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SAT0391

REMISSION AND DRUG RETENTION RATES OF SECUKINUMAB IN 1549 PATIENTS WITH PSORIATIC ARTHRITIS TREATED IN ROUTINE CARE – POOLED DATA FROM THE OBSERVATIONAL EUROSIPA RESEARCH COLLABORATION NETWORK

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Background: There is a lack of data on exposure, treatment outcomes and retention rates of secukinumab in patients with psoriatic arthritis (PsA) treated in routine care.

Objectives: Primary objective: To assess the proportion of PsA patients in remission after 6 months of secukinumab treatment across Europe. Secondary objectives: To compare baseline clinical and demographic characteristics, 6-month crude and LUNDEX adjusted remission rates, 6-month retention rates and median time to secukinumab withdrawal (due to loss of efficacy/adverse events) between bDMARD naïve and non-naïve patients as well as across the participating European registries.

Methods: PsA patients starting secukinumab in routine care and followed for at least 6 months were included from 12 European registries within the European Spondyloarthritis Research Collaboration (EuroSpA). Independent t-test, Mann-Whitney U test, ANOVA, Kruskal-Wallis and Chi-square test were used for group comparisons as appropriate, and Kaplan-Meier plots with log rank test for comparison of secukinumab drug survival.

Results: A total of 1549 PsA patients starting secukinumab were included (Table). 6-month remission and retention rates were significantly different between the registries (Table). Biologic DMARD (bDMARD) naïve compared with non-naïve patients had significantly higher 6-month remission rates and a trend towards better 6-month retention rates (Table, Figure 1a-b).

Conclusion: This study of >1500 patients in 12 European countries provides real-world data on the effectiveness of secukinumab in patients with PsA, adding evidence to existing RCTs. A majority of the patients had long disease duration and was previous bDMARD users. DAS28CRP, SDAI and DAPSA28 remission at 6 months were achieved by 35%, 12% and 12%, respectively. The overall retention rate was 86%, with significant differences across the registries. bDMARD naïve compared with non-naïve patients had significantly better 6-month remission rates and a trend towards better secukinumab retention rates.

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Figure 1. a Overall 6-month secukinumab retention rate in EuroSpA as well as compared between bDMARD naïve and non-naïve patients (Kaplan-Meier, log rank test; $p=0.07$)

Figure 1. b 6-month secukinumab retention rates overall and compared across the different registries in the EuroSpA collaboration (Kaplan-Meier, log rank test; $p<0.001$)

Pooled data from all registries					All patients (n=1549)	bDMARD naïve patients (n=302)	Previous bDMARD users (n=1247)	p*					
Age (years), mean (SD)	52 (11)				50 (12)	52 (11)	0.005						
Male, n/total (%)	42%				47%	40%	0.03						
Disease duration (years), mean (SD)	9 (8)				7 (7)	10 (8)	<0.001						
Current smokers, %	18%				17%	18%	0.97						
Baseline CRP (mg/L), median (IQR)	5 (2-13)				8 (2-22)	5 (2-11)	<0.001						
Baseline ESR (mm/h), median (IQR)	17 (7-33)				22 (10-42)	15 (7-30)	<0.001						
Baseline SJC (0-25), median (IQR)	2 (0-4)				2 (0-5)	1 (0-4)	0.002						
Baseline IJC (0-25), median (IQR)	4 (1-9)				5 (1-10)	4 (1-9)	0.41						
Baseline Pain (0-10), median (IQR)	7 (5-8)				6 (5-8)	7 (5-8)	0.14						
6-month DAS28 remission rate (≤2.6), % (95%CI)	35% (32-38%)				52% (44-61%)	32% (28-35%)	<0.001						
6-month SDAI remission rate (≤3.3), % (95%CI)	12% (9-15%)				23% (16-31%)	9% (6-11%)	<0.001						
6-month DAPSA28 remission rate (≤4), % (95%CI)	12% (10-14%)				22% (14-30%)	11% (8-13%)	0.001						
6-month secukinumab retention rate, % (95%CI)	96% (94-97%)				89% (83-95%)	85% (83-87%)	0.07						
LUNDEX adj. 6-month DAS28 remission rate, % (95%CI)	25% (23-27%)				39% (32-46%)	22% (20-24%)	<0.001						
LUNDEX adj. 6-month SDAI remission rate, % (95%CI)	9% (6-11%)				17% (11-23%)	6% (4-8%)	<0.001						
LUNDEX adj. 6-month DAPSA28 remission rate, % (95%CI)	9% (7-10%)				17% (11-22%)	8% (6-9%)	0.004						
Time to secukinumab withdrawal due to loss of efficacy or adverse events before 6 months, median (IQR) weeks, n of events	17 (10-21), n=203				18 (14-23), n=31	16 (9-21), n=172	0.09						
Mean (95%CI) drug retention time, weeks (censored by 26 weeks)	24.5 (24.3-24.7)				25.0 (24.6-25.4)	24.4 (24.1-24.6)	0.07						
*Comparison between bDMARD naïve and non-naïve patients													
According to registry													
	ARTIS n=10	ATTR A n=14	BIOBA DASER n=113	BIOBa L n=19	DAN BIO n=242	ICE BIO n=32	NOR- DMARD D n=97	REFUM A-PT n=55	ROB- FIN n=12	ERRR n=24	SCQM n=166	TURK BIO n=24	p*
Age (years) mean (SD)	53 (12)	51 (10)	50 (11)	54 (10)	51 (12)	55 (14)	54 (11)	52 (11)	51 (13)	52 (11)	52 (11)	49 (12)	0.07
Male, n/total (%)	39%	54%	42%	41%	42%	23%	32%	42%	58%	43%	82%	33%	0.04
Disease duration (years), mean (SD)	8 (7)	11 (8)	8 (7)	11 (8)	8 (8)	15 (11)	13 (10)	8 (9)	13 (9)	8 (7)	11 (10)	11 (10)	<0.001
Current smokers, %	12%	10%	22%	22%	20%	22%	28%	17%	15%	3%	10%	23%	0.04
BL CRP (mg/L), median (IQR)	5 (2-11)	2 (1-5)	5 (2-11)	5 (2-11)	5 (2-11)	3 (1-8)	4 (2-11)	6 (3-17)	1 (1-8)	24 (4-164)	4 (1-8)	2 (1-4)	<0.001
BL ESR (mm/h), median (IQR)	14 (8-27)	17 (10-24)	17 (10-24)	17 (10-24)	17 (10-24)	21 (10-35)	20 (10-35)	47 (20-102)	47 (20-102)	47 (20-102)	47 (20-102)	47 (20-102)	<0.001
BL SJC (0-25), median (IQR)	3 (0-4)	4 (1-7)	3 (0-4)	4 (1-7)	3 (0-4)	3 (0-4)	3 (0-4)	3 (0-4)	3 (0-4)	3 (0-4)	3 (0-4)	3 (0-4)	<0.001
BL IJC (0-25), median (IQR)	3 (0-4)	4 (1-7)	3 (0-4)	4 (1-7)	3 (0-4)	3 (0-4)	3 (0-4)	3 (0-4)	3 (0-4)	3 (0-4)	3 (0-4)	3 (0-4)	<0.001
BL Pain (0-10), median (IQR)	7 (5-8)	7 (5-8)	7 (5-8)	7 (5-8)	7 (5-8)	7 (5-8)	7 (5-8)	7 (5-8)	7 (5-8)	7 (5-8)	7 (5-8)	7 (5-8)	<0.001
6-month DAS28CRP ≤2.6, %	26%	40%	30%	47%	30%	25%	57%	40%	38%	50%	52%	**	0.001
6-month SDAI ≤3.3, %	7%	18%	-	15%	11%	0%	10%	15%	17%	**	23%	**	0.13
6-month DAPSA28 ≤4, %	8%	20%	-	12%	11%	0%	14%	13%	24%	-	38%	**	<0.001
6-month secukinumab retention rate, % (95%CI)	82% (52-100)	92% (81-100)	94% (89-100)	92% (88-100)	79% (63-95)	91% (74-100)	33% (24-44)	91% (78-100)	87% (72-100)	93% (84-100)	92% (86-100)	97% (90-100)	<0.001
LUNDEX adj. 6-month DAS28 ≤2.6, %	22%	38%	35%	47%	26%	23%	47%	42%	33%	47%	48%	**	<0.001
LUNDEX adj. 6-month SDAI ≤3.3, %	6%	17%	-	14%	9%	0%	8%	14%	15%	**	19%	**	0.11
LUNDEX adj. 6-month DAPSA28 ≤4, %	6%	19%	-	11%	9%	0%	12%	14%	21%	-	31%	**	<0.001
Median (IQR) weeks to secukinumab withdrawal, n events	18 (13-22), n=98	**	**	**	13 (6-19), n=69	**	**	**	**	**	17 (12-21), n=121	**	0.01
*Comparison across the registries; **Less than 10 observations; BL, baseline; -, not available													

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SAT0392 IMPLEMENTING THE PSORIATIC ARTHRITIS DISEASE ACTIVITY SCORE (PASDAS) IN ROUTINE CLINICAL PRACTICE: (IM)POSSIBLE?

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Background: Psoriatic arthritis (PsA) is a heterogeneous disease, with involvement of at least five health domains: peripheral joint disease, enthesitis, dactylitis, axial involvement, and skin and nail psoriasis. Because of the heterogeneity of the disease, assessment of disease activity is challenging. One of the many single or composite outcome measures that has been developed is the Psoriatic Arthritis Disease Activity Score (PASDAS). The PASDAS is a comprehensive measure that takes arthritis (66/68 joint score), dactylitis, enthesitis, CRP, physician disease activity VAS score and patient-reported outcomes into account¹. Furthermore, it is a continuous outcome measure in contrast to the Minimal Disease Activity criteria (MDA), facilitating the longitudinal follow-up of disease activity. The PASDAS also has better parametric distribution and discriminative capacity compared to other outcome measures such as the Disease Activity for Psoriatic Arthritis score (DAPSA). However, feasibility of PASDAS use in routine clinical care has been questioned due to its complexity. It requires a CRP and filled-out SF36 form at time of assessment, does not include a formal skin assessment, is difficult to calculate and is time consuming for both patient and physician.

Objectives: To implement PASDAS measurements and skin assessments in routine clinical care for all 1300 PsA patients treated at our centre.

Methods: The implementation consisted of the following stages: 1) assessment of patients' acceptability of measurement burden; 2) implementation of mathematical calculations of the PASDAS in our electronic health record; 3) PASDAS and skin assessment training of rheumatology nurses and rheumatologists; and 4) (logistic) adjustments to the outpatient visit.

Results: Our patient partners preferred comprehensive clinical assessment of skin and joints above a limited assessment (such as the DAS28-CRP), although the latter would be less time consuming. For this reason, and to comply with international guidelines, we decided to also add assessment of skin disease, by using the Body Surface Area (BSA) and Physician Global Assessment score (PGA). Furthermore, research demonstrated that for the PASDAS calculation the physical component score (PCS) of the SF36 could be substituted by the SF12-PCS². As the SF12 is more concise, minimizing patient burden, we chose to implement the SF12 instead of the SF36. The SF12-PCS, together with the other separate component scores and corresponding mathematical calculation of the PASDAS, was implemented in our electronic health record. Lastly, we set-up a three phase consultation that consists of laboratory tests and consultation with a rheumatology nurse who performs the physical measurements before each visit with the physician.

Conclusion: Standardized and routine measurement of the PASDAS and skin involvement at each outpatient visit of all our PsA patients before consultation with the treating rheumatologist was successfully implemented, underscoring the feasibility of this approach. In addition to improving clinical care, routine outcome measurements can be used for a variety of clinical studies.

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