Ustekinumab Therapy Outcomes in a Refractory Crohn's Disease Patient Population

RM. Corcoran, N. Breslin, B. Ryan, S. McKiernan,
F. MacCarthy, C. Dunne, K. Hartery,
A. O'Connor, S. O 'Donnell, D. McNamara, D Kevans.

St James's Hospital & Tallaght University Hospital; Trinity Academic Gastroenterology Group, School of Medicine, Trinity College, Dublin

INTRODUCTION

- Ustekinumab is a fully human IgG1 monoclonal antibody which binds the p40 subunit shared by the pro-inflammatory interleukins 12 and 23.
- Ustekinumab has been demonstrated to have efficacy for induction and maintenance of remission in patients with Crohn's disease (CD).
- Little is know about ustekinumab dose escalation effectiveness.

AIM

- To describe the outcomes of CD patients receiving ustekinumab therapy at two academic medical centres.
- The primary endpoint was ustekinumab therapy outcome assessed by drug persistence in the study cohort.
- Secondary endpoints included the requirement for and outcome of optimised ustekinumab dosing regimens and faecal calprotectin concentrations following therapy.

METHODS

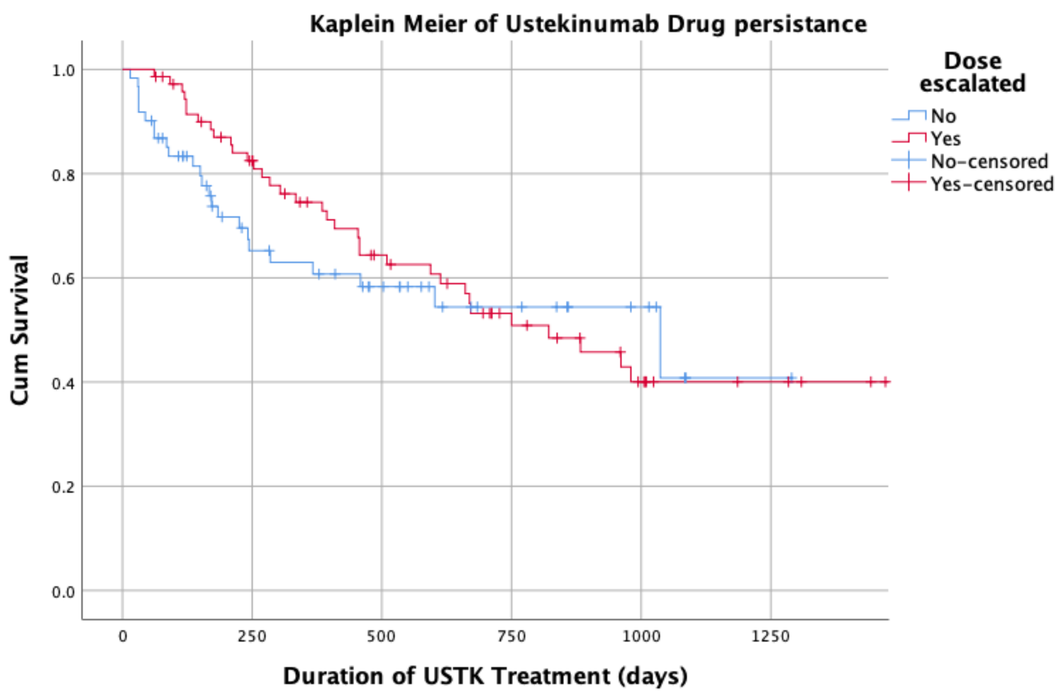
- Retrospective cohort study of Crohn's disease patients receiving ustekinumab at St James's and Tallaght University Hospitals between April 2012 and April 2021.
- Patient demographics, baseline characteristics, medication history and disease behaviour were characterised.
- Duration of ustekinumab therapy and ustekinumab dosing regimens were documented.
- Optimised dosing was defined as a dosing regimen of ustekinumab 90mg at less than an 8-weekly interval.

REASON FOR THERAPY DISCONTINUATION

USTK Therapy ongoing at last f/u	75 (56%)
Number of patients requiring dose escalation	61 (46%)
Reason for USTK discontinuation	
Primary non-response	19 (14%)
Secondary loss of response	25 (19%)
Side effects	13 (10%)
Pregnancy	1 (1%)

RESULTS

- 133 patients with CD were commenced on Ustekinumab during the study period.
- 99% had received 1 previous anti-TNF therapy and 58% 2 anti-TNF agents.
- In a survival analysis the median duration of ustekinumab therapy was 74.4 weeks (95% CI 63.2-85.1).
- There was no significant difference in ustekinumab persistence between patients receiving standard (8-weekly) dosing regimen (n=61, 46%) and those requiring an optimised dosing regimen (n=72, 54%).
- Pre and post dose escalation CRP and FC was available for 57 (79%) and 21 (29%) patients who underwent dose escalation respectively.
- 14 of the 32 patients with a CRP ≥5mg/L pre-escalation experienced a decrease to ≤5mg/L up to 6 months following escalation.
- 13 (62%) patients with pre and post dose escalation FC experienced a decrease in FC with 9 (43%) having a FC ≤ 500µg/g and 7 (33%) ≤250µg/g up to 6 months post escalation.



CONCLUSIONS

- Ustekinumab is an effective treatment for Crohn's disease patients which significant prior biologic therapy exposure.
- Optimised dosing regimens are frequently required, however, a durable response can be achieved with high long term treatment persistence.