Conclusion: AS-related work disability and healthcare resource utilization have an enormous economic impact in Portugal. Investment in strategies that encourage early referral, diagnosis and treatment is fundamental to mitigate such burden.

Disclosure of Interests: None declared

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THU0634 PHYSICIAN PERCEPTIONS OF BIOLOGICS VERSUS THEIR BIOSIMILAR COUNTERPARTS IN RHEUMATOLOGY: A MULTICOUNTRY STUDY IN EUROPE

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Background: Following LOE for the originator brand of etanercept in 2016 and the subsequent launch of its first biosimilar version, several other biosimilars have arrived in the rheumatoid arthritis treatment space. Due to their potential for reducing healthcare spend and their supposed equivalence, biosimilars are expected to be of rising relevance and impact in the following years. 12 biosimilar brands of biologic originator treatments are now available in Europe to treat rheumatoid arthritis; it will be crucial to understand physician perceptions of biosimilars relative to branded products and the impact such views have on potential prescribing decisions.

Objectives: The objective of the study was to assess perceptions of efficacy and safety for biosimilars relative to branded biologic originator products among treating Rheumatologists in the EU5 countries (United Kingdom (UK), France (FR), Italy (IT), Spain (SP) and Germany (DE)).

Methods: A cross-sectional survey was conducted in Q3 2018 in the EU5 among national, regional and hospital physicians who had been practicing between 3-30 years. Respondents completed a Physician Perceptual Questionnaire online, which assessed the overall perception of biologic brands and anti-TNF biosimilars, important attributes for treatments, and specific barriers to prescribing them. Data were analyzed using descriptive statistics.

Results: A total of 261 rheumatologists in the EU5 were recruited as part of the study (with almost equal numbers of rheumatologists representing each EU5 country). Treating rheumatologists were practicing for an average of 17.4 years, mainly in teaching hospitals (50.2%) and urban hospitals (20.7%)¹. Physicians consistently expressed greater satisfaction for branded products, with 73.9% (range: 63.5% DE to 90.6% FR) of physicians having rated satisfaction with the originator brand of etanercept as a 6 or 7 (on a 7-point scale where 7 corresponded to highest satisfaction), compared to only 37.5% for biosimilar etanercept (range: 28.6% IT to 51.9% DE)¹. When asked about specific attributes related to RA treatments, 64.4% of our sampled rheumatologists associated the originator brand of rituximab with 'Inhibition of radiographic progression' (range: 55.1% IT to 81.1% FR) – versus 47.5% association for biosimilar rituximab (range: 32.7% IT to 62.3% FR)¹. 73.2% of physicians associated the originator brand of infliximab with 'helps maintain or improve physical function' (range: 55.8% DE to 87.0% ES) compared to 58.6% of biosimilar infliximab (range: 44.9% IT to 67.9% FR)¹. For 'reduction in morning stiffness', 78.5% of our rheumatologists associated it with originator etanercept (range: 65.4% DE to 88.7% FR) versus only 66.7% for biosimilar etanercept (range: 55.1% IT to 81.1% FR)¹.

Figure: EU5 Physician Perceptions: Attribute associations for branded versus biosimilar products

Conclusion: Biosimilars score lower on overall satisfaction and are less frequently associated with specific efficacy attributes relative to branded products. This is possibly due to their relatively short time in clinical practice, and the resulting lack of experience and supporting data compared to the older branded equivalents. Proof of concept may be essential to close the perceptual gap that still exists between branded products and biosimilars.

REFERENCES:

- [1] Ipsos RA Therapy Monitor (261 sampled rheumatologists reporting on RA patients in EU5 in Q3 2018)

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THU0635 REAL WORLD PHYSICIAN SATISFACTION WITH SECUKINUMAB IN PSORIATIC ARTHRITIS AND ANKYLOSING SPONDYLITIS IN EUROPE

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Background: Psoriatic arthritis (PsA) and ankylosing spondylitis (AS) can lead to reduced physical functioning and quality of life. Secukinumab has demonstrated clinical benefits in PsA and AS, however little is known about physician satisfaction with its ability to control disease in the real world.

Objectives: Assess physician satisfaction with secukinumab's ability to control disease in a real-world setting.

Methods: This was a cross-sectional survey of rheumatologists and dermatologists (PsA only) in France, Germany, Italy, Spain, and UK. Data were collected from Jun-Aug 2018 via physician-completed patient record forms. Patients receiving any treatment were included in the survey. Patients receiving secukinumab >1 month were included in this analysis. Physicians rated satisfaction on a 5-point scale (Very satisfied to very dissatisfied), a binary variable of satisfied/not satisfied was created by grouping "Very satisfied" and "Satisfied" responses as satisfied and "Neutral", "Dissatisfied", and "Very dissatisfied" as not satisfied. Data were reported by disease, then stratified by overall physician-rated disease severity (mild/moderate/severe) at initiation of secukinumab, prior biologic use, treatment duration, and concomitant medication.

Results: 438 PsA and 277 AS patients were receiving secukinumab >1month at time of data collection. Patient mean age was 46.9 years (48.2 PsA, 44.8 AS) with 35.2% female (41.8% PsA; 24.9% AS). On average, patients had received secukinumab for 8.8 months (9.2 PsA; 8.2 AS). At secukinumab initiation, 44.2% of patients were rated by their physician as severe vs. 3.5% at the current consultation (39.3% vs. 2.7% PsA; 52.0% vs. 4.7% AS).

Overall, 87.6% of physicians were satisfied with the ability of secukinumab to control disease (87.9% PsA; 86.3% AS). Physicians report high satisfaction across each stratification (Table 1).

Table 1. Population characteristics, and physician reported satisfaction with secukinumab

	Population characteristics		Satisfaction level	
	N (%) PsA patients in each category (n=438)	N (%) AS patients in each category (n=277)	N (%) PsA physicians satisfied (n=438)	N (%) AS physicians satisfied (n=277)
Overall satisfaction	-	-	385 (87.9)	239 (86.3)
Severity at initiation*	28 (6.4)	5 (1.8)	18 (64.3)	4 (80.0)
Mild	236 (54.3)	128 (46.2)	210 (89.0)	109 (85.2)
Moderate	171 (39.3)	144 (52.0)	155 (90.6)	126 (87.5)
Severe				
Prior biologic use	191 (43.6)	147 (53.1)	155 (81.2)	118 (80.3)
Bio-experienced patients	247 (56.4)	130 (47.9)	230 (93.1)	121 (93.1)
Bio-naïve patients				
Secukinumab duration	82 (18.7)	72 (26.0)	56 (68.3)	48 (66.7)
1-4 months	120 (27.4)	68 (24.5)	108 (90.0)	61 (89.7)
>4-6 months	236 (53.9)	137 (49.5)	221 (93.6)	130 (94.9)
>6 months				
Concomitant medication	236 (53.9)	117 (42.2)	214 (90.7)	103 (88.0)
Monotherapy	104 (23.7)	113 (40.8)	89 (85.6)	95 (84.1)
Combination with a non-csDMARD	98 (22.4)	47 (17.0)	82 (83.7)	41 (87.2)
Combination with a csDMARD				

*PsA base size=435

Conclusion: This study provides insight into physician satisfaction with secukinumab in a real-world clinical setting. Physicians reported being highly satisfied with the ability of secukinumab to control PsA and AS disease, regardless of patient population subgroups.

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THU0636 HIGHER SOCIAL MEDIA USER STICKINESS ON SELF-MANAGEMENT SYSTEM MAY IMPROVE THE REMISSION RATE OF PATIENTS WITH ANKYLOSING SPONDYLITIS

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Background: With the advance of mobile health technologies, it is possible to set up economic management systems to improve health care. By using a Smart-phone Spondyloarthritis Management System (SpAMS), the Chinese Ankylosing Spondylitis (AS)/Spondyloarthritis Prospective Imaging Cohort (CASPIC) was launched.

Objectives: To explore the improvement of disease management and cost effectiveness of SpAMS for Chinese patients with AS.

Methods: Patients enrolled in the CASPIC cohort who fulfilled the 1984 modified New York criteria and with at least 2 evaluations of Ankylosing Spondylitis Disease Activity Score (ASDAS) were included in this analysis. All physician-reported assessments were collected at the Chinese People's Liberation Army General Hospital using SpAMS in Beijing. The disease activity states were defined according to ASDAS1, which separated inactive disease (ID) from low disease activity (LDA) by 1.3, LDA from high disease activity (HDA) by 2.1, and HDA from very high disease activity (VHDA) by 3.5. According to ASDAS at the baseline visits and final visits, patients were divided into four groups (Figure 1): maintainer of ID/LDA, patients with relapse, maintainer of active disease, and new achiever of ID/LDA.

Results: From April 2016 to April 2018, 1201 patients with AS were enrolled in CASPIC. 4659 patient self-assessments were completed, including 3304 pre-visit assessments and 1355 assessments during the

follow-up interval. After online consultation, 29.1% of clinic visits to a tertiary hospital were considered unnecessary and could be solved in the primary care hospital. The time and cost of each patient's journey to Beijing were calculated based on the location of each patient. For the 1037 (86.3%) patients who lived outside the vicinity of Beijing, at least an average of 5.3 hours and 327.4 RMB for each person (USD: RMB =1:6.418) for traffic time and expenses were saved, which equaled to 16% of the Chinese monthly disposable personal income (data in 2016).

Table 1. Characteristics of disease activity

Characteristics	ID/LDA at baseline (n=445, 57.2%)			Active at baseline (n=332, 42.7%)		
	Maintainers of ID/LDA (n=410, 92.1%)	Patients with relapse (n=35, 7.9%)	P value	Maintainers of active disease (n=127, 38.2%)	New achievers of ID/LDA (n=205, 61.7%)	P value
Age, mean (s.d.), years	30.2 (9.1)	29.8 (7.6)	0.785	30.8 (8.6)	30.6 (8.3)	0.816
Disease duration, mean (s.d.), years	7.6 (6.2)	7.3 (5.6)	0.787	9.0(6.1)	9.3(6.1)	0.714
Number of self-assessments, mean (s.d.)	5.0 (2.7)	3.3 (1.8)	<0.001*	4.5(2.5)	5.6(3.1)	<0.001*
Male sex, %	79.8	88.6	0.207	89.8	83.9	0.133
ASDAS at baseline, mean (s.d.)	1.4 (0.5)	1.5 (0.4)	0.031*	3.2 (0.8)	3.0 (0.8)	0.134
Smoker, %	24.7	40.0	0.047*	44.0	32.8	0.042*
NSAIDs at baseline, %	98.1	99.8	0.448	97.9	99.4	0.263
TNFi at baseline, %	19.2	13.8	0.479	24.5	29.8	0.359
DMARDs at baseline, %	64.0	72.4	0.363	66.0	68.5	0.679
TNFi during follow-up period ^a , %	29.9	27.3	0.755	32.3	45.6	0.016*

*P < 0.05.

Figure 1. Flow chart of participants in the study

Abbreviation: ID: inactive disease; LDA: low disease activity; HDA: high disease activity; VHDA: very high disease activity

Of these patients enrolled in CASPIC, 777 patients had at least 2 evaluations of ASDAS. The rate of patients with ID/LDA was 57.2% at baseline and increased significantly to 79.2% with a mean (SD) follow-up of 13.3 (5.9) months (Table 1). Compared with patients who relapsed, those that maintained the ID/LDA had more patient assessments [5.0 (2.7) vs 3.3 (1.8), $P < 0.001$]. The new achievers of ID/LDA also completed online patient assessments more frequent [5.6 (3.1) vs 4.5 (2.5), $P < 0.001$] compared to patients who maintained active disease.

Conclusion: Higher social media user stickiness on self-management system may improve the remission rate of AS patients. SpAMS could serve as a cost- and time-saving specialty care online platform for patients with AS.

REFERENCES:

- [1] Machado PM, Landewé R, Heijde Dvd. Ankylosing Spondylitis Disease Activity Score (ASDAS): 2018 update of the nomenclature for disease activity states. *Ann Rheum Dis* 2018;annrheumdis-2018-213184