SAT0220

EVALUATION OF LIVE ZOSTER VACCINE IN A SUBSET OF PATIENTS WITH RHEUMATOID ARTHRITIS TREATED WITH TOFACITINIB WITH OR WITHOUT METHOTREXATE, AND ADALIMUMAB WITH METHOTREXATE: RESULTS FROM A PHASE 3B/4 RANDOMISED TRIAL

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Background: Tofacitinib is an oral Janus kinase inhibitor for the treatment of rheumatoid arthritis (RA). Patients (pts) with RA are at increased risk for herpes zoster (HZ) and this risk is further increased with tofacitinib treatment.¹

Objectives: To evaluate the effect of live zoster vaccination (LZV) on HZ rates in a subset of methotrexate inadequate responder (MTX-IR) pts with RA who received tofacitinib with or without MTX, or adalimumab (ADA) with MTX in the ORAL Strategy randomised controlled trial (RCT).²

Methods: ORAL Strategy (NCT02187055) was a Phase 3b/4, 1-year, triple-dummy active-comparator-controlled RCT. Pts were randomised 1:1:1 to receive tofacitinib 5 mg twice daily (BID; tofa mono), tofacitinib 5 mg BID+MTX (tofa +MTX), or subcutaneous ADA 40 mg every other week + MTX (ADA+MTX); target MTX dose was 15–25 mg/week. In countries where LZV was available, pts aged ≥50 years received LZV at the investigator's discretion, 28 days before the first dose of study drug. HZ incidence rates (IR; pts with events per 100 pt-years) and 95% confidence intervals (CI) were calculated for each treatment arm and for vaccinated vs non-vaccinated pts.

Table 1. IRs and 95% CIs of HZ (serious and non-serious), and demographic characteristics among patients vaccinated and not vaccinated against HZ in the ORAL Strategy RCT

	Tofacitinib 5 mg BID monotherapy N=384		Tofacitinib 5 mg BID+MTX N=376		ADA 40 mg EQW+MTX N=386	
Vaccinated at study screening, n (%)	69 (18.0%)		75 (19.9%)		72 (18.7%)	
Vaccinated prior to study, n (%)	11 (2.9%)		9 (2.4%)		10 (2.6%)	
IR, n/N (%)	4/384 (1.0%)		8/376 (2.1%)		6/386 (1.6%)	
95% CI	1.12 (0.31, 2.89)		2.33 (1.00, 4.58)		1.69 (0.62, 3.67)	
Vaccinated at screening	1/69 (1.4%)		2/75 (2.7%)		0/72 (0.0%)	
Not vaccinated at screening	1/58 (1.7%)		3/301 (1.0%)		6/314 (1.9%)	
95% CI	0.04 (0.01, 0.33)		0.00 (0.00, 0.36)		0.00 (0.00, 0.59)	
Not vaccinated at screening	1/58 (1.7%)		2/301 (0.7%)		2/314 (0.6%)	
95% CI	0.04 (0.01, 0.33)		0.00 (0.00, 0.36)		0.00 (0.00, 0.59)	
Characteristics of patients who had HZ	Vaccinated N=1	Not vaccinated N=3	Vaccinated N=2	Not vaccinated N=6	Vaccinated N=0	Not vaccinated N=6
Mean age, years	75.0	40.7	58.0	58.8	-	52.2
Gender, M/F	0/1	0/3	1/1	0/6	-	2/4
Geographic region ^a , n						
North America ^b	0	1	1	3	-	2
Latin America ^c	0	1	0	1	-	0
Eastern Europe ^d	0	1	0	2	-	4
Western Europe ^e	1	0	1	0	-	0
Asia ^f	1	0	0	0	-	0
Serious HZ infection ^g	0	0	0	1	0	1
Adjusted OR ^h	1	1	0	0	0	2

^aFrozen LZV was not available in Canada, Israel or Thailand at the beginning of ORAL Strategy. In some instances, the ethics committees did not allow the vaccine to be given. ^bUSA, n=7; Mexico, n=2; Latvia, n=1; Bulgaria, n=1; Poland, n=3; Russia, n=1; Bosnia and Herzegovina, n=1; UK, n=1; Taiwan, n=1; ^cHZ cases requiring hospitalisation or parenteral HZ treatment. ^dDefined as disseminated or multifocal/multinodular (nonadjacent or >2 adjacent dermatomes) HZ. ^eOne case of varicella adjudicated as an OH was included as an OH case. ^fADA, adalimumab; BID, twice daily; CI, confidence interval; EQW, every other week; HZ, herpes zoster; IR, incidence rate; patients with events per 100 patient-years; LZV, live zoster vaccination; MTX, methotrexate; OR, odds ratio; RCT, randomised controlled trial.

Results: Of 1146 pts who received study drug (mean age: 50.1 years), 216 received LZV (proportion of pts who received LZV by treatment group: tofa mono: 18.0%; tofa+MTX: 19.9%; ADA+MTX: 18.7%) 28 days before randomisation in this RCT; 30 pts self-reported prior vaccination (Table). No pts had zoster-like lesions within 42 days of vaccination; 1 pt had vaccination site erythema. In the overall study population, HZ IR was similar between tofa mono and ADA+MTX and numerically higher (overlapping CI) with tofa+MTX. IRs were generally similar for pts who received LZV (18.8% of pts were vaccinated) vs those who did not (81.2%) (Table). Overall, 18/1146 pts had HZ. Among vaccinated pts, 3 (1.4%) had HZ: no events were serious and 1 (0.5%) event was multidermatomal (tofa mono). Among pts not vaccinated, 15 (1.6%) had HZ: there were 2 (0.2%) serious HZ events (tofa+MTX: n=1; ADA+MTX: n=1), 2 (0.2%) multidermatomal events (tofa mono: n=1; ADA+MTX: n=1) and 1 (0.1%) disseminated event (ADA+MTX).

Conclusions: In MTX-IR pts with RA, LZV was well-tolerated. HZ IR was numerically similar between tofa mono and ADA+MTX and higher with tofa+MTX. HZ rates were generally similar in pts who received LZV vs those not vaccinated. LZV has shown efficacy in prevention of HZ in 51% (pts ≥60 years old) and 70% (50–59 years old) of immunocompetent adults.³ Efficacy of LZV could not be fully evaluated as a minority (<20%) of pts received LZV and not all geographic regions studied in other tofacitinib studies were represented.

REFERENCES:

- Winthrop, et al. *Arthritis Rheumatol* 2014;66:2675–84.
- Fleischmann, et al. *Lancet* 2017;390:457–68.
- Hales, et al. *MMWR Morb Mortal Wkly Rep* 2014;63:729–31.

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SAT0221

EFFECT OF TOFACITINIB ON REDUCING PAIN IN PATIENTS WITH RHEUMATOID ARTHRITIS, PSORIATIC ARTHRITIS AND ANKYLOSING SPONDYLITIS

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Background: Tofacitinib is an oral Janus kinase inhibitor for the treatment of rheumatoid arthritis (RA) and psoriatic arthritis (PsA), which has also been evaluated in other inflammatory rheumatic diseases (IRD) including ankylosing spondylitis (AS). Pain contributes substantial morbidity in patients (pts) with IRD and directly impacts treatment adherence, assessment of disease improvement and health-related quality of life.

Objectives: To evaluate the effectiveness of tofacitinib in reducing pain in randomised controlled clinical trials in pts with RA, PsA and AS.

Methods: Five pt populations treated with tofacitinib 5 mg twice daily (BID), 10 mg BID or placebo (PBO) were evaluated: [1] conventional synthetic disease-modifying antirheumatic drug (csDMARD)-inadequate response (IR) RA pts pooled from ORAL Scan (NCT00847613), ORAL Sync (NCT00856544) and ORAL Standard (NCT00853385), [2] tumour necrosis factor inhibitor (TNFi)-IR RA pts from ORAL Step (NCT00960440), [3] csDMARD-IR PsA pts from OPAL Broaden (NCT01877668), [4] TNFi-IR PsA pts from OPAL Beyond (NCT01882439) and [5] AS pts from a Phase 2 study (NCT01786668). Pain outcomes evaluated from baseline to Month (M)6 (Week [W]12 in the AS population) included Pt's Assessment of Arthritis Pain (PAAP) (RA and PsA populations only), Short-Form Health Survey (SF)-36v2 Q7 (bodily pain in the past week), SF-36v2 Bodily Pain Domain (BP), EuroQol Five Dimensions Questionnaire Pain/Discomfort Domain (EQ-5D PD; all populations) and Bath Ankylosing Spondylitis Disease Activity Index (BASDAI) Q2 (level of AS neck, back or hip pain) and Q3 (other pain) score (PsA and AS populations only; PsA pts had presence of spondylitis at screening and baseline BASDAI total score >0 in the full analysis set [FAS]). Data were analysed descriptively.

Results: The csDMARD-IR RA, TNFi-IR RA, csDMARD-IR PsA, TNFi-IR PsA and AS populations comprised a total of 2066, 399, 316, 394 and 155 pts in the FAS, respectively. In each RA or PsA csDMARD-IR and TNFi-IR population treated with tofacitinib, mean PAAP at baseline (5 mg BID, range 55.7–65.7 mm; 10 mg BID, 54.4–60.1 mm) decreased as early as W2 (1st post-baseline assessment; 45.8–49.8 mm; 38.9–44.8 mm) and continued to decrease through M6 (30.9–34.4 mm; 28.2–36.7 mm); decreases were numerically greater vs PBO and the magnitude of change in RA and PsA populations was similar (Table). Improvements in SF-36v2 Q7 (Table), SF-36v2 BP (Table) and EQ-5D PD were observed in all 4 RA and PsA csDMARD-IR and TNFi-IR populations, and in BASDAI Q2 and Q3 in the csDMARD-IR PsA and TNFi-IR PsA populations. In the AS population, improvements from baseline in mean SF-36v2 Q7 (Table), SF-36v2 BP (Table), EQ-5D PD and BASDAI Q2 were reported at W12 and were numerically greater vs PBO.

Table 1. Mean (SE) PAAP score,^a SF-36v2Q7 score^b and SF-36v2 BP^c at baseline through M6(FAS) in RA and PsA csDMARD-IR or TNFi-IR population, and SF-36v2Q7 score,^b and SF-36v2 BP^c at baseline and W12 (FAS) in the AS population

	Tofacitinib 18 mg BID						Tofacitinib 18 mg BID						PBQ ^d					
	BL	W2	M1	M3	M6	SE	BL	W2	M1	M3	M6	SE	BL	W2	M1	M3	M6	SE
RA csDMARD-IR, N=266 (FAS)	infliximab 5 mg BID w=38, subcutaneous 18 mg BID w=182, PBO w=197						infliximab 5 mg BID w=38, subcutaneous 18 mg BID w=182, PBO w=197											
PAAP	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)
SF-36v2 Q7 (0-100)	43 (0.9)	NC	3.6 (0.9)	3.4 (0.9)	3.3 (0.9)	4.2 (0.9)	NC	3.3 (0.9)	3.1 (0.9)	3.1 (0.9)	4.2 (0.9)	NC	4.2 (0.9)	NC	3.9 (0.9)	3.8 (0.9)	3.8 (0.9)	0.3 (0.9)
SF-36v2 BP (0-100)	33.6 (0.3)	NC	39.5 (0.3)	40.8 (0.3)	41.8 (0.3)	34.1 (0.3)	NC	41.2 (0.3)	43.1 (0.3)	43.3 (0.3)	34.8 (0.3)	NC	34.8 (0.3)	NC	36.9 (0.3)	37.6 (0.3)	37.6 (0.3)	0.4 (0.3)
RA TNFi-IR, N=266 (FAS)	infliximab 5 mg BID w=38, subcutaneous 18 mg BID w=182, PBO w=197						infliximab 5 mg BID w=38, subcutaneous 18 mg BID w=182, PBO w=197											
PAAP	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)
SF-36v2 Q7 (0-100)	43 (0.9)	NC	3.6 (0.9)	3.4 (0.9)	3.3 (0.9)	4.2 (0.9)	NC	3.3 (0.9)	3.1 (0.9)	3.1 (0.9)	4.2 (0.9)	NC	4.2 (0.9)	NC	3.9 (0.9)	3.8 (0.9)	3.8 (0.9)	0.3 (0.9)
SF-36v2 BP (0-100)	33.6 (0.3)	NC	39.5 (0.3)	40.8 (0.3)	41.8 (0.3)	34.1 (0.3)	NC	41.2 (0.3)	43.1 (0.3)	43.3 (0.3)	34.8 (0.3)	NC	34.8 (0.3)	NC	36.9 (0.3)	37.6 (0.3)	37.6 (0.3)	0.4 (0.3)
PsA csDMARD-IR, N=116 (FAS)	infliximab 5 mg BID w=38, subcutaneous 18 mg BID w=182, PBO w=197						infliximab 5 mg BID w=38, subcutaneous 18 mg BID w=182, PBO w=197											
PAAP	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)
SF-36v2 Q7 (0-100)	43 (0.9)	NC	3.6 (0.9)	3.4 (0.9)	3.3 (0.9)	4.2 (0.9)	NC	3.3 (0.9)	3.1 (0.9)	3.1 (0.9)	4.2 (0.9)	NC	4.2 (0.9)	NC	3.9 (0.9)	3.8 (0.9)	3.8 (0.9)	0.3 (0.9)
SF-36v2 BP (0-100)	33.6 (0.3)	NC	39.5 (0.3)	40.8 (0.3)	41.8 (0.3)	34.1 (0.3)	NC	41.2 (0.3)	43.1 (0.3)	43.3 (0.3)	34.8 (0.3)	NC	34.8 (0.3)	NC	36.9 (0.3)	37.6 (0.3)	37.6 (0.3)	0.4 (0.3)
PsA TNFi-IR, N=116 (FAS)	infliximab 5 mg BID w=38, subcutaneous 18 mg BID w=182, PBO w=197						infliximab 5 mg BID w=38, subcutaneous 18 mg BID w=182, PBO w=197											
PAAP	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)
SF-36v2 Q7 (0-100)	43 (0.9)	NC	3.6 (0.9)	3.4 (0.9)	3.3 (0.9)	4.2 (0.9)	NC	3.3 (0.9)	3.1 (0.9)	3.1 (0.9)	4.2 (0.9)	NC	4.2 (0.9)	NC	3.9 (0.9)	3.8 (0.9)	3.8 (0.9)	0.3 (0.9)
SF-36v2 BP (0-100)	33.6 (0.3)	NC	39.5 (0.3)	40.8 (0.3)	41.8 (0.3)	34.1 (0.3)	NC	41.2 (0.3)	43.1 (0.3)	43.3 (0.3)	34.8 (0.3)	NC	34.8 (0.3)	NC	36.9 (0.3)	37.6 (0.3)	37.6 (0.3)	0.4 (0.3)
AS, N=155 (FAS)	infliximab 5 mg BID w=38, subcutaneous 18 mg BID w=182, PBO w=197						infliximab 5 mg BID w=38, subcutaneous 18 mg BID w=182, PBO w=197											
PAAP	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	4.0 (0.1)	0.1 (0.1)
SF-36v2 Q7 (0-100)	43 (0.9)	NC	3.6 (0.9)	3.4 (0.9)	3.3 (0.9)	4.2 (0.9)	NC	3.3 (0.9)	3.1 (0.9)	3.1 (0.9)	4.2 (0.9)	NC	4.2 (0.9)	NC	3.9 (0.9)	3.8 (0.9)	3.8 (0.9)	0.3 (0.9)
SF-36v2 BP (0-100)	33.6 (0.3)	NC	39.5 (0.3)	40.8 (0.3)	41.8 (0.3)	34.1 (0.3)	NC	41.2 (0.3)	43.1 (0.3)	43.3 (0.3)	34.8 (0.3)	NC	34.8 (0.3)	NC	36.9 (0.3)	37.6 (0.3)	37.6 (0.3)	0.4 (0.3)

Conclusions: Treatment with tofacitinib is associated with a rapid improvement and sustained reduction of pain in pts with RA and PsA who are csDMARD-IR or TNFi-IR, and in pts with AS.

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SAT0222 CLINICAL RISK STRATIFICATION FOR HYDROXYCHLOROQUINE PRESCRIBING IN A LARGE URBAN DISTRICT GENERAL HOSPITAL

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Background: New 2017 British Society of Rheumatology guidelines have recommended baseline formal ophthalmic examination, ideally including objective retinal assessment for example using optical coherence tomography, within 1 year of commencing an antimalarial drug. While the feasibility and costing of this recommendation is being assessed, we audited the current risk assessment for hydroxychloroquine prescriptions (HCQ) against the American College of Ophthalmology (ACO) guidelines for HCQ published in 2016. Table 1 shows the clinical criteria for assessment.

Methods: We identified all prescriptions of HCQ documented on the electronic patient records (EPR) from January to September 2017 by the Rheumatology department of Croydon University Hospital. This generated 237 records of which 114 were new prescriptions and 117 were continuation prescriptions. 8 records were excluded due to inadequate patient compliance. Cumulative doses were estimated from dates in the EPR going back to 2013

Results: New patient records were assessed for compliance with the ACO guidelines. Patients were assessed for kidney function, pre-existing renal disease, pre-existing eye disease. 74.6% patients were counselled regarding side effects and were advised to have optician retinal screening and 3.5% who had pre-existing eye disease were referred to ophthalmologists. 50.0% of patients had their weight documented prior to prescription. There was no documentation of dose calculated by weight. The commonest indication for HCQ were Systemic Lupus Erythematosus, Inflammatory Arthritis and Sjogren's Syndrome. 13.2 % discontinued HCQ due to side effects. The commonest side effects were diarrhoea, dizziness, rashes, and mood swings.

Long-term patient records were assessed for cumulative dose of HCQ estimated from documentation. The average cumulative dose for these patients was with a maximum of 810,000 mg and a minimum of 49,600 mg. Overall, 3.0% percentage of patients did not have cumulative doses calculated due to documented compliance issues and 64.0% of patients had tightly monitored renal function.

Table 1 Clinical criteria for HCQ risk assessment based on American College of Ophthalmology guidelines (2016)

TABLE 1. Clinical criteria for HCQ risk assessment based on American College of Ophthalmology guidelines (2016)	
Factors Assessed	Explanation
Cumulative dose <5mg/kg daily dose for 5 years	Guidelines recommend a daily dose of <5mg/kg. Any higher can incrementally increase the risk of retinopathy
Duration of Use	Decades of use can increase the risk, even in patients on the recommended daily dose.
Renal Disease Screening	HCQ is cleared by the kidneys, any drop in GFR can increase circulating drug doses therefore increase risk of toxicity.
Retinal Baseline Screening	Retinal screening is recommended for all patients to monitor the Retinal Pigment Epithelium damage therefore preserve central vision
Tamoxifen Use	Use of tamoxifen alongside HCQ can increase the risk of toxicity approximately 5-fold.
Pre-existing Retinal OR Macular disease	Eye sight can worsen on initiating HCQ.

Conclusions: 50% of patients had weight documented prior to prescription and this was not used to determine dosage. The majority of patients were well informed regarding side-effects of HCQ, had tightly monitored renal function and advised to have baseline retinal screening.

Disclosure of Interest: None declared

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SAT0223 PREDICTIVE FACTORS OF EARLY FAILURE TO FIRST LINE TREATMENT WITH METHOTREXATE IN PATIENTS WITH RHEUMATOID ARTHRITIS. RESULTS FROM THE GISEA REGISTRY.

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Background: Methotrexate (MTX) is generally recommended as first-line treatment of rheumatoid arthritis (RA). Despite its efficacy is well established, a percentage of patients fails the treatment. Few studies investigated the causes of early discontinuation of MTX; a two-year retention rate of about 66% is described for RA patients with lower age and longer disease duration as independent predictors for discontinuation.

Objectives: Aim of this study was to detect possible predictive factors for early discontinuation of MTX prescribed as first line treatment in RA patients enrolled in the GISEA (Italian Group for the Study of Early Arthritis) registry.

Methods: RA patients who began MTX as first line treatment were included in the study. For all patients age, sex, disease duration, smoking status, the intake of glucocorticoids, clinical and serological data, comorbidities and extra-articular manifestations were collected.

Results: We analyzed 612 RA patients (females/males 477/132, mean age 55.73±14.5 years; mean DAS28 5.35±1.5); rheumatoid factor (RF) was positive in 64.9%, anti-citrullinated peptide antibodies (ACPA) in 42.7%. Comorbidities were observed in 17.5% of patients, while extra-articular RA manifestations were recorded in 1.5%; 68.3% of subjects taken low doses of steroids. One hundred and forty-nine (24.3%) patients discontinued MTX during the first year (for inefficacy in 66/149 (44.3%) patients, adverse events in 51/149 (34.2%), and other reasons in 32/149 (21.5)). At univariate analysis early discontinuation of MTX was associated to a lower mean age (p=0.041) and a higher mean tender