second infusion, W16 and the visit on which a new rituximab cycle was prescribed. The dotted lines represent a DAS28CRP-score of 2.6 (remission cut-off) and 3.2 (low disease activity cut-off). C: cycle; W: week; VAS: visual analogue scale.

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POS0617

ANTI INFLIXIMAB ANTIBODIES DETECTED BY A DRUG TOLERANT ASSAY ARE FREQUENT BUT, IN MANY CASES, WITHOUT RELEVANT CLINICAL SIGNIFICANCE

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Background: Infliximab (Ifx) has proven effective in treating rheumatoid arthritis (RA) and spondyloarthropathies (SpA), although around 40% of cases fails, mainly due to immunogenicity. Formation of immunocomplexes between antibodies to Ifx (ATI) and Ifx can increase drug clearance, leading to treatment failure. Standard ELISA assays which are drug -sensitive are frequently used, being able to detect only free ATI. Interest in drug-tolerant assays to measure total ATI (free and complexed) is increasing.

Objectives: To compare the development of ATI using both drug-tolerant and drug-sensitive assays at early stages of Ifx therapy. To analyse the relationship of ATI detected by both assays with the drop-out of treatment.

Methods: This is a prospective observational study including 45 patients with RA and 61 with axial-SpA treated with standard doses of Ifx (3mg/kg and 5mg/kg, respectively) enrolled at Biological Therapy Unit of Hospital La Paz. Serum samples were obtained at 2, 6, 12 and 22 weeks (W) after Ifx initiation. The data about discontinuation for inefficacy was obtained from the database. ATI presence was evaluated by a drug-sensitive in-house two-site (bridging) ELISA (bELISA) and a drug-tolerant commercial ELISA assay (Immudiagnostik®/IDK). All comparisons were performed throughout non-parametrical test. In SpA group, due to the low number of ATI+ patients at W12 by bELISA the statistical analysis to compare both assays were not performed.

Results: ATI detection by both assays at early stages (≤ 22 W) of treatment is shown in Table 1a. ATI were always detected earlier by IDK than bELISA and also in RA than in SpA patients probably reflecting the effect of lower Ifx doses. Three out of 106 (3%) vs 0 (0%) patients had ATI at W 2 and 62 (58%) vs 20 (18%) patients at W22, by IDK and bELISA, respectively.

Table 1.

	W2		W6		W12		W22	
	AR	SpA	AR	SpA	AR	SpA	AR	SpA
<i>a) ATI+ patients (n, %) at early stages</i>								
bELISA	0	0	3(7%)	0	10(22%)	1(2%)	13(29%)	7(12%)
IDK	1(2%)	2(3%)	7(16%)	2(3%)	16(36%)	16(26%)	28(62%)	34(56%)
<i>b) Patients who discontinued (n, %) Ifx therapy considering ATI status at early stages</i>								
bELISA+					9(90%)*	1(100%)*	12(92%)	4(57%)
bELISA-					23(66%)	22(37%)	20(63%)	19(35%)
IDK+					15(94%)*	7(44%)	24(86%)	13(38%)
IDK-					17(59%)	11(24%)	13(77%)	10(27%)

*p<0.05 comparing between ATI+ vs ATI- in each assay.

Once ATIs appeared, regardless both methods, they persisted throughout the follow-up, indicating that immunogenicity was not transient.

At W22, only 13/28 (46%) and 7/34 (21%) patients with ATI detected by IDK were also positive by bELISA in RA and SpA, respectively.

ATI levels by IDK were higher in ATI+ by bELISA than in ATI- patients at early stages: ATI levels by IDK at W12: 91[74-348] ng/ml ATI+ vs 21.7[15-59.5] ng/ml ATI- (p<0.01) and at W22: 132 [89-372] ng/ml ATI+ vs 23[13-66] ng/ml ATI- (p<0.001). However, only in 4% (2/45) patients with RA and in 13% (8/61) patients with SpA the detection by IDK was earlier than by bELISA at W12.

Free IFX in serum was not detected in bELISA ATI+ patients. In IDK ATI+ patients low circulating Ifx levels were present as compare to ATI- since W6 to the end of follow-up (p<0.01).

More ATI+ patients dropped out Ifx at W12 and W22 regardless de assay (Table 1.b), being statistically significant for both assays in patients with RA and only for bELISA in patients with SpA.

Conclusion: ATI measured by a drug-tolerant assay are always detected earlier than ATI detected by bELISA, indicating that immunogenicity, at least with

Ifx, is usually an early event. High levels of ATI by IDK are associated with an earlier detection by bELISA in case of RA patients. ATI detected only by drug tolerant assays are associated with low levels of circulating Ifx but not with a complete drug neutralization and may do not have clinical relevance compared to ATI detected by bELISA. Many patients have low levels of ATI which can only be detected by drug tolerant assays after long-term of follow-up.

The reasons why ATI levels rise rapidly in some patients while in others remain low are currently unknown but may be relevant if the clinical effect of immunogenicity is to be minimized.

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POS0618

PERSISTENCE OF REMISSION AFTER TAPERING OF GOLIMUMAB IN INFLAMMATORY JOINT DISEASE (IJD)

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Background: In refractory IJD, remission may be obtained with anti-TNF α drugs and other biological disease modifying anti-rheumatic drugs (bDMARDs). The last EULAR recommendations suggest tapering of bDMARD when remission persists¹. However, best timing and modality of tapering are uncertain and specific knowledge on patients' characteristics associated to a better outcome is still lacking.

Objectives: To evaluate the persistency of remission after increasing the interval between injections of Golimumab in a group of patients affected by rheumatoid arthritis (RA), psoriatic arthritis (PsA), ankylosing spondylitis (AS) and juvenile idiopathic arthritis (JIA) and to identify any variables associated to disease flare after tapering.

Methods: Between 2011 and July 2020, 80 patients affected by RA, PsA, AS and JIA treated with Golimumab were enrolled. Their demographic and clinical data, including inflammation (ESR and CRP) and clinimetric indices (DAS28 or BASDAI), were collected at baseline and during the follow up visit (T1). In 22/80 patients that reached clinical remission at T1, the time between Golimumab injections has been prolonged (mean time between injection: 43.7 days); ESR and CRP, DAS28/BASDAI, and time since the start of the tapering (weeks) were evaluated in the next control visit (T2).

Results: 80 patients were enrolled (32 male, mean age 50.6 years $\pm$ 13.91), 34 AS, 33 PsA, 9 RA and 4 JIA. At baseline they have an active disease with a DAS 28 of 4.74 $\pm$ 0.85 and a BASDAI of 5.23 $\pm$ 1.31. At T1, 60/80 patients were in remission (75%), with a mean DAS 28 of 1.84 $\pm$ 0.6 and an average BASDAI of 1.32 $\pm$ 0.6, and 22/60 patients started drug tapering. At T2, 20/22 patients (91%) were in remission, (DAS 28 1.9 $\pm$ 0.49, BASDAI of 0.8 $\pm$ 0.67). A significantly higher BASDAI was observed at T1, even though in the range of absence of disease activity (2.2, $\pm$ 0.28 vs 0.58, $\pm$ 0.47; p < 0.001) in patients who, after extending the therapeutic interval (T1) were no longer in remission at T2. Patients with a flare of disease activity (2/22) were taken back to the 28 days window of Golimumab with a prompt recovery of disease remission. Out of the 38 patients maintained at the standard dose, 4 experienced a disease flare with necessity to switch or swope bDMARD, with a retention rate in this group of 90%. Difference of retention rate between patients on standard vs reduced dose was not statistically significant.

Conclusion: Tapering of Golimumab was successful in 91% of the cases without flare. Moreover, the prolongation of the increase of the treatment window provided the same result as that obtained in patients that continued in the standard time window. This evidence suggests that the extension of the gap between Golimumab administrations may be feasible and safely applied in practice.

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