uegweek Treatment Discontinuation Due to Lack of Efficacy During Maintenance Phase of Infliximab or Vedolizumab Treatment in Patients with Crohn's Disease: A Comparative Analysis of Randomized Controlled Trials

M. Ferrante¹, L. Peyrin-Biroulet^{2.3}, P. Arkkila^{4.5}, A. Armuzzi^{6,7}, S. Danese⁸, R. Faggiani⁹, J. Guardiola¹⁰, S.B. Hanauer¹¹, J. Jahnsen¹², W. Reinisch¹³, X. Roblin¹⁴, P.J. Smith¹⁵, T. Kwon¹⁶, S. Kim¹⁶, R. Atreya¹⁷

¹Department of Gastroenterology and Hepatology, University Hospitals Leuven, KU Leuven, Leuven, Belgium; ²University of Lorraine, Inserm, NGERE, Nancy, France; ³Groupe Hospitalier privé Ambroise Paré - Hartmann, Paris IBD center, Neuilly sur Seine, France; ⁴Department of Gastroenterology, Helsi University Hospital, Helsinki, Finland; ⁵Helsinki University, Helsinki, Finland; ⁶IBD Center, IRCCS Humanitas University, Pieve Emanuele, Milan, Italy; ⁸Gastroenterology and Endoscopy, University Vita-Salute San Raffaele, Milan, Italy; ⁹Director of Gastroenterology Department at San Camillo Hospital; ¹⁰Digestive Diseases Department, Bellvitge Biomedical Research Institute-IDIBELL, University of Barcelona, L'Hospitalet de Llobregat, Barcelona, Spain; ¹¹Icahn School of Medicine at Mt Sinai, New York, NY, USA.; 12Institute of Clinical Medicine/Department of Gastroenterology, University of Oslo/Akershus University Hospital of Saint-Etienne, Saint-Etienne, France; 15Department of Gastroenterology, Royal Liverpool Hospital, Liverpool University Hospitals NHS Foundation Trust, Liverpool, UK; ¹⁶Celltrion Healthcare, Incheon, Republic of Korea; ¹⁷Medical Department 1, University Hospital Erlangen, Friedrich-Alexander-University of Erlangen-Nürnberg, Erlangen, Germany

BACKGROUND AND AIM

- A previous meta-analysis in Crohn's disease (CD) patients suggested lower discontinuation rates due to lack of efficacy in infliximab (IFX) compared to vedolizumab (VDZ) during a one-year maintenance phase.¹
- Aim: To compare the discontinuation rates due to lack of efficacy between VDZ and IFX by adding the oneyear results of LIBERTY-CD (A randomised, pLacebocontrolled, double-BlInd, phase 3 Study to evaluate the Efficacy and Safety of the SuBcutanEous Injection of CT-P13 (CT-P13 SC) as Maintenance The Rapy in PatienTs with moderatelY to severely active Crohn's Disease).

METHOD

- In addition to the previous results¹, the LIBERTY-CD² study results were included in this comparative analysis.
- The pooled discontinuation rates for each treatment using a random-effect model were reported as forest plots with 95% confidence intervals (CI).
- A sensitivity analysis was conducted among patients who responded to induction therapy in VDZ.
- Statistical analyses were performed using MetaProp in R (version 4.2.2).
- The I^2 statistic was used to estimate the heterogeneity across trials.

0.00 0.10 0.01 0.08 0.05 0.04 0.5 0.6 a: B	[0.00; 0.18] [0.00; 0.14] [0.07; 0.15] [0.00; 0.04] [0.01; 0.25] [0.02; 0.09] [0.01; 0.08]	15.8% 18.6% 23.9% 8.0% 21.0% 100.0%
0.00 0.10 0.01 0.08 0.05 0.04 0.5 0.6 a: B	[0.00; 0.14] [0.07; 0.15] [0.00; 0.04] [0.01; 0.25] [0.02; 0.09] [0.01; 0.08]	15.8% 18.6% 23.9% 8.0% 21.0% 100.0%
0.5 0.6 a: B	io-experience	
	-	eu
U. D	lio-naïve	
Proportion	95%-CI	Weight
0.31 	[0.23; 0.34] [0.24; 0.39] [0.46; 0.55] [0.30; 0.46]	
0.37	[0.27; 0.47]	100.0%
	esponders at i on-responder	
Proportion	95%-CI	Weight
	[0.24; 0.39]	30.2%
0.31		100.0%
	0.31	0.28 [0.23; 0.34] 0.31 [0.24; 0.39] 0.38 [0.30; 0.46] 0.32 [0.27; 0.37]

Figure 1. Forest plots of the discontinuation rates due to lack of efficacy during the one-year maintenance phase

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RESULTS

- Four RCTs on IFX and two RCTs on VDZ were included in the analysis (IFX [N=659], VDZ [N=995]).
- The discontinuation rate due to lack of efficacy during the one-year maintenance phase was significantly lower in IFX (0.04 [95% CI: 0.01-0.08, heterogeneity: *I*²=81%) compared to VDZ (0.37 [95% CI: 0.27-0.47, heterogeneity: *I*²=93%) in CD patients. (**Figure 1A, 1B**)
- The significant difference was maintained in a sensitivity analysis, which excluded non-responder to induction therapy in VDZ (0.32 [95% CI: 0.27-0.37], heterogeneity: *l*²=48%). (**Figure 1C**)

CONCLUSIONS

- IFX showed significantly lower rates of discontinuation due to lack of efficacy during the one-year maintenance compared to VDZ in CD patients, even after excluding non-responders at week 6 from the VDZ groups.
- Results from this study support previous findings that discontinuation due to the lack of efficacy of IFX was lower than that of VDZ in CD patients.

REFERENCES

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