Lines represent changes of mean SF36-MCS and mean SF36-PCS for EA and IBP; 95% confidence intervals were not represented because they were very small; The number of available data is between 696 and 508 according to the timepoint for SF-36 in EA and 646 to 422 according to the timepoint for SF-36 in IBP.

Conclusions: HRQoL was altered similarly for both physical and mental aspects in EA and early IBP. More than half the patients reached levels of HRQoL close to the general population. Disease activity only partly explained HRQoL: the drivers of HRQoL should be further explored.

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THU0687 THE IMPACT OF URATE-LOWERING THERAPY ON KIDNEY FUNCTION (IMPULSKF): PRELIMINARY RESULTS

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Background: The extended 2016 EULAR updated report states that for patients on ULT, SUA level should be monitored and maintained to <6 mg/dL (360 µmol/L). SUA level <3 mg/dL (180 µmol/L) is not recommended in the long term. And among EULAR proposals for future research is mentioned the optimal duration for prophylaxis of acute attacks when starting ULT, long-term impact of very low urate levels on the central nervous system, impact of ULT on kidney function.

Objectives: This project aims to investigate the impact of two target levels urate-lowering therapy (ULT) caused by hyperuricemia (HU) on kidney function and CKD progression measured by eGFR and albuminuria (A).

This trial had been formulated by 2016 updated EULAR evidence-based recommendations for the management of gout as a perspective proposal task for future research.

The key points are: 1) an unknown target HU level and 2) the time duration of ULT resulting in preserved kidney function in two subject groups a) with gout and b) without gout but highly elevated uricemia and CKD.

Methods: The trial has POEM design with 36 months duration. IMPULSKF is a Clinical Randomised Prospective Controlled Open Multicenter trial that randomly (by chance) assigns 180 participants in parallel groups. These patients with high SUA level (>8 mg/dL; 480 µmol/L) were divided into 2 arms (90+90) 1) with gout (EULAR's criteria) and 2) without gout but with presence of CKD 1–4 and 2 target SUA levels in each group as 5 mg/dL (300 µmol/L) and ultralow SUA <3 mg/dL (180 µmol/L) achieved either with allopurinol or febuxostat. The data obtained will be compared with control group (45 with gout without CKD and 45 with CKD).

Results: Retrospective analysis and 6 mothes in trial results has been shown that treatment with febuxostat improves GFR and BP control in patients with asymptomatic HU in non-diabetic CKD 2–3.²

Febuxostat treatment led to the most beneficial decrease in the level of uric acid (–223±16 µmol/L, p<0.01 with control and p<0.05 with allopurinol group), increased GFR (+10±2 ml/min, p<0.01 with control and p<0.05 with allopurinol group), blood pressure decrease (–7±2/–3±1 mm hg, p<0.05 with control and p=0.93 with allopurinol group), albuminuria (–131±19 mg, p<0.01 with control and p<0.05 with allopurinol group). Potential benefits of febuxostat were better tolerability compared with allopurinol group with target levels of uricemia less 180 µmol/L in 32% of people.

Conclusions: Treatment with febuxostat (better than allopurinol) improves GFR and BP in patients with asymptomatic hyperuricemia in non-diabetic CKD 2–3. Ultralow SUA levels seems to be safe in majority of patients but its effect on CKD function is not yet clear.

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THU0688 DO CERTAIN DMARDS INCREASE RISK OF NEW-ONSET TYPE 2 DIABETES? EVALUATION OF PATIENTS' BASELINE CHARACTERISTICS

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Background: The risk of cardiovascular morbidities is higher in patients (pts) with RA and is exacerbated with type 2 diabetes (T2D).¹ Recent analysis showed that abatacept (ABA), a biologic (b)DMARD, has a lower incidence of T2D in pts with RA in clinical practice.²

Objectives: To compare baseline characteristics of pts with RA on DMARDs and evaluate incidence of T2D among these pts based on DMARD exposure.

Methods: Administrative claims data (2006–2016) from Optum Clinformatics (database A), QuintilesIMS PharMetrics Plus (database B) and Truven Market-Scan® (database C). Inclusion criteria were: 2 RA diagnosis codes+1 DMARD prescription; age ≥18 years; ≥3 months baseline (pre-index date); and 3 months of follow-up (post-index date). Mutually exclusive treatment groups (grp) were created based on the first prescription (index date) using a hierarchy of ABA, non-ABA bDMARDs (TNF inhibitors [TNFi] and non-TNFi [excluding ABA]) and conventional DMARDs (cDMARD; MTX or hydroxychloroquine [HCQ]). Also, an RA grp without DMARD use (NoDMARD) was identified. The index date for NoDMARD was first diagnosis date. Incident T2D was identified as those without T2D prior to index using one International Classification of Disease (ICD)–9 or ICD-10 diagnosis code for T2D. Assessment of T2D risk between treatment grps was based on regression and disease risk score (DRS) models. Adjusted incidence rate for T2D was based on a Cox model (stratified by DRS grps and categorised into 4 equal grps using quartile scores) with treatment as the independent variable.

Results: In databases A, B and C, 84,875, 2 07 811 and 1 94 819 pts with RA were identified, respectively (table 1). The combined proportions of pts in each treatment grp were: 3%–4% ABA; 12%–16% non-ABA bDMARD; and 41%–45% cDMARDs. Pts treated with ABA were older compared with those on non-ABA bDMARDs and a greater proportion had T2D risk factors of obesity, hypertension, dyslipidaemia and heart failure (table 1). The adjusted hazard ratios for T2D were significantly higher for non-bDMARD grps of TNFi and other bDMARDs vs ABA (figure 1).

Abstract THU0688 – Table 1. Baseline Risk Factors for T2D in Pts With RA by DMARD Grps

	ABA	TNFi	Non-TNFi	MTX only	HCQ	cDMARD – others	NoDMARD
Database A (N)	2825	9569	632	12 676	18 233	4368	36 572
Age≥55 years	52.5	38.8	60.3	63.3	53.4	62.6	61.3
Smoking	11.3	9.8	8.7	11.2	11.2	11.7	14.1
Obesity	9.7	7.1	6.2	7.4	7.9	8.2	10.0
Hypertension	39.9	30.5	36.2	44.1	40.7	46.7	54.8
Dyslipidaemia	35.9	28.4	29.1	41.2	39.9	43.9	52.2
Database B (N)	6497	30 329	1664	29 821	49 652	10 358	79 490
Age≥55 years	45.5	34.1	39.6	49.7	41.7	48.9	45.0
Smoking	9.4	8.4	8.0	9.3	8.9	9.3	11.7
Obesity	8.4	6.4	5.1	6.5	7.5	7.1	9.3
Hypertension	36.1	25.2	27.2	34.4	31.9	35.8	42.4
Dyslipidaemia	31.2	24.4	23.1	33.6	32.6	36.7	42.0
Database C (N)	8853	29 671	1714	30 669	47 850	10 891	65 171
Age≥55 years	50.7	36.0	43.3	54.9	46.1	54.5	53.1
Smoking	4.7	5.0	5.5	5.4	5.2	5.3	6.8
Obesity	5.4	4.6	5.0	4.8	5.2	4.8	6.4
Hypertension	37.7	26.2	29.2	36.1	33.5	37.8	43.8
Dyslipidaemia	28.9	23.4	23.1	31.1	30.2	33.7	38.4

All data are % unless indicated otherwise