A 10-Year Retrospective Review of Dose Modification of Infliximab Therapy in Private Healthcare in Ireland

RWD80

P.Malone
Vhi Insurance Dac, Dublin, Ireland

INTRODUCTION

Dose escalation of infliximab—through dose increase, interval shortening, or both—is commonly used to manage loss of response in patients with inflammatory bowel disease (IBD) and rheumatoid arthritis. Despite its widespread use in clinical practice, infliximab dose escalation represents an **off-label** treatment strategy. Real world evidence describing the frequency and patterns of treatment intensification remains limited.

OBJECTIVE

To quantify the prevalence and patterns of infliximab dose intensification in routine clinical practice over a 10-year period using real world claims data from a private health insurer in Ireland.

Secondary objectives included assessing whether dose increases and interval shortening occurred independently or concurrently and determining the proportion of patients receiving doses exceeding 400 mg (assuming a standard dose of 5 mg/kg for an 80 kg patient).

METHOD

Retrospective longitudinal analysis of real real world claims.
Cycle 3 was defined as the patient baseline, all subsequent cycles were evaluated for:

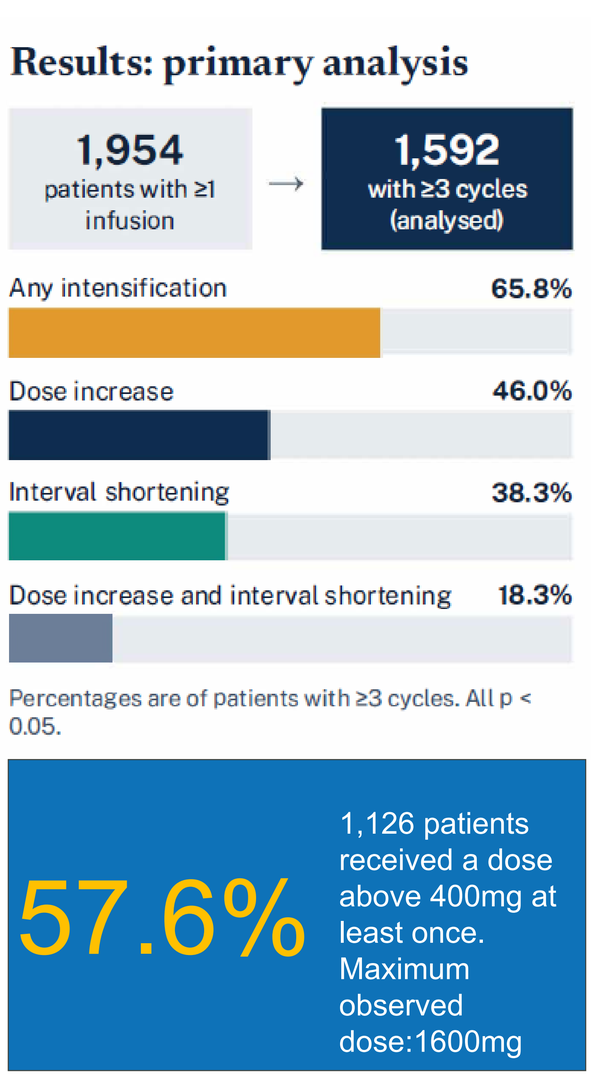
1. Dose increase vs baseline
2. Interval shortening vs baseline
3. Both at once

Incidence proportions were calculated at the patient level. Secondary analyses examined the maximum dose administered per patient across their treatment course.

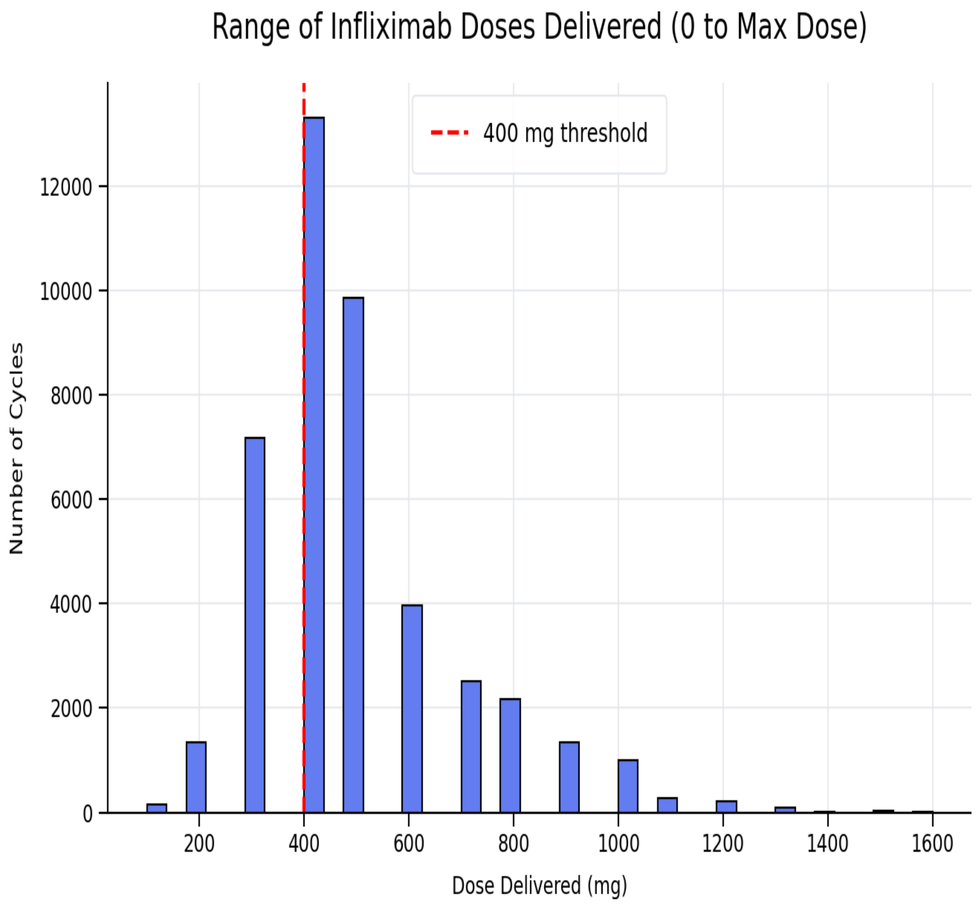
RESULTS

Among 1,954 patients who received at least one infliximab infusion, 1,592 received three or more cycles and were included in the primary analysis. Dose increases occurred in 46.0% of patients, interval shortening in 38.3%, and concurrent dose and interval modification in 18.3%. Overall, 65.8% of patients experienced at least one form of treatment intensification (all $p < 0.05$).

In the secondary analysis, 1,126 patients (57.6%) received doses exceeding 400 mg at least once during treatment, with a maximum observed dose of 1,600 mg.



57.6% — 1,126 patients received a dose above 400mg at least once. Maximum observed dose:1600mg



CONCLUSIONS

Widespread in real world clinical practice within private healthcare in Ireland and is not confined to individual centres.

2 out 3 patients experienced off label dose modification, including substantial escalation beyond standard dosing thresholds.

Often combined escalation with nearly one in five had does and interval changed together.

Implications

Research is needed on the clinical and economic outcomes of dose escalation, and on alternative strategies such as **point of care therapeutic drug monitoring**—that may reduce the need for intensification.

CONTACT INFORMATION

Patrick.Malone@vhi.ie

https://ie.linkedin.com/in/patrick-malone-b666651b2