health status, the change in patient satisfaction adjusted for CDAI at week 0 was statistically significantly correlated with changes in "symptom" and "affect" (all p -values < 0.05). However, there were no statistically significant correlations between change in patient satisfaction and change in "physical", "role", and "social interaction".

Conclusions: Satisfaction was correlated with pain, PGA and psychological state in patients with RA treated with tocilizumab. On the other hand, satisfaction was not correlated with TJC, SJC and EGA. In other words, it appears that patient satisfaction is more closely linked with how symptoms are experienced physically and mentally. Further research into specific factors influencing the patients' experience could shed more light on conditions for improving patients' satisfaction and QOL.

Disclosure of Interest: None declared

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FRI0133 CENTRAL ROLE OF TOCILIZUMAB IN FIBROBLAST DOMINATED MODELS OF INFLAMMATORY AUTOIMMUNE ARTHRITIS

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Background: Immune mediated inflammatory arthritis including rheumatoid arthritis (RA), psoriatic arthritis (PsA) and spondyloarthritis (SpA) all characterised by joint synovitis. Disease-modifying antirheumatic drugs (bDMARDs) targeting specific components of the pathogenesis have radically improved the treatment of the diseases. However, a fair proportion of patients are non-responders.

Today, the first choice of DMARD is dependent on market pricing, regardless of the immunological target. This is due to the rather similar efficacy profile of the different DMARDs. Therefore, there is a need for stratification of patients suffering from Immune mediated inflammatory arthritis in order to reduce the fraction of DMARD non-responders.

Objectives: The objective of this study was to study the effects of various DMARDs on different synovial cell subsets using several human *ex vivo* models of immune mediated inflammatory arthritis. This could potentially guide future studies of personalising DMARDs in these diseases.

Methods: Synovial fluid was obtained from a study population of patients with active rheumatoid arthritis (RA) or peripheral spondyloarthritis (SpA). Synovial fluid mononuclear cells (SFMCs) containing primarily synovial monocytes and lymphocytes cultured for 48 hours ("Macrophage and Lymphocyte model") were used to study the effect of different biological agents on secretion of monocyte chemoattractant protein-1 (MCP-1) ($n=14$). Further, fibroblast-like synovial cells (FLSs) were co-cultured with autologous PBMCs ("FLS model") to study the effects of the same biological agents ($n=6$) in cultures dominated by synovial FLSs. Finally, SFMCs cultured for 21 days ("Osteoclast model") were studied to assess the effects on inflammatory osteoclastogenesis ($n=10$) measured by tartrate-resistant acid phosphatase (TRAP). The DMARDs investigated are shown in table 1.

Results: "Macrophage and Lymphocyte model"; In SFMCs cultured for 48 hours, all DMARDs included, except anakinra, had the ability to decrease the production of MCP-1. The two TNF inhibitors (adalimumab and etanercept) ($p<0.05$ and $p<0.01$) and baricitinib ($p<0.05$) had the most pronounced effects and reduced the production of MCP-1 by approximately 25%. Tocilizumab had in this culture a non-significant reduction of MCP-1 production.

"FLS model"; In the FLS+PBMCs cultured for 48 hours, tocilizumab ($p<0.001$) and the two JAK inhibitors (tofacitinib and baricitinib, $p<0.05$ and $p<0.05$) were exclusive in decreasing the cytokine production of MCP-1 by around 50%.

"Osteoclast model"; In SFMCs cultured for 21 days, only the two TNF inhibitors, adalimumab and etanercept were able to significantly reduce the secretion of TRAP from adherent macrophage like synovial cells by roughly 25% ($p<0.01$, $p<0.001$).

Abstract FRI0133 – Table 1

Generic name:

Adalimumab
Etanercept
Tocilizumab
Anakinra
Ustekinumab
Secukinumab
Tofacitinib
Baricitinib

Conclusions: This study reveals that most DMARDs have effects in the "Macrophage and Lymphocyte model" whereas tocilizumab, tofacitinib and baricitinib were superior in the "FLS model" and only the two TNF inhibitors were effective in

the "Osteoclast model". The findings in the "FLS model" reveals a possible beneficial effect of tocilizumab and JAK inhibitors to patients with fibroblast dominated arthritis. This study could potentially guide future studies of personalising DMARDs to treat immune mediated inflammatory arthritis.

Disclosure of Interest: None declared

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FRI0134 IS THERE ANY DIFFERENCE IN RA PATIENTS FOR METHOTREXATE USE VS. LEFLUNOMIDE USE AS A CONCOMITANT TREATMENT WITH BIOLOGICAL AND TARGETED SYNTHETIC DMARDs IN TURKIBO REGISTRY?

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Background: TURKIBO registry is the Turkish version of Danish DANBIO rheumatologic database which has been established in 2011. Demographics and previous or current treatment with conventional (csDMARD) and targeted synthetic (tsDMARD), and biological DMARDs (bDMARDs) were collected.

Objectives: We aimed to investigate the efficacy and safety status of methotrexate (MTX) vs. leflunomide (LEF) use as a concomitant treatment with bDMARDs and tsDMARD in this registry.

Methods: Frequencies of achievement of remission or remission +low disease activity (LDA) at the 6th month of bDMARD or tsDMARD treatment were compared between patients who were on these medications with MTX vs. LEF as a concomitant treatment. Drug survival and switch rates of bDMARDs and tsDMARD treatments either with MTX or LEF were compared. The adverse effects with MTX and LEF concomitant use were evaluated as well.

Results: The study included 725 bDMARD or tsDMARD receiving RA patients from 8 participating centres of the TURKIBO registry. Of these patients, 462 (63.7%) were receiving concomitant MTX and 263 (36.3%) LEF. Demographic findings are given in the table 1. Achievement of remission and remission +LDA at the 6th month of bDMARD or tsDMARD initiation was similar in concomitant MTX vs LEF groups (51.4% vs. 53%, $p=0.683$). When each bDMARD and tsDMARD was evaluated separately, achievement of remission were again similar in MTX and LEF concomitant users (TNFi: 53% vs. 54%; ABA: 50% vs. 59%; RTX: 53% vs. 61%; TCZ: 42% vs. 35%; $p>0.05$ for all). For TOFA, although remission +LDA rate was numerically higher in MTX concomitant group than LEF group (42% vs. 21%), the difference was not statistically significant due to the smaller sample size of TOFA ($n=33$). The results were similar for all DMARD groups when remission was evaluated alone. Drug survival (17±12 vs. 16±11 months, $p>0.05$) and drug discontinuation (42,2 vs 38, $p>0.05$) rates of bDMARDs or tsDMARD were also not different in MTX vs. LEF concomitant users. Adverse effects rate (19.5% vs 20.5%, $p>0.05$) were similar between MTX vs. LEF concomitant users as well.

Abstract FRI0134 – Table 1. Demographic findings of patients.

Sex, n (%)	Female	596 (82,2)
	Male	129 (17,8)
Age, Median (Q1-Q3)		55 (45-62)
Age, Mean±SD		54±13
Disease duration, Orntaca (Q1-Q3)		12 (8-17)
Disease duration, OrntSD		13±8
Biological and targeted synthetic drugs, n (%)	TNFi*	354 (48,8)
	RITUXIMAB	144 (19,9)
	ABATACEPT	127 (17,5)
	TOCILIZUMAB	61 (8,4)
	TOFACITINIB	36 (5,0)
	ANAKINRA	3 (0,4)
Biological+MTX, n (%)		462 (63,7)
Biological+LEF, n (%)		263 (36,3)

*TNFi: ETANERCEPT, ADALIMUMAB, CERTOLIZUMAB, GOLIMUMAB, INFILIXIMAB, REMSIMA.

Conclusions: Achievement of remission or remission +LDA was not different with the concomitant use of MTX vs. LEF with any bDMARD or tsDMARD treatment in RA patients with a similar safety profile. LEF might be an alternative as a concomitant DMARD in MTX-intolerant RA patients initiating bDMARDs or tsDMARD.

Disclosure of Interest: None declared