

# Infliximab Intravenous to Subcutaneous switch: A Patient's Perspective

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## Introduction

- Biologics have greatly improved outcomes in IBD.
- Biosimilars have reduced cost and improved access to treatment.
- CT-P13 (Remsima) is an Infliximab biosimilar molecule that is approved for subcutaneous administration.
- Studies have demonstrated comparable efficacy and safety of the SC and IV formulations<sup>1</sup>.
- Trials have previously suggested a patient preference for subcutaneous anti-TNF administration<sup>2</sup>.

## Aims

We set out to ascertain if patients want to switch from IV to SC Infliximab and the reasons behind this decision. Treatment costs were also reviewed.

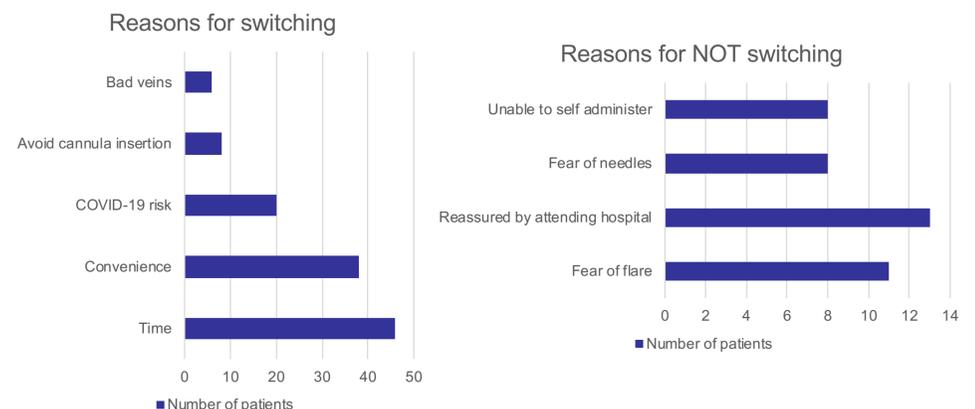
## Methods

We administered a 9-point questionnaire to patients receiving Infliximab for IBD at our centre. Baseline characteristics and disease behaviour were recorded from electronic records. Eligibility to switch was deemed as being clinically stable, on maintenance Infliximab therapy for  $\geq 14$  weeks and having no active inflammation demonstrated biochemically, endoscopically or radiologically during this time.

## Results

- 104 patients were identified as receiving Infliximab.
- There was a response rate of 85% (88 patients).
- 62% male, 38% female. Median age 38.5years (range 17-76years).
- 69% Crohn's Disease, 28% Ulcerative Colitis and Indeterminant Colitis 3%.
- 57% of patients were eligible for switch.
- 78% wanted to switch (m=82%, f=75.6%).
- Common reasons for wishing to switch; convenience (80%), time (59%), COVID-19 risk m=16.3% versus f=24.4%.

- Common reasons for not wishing to; reassured by attending hospital (60%), fear of flare (42%).



## Cost Analysis

Current drug cost in CUH per 100mg of Infliximab

- Standard dose: 5-10/mg/kg 6-8weekly
- Remicade: €478.41/100mg
- Inflectra: €202.25/100mg

Mean non-drug cost for IV administration in CUH (2018)<sup>3</sup>

- €224.54/treatment
- Mean time 143.78 mins/treatment

Current quoted cost of CT-P13 SC

- Standard dose: 120mg if <80kg, 240mg if  $\geq 80$ kg every other week
- <€300/120mg pre-filled disposable injection

## Conclusions

This study shows a clear preference of switching from IV to SC Infliximab. It has identified potential barriers to switching; namely the need for pre-emptive patient education and enforcement of pre-existing communication channels to allow for a smooth transition to home administration. The study highlights the unseen cost of infusion therapies with regards to non-drug costs and patient time. Currently the National Centre for Pharmacoeconomics does not recommend reimbursement for CT-P13 SC.

## References

1. Schreiber S et al Randomized Controlled Trial: Subcutaneous vs Intravenous Infliximab CT-P13 Maintenance in Inflammatory Bowel Disease. Gastroenterology. 2021 Jun;160(7):2340-2353. Epub 2021 Mar 5
2. Sylwestrzak G et al A. Considering patient preferences when selecting anti-tumor necrosis factor therapeutic options. Am Health Drug Benefits. 2014;7(2):71-81
3. Cronin J et al The non-drug costs associated with the administration of an intravenous biologic treatment in the hospital setting. Ir J Med Sci. 2019 Aug;188(3):821-834