SIGNIFICANT DISCONTINUATION RATES IN PATIENTS INITIATING OR SWITCHING FROM CT-P13: A RETROSPECTIVE COHORT STUDY IN A UNIVERSITY HOSPITAL

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Background and Importance

- CT-P13 is an infliximab biosimilar that received market authorization in the European Union in 2013.[1]
- CT-P13 has undeniable cost-savings opportunities and extensive literature supporting its equivalence to originator infliximab (OI) in terms of efficacy, safety and immunogenicity.[2]
- Despite these elements, CT-P13 remains largely underused in our country, either under-prescribed of discontinued after its introduction.[3]

Objective

- **Explore the reasons behind the high discontinuation rate observed among the patients on CT-P13 in a large tertiary hospital.**

Methods

- Retrospective cohort analysis using routinely collected data following the RECORD statement.[4]
- Patients were eligible if they received OI or CT-P13 between September 2017 and December 2020. They were included following the criteria listed in Table 1.

Table 1 Inclusion and exclusion criteria

	Inclusion criteria	Exclusion criteria
Participants	Patients who have been on OI or CT-P13 treatment, regardless of age	Patients with an underlying oncology diagnosis
Interventions	At least two CT-P13 infusions	Switchers with < 3 months of OI treatment before switch to CT-P13
Follow-up	≥ 1 year prior to and ≥ 6 months after the first CT-P13 infusion	Follow-up < 6 months after the first CT-P13 infusion
Data	Available infusions dates (onset, end, discontinuation, switch)	Incomplete medical records

OI = Originator infliximab , Switchers = Patients switched from OI to CT-P13

Results

- 156 patients were included and classified into two groups: switchers that were treated with OI and were switched to CT-P13 (n = 85, 54%) and initiators that did not receive OI prior to CT-P13 treatment (n = 71, 46%). 23 (27%) switchers and 35 (49%) initiators discontinued CT-P13 after 12 months (Fig. 1).
- Main reasons for CT-P13 discontinuation were lack of efficacy (n = 21, 36%) and treatment resistance (n = 16, 28%) (Fig. 2).
- Lack of active training and coordination among healthcare professionals and little education in patients may have exacerbated patients' subjective complaints and increased CT-P13 discontinuation rate.

Conclusion and Relevance

- **According to routine medical data :**
  - **Lack of efficacy and treatment resistance were the main reasons for the high CT-P13 discontinuation rate observed in a large tertiary hospital.**
  - **Coordination between the various healthcare professionals involved with the patient is a prerequisite for biosimilars to achieve their maximum cost-saving potential.**

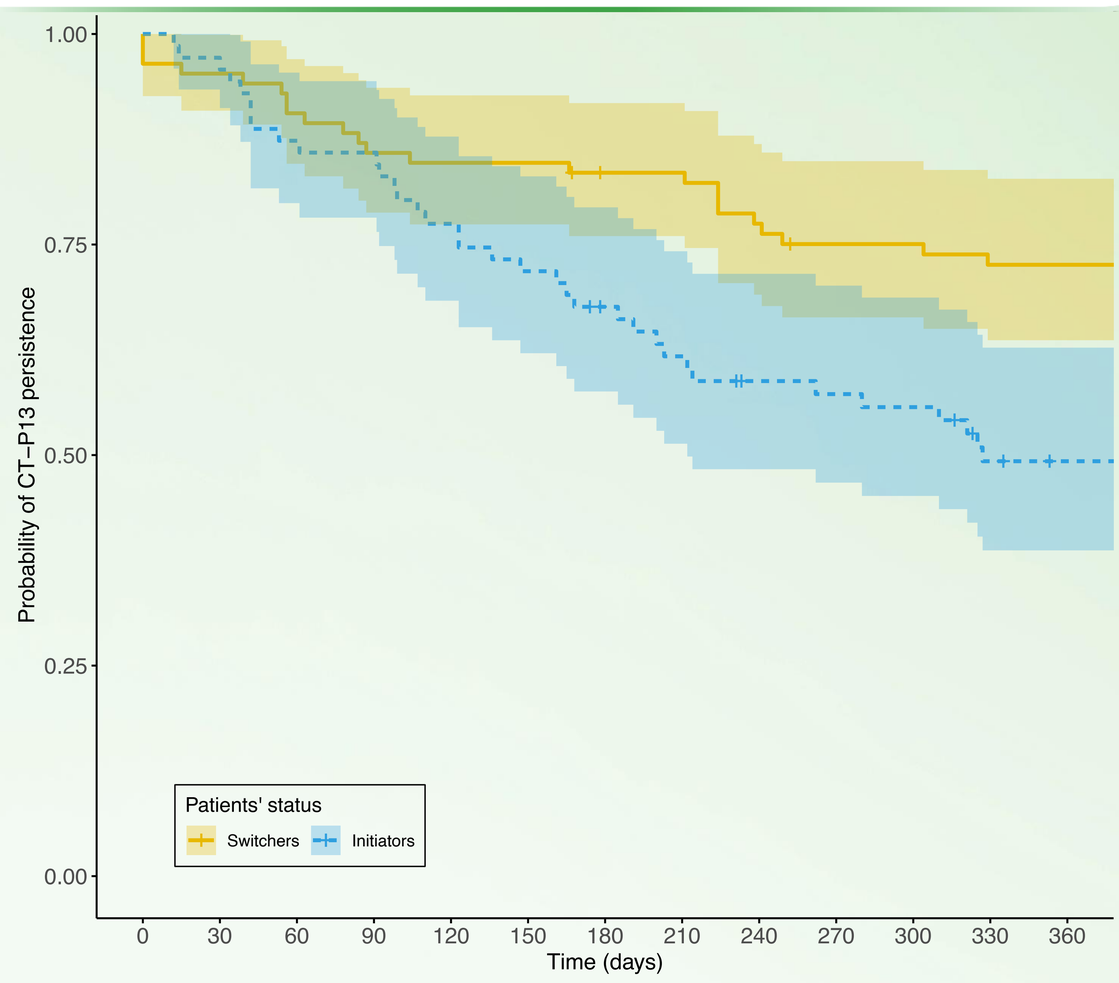

Fig. 1 Kaplan-Meier plot showing the proportion of switchers (yellow) and initiators (blue) that discontinued CT-P13 over 360 days. Continuous and dotted heavy lines represent the median function curves, respectively. Both shaded areas represent the interquartile interval.

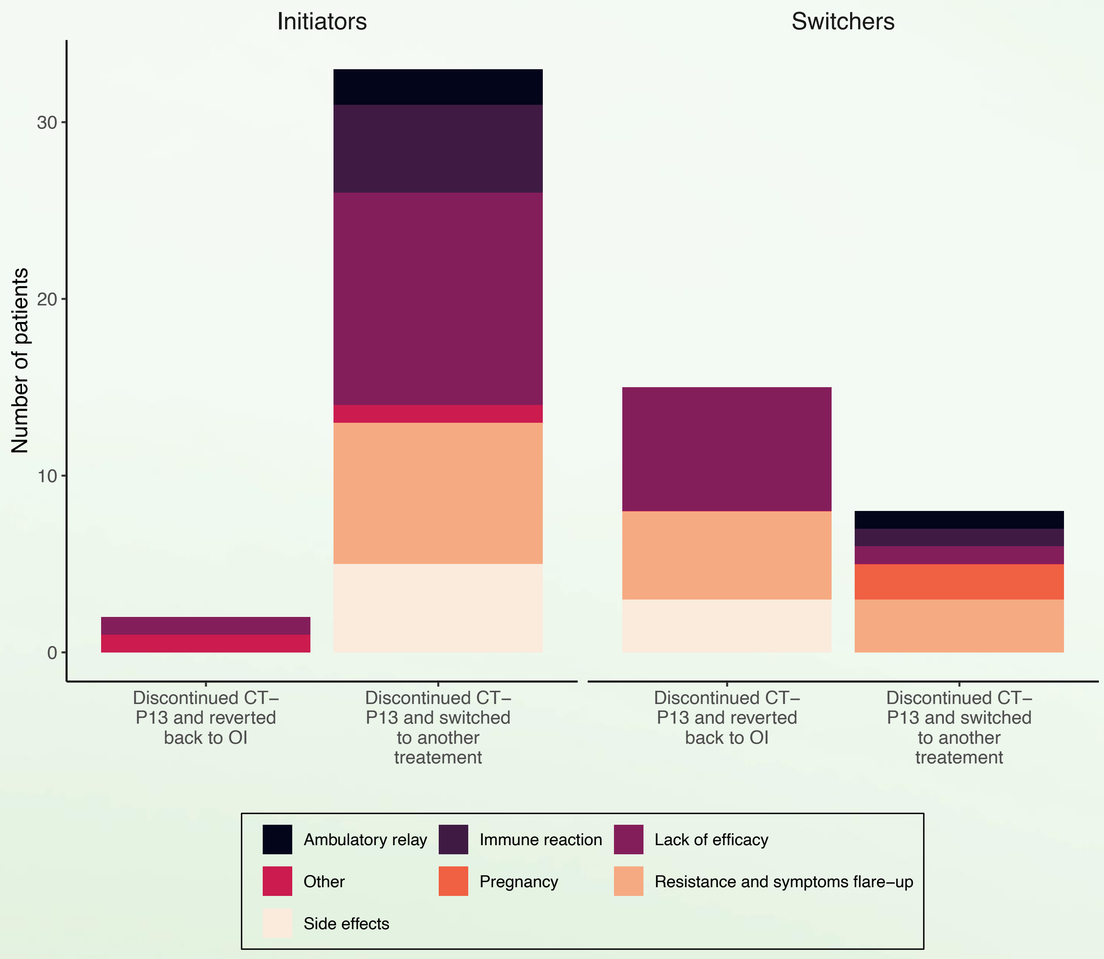

Fig. 2 Reasons for CT-P13 discontinuation in switchers and initiators that switched for a different treatment of reverted back to original infliximab. *OI = Original infliximab*

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