for further research in order to identify the reasons of non-active disease activity in patients classified clinically as in moderate or severe disease activity.

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SAT0132

COMORBIDITIES AFFECT THE RETENTION RATE BUT NOT THE CLINICAL RESPONSE IN A COHORT OF RHEUMATOID ARTHRITIS PATIENTS TREATED WITH TUMOR NECROSIS FACTOR INHIBITORS.

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Background: Rheumatoid arthritis (RA) is frequently complicated by other comorbid diseases that may drive therapeutic strategy or interfere with achieving clinical response.

Objectives: To retrospectively evaluate the impact of comorbidities on treatment choice, 12-month clinical response, and 24-month retention rate in a cohort of RA patients treated with a first-line subcutaneous tumor necrosis factor alpha inhibitor (TNFi).

Methods: Study population was extracted from a local registry which included all RA patients receiving adalimumab (ADA) or etanercept (ETN) as first-line biologic drug between January 2001 and December 2013. The prevalence of common RA comorbidities was computed and the study population was stratified according to Rheumatic Disease Comorbidity Index (RDICI) RDICI=0 vs RDICI≥1 for evaluating the role of comorbidities on the choice between ETN and ADA; the prescription of concomitant methotrexate (MTX); and the impact of comorbidities on 1-year Disease Activity Score 28 (DAS28-ESR) remission and EULAR good-moderate response rates. The 24-month retention rate was computed by the Kaplan-Meier method and a Cox proportional hazard model was developed to examine the role of RDICI and other baseline factors as predictors of TNFi persistence.

Results: 310 RA patients (153 ADA and 157 ETN) were included (female 82.1%, mean±standard deviation (SD) age 53.6±13.1 years, mean disease duration 11.6±9.2 years, mean baseline DAS 28.5±1.21, RF positivity 76.4%, mean HAQ 1.39±0.56). 41.2% of patients had at least one comorbidity (overall mean RDICI 0.73) and the prevalence of conditions is reported in table 1. The proportion of patients with RDICI≥1 was similar in the subgroup receiving or not concomitant MTX (55.1% versus 44.8%, respectively; p=0.57) and similar (p=0.22) in patients treated with ADA (44.8%) or ETN (37.8%). No individual comorbidity was associated with the prescription of MTX or the choice between the two TNFis. No difference was found in the rates of both EULAR good-moderate response (61.3% vs 53.7%, p=0.175) and DAS28-ESR remission (31.4% vs 27.2%, p=0.463) according to baseline RDICI score. On the other hand, elevated RDICI is a predictor of biologic drug discontinuation (Hazard Ratio [HR] 1.17, confidence interval [95% CI] 1.00-1.37; p=0.04), whereas treatment with ETN (HR 0.50, 95% CI 0.35-0.71; p<0.001) and concomitant MTX (HR 0.57, 95% CI 0.40-0.81; p=0.002) were both associated with a lower risk of TNFi withdrawal.

COMORBIDITY	PREVALENCE (n=310)
Osteoporosis (no fractures)	24.5%
Hypertension	20.3%
Depression	11.8%
Cardiovascular disease	10.6%
Lung disease	7.9%
Fibromyalgia	7.6%
Autoimmune Thyroid disease	5.8%
Dyslipidemia	5.5%
Gastrointestinal disorders	5.1%
Diabetes	3.3%
Osteoporotic fractures	2.4%
Neurological disorders	1.8%
History of malignancy	0.3%

Conclusions: in our real-life experience, the baseline presence of comorbidity seemed to not influence the prescription of concomitant MTX and to not drive the choice between ADA and ETN. Comorbidities did not affect 1-year clinical response, but were associated with a higher risk of TNFi discontinuation over a 2-

year follow-up period. The use of ETN and concomitant treatment with MTX were both strong predictors of drug persistence.

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SAT0133

PREVALENCE OF TYPE 2 DIABETES AND EVALUATION OF PATIENT CHARACTERISTICS AMONG PATIENTS WITH AND WITHOUT RA FROM COMMUNITY RHEUMATOLOGY CLINICS

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Background: RA and type 2 diabetes (T2D) have common core pathophysiologic pathways, such as insulin resistance and increased glycated end products related to endothelial dysfunction, which may portend cardiovascular disease.¹ Currently there is limited real-world evidence of T2D prevalence among patients (pts) with RA.

Objectives: To estimate the prevalence of T2D and insulin resistance among pts with RA vs control (osteoarthritis [OA] pts). To evaluate characteristics among RA pts with/without T2D.

Methods: A retrospective study was conducted on a subset of the JointMan database (an electronic medical record of >6000 pts from >10 providers). At each visit, diagnosis, medications, test results, co-morbidities and demographic data were collected. Pts aged ≥18 years with ≥2 diagnoses of RA or satisfying ACR criteria from 1 Jan 2009 to 30 Nov 2017 were included with a control group (pts with ≥2 OA diagnoses in the same period). Pts were considered to have T2D if they had a diagnosis code, diabetic medications prescription, HbA1c ≥6.5%, random glucose test ≥200 mg/dL or prior report of T2D. Between-group prevalence was compared using a chi-squared test and characteristics of pts with/without T2D were compared using Fisher's exact, chi-squared and Mann-Whitney tests.

Results: Data were analysed from 4181, 1157 and 1626 pts in RA-only, OA-only and dual (RA plus OA) cohorts, respectively. The RA-only cohort was younger and had a lower proportion of white pts compared with other cohorts (Table). T2D prevalence was significantly higher in the dual cohort (24.3%, n=395) vs RA-only (16.2%, n=676; p<0.001) and OA-only cohorts (10.5%, n=121; p<0.001). T2D prevalence was significantly higher in the RA-only vs OA-only cohorts (p<0.001). Sicca and Sjögren's syndromes were more prevalent co-morbidities in pts with RA only with vs without T2D (16.3 vs 13.0%; p=0.023) and a similar trend was observed for thyroid disorder (6.4 vs 3.7%; p=0.001).

Table 1. Pt Characteristics by Cohort

	RA only (n=4181)		OA only (n=1157)		Dual (RA plus OA) (n=1626)	
	With T2D (n=676)	No T2D (n=3505)	With T2D (n=121)	No T2D (n=1036)	With T2D (n=395)	No T2D (n=1231)
Age (years), mean (SD)	59.6 (13.5)	59.6 (14.8)	68.6 (9.8)	65.4 (11.4)	64.7 (10.5)	64.5 (11.1)
Female, n (%)	504 (74.6)	2643 (75.4)	83 (68.8)	761 (73.5)	294 (74.4)	943 (76.6)
Race, n (%)						
American Indian or Alaska Native	29 (4.3)	71 (2.0)	6 (5.0)	9 (0.9)	12 (3.0)	27 (2.2)
White	521 (77.1)	2579 (73.6)	105 (86.8)	921 (88.9)	363 (91.9)	1127 (91.6)
Co-morbidities, n (%)						
Sicca/Sjögren's syndromes	110 (16.3)	456 (13.0)	20 (16.5)	117 (11.3)	92 (23.3)	356 (28.9)
Thyroid disorders	43 (6.4)	128 (3.7)	3 (2.5)	65 (6.3)	27 (6.8)	68 (5.5)
Charlson Comorbidity Index, mean (SD)	1.02 (0.15)	1.01 (0.18)	1.05 (0.34)	1.01 (0.12)	1.01 (0.14)	1 (0.09)

Conclusions: A higher prevalence of T2D was observed in pts with RA compared with controls. In addition, co-morbidities of Sjögren's syndrome and thyroid disorder were higher in T2D pts with RA but not for dual RA plus OA.

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