Figure 1. Receiver operating characteristic curves for CSA (red), CSMI (green) and SI (blue). AUC for CSA was 0.632, CSMI-0.609 and SI-0.625.

Conclusion: These data suggest that CSA, CSMI and SI help predict the fracture risk in patients with RA. HAL, D1, D2, D3, A, Θ and Y do not predict risk of fracture. The CSA regression model was the strongest predictor of fracture. HSA measurements can therefore help predict risk of fracture in conjunction with other factors. Limitations of the study are that it was retrospective and only studied patients who had a DEXA scan.

REFERENCES:

- [1] Xue A, Wu S, Jiang L, Feng A, Guo H, Zhao P. Bone fracture risk in patients with rheumatoid arthritis: A meta-analysis. *Medicine*. 2017; 96 (36): e6983. Available from: doi: 10.1097/MD.0000000000006983.
- [2] Faulkner KG, Wacker WK, Barden HS, Simonelli C, Burke PK, Ragi S, Del Rio L. Femur strength index predicts hip fracture independent of bone density and hip axis length. *Osteoporos Int*. 2006;17(4):593-9. doi: 10.1007/s00198-005-0019-4.
- [3] Kaptoge S, Beck TJ, Reeve J, Stone KL, Hillier TA, Cauley JA, et al. Prediction of Incident Hip Fracture Risk by Femur Geometry Variables Measured by Hip Structural Analysis in the Study of Osteoporotic Fractures. *Journal of Bone and Mineral Research*. 2008; 23 (12): 1892-1904. Available from: doi: https://doi.org/10.1359/jbmr.080802.

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POS0512

DIFFERENCES IN TREATMENT SATISFACTION, PATIENT PREFERENCES, AND TREATMENT PATTERNS BETWEEN EUROPEAN, SOUTH AMERICAN, AND JAPANESE PATIENTS WITH SUBOPTIMALLY CONTROLLED RHEUMATOID ARTHRITIS: A SUBGROUP ANALYSIS OF THE SENSE STUDY

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Background: Despite the availability of advanced therapies, many patients with rheumatoid arthritis (RA) do not achieve their treatment goals. Understanding geographic influence on patient perspectives and physicians' attitudes toward

treatment adjustments may inform region-specific strategies to improve outcomes in RA.

Objectives: To explore differences in treatment satisfaction, patient preferences, and treatment strategies between patients from Europe (EU), South America (SA), and Japan (JP) with suboptimal control of RA.

Methods: This is a subgroup analysis of SENSE, a non-interventional cross-sectional study in adults with RA who had moderate/high disease activity as measured by Disease Activity Score in 28 joints with erythrocyte sedimentation rate (DAS28[ESR]) >3.2, despite disease-modifying antirheumatic drug (DMARD) treatment. Patient satisfaction and preferences, treatment adherence, patient-reported outcomes, and physicians' plans for DMARD switch were assessed as previously described.¹ Predictors of good treatment satisfaction and physician's decision not to switch DMARDs were identified using multiple logistic regression analyses.

Results: Of 1234, 272, and 118 patients enrolled from EU, SA, and JP, respectively, 13.9%, 15.4%, and 5.9% reported good treatment satisfaction. Irrespective of region, patients reported impaired quality of life and good treatment adherence, and around one-third of patients received targeted synthetic (ts) or biologic (b) DMARDs. Among patients treated with ts/bDMARDs, monotherapy was most common in SA (45.3%), followed by EU (26.3%) and JP (18.8%), consistent with a greater acceptance of combination therapy in JP. More than 80% of JP patients preferred oral treatments versus <60% of EU/SA patients. DMARD switches were planned in 51.8% (EU), 57.4% (SA), and 38.1% (JP) of patients, most commonly to a tumor necrosis factor inhibitor. Predictors for good treatment satisfaction included treatment with ts/bDMARDs and the presence of psychiatric disorders in EU and SA; however, current disease activity was not a common predictor (Table 1). Reluctance to switch treatments was predicted by lower disease activity assessed by DAS28(ESR) (all regions) and current treatment with ts/bDMARDs (EU/SA).

Table 1. Predictors for good treatment satisfaction and no treatment switch planned

OR (95% CI)	Europe (n=1234)	South America (n=272)	Japan (n=118)
Good treatment satisfaction (TSQM global treatment satisfaction ≥80)			
Current treatment with ts/bDMARDs	3.8 (2.7, 5.4)****	4.9 (2.2, 10.8)****	—
Psychiatric disorders	2.4 (1.3, 4.6)**	3.1 (1.2, 8.4)*	—
Number of comorbidities	—	—	2.3 (1.2, 4.3)*
Worst joint pain	—	1.3 (1.1, 1.5)**	—
SF-36 MCS	1.0 (1.0, 1.1)****	—	1.3 (1.1, 1.5)**
SF-36 PCS	1.1 (1.0, 1.1)****	—	—
Work Productivity and Activity Impairment—Rheumatoid Arthritis:	—	1.0 (1.0, 1.0)***	—
Total activity impairment	—	0.3 (0.1, 0.7)**	—
DAS28(ESR) >5.1	—	—	0.1 (0.0, 0.9)*
Female	—	—	—
No treatment switch planned			
Current treatment with ts/bDMARDs	3.9 (3.0, 5.2)****	2.4 (1.4, 4.2)**	—
Number of comorbidities	1.2 (1.1, 1.4)****	—	—
Age	—	—	1.0 (1.0, 1.1)*
TSQM effectiveness subscore	1.0 (1.0, 1.0)***	1.0 (1.0, 1.0)***	—
Number of concomitant medications	0.9 (0.8, 1.0)**	—	—
DAS28(ESR)	0.5 (0.5, 0.6)****	0.6 (0.5, 0.8)***	0.6 (0.4, 0.9)*

X² test: ****p<0.0001, ***p<0.001, **p<0.01, *p<0.05CI, confidence interval; OR, odds ratio; SF-36M/PCS, 36-Item Short-Form Survey mental/physical component summary; TSQM, Treatment Satisfaction Questionnaire for Medication

Conclusion: In patients with moderate to high RA disease activity, current disease control was a common determinant of treatment switches. Predictors for good treatment satisfaction revealed region-specific patient attitudes to treatment acceptance despite poor disease control.

REFERENCES:

- [1] Taylor PC, et al. *Ann Rheum Dis* 2020;79:996–7

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POS0513

ABATACEPT IN MONOTHERAPY VERSUS COMBINED IN INTERSTITIAL LUNG DISEASE OF RHEUMATOID ARTHRITIS. MULTICENTER STUDY OF 263 CAUCASIAN PATIENTS

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Background: Interstitial lung disease (ILD) is a severe complication of RA. Abatacept (ABA) have demonstrated efficacy in RA-ILD [1,2], although combined treatment with MTX or others DMARDs remain controversial.

Objectives: To assess the efficacy and safety of ABA in monotherapy (ABA_{MONO}) versus combined-ABA, ABA plus MTX (ABA_{MTX}) or ABA plus other non-MTX DMARDs (ABA_{NON-MTX}), in RA-ILD.

Methods: Observational multicenter study of RA-ILD caucasian patients treated with ABA. We analyzed in three groups (ABA_{MONO}, ABA_{MTX}, ABA_{NON-MTX}) the following outcomes: **a)** Dyspnea, **b)** FVC and DLCO, **c)** HRCT, **d)** DAS28-ESR, **e)** corticosteroid-sparing effect. Differences between basal and final follow-up were evaluated. Multivariable linear regression was used between the three groups.

Results: We studied 263 RA-ILD patients (mean age 64.6±10 years) [ABA_{MONO} (n=111), ABA_{MTX} (n=46) and ABA_{NON-MTX} (n=106)]. At baseline, ABA_{MONO} patients were older (67±10 years) and took higher prednisone dose (10 [IQR 5-15] mg/day). There was no statistically significant differences in sex, seropositivity, ILD patterns, FVC, DLCO or disease duration. In all groups, most patients experienced stabilization or improvement in FVC, DLCO, dyspnea, HRCT as well as improvement in DAS28-ESR. A statistically significant difference between basal and final follow-up was only found in corticosteroid-sparing effect in ABA_{MTX} or ABA_{NON-MTX} (Figure 1). However, in the multivariable analysis, there were no differences in any outcome between the three groups (Table 1).

Figure 1.

Conclusion: In caucasian individuals with RA-ILD, ABA_{MONO} or ABA_{MTX} or ABA_{NON-MTX} seems to be equally effective and safe. However, a corticosteroid-sparing effect is only observed in combined-ABA.

REFERENCES:

- 1) Fernández-Díaz C, et al. Abatacept in patients with rheumatoid arthritis and interstitial lung disease: A national multicenter study of 63 patients. *Semin Arthritis Rheum.* 2018 Aug;48(1):22-27. doi: 10.1016/j.semarthrit.2017.12.012.
- 2) Fernández-Díaz C, et al. Abatacept in interstitial lung disease associated with rheumatoid arthritis: national multicenter study of 263 patients. *Rheumatology (Oxford).* 2020 Dec 1;59(12):3906-3916. doi: 10.1093/rheumatology/keaa621.

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