population; I, intervention; C, comparison; O, outcome) concept was used to perform the analysis according to: Patients: adults (>18 years old) with r-axSpA or nr-axSpA; Intervention: any bDMARD regardless of formulation or duration; Comparison: placebo and/or any different drug; Outcomes: The Bath Ankylosing Spondylitis Functional Index (BASFI), the Ankylosing Spondylitis Quality of Life (ASQoL), the EuroQol-5D (EQ-5D), the Short Form 36 Health Survey physical component summary (SF36-PCS), the Short Form 36 Health Survey mental component summary (SF36-MCS), and the Functional Assessment of Chronic Illness Therapy – Facit (FACIT-F). For each outcome we assessed whether the treatment group was superior, equal or inferior to the placebo (PBO) group regarding the achievement of the MCID of the assessed PRO over time.

Results: After screening 557 references (after de-duplication), 16 RCTs were included, studying interleukin 17 inhibitors (IL17i) and tumour necrosis factor inhibitors (TNFi). In r-axSpA, the treatment group (for both TNFi and IL17i) reached the MCID for all the assessed PROs, except for a single study in which both the treatment and PBO groups reached the MCID for the SF36-PCS. For nr-axSpA the results were more heterogeneous (table 1).

Abstract AB0845 – Table 1

Phenotype	PRO and MCID cut-off for improvement	Difference between MCID from baseline to RCT end in favour of treatment arm (against PBO)	Drug (reference)
r-AxSpA	BASFI (0-10) (≥7mm)	YES	ADA (Maksy 2008); SEC (Deodhar 2017); ADA (van der Heijde 2009)
	ASQoL (0-18) (≥1.8)	YES	SEC (Deodhar 2017); GOL (Deodhar 2017)
	EQ-5D (≥10.0)	YES	SEC (Deodhar 2017; Marzo-Ortega 2017); GOL (Reveille 2017)
	SF36-PCS (≥2.5)	YES	SEC (Deodhar 2017; Marzo-Ortega 2017)
	SF36-PCS (≥2.5)	YES#	GOL (van Heijde 2014; Reveille 2017)
	SF36-MCS (≥2.5)	YES	SEC (Deodhar 2017); GOL (van der Heijde 2004; Reveille 2017)
nr-axSpA	FACIT-F (≥4)	YES	SEC (Kvien 2017; Kvien 2017)
	BASFI (0-10) (≥7mm)	YES	ETN (Maksymowich 2016)
	BASFI (0-10) (≥7mm)	YES#	ADA (Haibel 2008); IFX (Sieper 2014)
	ASQoL (0-18) (≥1.8)	YES	CZP (Sieper 2015)
	EQ-5D (≥10.0)	YES#	ADA (Haibel 2008); IFX (Sieper 2014)
	EQ-5D (≥10.0)	NO	ETN (Dougados 2015)
	SF36-PCS (≥2.5)	YES	ADA (Sieper 2013)
	SF36-PCS (≥2.5)	YES#	ADA (Haibel 2008); ETN (Dougados 2015)
	SF36-MCS (≥2.5)	YES	ADA (Haibel 2008)
	SF36-MCS (≥2.5)	NO	ETN (Dougados 2015)

PRO: Patient reported outcome; RCT: Randomised control trial; PBO: Placebo; r-axSpA: radiographic axial spondyloarthritis; nr-axSpA: non-radiographic axial spondyloarthritis; BASFI: The Bath Ankylosing Spondylitis Functional Index; ASQoL: Ankylosing Spondylitis Quality of Life Questionnaire; EQ-5D; the EuroQol-5D; SF36-PCS: Short Form 36 Health Survey physical component summary; SF36-MCS: the Short Form 36 Health Survey mental component summary; FACIT-F: the Functional Assessment of Chronic Illness Therapy – Facit; ADA: Adalimumab; SEK: Secukinumab; GOL: Golimumab; ETN: Etanercept; IFX: Infliximab; CZP: Certolizumab pegol; YES: There was an improvement on treatment but not on PBO groups; YES# There was a MCID improvement in both treatment and PBO groups; NO: there was no improvement in neither treatment nor PBO group.

Conclusions: The assessment of PROs in RCT is scarce. The profile of PROs response seems to be different between r-axSpA and nr-axSpA patients; these differences must be further validated in future trials.

This study launches a call for action in PROs reporting standardisation.

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AB0846

PERSONALISING CARE: USING INFLIXIMAB DRUG TROUGH AND ANTI-DRUG ANTIBODY LEVELS IMPROVES CLINICAL TREATMENT DECISIONS AND IS A COST EFFECTIVE STRATEGY IN SPONDYLOARTHRITIS

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Background: Personalised medicine tailors treatment to the individual's needs. The advent of biosimilars has led to therapy re-appraisals driven by healthcare commissioning bodies' demand for cost-effective interventions. Yet, biologic drug dosing is standardised and little is known about the rationale and efficacy of dose adjustment.

Objectives: As part of a service evaluation exercise, we measured serum drug trough levels (DLs) and anti-drug antibodies (ADABs) in our cohort of patients with axial spondyloarthritis (axSpA) and Psoriatic arthritis (PsA) receiving bio-originator infliximab with the aims of a) informing our decision making upon switching to a biosimilar and b) assessing the impact of this approach to our clinical practice.

Methods: Eligible subjects identified, were counselled and consented by an experienced specialist nurse on DLs and ADAB testing and possible associated outcomes including change in drug class, dose, infusion time interval and switching from bio-originator infliximab to the biosimilar infliximab CT-P13. A treatment algorithm was developed to guide the treating physician. Clinical and outcome data were recorded as per routine practice including disease status, DLs and ADAB titre, and clinical outcome.

Results: We identified 53 subjects. Based upon disease activity, DL and ADAB level, bio-originator infliximab was discontinued in 3 (6%) subjects, the infusion interval was extended in 8 (15%), shortened in 3 (6%), and the dose reduced in 3 (6%) subjects. Four patients (8%) changed to an alternative biologic due to persistent high disease activity on infliximab. ADABs were absent in 20/28 (71%) subjects on concomitant methotrexate (MTX). Very high titre ADABs were identified in 8 (15%) subjects with corresponding very low (n=2) or undetectable (n=6) DLs suggesting likely drug-neutralisation. The total estimated cost-savings from drug discontinuation and interval extension or dose reduction were £28,689 per annum in addition to the biosimilar switch saving of £41,184 per annum.

Abstract AB0846 – Table 1

	axSpA (n=32, 60%)	PsA (n=21, 40%)
M:F	30:1	7:14
Bio-originator infliximab duration (years), (median, IQR)	11 (8–15)	9 (6–14)
Concomitant csDMARD, n (%)	12 (36%)	17 (81%)
MTX, n (%), (median dose)	12 (100%, 15 mg/week)	16 (94%, 10 mg/week)
Previous biologic (bDMARD)	5 (16%)	5 (24%)
Positive ADABs (median, IQR) AU/mL	12 (37%), 46.5 (18–74)	8 (38%), 86.5 (29–212)
Therapeutic range DL	14 (44%)	10 (48%)
High ADAB/very low or undetectable drug (likely drug-neutralising)	4 (13%)	4 (27%)
Drug discontinued (no alternative bDMARD required)	1 (3%)	2 (10%)
Dose reduced or interval extended	8 (25%)	3 (14%)
Alternative bDMARD (either TNFi or different mode of action)	1 (3%)	3 (14%)
Switched to biosimilar	14 (44%)	10 (48%)

Conclusions: These data from a small cohort suggest that measuring ADABs and DLs to characterise treatment response, tailor treatment regime and inform biosimilar switching is a clinically efficacious and cost-effective strategy in infliximab-treated SpA patients. We anticipate further significant savings with our

cohort receiving subcutaneous therapies. This approach unlocks the potential of "personalised medicine" which supports individualised treatment and brings significant savings to the healthcare provider.

Disclosure of Interest: None declared

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AB0847 IMPACT OF SPONDYLOARTHRITIS ON LIFE QUALITY: BEFORE AND AFTER TREATMENT

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Background: Life quality issues in spondyloarthritis (SPA) are often spontaneously mentioned by patients or identified by rheumatologists. Besides classic follow up parameters, we have to consider those issues to improve our patients life quality.

Objectives: Explore and quantify the impact of SPA on life quality via everyday's life and psychological items and the effect of treatment on them.

Methods: SPA cases were collected by a group of 14 private practice rheumatologists (Rh) in the Paris area. Basic informations about the patient and his disease were provided by his rheumatologist. Questionnaire including 12 themes and 41 items was filled in by the patient.

Results: 50 cases collected, 59.5% men, mean age 45 years, 82% working Axial SPA 42%, peripheral 4%, mixt 52%. Mean duration before study: 14 years. Moderate disease 57%, severe 26.5%. HLA B27 positive 84%

Drugs: NSAIDs 96%, classic DMARDS 31%, biological DMARDS 84%, corticosteroids 36%, combination therapy 42%.

Associated measures were suggested by the Rh: Physical activity (62%), rest (56%), psychological support, physiotherapy, yoga, adapting professional activity and environment...

Life quality issues are spontaneously mentioned by 40% of the patients.

Before treatment, 72% of the patients report consequences on their hobbies, 68% on their psychological well-being, 54% on their getting about, 50% on their family relations. The less impacted items are food (26%) and economy (24%).

Life quality is mostly altered by pain (71%), then fatigue (17%), handicap (7%) and other people's attitude (5%).

After treatment, social repercussions diminish by 47%, then getting about, housework, family relations, holidays, sexual life, psychological well-being, hobbies and work (between -21% and -44%).

Drug intolerance: 36%.

The items improving by more than 50% after treatment are in this order: cultural life, transports, house-keeping, do-it-yourself, sleep, going out, work (53% less sick leave).

The treatment is less efficient (<22%) on economy, dependance, disillusion, depression and sexual life.

Family circle lacks empathy in 66% of the cases, family relations stay difficult after treatment.

Conclusions: SPA diminishes quality of life in 75% of our patients, but only 40% mention it spontaneously. All the parameters impacted by SPA were significantly improved after treatment. The best improvement concerned hobbies, including culture, do-it-yourself and going out. One patient of two found correct sleep and felt psychologically better. Sick leave was reduced by half, but, unfortunately, family relations didn't improve.

The rheumatologist has to track, in a trusting patient-physician relation, the daily situation impacted by the SPA.

Disclosure of Interest: None declared

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Spondyloarthritis – clinical aspects (other than treatment)

AB0848 FOUR YEARS OF DELAY IN THE DIAGNOSIS OF SAPHO SYNDROME: SINGLE TERTIARY CENTRE EXPERIENCE

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Background: SAPHO syndrome is a chronic disease with bone, joint and skin involvement characterised by synovitis, acne, pustulosis, hyperostosis and osteitis. It is a rare disease and its diagnosis may depend on detailed clinical examination as well as radiological evaluation

Objectives: In this study, we aim to present clinical features and diagnostic course of patients with SAPHO syndrome who are followed in our tertiary referral clinic.

Methods: All patients with SAPHO syndrome diagnosed since February 2014 have been registered with a standard form. Patients are prospectively monitored since then. Diagnosis was based on the criteria by Benhamou et al.¹ In the questionnaire, demographic data (age, sex, duration of illness), clinical features (skin and joint involvement), laboratory characteristics (acute phase reactants, HLA-B27), radiological imaging (bone scintigraphy (increased activity in the sternum, bilateral sternoclavicular joints and clavicles), MRI) disease activity parameters (BASDAI, BASFI) were questioned. There were 24 patients with SAPHO syndrome. The data of 21 patients were presented because the clinical findings of 3 patients were insufficient.

Results: Data of 21 patients with SAPHO syndrome were available and 11 (52.4%) patients were female. Mean age at diagnosis was 39.9±12.9, mean age of symptom onset was 35.2±12.9, mean follow-up duration was 18.1±25.1 months. The mean delay time of diagnosis SAPHO syndrome was calculated as 49.0±82.5 months. Thirteen patients (61.9%) were followed up with another clinical diagnosis before SAPHO diagnosis. The clinical characteristics of the patients are shown in Figure 1. HLA-B27 was positive in 3 of 13 patients. Mean activity scores of our patients at initial visit were; BASDAI: 4.8±2.8, BASFI: 4.6±2.2, CRP2.3±4.2 mg/dL and erythrocyte sedimentation rate 23.8±22.6 mm/h. Scintigraphy findings were positive in 16 (94.1%) of 17 patients. The diagnosis of 2 patients was supported by MRI. The remaining 2 patients were diagnosed with X-ray and clinic findings.

Involvement pattern	n (%)
Spinal involvement	14 (66.7)
Peripheral joint involvement	8 (38.1)
Skin involvement	16 (76.2)
- PPP	10 (47.6)
- Serious acne	5 (23.8)
- Psoriasis vulgaris	5 (23.8)
- Hidradenitis suppurativa	1 (4.8)
Skin involvement time	
- Before muscle skeletal symptoms	7 (43.8)
- Muscle skeletal symptoms at the same time	1 (6.3)
- After musculoskeletal symptoms	8 (50)
Osteoarticular symptoms	19 (90.5)
- Cervical pain	10 (47.6)
- Thoracic pain	15 (71.4)
- Lumbosacral pain	15 (71.4)
Anterior chest wall pain	20 (95.2)
IBP	12 (57.1)
Morning stiffness (more than 1 hour)	10 (47.6)
Sternocostal joint involvement	7 (33.3)
Sternoclavicular joint involvement	18 (85.7)
Manubrium sternal involvement	11 (52.4)
Costochondral joint involvement	6 (28.6)
Hip joint involvement	10 (47.6)
Sacroiliitis	10 (47.6)
Osteoitis	10 (47.6)
Entesis	4 (19)
Uveitis	3 (14.3)

PPP: palmoplantar pustulosis, IBP: Inflammatory Back pain

Abstract AB0848 – Figure 1. Clinical characteristics of patients at diagnosis

PPP: palmoplantar pustulosis, IBP: Inflammatory Back pain

Conclusions: There is a certain diagnostic problem in the SAPHO syndrome. Delay of SAPHO diagnosis was almost 4 years and 62% of patients had wrong diagnosis before SAPHO syndrome. Anterior chest wall involvement with dermatological findings should be alerting to the physicians. Bone scintigraphy can be helpful to diagnose SAPHO syndrome. It is important to distinguish SAPHO syndrome from other spondyloarthritis and/or psoriatic arthritis because of the potential different treatment strategies.

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