using monoclonal antibodies for UC in adults with DM
- When considering management (e.g., medications, lifestyle, diet), it is imperative to understand how monoclonal antibodies specifically affect patients with UC and DM to optimize treatment and reduce complications

Objectives

- To investigate the implications of using monoclonal antibodies for UC in adults with DM

Results

Table #1: Summary of results

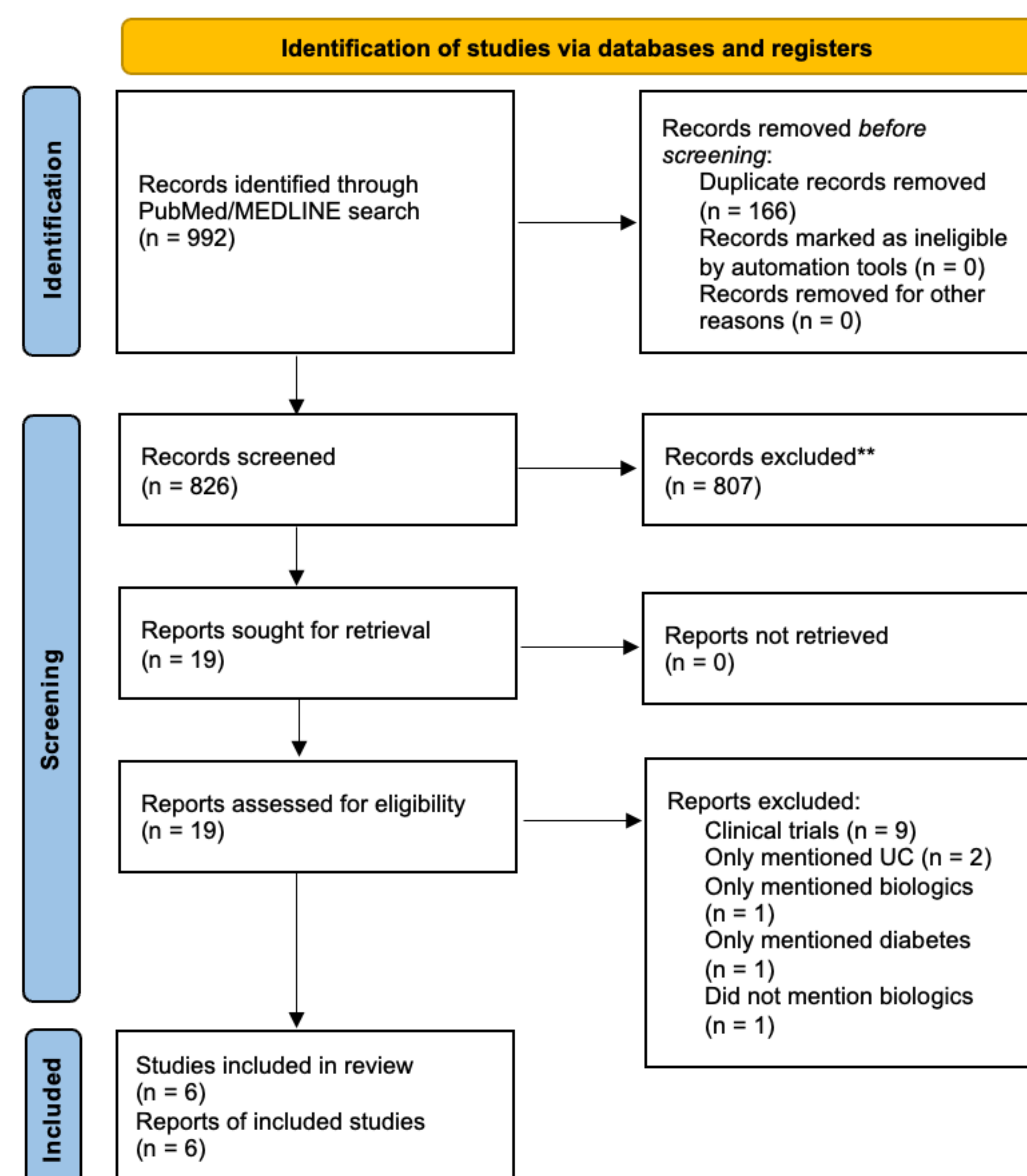
No. of Articles	Summary
4	Highlight the lack of information available to draw conclusions regarding biologic use in IBD + DM related to drug induced autoimmunity, comparing infection risks, outcomes, and risk of developing DM.
2	Present an increased risk of infection with IBD + DM that is not significantly affected with use of biologic treatments. One reporting for IBD + DM using immunomodulators, risk of infection is independently associated with corticosteroid use
5	Support a negative interplay in disease activity/severity and/or complications between concomitant UC and DM
5	Establish an increased risk of DM in IBD; 2 of the 5 articles additionally establish this risk in UC alone, for both Type 1 and Type 2 DM

Conclusion

- UC/IBD + DM shows increased health care utilization and worsened disease than UC/IBD alone, **but no significant difference in use of monoclonal antibody treatment**
- IBD + DM carries an increased risk of infection that is **not proven** to be significantly altered with the use of monoclonal antibody medications
- There is a clear and documented gap in research on monoclonal antibody treatment in this population
- Given the above findings, further investigation of this topic is warranted to establish the implications of monoclonal antibody use in UC + DM and potentially reduce negative outcomes

Methods

Figure #1: PRISMA Flowchart for the systematic review



- IBD + DM is associated with **significantly higher** health care utilization, including IBD-related hospitalizations and gastrointestinal clinic visits compared to IBD only; **however, this utilization in IBD + DM patients receiving biologic treatment was not significantly different compared to IBD + DM without biologic treatment**
- UC + DM is associated with **increased measures** of UC activity, inflammation, and worse quality of life compared to UC alone; **however, no significant difference in the use of biologics compared to UC/IBD alone**

References



Contact Info

Lindsay Trigg, OMS-3
Email: Lt1060@mynsu.nova.edu
Nova Southeastern University KPCOM