

# Drug use evaluation of TNF-alpha antagonists for non-infectious uveitis at a Western Australian Tertiary Hospital

Matthew Rooney, Cale Padgett  
Pharmacy Department, Sir Charles Gairdner Hospital, Perth WA

## Background

Adalimumab is listed on the WA Statewide Medicines Formulary (SMF) for the treatment of non-infectious uveitis and supported with a treatment algorithm. Infliximab is also prescribed for patients who cannot tolerate adalimumab with approval from the Drugs and Therapeutics Committee (DTC). It is currently unknown how well clinicians prescribe in accordance with the current algorithm.

## Aim

To assess the rate of patients prescribed TNF-alpha antagonists for non-infectious uveitis who were concordant with the starting and stopping criteria of the algorithm.

## Methods

This was a retrospective audit of outpatients receiving adalimumab or infliximab between January 2017 and January 2019 at a Western Australian (WA) tertiary hospital. Patients were identified using iPharmacy dispensing software. Information was collected from patient medical records using an audit tool. Starting and stopping criteria from the algorithm were assessed and statistical analysis was conducted using Microsoft Excel.

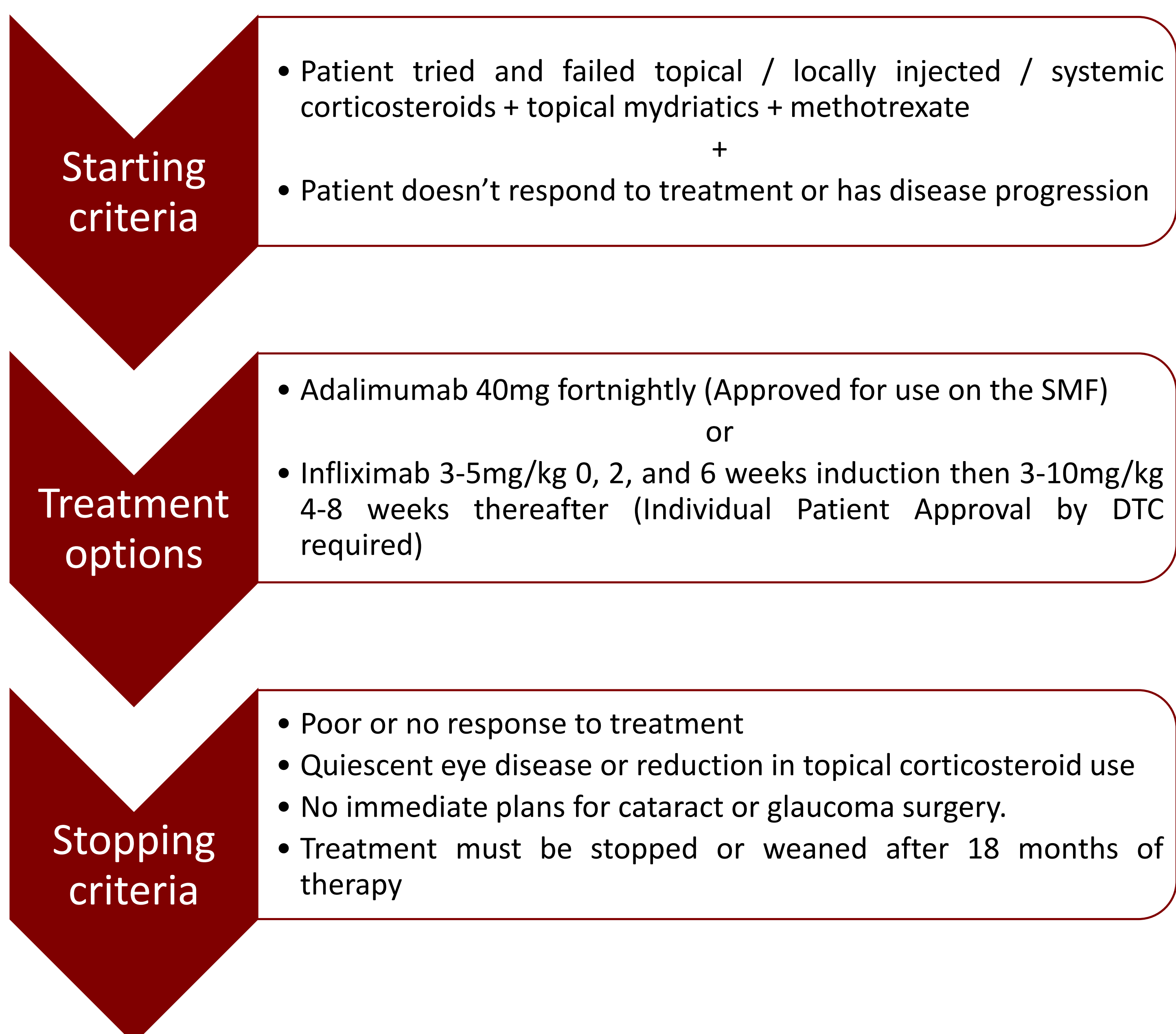


Figure 1. Abbreviated Statewide Medicines Formulary treatment algorithm for non-infectious uveitis

## Results

A total of ten patients were identified; 60% received adalimumab (n=6) and 40% received infliximab (n=4). 50% of patients treated with adalimumab (n=3) and 50% treated with infliximab (n=2) had failed first-line regimen of corticosteroid, topical mydriatics and methotrexate treatment. 50% of both adalimumab (n=3) and infliximab (n=2) patients did not meet starting criteria based on previous first-line treatments.

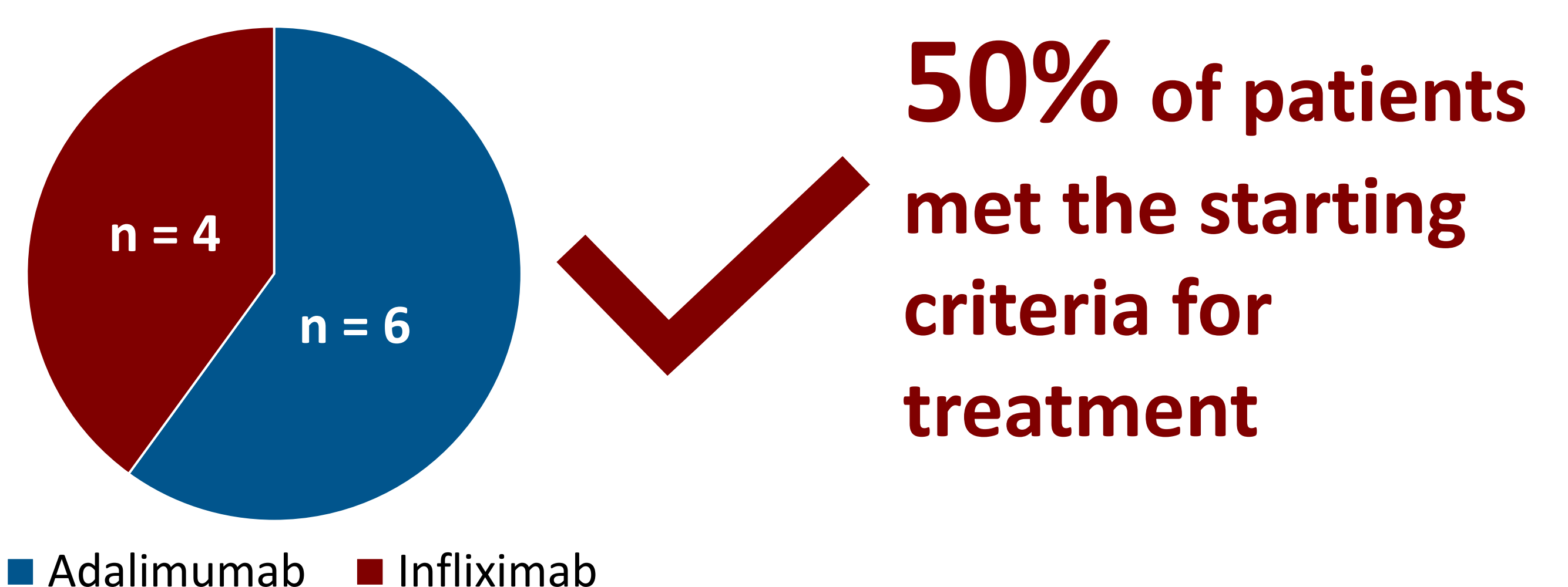


Figure 2. Number of patients prescribed TNF-alpha antagonist therapy for non-infectious uveitis

The average treatment duration for adalimumab patients was 42 months (range 24-103), and infliximab patients was 64 months (range 22-110). 100% (n=10) of patients being treated with TNF-alpha antagonists failed to meet the stopping criteria of not exceeding 18 months of total treatment.



**100% of patients failed to meet the stopping criteria of not exceeding 18 months treatment**



## Conclusions

It was difficult to access all parameters relevant to starting and stopping criteria from the patients' medical record however the results suggest that the stopping criteria surrounding treatment length in the algorithm for non-infectious uveitis are not followed. Patients may be receiving prolonged treatment unnecessarily. Education to relevant prescribers via the DTC is required.

### Contact Us

**Matthew Rooney**, Pharmacy Department, Sir Charles Gairdner Hospital  
Email: [Matthew.Rooney@health.wa.gov.au](mailto:Matthew.Rooney@health.wa.gov.au)