

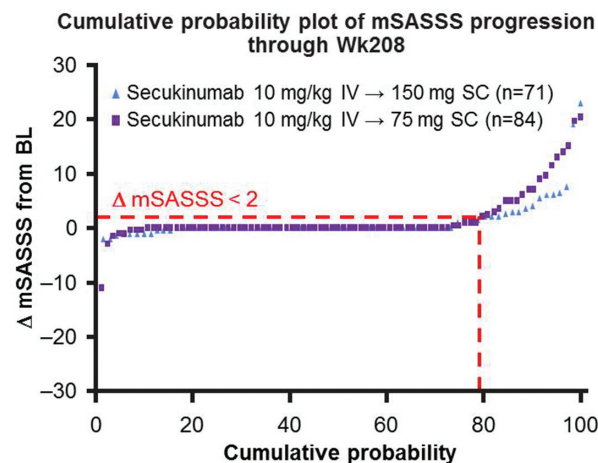
BL syndesmophytes or elevated BL hsCRP. Reductions from BL in the Berlin SI joint oedema and Berlin spine scores were seen with secukinumab 150 mg. Sustained efficacy in signs/symptoms was seen through 208 wks (Table). Exposure-adjusted incidence rates per 100 pt-yrs (total exposure [mean  $\pm$ SD]=3.4  $\pm$ 1.44 years) were: serious infections (1.0), IBD (0.7), uveitis (1.8) and malignant/unspecified tumours (0.5).

Abstract SAT0268 – Table 1. Efficacy at Wk208

	Secukinumab IV $\rightarrow$ 150 mg (n=87)
<b>mSASSS<sup>a,b</sup></b>	
BL (n=71 with X-rays at BL and Wk208)	8.8 $\pm$ 16.23
$\Delta$ BL to Wk208	1.2 $\pm$ 3.91
$\Delta$ BL to Wk104/ $\Delta$ Wk104 to 208 <sup>d</sup>	0.5 $\pm$ 1.69/0.8 $\pm$ 3.34
<b>MRI<sup>a,b</sup></b>	
Berlin SI joint total oedema score, $\Delta$ BL to Wk104/ $\Delta$ BL to Wk208	-2.3 $\pm$ 3.06 <sup>18</sup> / $-1.6\pm 3.03$ <sup>22</sup>
Berlin spine score, $\Delta$ BL to Wk104/ $\Delta$ BL to Wk208	-0.9 $\pm$ 2.17 <sup>18</sup> / $-0.6\pm 2.01$ <sup>22</sup>
<b>Clinical efficacy</b>	
ASAS20/40 <sup>e</sup>	76.4/58.0
BASDAI, <sup>f</sup> $\Delta$ from BL	-3.3 $\pm$ 0.23
ASDAS inactive disease <sup>g</sup>	27.6
BASFI/BASMI, <sup>h</sup> $\Delta$ from BL	-2.9 $\pm$ 2.39 (80)/-0.5 $\pm$ 1.12 (76)

n, no. of pts assessed; N, total no. of pts in extension trial

<sup>a</sup>Radiographs/MRIs taken at BL and Wk104 were re-read for pts completing Wk208 of treatment; <sup>b</sup>Mean $\pm$ SD (n) for observed data; <sup>c</sup>Based on n=67 pts with X-rays at BL, Wk104 and Wk208 and BL mSASSS of  $8.01\pm 15.29$  and  $9.01\pm 16.77$ , calculated from matched vertebral edges at BL and Wk104, and BL and Wk208, respectively; <sup>d</sup>% pts estimated using multiple imputation; <sup>e</sup>Least-squares mean $\pm$ standard error for MMRM estimates



**Conclusions:** Secukinumab 150 mg showed numerically lower radiographic progression vs 75 mg at 4 years. Secukinumab also demonstrated sustained efficacy on signs and symptoms, and MRI outcomes and a consistent safety profile.<sup>1</sup>

#### REFERENCE:

[1] Braun J, et al. Ann Rheum Dis 2017;76:1070–7.

**Disclosure of Interest:** X. Baraliakos Grant/research support from: AbbVie, Merck, Pfizer, UCB, Novartis, and Chugai, Consultant for: AbbVie, Merck, Pfizer, UCB, Novartis, and Chugai, Speakers bureau: AbbVie, Merck, Pfizer, UCB, Novartis, and Chugai, J. Braun Grant/research support from: AbbVie (Abbott), Amgen, BMS, Boehringer, Celgene, Celltrion, Centocor, Chugai, EBEWE Pharma, Medac, MSD (Schering-Plough), Mundipharma, Novartis, Pfizer (Wyeth), Roche, Sanofi-Aventis and UCB, Consultant for: AbbVie (Abbott), Amgen, BMS, Boehringer, Celgene, Celltrion, Centocor, Chugai, EBEWE Pharma, Medac, MSD (Schering-Plough), Mundipharma, Novartis, Pfizer (Wyeth), Roche, Sanofi-Aventis and UCB, A. Deodhar Grant/research support from: AbbVie, Eli Lilly, GSK, Janssen, Novartis, Pfizer, UCB, Consultant for: AbbVie, Eli Lilly, Janssen, Novartis, Pfizer, UCB, D. Poddubny Grant/research support from: AbbVie, MSD, Novartis, Consultant for: AbbVie, BMS, MSD, Novartis, Pfizer, UCB, Speakers bureau: AbbVie, BMS, Janssen, MSD, Novartis, Pfizer, UCB, P. Emery Consultant for: AbbVie, BMS, Merck, Novartis, Pfizer, Roche, UCB, E. Delicha Employee of: Novartis Pharma AG, Z. Tallocozy Shareholder of: Novartis, Employee of: Novartis Pharmaceuticals Corporation, B. Porter Shareholder of: Novartis, Employee of: Novartis Pharmaceuticals Corporation

DOI: 10.1136/annrheumdis-2018-eular.1396

SAT0269

### THE EFFECT OF BIOLOGIC DISEASE-MODIFYING ANTIRHEUMATIC DRUGS IN TARGETING DISEASE REMISSION IN AXIAL SPONDYLOARTHRITIS (AXSPA): A SYSTEMATIC LITERATURE REVIEW

A.R. Cruz-Machado<sup>1,2</sup>, S.R. Manica<sup>3,4</sup>, J.L. Silva<sup>5</sup>, F.M. Pimentel-Santos<sup>3,4</sup>, J. Tavares-Costa<sup>5</sup>, E. Vieira-Sousa<sup>1,2</sup>. <sup>1</sup>Rheumatology and Metabolic Bone Diseases Department, Hospital de Santa Maria, CHLN, Lisbon Academic Medical Centre; <sup>2</sup>Rheumatology Research Unit, Instituto de Medicina Molecular, Faculty of Medicine, University of Lisbon; <sup>3</sup>Rheumatology Department, Hospital Egas Moniz, Centro Hospitalar de Lisboa Ocidental; <sup>4</sup>CEDOC, NOVA Medical School, Lisbon; <sup>5</sup>Rheumatology Department, Unidade Local de Saúde do Alto Minho, Ponte de Lima, Portugal

**Background:** The treat-to-target concept is currently recommended in axSpA management and remission is the main objective of treatment. Although consensual definitions of remission are lacking, most authors assume remission as a state of inactive disease or, alternatively, of low disease activity, as a near concept. In current practice, ASAS-Partial Remission (ASAS-PR) and ASDAS-Inactive Disease (ASDAS-ID) scores have gained wide acceptance as clinical remission-like definitions.

**Objectives:** In this review we assessed the efficacy of different biologic disease-modifying anti-rheumatic drugs (bDMARD) in achieving ASAS-PR or/and ASDAS-ID as remission-like primary outcomes. Data from randomised controlled trials (RCT) conducted in radiographic axSpA (r-axSpA) and non-radiographic axSpA (nr-axSpA) patients were included.

**Methods:** A systematic literature review was performed using the MEDLINE database (August 17 2017) with the filters "published in the last 10 years" and "humans". The PICO (P, 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: ASAS-PR and ASDAS-ID.

**Results:** After screening 557 references (after de-duplication), 7 RCTs fulfilled the inclusion criteria, all concerning tumour necrosis factor inhibitors (TNFi) bDMARDs – table 1. ASAS-PR was the most commonly used remission-like definition in 6 of the 7 trials, 1 of those as a composed measure with a magnetic resonance score. Despite different baseline populations (including r-axSpA and nr-axSpA), all these trials provide evidence of TNFi efficacy in achieving remission. The proportion of patients achieving ASAS-PR and ASDAS-ID varied between 33%–61.9% and 27.3%–55%, respectively, with a minimum and maximum follow-up periods of 28 to 254 weeks for ASAS-PR and 24 weeks to 5 years for ASDAS-ID.

Abstract SAT0269 – Table 1. bDMARD trials addressing ASAS-PR or ASDAS-ID as primary outcomes

Reference	Phenotype	Study design and duration	Drug (number of patients enrolled)	Primary Outcome	Results
Braun, 2008	r-axSpA	Extension 254 weeks	IFX/IFX vs PBO/IFX (38)	ASAS-PR	34.2% of patients achieved ASAS-PR
Sieper, 2012	r-axSpA and nr-axSpA	RCT 28 weeks	NPX +PBO (51) vs NPX +IFX (105)	ASAS-PR	ASAS-PR in 61.9% NPX+IFX vs 35.3% NPX+PBO (p<0.05)
Sieper, 2013	r-axSpA and nr-axSpA	Extension 52 weeks	NPX (40) vs no treatment (40) after partial remission under IFX+NPX or NPX+PBO	ASAS-PR	No statistically significant differences between the groups
Davis, 2008	r-axSpA	Extension 192 weeks	ETN/ETN (128) vs PBO/ETN (129)	ASAS-PR	44% of patients achieved ASAS-PR
Song, 2012	nr-axSpA	RCT (first part) 48 weeks	ETN (40) vs SSZ (36)	ASAS-PR plus MRI remission	ASAS-PR+MRI remission in 33% ETN vs 11% SSZ (p<0.05)
Sieper, 2011	r-axSpA	RCT and Extension 5 years	ADA/JADA vs PBO/JADA (311)	ASAS-PR and ASDAS-ID	ASAS-PR in 45% ASDAS-ID in 55%
van Heijde, 2014	r-axSpA	RCT (first part) 24 weeks	GOL (278) vs PBO (78)	ASDAS-ID	ASDAS-ID in 27.3% GOL vs 2.8% PBO (p<0.001)

Legend: ADA: adalimumab; ASAS-PR: ASAS- Partial Remission; ASDAS-ID: ASDAS Inactive Disease; ETN: etanercept; GOL: golimumab; IFX: infliximab; MRI: magnetic resonance image; NPX: naproxen; nr-axSpA: non-radiographic axial spondyloarthritis; PBO: placebo; r-axSpA: radiographic spondyloarthritis; RCT: randomised controlled trial; SSZ: sulfasalazine, vs – versus.

**Conclusions:** Clinical trials addressing remission-like concepts as primary outcomes are scarce. ASAS-PR score was the most commonly used remission outcome. Depending on the studies, between one third to one half of patients treated with TNFi achieved ASAS-PR or ASDAS-ID. Considering nowadays aimed treatment targets, these data raise the unmet need for improved treatment options and strategies, that favour optimised remissions rates in axSpA patients.

#### REFERENCES:

- [1] Braun 2008.
- [2] Davis 2008.
- [3] Sieper 2011.
- [4] Sieper 2012.

- [5] Song 2012.  
 [6] Sieper 2013.  
 [7] van Heijde 2014.  
 [8] van Heijde 2016.  
 [9] Smolen 2017.

**Disclosure of Interest:** None declared

**DOI:** 10.1136/annrheumdis-2018-eular.4979

**SAT0270** **LOW INCIDENCE OF BOTH NEW-ONSET AND FLARES OF UVEITIS IN SECUKINUMAB-TREATED PATIENTS WITH ANKYLOSING SPONDYLITIS: CLINICAL TRIAL AND POST-MARKETING SAFETY ANALYSIS**

A. Deodhar<sup>1</sup>, C. Miceli-Richard<sup>2</sup>, X. Baraliakos<sup>3</sup>, H. Marzo-Ortega<sup>4</sup>, D. D. Gladman<sup>5</sup>, R. Martin<sup>6</sup>, J. Safi Jr<sup>6</sup>, B. Porter<sup>6</sup>, A. Shete<sup>7</sup>. <sup>1</sup>Oregon Health and Science University, Portland, USA; <sup>2</sup>Hôpital Cochin, Paris, France; <sup>3</sup>Rheumazentrum Ruhrgebiet, Herne, Germany; <sup>4</sup>IHR LBRC, LTHT and LIRMM, University of Leeds, Leeds, UK; <sup>5</sup>Toronto Western Hospital, Toronto, Canada; <sup>6</sup>Novartis Pharmaceuticals Corporation, East Hanover, USA; <sup>7</sup>Novartis Pharma AG, Basel, Switzerland

**Background:** Uveitis, a common extra-articular manifestation of SpA, has an estimated prevalence in patients (pts) with ankylosing spondylitis (AS) of 33.2%, which increases with disease duration and positive HLA-B27 status.<sup>1</sup> Uveitis occurs in 10%–50% of SpA pts.<sup>1</sup> The exposure-adjusted incidence rate [EAIR] of uveitis (combined new-onset and flares) reported in AS pts treated with TNF inhibitors is 2.6–3.5 per 100 patient-years (pt-yrs).<sup>2–5</sup>

**Objectives:** To assess the incidence of uveitis in secukinumab-treated AS pts in long-term pooled clinical data from three phase 3 trials (MEASURE 1–3 [NCT01358175, NCT01649375, NCT02008916]) and from post-marketing analyses.

**Methods:** Analysis included pooled pt-level data from all pts in MEASURE 1 who received any dose ( $\geq 1$ ) of secukinumab up to the last pt attending Week 156 study visit, and up to visit Week 156 in MEASURE 2 and visit Week 104 in MEASURE 3 for each patient, respectively. Post-marketing data were from the most recent periodic safety surveillance report. Incidence of uveitis is reported as EAIR per 100 pt-yrs of secukinumab exposure.

**Results:** In the phase 3 AS clinical trials, 135 (17%) pts reported pre-existing (but not active or ongoing) uveitis at baseline and 589 (74.2%) pts were HLA-B27 positive. The EAIR for uveitis was 1.4 per 100 pt-yrs over the entire treatment period (n=794). Among all cases of uveitis (n=26), 14 (54%) were flares in pts with a history of uveitis at baseline (Table). The EAIR of uveitis in the post-marketing data (based on cumulative secukinumab exposure of 96 054 pt-yrs) was 0.03 per 100 pt-yrs.

**Abstract SAT0270 – Table 1.** Safety Analysis for Uveitis with Secukinumab in AS

Data from Clinical Studies	
Number of clinical studies/pts included	3/794
Uveitis cases reported, n (%)	
Total	26 (3.3%)
New onset cases	14 (1.8%)
Treatment discontinuation	2 (0.3%)
Treatment interruption	1 (0.1%)
EAIR (95% confidence interval) per 100 pt-yrs <sup>a</sup>	1.4 (0.9–2.0)
Post-Marketing Data <sup>b</sup>	
Cumulative estimated market experience (pt-treatment yrs) <sup>c</sup>	96 054
Cumulative number of cases reported	29
Crude incidence rate per 100 pt-yrs	0.03

<sup>a</sup>Rates are for uveitis MedDRA preferred term

<sup>b</sup>Data from the periodic safety update report (PSUR) dated 10th August 2017 – includes all indications

<sup>c</sup>Estimated based on cumulative worldwide sales volume and the average maintenance dose

**Conclusions:**

In secukinumab-treated pts with active AS, a low incidence of uveitis was observed, including new-onset cases and flares, in both clinical trials and post-marketing analyses.

**REFERENCES:**

- [1] Zeboulon, et al. *Ann Rheum Dis* 2008;67:955–59.  
 [2] Wendling, et al. *Curr Med Res Opin* 2014;30:2515–21.  
 [3] Van der Heijde, et al. *Rheumatology (Oxford)* 2017;56:1498–509.  
 [4] Sieper, et al. *Arthritis Rheum* 2014;66:S242.  
 [5] Heldmann, et al. *Clin Exp Rheumatol* 2011;29:672–80.

**Disclosure of Interest:** A. Deodhar Grant/research support from: AbbVie Inc., Eli Lilly, GSK, Janssen, Novartis, Pfizer Inc., UCB, Consultant for: AbbVie, Eli Lilly, Janssen, Novartis, Pfizer, UCB, C. Miceli-Richard Grant/research support from: Pfizer, Roche, UCB, Wyeth, Merck, Consultant for: Abbott/AbbVie, Bristol-Myers Squibb, Novartis, Merck, Pfizer, Wyeth, Speakers bureau: Abbott, Bristol-Myers Squibb, Merck, Pfizer, Roche, Schering-Plough, Wyeth., X. Baraliakos Grant/research support from: AbbVie, BMS, Celgene, Chugai, MSD, Novartis, Pfizer, UCB, Consultant for: AbbVie, BMS, Celgene, Chugai, MSD, Novartis, Pfizer, UCB, Speakers bureau: AbbVie, BMS, Celgene, Chugai, MSD, Novartis, Pfizer, UCB, H. Marzo-Ortega Grant/research support from: Janssen and Pfizer, Consultant for: AbbVie, Celgene, Janssen, Novartis and UCB, Speakers bureau: AbbVie, Celgene, Janssen and UCB, D. Gladman Grant/research support from: Amgen, AbbVie, BMS, Celgene, Eli Lilly, Janssen, Novartis, Pfizer and UCB., Consultant for: Amgen, AbbVie, BMS, Celgene, Eli Lilly, Janssen, Novartis, Pfizer and UCB., R. Martin Shareholder of: Novartis, Employee of: Novartis, J. Safi Jr Shareholder of: Novartis, Employee of: Novartis, B. Porter Shareholder of: Novartis, Employee of: Novartis, A. Shete Shareholder of: Novartis, Employee of: Novartis

**DOI:** 10.1136/annrheumdis-2018-eular.4474

**SAT0271** **SECUKINUMAB, A FULLY HUMAN ANTI-INTERLEUKIN-17A MONOCLONAL ANTIBODY, EXHIBITS LOW IMMUNOGENICITY IN PATIENTS WITH PSORIATIC ARTHRITIS AND ANKYLOSING SPONDYLITIS DURING A 52-WEEK TREATMENT PERIOD**

A. Deodhar<sup>1</sup>, D. Gladman<sup>2</sup>, I. McInnes<sup>3</sup>, M. Ren<sup>4</sup>, S. Spindeldreher<sup>5</sup>, L. Pricop<sup>6</sup>, B. Porter<sup>6</sup>, J. Safi<sup>6</sup>, A. Shete<sup>7</sup>, G. Bruin<sup>5</sup>. <sup>1</sup>Oregon Health and Science University, Portland, USA; <sup>2</sup>Toronto Western Hospital, Toronto, Canada; <sup>3</sup>University of Glasgow, Glasgow, UK; <sup>4</sup>Novartis Pharmaceuticals, Shanghai, China; <sup>5</sup>Novartis Institutes for Biomedical Research, Basel, Switzerland; <sup>6</sup>Novartis Pharmaceuticals Corporation, East Hanover, USA; <sup>7</sup>Novartis Pharma AG, Basel, Switzerland

**Background:** Secukinumab (SEC), a fully human monoclonal antibody (mAb) that selectively targets IL-17A, is highly efficacious for the treatment of psoriatic arthritis (PsA) and ankylosing spondylitis (AS). mAb therapies may be associated with immunogenicity (IG) and production of anti-drug antibodies (ADAs) that may cause adverse events (AEs), and affect drug pharmacokinetics (PK) and clinical response.

**Abstract SAT0271 – Table 1.** Overview of pts with TE-ADA<sup>1</sup>

PsA studies	Study	SEC dose	Prior biologics	ADA (titer)/ Neut-Ab	AE IG related	Impact on efficacy <sup>2</sup>	PK behaviour <sup>3</sup>
	F2306	PBO-75 mg	0	W24 (no titer)/Y	N	None	Normal
	F2312	PBO-150 mg	0	W52 (2.99)/N	N	None	Normal
	F2318	150 mg	Infliximab	W52 (2.14)/N	N	None	Normal
		150 mg	0	W24 (1.00)/N	N	None	Normal
		150 mg	0	W52 (2.59)/N	N	None	Normal
AS studies	F2305	10 mg/kg–150 mg	0	W52 (2.39)/N	N	None	Normal
		PBO-150 mg	0	W52 (10.61)/N	N	None	Normal
	F2310	PBO-75 mg	0	W52 (39.39)/N	N	None	Normal
	F2314	PBO-300 mg	0	W52 (1.02)/N	N	None	Normal
	F2320	150 mg	0	W16 (6.35)/N	N	None	Normal
				W52 (2.96)/N			
		150 mg	0	W16 (2.70)/N	N	None	Normal
		No Load		W24 (2.80)/N	N	None	Normal
		150 mg	0	W52 (2.89)/N	N	None	Normal