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 IN, IN MANY CASES, WITHOUT RELEVANT CLINICAL SIGNIFICANCE**

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**Background:** Infliximab (Ifx) has proven effective in treating rheumatoid arthritis (RA) and spondyloarthopathies (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. Ifx presence was evaluated by a drug-sensitive in-house two-site (bridging) ELISA (bELISA) and a drug-tolerant commercial ELISA assay (ImmunoDiagnostik®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 (W22W) of treatment is shown in Table 1. 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.**

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<td>22</td>
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a) ATI+ patients (n, %) at early stages

b) Patients who discontinued (n, %) Ifx therapy considering ATI status at early stages

**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 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 RETENTION AFTER TAPERING OF GOLIMUMAB IN INFLAMMATORY JOINT DISEASE (IJD)**

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**Background:** In refractory IJD, remission may be obtained with anti-TNFα 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 persistence of remission after increasing the interval between injections of Golimumab in a group of patients affected by rheumatoid arthritis (RA), psoriatic arthritis (PsA), anklyosing 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 +/- 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+/-.85 and a BASAI of 5.23+/-.13. At T1, 60/80 patients were in remission (75%), with a mean DAS 28 of 1.64+/-.6 and an average BASDAI of 1.32+/-.6, and 22/80 patients started drug tapering. At T2, 20/22 patients (91%) were in remission, (DAS 28 1.9+/-.49, BASAI of 0.8+/-. 0, 87). A significantly higher BASDAI was observed at T1, even though in the range of absence of disease activity (2.2, +/- 0.28 vs 0.58, +/- 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 (22/2) were taken back to the 28 days weekly of Golimumab with prompt recovery of remission. Out of the 38 patients maintained at the standard dose, 4 experienced a disease flare with necessity to switch or swap 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 in 51% of the patients that remained in the standard fixed time window. This evidence suggests that the extension of the gap between Golimumab administrations may be feasible and safely applied in practice.

**References:**


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