Switching from intravenous to subcutaneous infliximab in patients with inflammatory bowel disease

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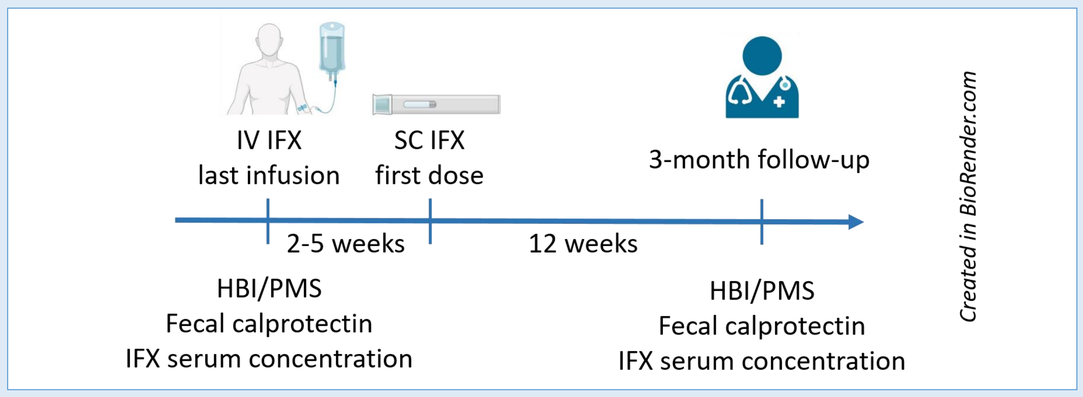
Background and methods

The aim of the project was to confirm the feasibility and safety of switching to SC IFX in patients on IV IFX maintenance therapy, as well as to examine IFX serum concentrations during SC treatment.

Patients that had received IV IFX for ≥12 weeks were consecutively considered for switching to SC IFX. Exclusion criteria were physician-assessed non-remission, planned treatment change, planned surgery within the next 3 months, pregnancy, and reduced compliance. The first SC dose was administered halfway through the established IV infusion interval.



In total, 63 patients have completed the 3-month follow-up. No severe adverse events were recorded. Two patients reported mild injection reactions, and one patient developed a mild rash. Two patients discontinued SC IFX before the 3-month follow-up.

Results

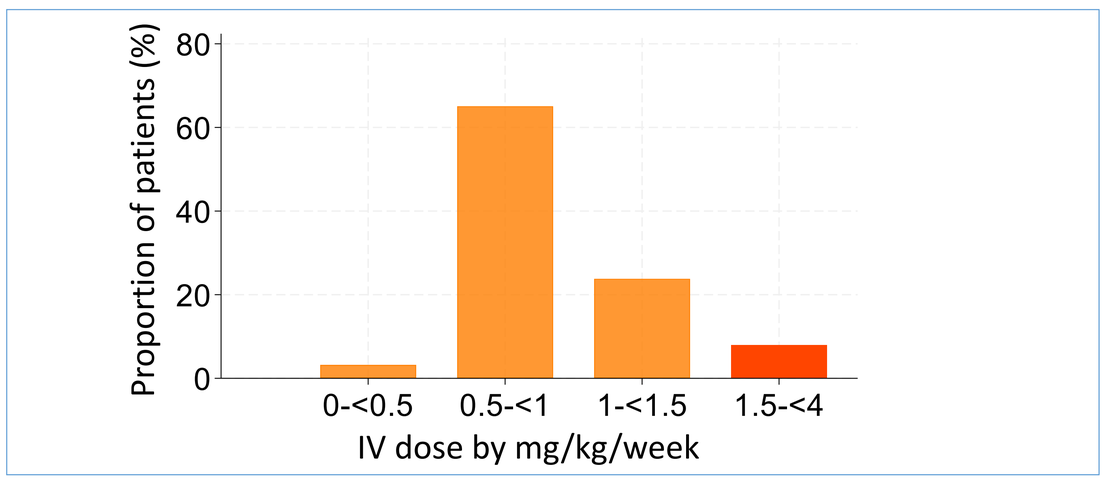


Figure 1. IV IFX dose at baseline. Patients receiving IV IFX <1.5 mg/kg/week (orange bars) were switched to standard SC regimen (120mg/14d) and patients receiving IV IFX ≥1.5 mg/kg/week (red bar) were switched to intensified SC regimen (240mg/14d).

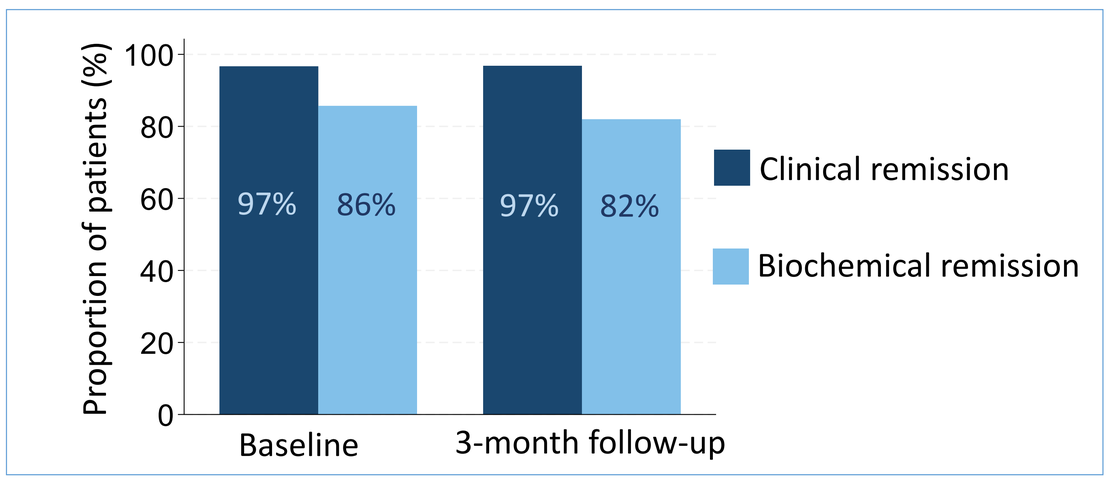


Figure 2. Remission at baseline and 3-month follow-up. Clinical remission: HBI ≤4 or PMS ≤2. Biochemical remission: fecal calprotectin ≤250 and CRP <5. There was no statistical significant change in clinical remission (p = 1.00) or biochemical remission (p=0.77).

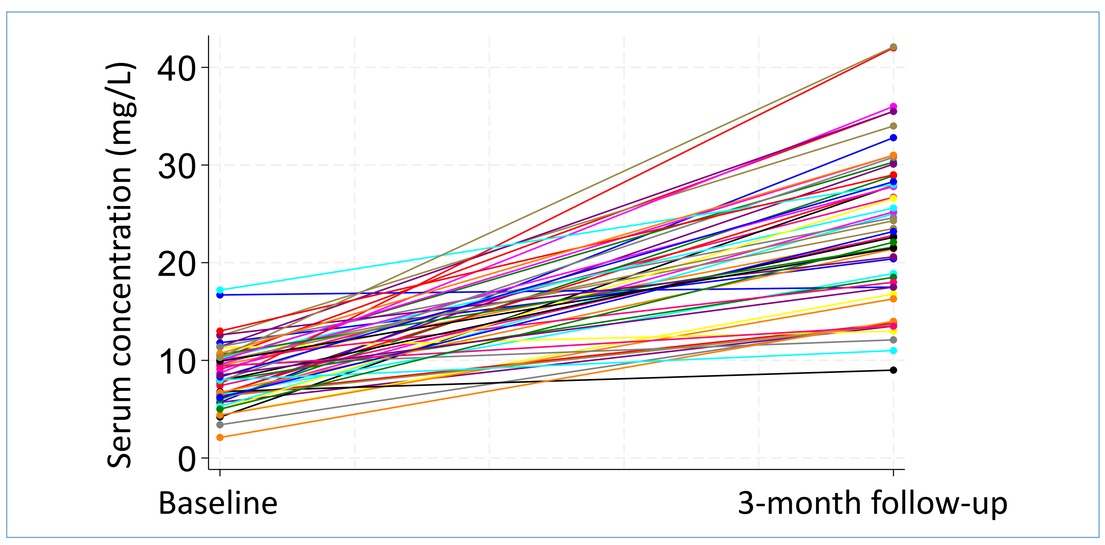


Figure 3A. Serum concentrations for patients on standard SC regimen. Each line corresponds to one patient. Median serum concentrations were 8.4 mg/L (IQR: 6.3-10.2 mg/L) at baseline and 23.5 mg/L (IQR: 17.5-29.0 mg/L) at the 3-month follow-up.

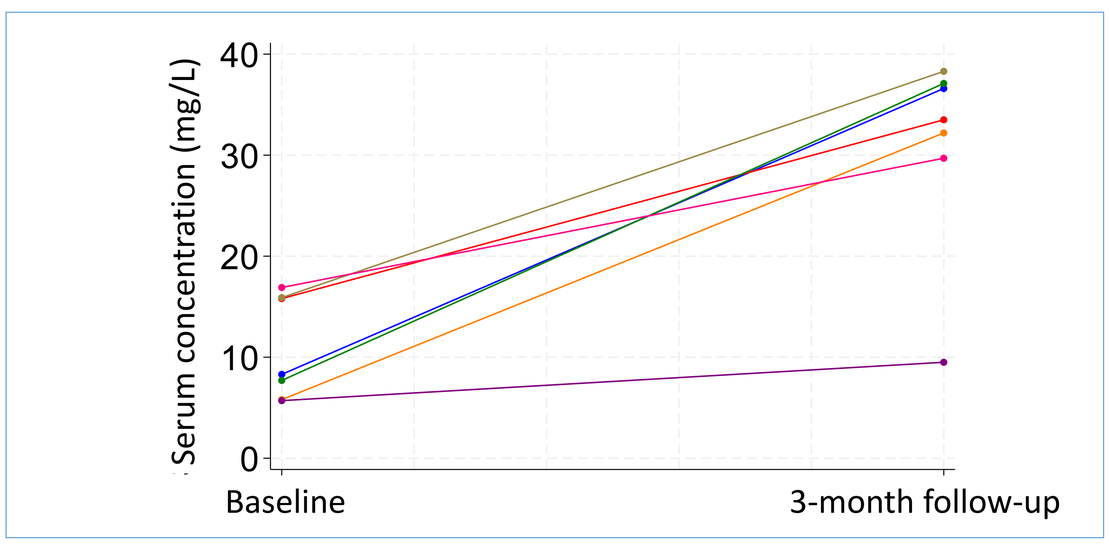


Figure 3B. Serum concentrations for patients on intensified SC regimen. Each line corresponds to one patient. Median serum concentrations were 8.3 mg/L (IQR: 5.8-15.9 mg/L) at baseline and 33.5 mg/L (IQR: 29.7-37.1 mg/L) at the 3-month follow-up.

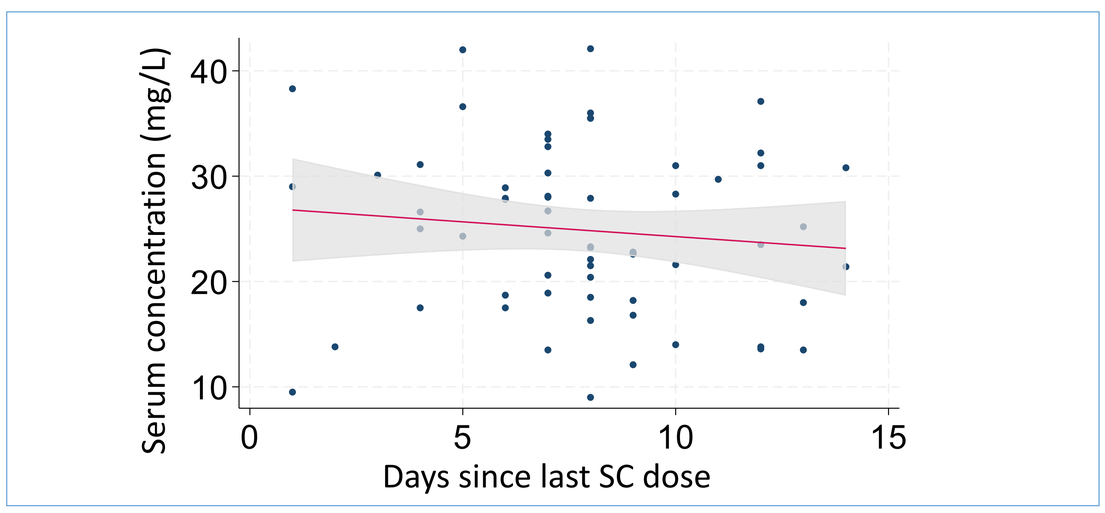


Figure 4. Correlation between time since last SC dose and serum concentration. SC serum concentrations were assessed without relation to time of drug administrations.

Conclusion

- Switching from IV maintenance therapy to SC is safe, feasible, and well accepted in IBD patients in remission irrespective of IV dosing regimens and IV serum concentrations.
- SC serum concentrations after 3 months were slightly higher than in previous reports and was not affected by the timing of the last SC dose.
- Patients on intensified SC regimen tended to have higher serum concentration than patients on standard SC regimen.