

CADTH Reference List

Infliximab for Graft Versus Host Disease

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Key Message

No evidence was identified about the clinical effectiveness of infliximab in patients with graft versus host disease.

Research Question

What is the clinical effectiveness of infliximab in patients with graft versus host disease?

Methods

Literature Search Methods

A limited literature search was conducted by an information specialist on key resources including MEDLINE, Embase, the Cochrane Database of Systematic Reviews, the International HTA Database, the websites of Canadian and major international health technology agencies, as well as a focused internet search. The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. The main search concepts were infliximab and graft-versus-host disease. CADTH-developed search filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, or indirect treatment comparisons; and randomized controlled trials, controlled clinical trials, or any other type of clinical trial. Where possible, retrieval was limited to the human population. The search was completed on April 28, 2022 and limited to English-language documents published since January 1, 2017. Internet links were provided, where available.

Selection Criteria and Summary Methods

One reviewer screened literature search results (titles and abstracts) and selected publications according to the inclusion criteria presented in [Table 1](#). Full texts of study publications were not reviewed. The information presented in the Overall Summary of Findings section was based on information available in the abstracts of selected publications.

Results

No relevant health technology assessments, systematic reviews, randomized controlled trials, or non-randomized studies were identified about the clinical effectiveness of infliximab in patients with graft versus host disease.

References of potential interest that did not meet the inclusion criteria are provided in [Appendix 1](#).

Table 1: Selection Criteria

Criteria	Description
Population	Patients (of all ages) with graft vs. host disease
Intervention	Infliximab
Comparator	Extracorporeal photopheresis, mycophenolate mofetil, etanercept, low-dose methotrexate, mTOR inhibitor (e.g., sirolimus, everolimus), imatinib, ibrutinib, rituximab, pentostatin, cyclosporine, corticosteroids, placebo
Outcomes	Clinical effectiveness (e.g., failure free survival, overall response rate, health-related quality of life, symptom severity, duration of response, overall survival, non-relapse mortality, malignancy relapse or progression, steroid dosing); safety (e.g., adverse events, severe adverse events)
Study designs	Health technology assessments, systematic reviews, randomized controlled trials, non-randomized studies

mTOR = mechanistic target of rapamycin.

Overall Summary of Findings

No relevant literature was found about the clinical effectiveness of infliximab in patients with graft versus host disease; therefore, no summary can be provided.

References

Health Technology Assessments

No literature identified.

Systematic Reviews

No literature identified.

Randomized Controlled Trials

No literature identified.

Non-Randomized Studies

No literature identified.

Appendix 1: References of Potential Interest

Systematic Reviews

Mixed Intervention – Multiple Treatments for Graft Versus Host Disease

1. Dignan F, Velickovic V, McIlwaine E, Zhang R, Spelman T. Adverse effects of therapeutic treatments for acute graft versus host disease (aGvHD): A systematic review. *Bone Marrow Transplantation*. 2019;53:392-393.
2. Taylor A, Wissinger E, Cadarette S, Ruiz K, Jansson J, Akbari M. Treatments for steroid-refractory acute graft versus host disease: A systematic literature review. *HemaSphere*. 2018;2(Supplement 2):1087.

Non-Randomized Studies

Alternate Comparator – Differing Frequency of Infliximab Administration

3. Cavness A, Jacobsohn DA, Rohatgi R. Safety and Efficacy of Twice-Weekly Versus Once-Weekly Infliximab for Refractory Acute Graft-Versus-Host Disease in Pediatric Patients. *Biology of Blood and Marrow Transplantation*. 2020;26(3 Supplement):S391.

Alternate Comparator – Treatment with Extracorporeal Photopheresis Alone or in Addition to Infliximab

4. Nygaard M, Karlsmark T, Smedegaard N, et al. Experience with the use of infliximab and/or extracorporeal photopheresis in steroid-refractory acute graft versus host disease. *Biology of Blood and Marrow Transplantation*. 2018;24(3 Supplement 1):S194.