achievers at Wk 16 maintained LDA with some (37% (N=13)) fluctuations, between LDA and high disease activity (ASDAS 2.1-3.5, HDA). Of the 114 pts initially randomised to IXE Q4W in COAST-W, 20 pts achieved LDA at Wk 16. Of those, 50% (N=10) of pts maintained LDA at every visit afterwards. In total, 95% (N=19) of the ASDAS-LDA achievers at Wk 16 maintained LDA with some (45% (N=9)) fluctuations between LDA and HDA.

Conclusion: This analysis demonstrates that pts with r-axSpA and treated with IXE Q4W who achieve ASAS40 or ASDAS-LDA at Wk 16 show a sustainable response, at the individual patient level, with similar levels of efficacy over time and at each visit out to week 52.

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POS0916

SAFETY OF BIOLOGIC TREATMENTS IN SOLID ORGAN TRANSPLANT RECIPIENTS: A SYSTEMATIC REVIEW

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Background: The management of a broad spectrum of autoimmune/inflammatory diseases has been transformed with the development of biological treatments. However, little is known about their use in solid organ transplant recipients, a group of patients with high risk of serious infections and malignancies.

Objectives: To evaluate complications occurring with biologic treatments in solid-organ transplant recipients.

Methods: A systematic review of the literature was performed on the PubMed including Medline, Embase and Cochrane databases, up to 01/10/2020, to identify published case reports/series regarding the use of biologic treatments in solid organ transplant recipients in the context of chronic inflammatory diseases. Collected data were patient's characteristics (age, sex, reason for transplantation, antirejection regimen, type of biological treatment used, autoimmune/inflammatory disease treated, time between transplantation and bioterapy initiation, treatment duration) and their reported complications (deaths, infections, malignancies, graft dysfunction).

Results: 55 papers were included, representing 177 patients (131 liver, 42 kidney, 3 heart, and 1 liver-kidney transplant recipients). Inflammatory bowel diseases represented largely the most common indication of biologic treatment initiation (80.2%), followed by rheumatic diseases (7.3%), hereditary periodic fever syndromes (6.2%) and psoriasis (5.1%). Anti-TNF α were mainly used (81.4%) before anti- $\alpha 4\beta 7$ integrin Vedolizumab (23.7%) and anti-IL1R Anakinra (7.3%). 25/177 patients had several lines of different treatments. Median treatment duration was 13.5 months. Infections occurred in 48 patients (27.1%) through 76 recorded flares (mostly bacterial 68.4% and viral 19.7%). No therapeutic or epidemiological factor was associated with the occurrence of an infection. 16 patients (9.0%) developed malignancies, especially colorectal (4 cases, 2.3%) and skin cancers (4 cases, 2.3%) or Post-transplantation lymphoproliferative disorders (3 cases, 1.7%). Acute graft rejections occurred in 5 patients (2.8%), mostly in kidney transplants (4/5). Among a total of 177 patients, 6 deaths were identified (3.4%).

Conclusion: This review gathers, to our knowledge, the largest number of published case series/reports about the use of biological treatments in solid organ transplant recipients, providing data about their safety. Caution must be taken about eventual publication bias and the necessity of further head-to-head analysis comparing complications occurring in solid organ transplant recipients cohorts with and without biologic treatments.

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POS0917

EFFECTIVENESS AND SAFETY OF COMBINED BIOLOGICAL THERAPY IN PATIENTS WITH REFRACTORY SPONDYLOARTHRITIS

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Background: Biological therapy in combination is discouraged in the guidelines for the treatment of immune-mediated inflammatory diseases, attending to safety reasons. However, combined biological therapy could be a valid alternative in patients with highly refractory spondyloarthritis (SpA) as has been previously demonstrated in some reluctant inflammatory bowel disease patients. Published experiences in the literature are very scarce and the follow-up is limited.

Objectives: The aim of this study is to determine the effectiveness and safety of the association of biological drugs in patients with SpA and describe the clinical profile of these patients.

Methods: This is a retrospective, cross-sectional and descriptive study. We included patients with SpA who had received simultaneously at least two biological drugs with different therapeutic targets. We reviewed the database of our hospital that included all patients diagnosed with SpA meeting the ASAS criteria for axial SpA under active biological treatment.

Demographics, clinical and laboratory data, previous treatments, disease activity index (ASDAS CRP) and adverse events were collected. Remission and low activity criteria were considered according to cut-off descriptions in ASDAS CRP, <1.3 and 2.1, respectively.

Results: We identified six patients with SpA receiving combined biological therapy (Table 1). All patients showed high disease activity at the start of combination treatment and most of them presented several disease domains involvement. The average of previous biologics drugs was 5.33 ± 1.75 . Four patients received an anti-TNF in combination with an anti-IL17 agent and one patient with concomitant Crohn disease was prescribed an anti-TNF combined with an anti-IL23 agent. The sixth patient, with SpA and concomitant systemic lupus erythematosus, received rituximab with an anti-IL17 (Table 1). The median treatment duration of the combined biological therapy was 12.5 months (IQR 4-43.5; range: 4-117). All patients achieved low disease activity or clinical remission at some point during follow-up, allowing for initial de-escalation of initial dose in some patients. Only one patient experienced a transient relapse (unic uveitis episode). No relevant adverse effects have been found clearly attributable to combination therapy. A 60-year-old patient with multiple comorbidities has stopped treatment due to aggravation of a previous liver cirrhosis.

Conclusion: Combined biological therapy could be an effective therapeutic alternative to patients with multidomain and refractory SpA. In our series, we provide acceptable safety data for follow-up periods that it are longer than the majority of reported cases to date.

Table 1. Main characteristics of patients with SpA and treatment schedules.

Characteristics	Patients (N= 6)		
Male, n	3		
Age at diagnosis (years)	25 (8-52)		
mean (IQR)			
Ethnicity, n	5 Caucasian; 1 Hispanic		
Smoker, n	1		
Diagnosis	3 Juvenile SpA-ERA, 2 PsA, 1 SpA + SLE		
Duration of disease (years) mean (IQR)	20.5 (5.25-33.5)		
Domains involved, n	6		
Axial	6		
Peripheral	6		
Enthesis	5		
Extra-articular	2 psoriasis (1 with aortic insufficiency), 2 uveitis, 1 Crohn disease		
HLA-B27 +, n	4		
Previous biological or targeted therapy, n			
Anti-TNF	6 (5 etanercept, 5 adalimumab, 4 infliximab, 4 golimumab, 3 certolizumab)		
Anti-IL17	6 (5 secukinumab, 1 ixekizumab)		
Jakinibs	1 (1 tofacitinib)		
Other	3 (1 anakinra, 1 tocilizumab, 1 apremilast)		
Combined biological Therapy	Treatment 1 + Treatment 2	Time of follow-up (months)	Actual state
	1.GOL 100mg/4w + SEC 150mg/1w	117	Remission
	2.ETN 50mg/1w + SEC 150mg/2w	9	*Low activity
	3.ETN 50mg/1w + SEC 150mg/4w;	16	Remission
	4.GOL 100mg/4w + SEC 150mg/2w	4	Low activity
	5.GOL 100mg/3w + RIS 250mg/12w	4	Low activity
	6.RTX 2g infusion + SEC 150mg/4w	19	Remission

*At treatment interruptionAbbreviations: ERA: enthesitis-related arthritis; ETN: etanercept; GOL: golimumab; IQR: interquartile range; PsA: psoriatic arthritis; RIS: risankizumab; RTX: rituximab SEC: secukinumab; SLE: systemic lupus erythematosus; SpA: spondyloarthritis; w: week.

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