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FRI0287

BIOLOGIC DRUG RESPONSE DOES NOT APPEAR RELATED TO RADIOGRAPHIC STATUS IN AXIAL SPONDYLOARTHRITIS: DATA FROM THE BSRBR-AS REGISTRY

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Background: The concept of axial spondyloarthritis (axSpA) incorporates the full range of inflammatory spinal disease. In the absence of specific immuno-genetic biomarkers, classification criteria differentiate two groups (non-radiographic [nr-axSpA] and radiographic axSpA [r-axSpA]) based on the presence of structural damage of the sacroiliac joints. Controversy remains as to whether nr-axSpA represents a milder form with biologic DMARD (bDMARD) treatment restrictions still in place in many countries.

Table 1. Baseline characteristics of nr-axSpA and r-axSpA patients starting biologics.

Variables	Level	nr-axSpA n=418	r-axSpA n=727	p-value
Age, mean (SD), years		39.7 (12.4)	46.1 (13.4)	<0.001
Sex, n (%)	Male	239 (57%)	529 (73%)	<0.001
Symptom duration, mean (SD), years		11.2 (10.9)	16.7 (12.9)	<0.001
Diagnostic delay, median (IQR), years		3.0 (1.0, 10.0)	3.0 (0.0, 11.0)	0.83
HLA-B27 (missing=325)		227 (73%)	387 (76%)	0.40
Inflammatory back pain, n (%)		384 (92%)	619 (92%)	0.95
Uveitis, n (%)		92 (22%)	205 (30%)	0.003
Crohn's / Colitis, n (%)		55 (13%)	113 (17%)	0.11
Psoriasis, n (%)		79 (19%)	115 (17%)	0.43
Smoking status, n (%)	Never smoked	148 (43%)	218 (38%)	0.040
	Ex-smoker	95 (28%)	207 (36%)	
	Current smoker	100 (29%)	154 (27%)	
NSAID use, n (%)		311 (75%)	560 (77%)	0.43
CRP, median (IQR), mg/dL		0.5 (0.1, 1.3)	0.9 (0.3, 2.5)	<0.001
BMI, mean (SD)		27.5 (5.6)	28.2 (5.8)	0.10
BASDAI, median (IQR)		6.7 (5.4, 7.8)	6.5 (5.0, 7.7)	0.12
BASFI, median (IQR)		5.9 (4.2, 7.8)	6.5 (4.4, 8.3)	0.043
VAS-G, mean (SD)		7.0 (2.0)	6.8 (2.0)	0.056
ASDAS-CRP, mean (SD)		2.8 (0.8)	2.8 (0.9)	0.32
ASQOL, median (IQR)		13.0 (9.0, 16.0)	13.0 (9.0, 15.5)	0.29
Biologic (to start), n (%)	Adalimumab	238 (57%)	436 (60%)	0.20
	Etanercept	131 (31%)	220 (30%)	
	Certolizumab	35 (8%)	47 (6%)	
	Golimumab	5 (1%)	12 (2%)	
	Secukinumab	7 (2%)	10 (1%)	
	Infliximab	2 (<1%)	2 (<1%)	

Objectives: To describe the baseline characteristics and bDMARD response at one year in axSpA patients in the British Society for Rheumatology Biologics Register in Ankylosing Spondylitis (BSRBR-AS) according to radiographic status.

Methods: BSRBR-AS is a national prospective cohort including participants who fulfil the ASAS classification criteria for axSpA. In this analysis, cross-sectional baseline data of patients starting bDMARDs including clinical, demographic and patient-reported outcomes (PROs) were compared. Follow-up data at one year was identified if 12±4 months from baseline and PROs completed within 2 months of visit date. Ankylosing Spondylitis Disease Activity Scores (ASDAS) for low disease status, clinically important improvement (CII) and major improvement (MI) were used to assess treatment response.

Results: Baseline characteristics were available for 1,145 patients. Those with r-axSpA were more likely to be male, were older, and had longer disease duration (Table 1). Follow-up ASDAS was available in 290 patients. Two thirds of the patients achieved ASDAS low disease state at one year regardless of radiographic status (nr-axSpA: 64.2% vs r-axSpA: 66.1, Diff: -1.9%, 95% CI -13.7 to 9.8). Further, no significant differences were seen between the groups in attaining ASDAS CII (nr-axSpA: 50.7% vs r-axSpA: 44.7%, Diff: 6.0%, 95% CI -7.8 to 19.8%) or MI (nr-axSpA: 20% vs r-axSpA: 18.7%, Diff: 1.3%, 95% CI -9.7 to 12.3%).

Conclusion: Although there appeared to be some differences in the baseline characteristics when exploring this cohort, according to radiographic status, which are likely related to the natural history of the disease; the level of biologic response was comparable between the groups supporting the concept of axSpA as a single disease entity.

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FRI0288

TREATMENT PATTERNS AND PHARMACOUTILIZATION AMONG PATIENTS AFFECTED BY ANKYLOSING SPONDYLITIS: AN ITALIAN REAL-WORLD STUDY

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Background: Ankylosing spondylitis (AS) is a chronic rheumatologic condition requiring lifelong treatments. To date, few real-world studies on AS patients in Italy are reported.

Objectives: Aims of the study were to evaluate treatment patterns and to analyse pharmacoutilization on patients affected by AS in a real-world setting of Italian clinical practice.

Methods: This observational study was based on administrative databases of a pool of Italian settings. A retrospective cross-sectional analysis was performed for years 2015-2017 to evaluate AS-diagnosed patients and, among them, to estimate percentage of treated and untreated ones. Patients were included if having a hospitalization discharge diagnosis at any level of AS (ICD-9-CM: 720.0) or exemption code for AS (054.720.0). Index date (ID) was date in which patients met one of the inclusion criteria. Patients with a prescription for drugs indicated for AS [non-steroidal anti-inflammatory drugs, disease-modifying antirheumatic drugs (DMARDs) - targeted synthetic (tsDMARDs) and biological (bDMARDs)] at ID were defined "treated". Patients without such drug prescriptions at ID were considered "untreated". To analyse treatment patterns of b/tsDMARDs-treated patients a longitudinal cohort study was conducted considering as inclusion periods the year 2014 and a period from 01/07/2016 to 30/06/2017. ID was date of first b/tsDMARDs prescription during inclusion period. Follow-up (F-up) lasted one year after ID. The interruption of treatment was defined as the absence of prescriptions in the last 3 months of F-up.

Results: For cross-sectional-cohort: AS-diagnosed patients were 4,824 in 2015, 5,357 in 2016, 5,894 in 2017. In all years analysed, about 50% of patients were male. Mean age±SD ranged from 51.5±13.7 (2015) to 52.4±14.0 (2017). Untreated patients were 33.6% (2015), 35.1% (2016) and 37.9% (2017), while patients in therapy with b/tsDMARDs were 22.7% (2015), 22.3% (2016) and 22.2% (2017). The remaining percentage of patients were treated with csDMARDs/NSAIDs: 43.7% (2015), 42.6% (2016), 39.9% (2017)). In 2015 and 2016 all b/tsDMARDs-treated patients were in therapy with anti-TFN agents, while the advent of IL-inhibitors was observed starting from 2017 (8.2% b/tsDMARDs-treated patients with IL-inhibitors). For longitudinal-cohort: in 2014, 310 patients had a b/tsDMARDs prescription and during 1-year F-up 11.9% of them interrupted the treatment after a mean time ±SD of 83.3±66.9 days. Of the 183 patients who had a prescription of b/tsDMARDs at ID during 2016-2017, 22.4% had a treatment interruption after a mean time±SD of 134.4±86.1 days during F-up.

Conclusion: This real-world study provided insights on AS treatment patterns. Preliminary results showed that approximately one third of AS patients are untreated and about one in five are treated with b/tsDMARDs. Despite the improvement in treatment duration observed from 2014 to 2016/17, still 22.4% of b/tsDMARDs-treated patients interrupted therapy in the most recent cohort. A larger sample size is needed to confirm results.