«Προγνωστικοί παράγοντες μη επίτευξης ύφεσης / χαμηλής δραστηριότητας στην Αξονική Σπονδυλαρθρίτιδα»

Στυλιανός Πανόπουλος

Ά Προπαιδευτική Παθολογική Κλινική

Γ.Ν.Α ΛΑΙΚΟ

- Δεν υπάρχει σύγκρουση συμφερόντων

Περίγραμμα ομιλίας

- Ορισμός ύφεσης- Σημασία επίτευξης ύφεσης/χαμηλής ενεργότητας νόσου

- Συχνότητα μη ανταπόκρισης στη θεραπεία / difficult to manage (D2M) νόσου

- Προγνωστικοί δείκτες μη επίτευξης ύφεσης

δεδομένα από μελέτης παρατήρησης/αρχεία καταγραφής ασθενών

ανάλυση επιμέρους παραγόντων

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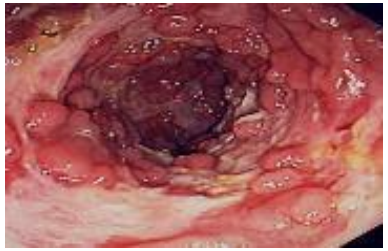
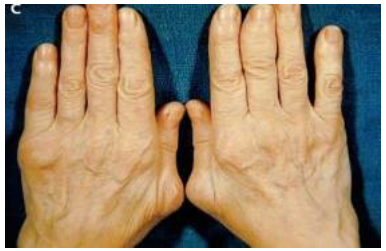
ΑΞΟΝΙΚΗ ΣΠΟΝΔΥΛΟΑΡΘΡΙΤΙΔΑ (AxSpA)

- Επιπολασμός 0.3-1.4% γενικού πληθυσμού
- Πιο συχνή εμφάνιση στη 3η δεκαετία
- Αρρεν:θηλυ 2-3/1



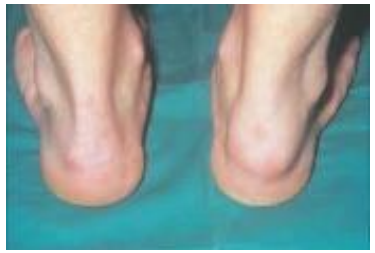
IBD

4–10%



Peripheral arthritis

20-25 %

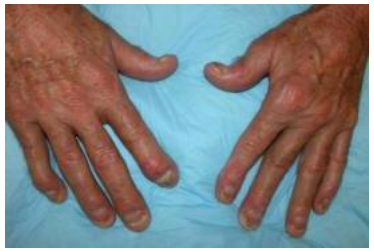


Enthesitis

25-30%

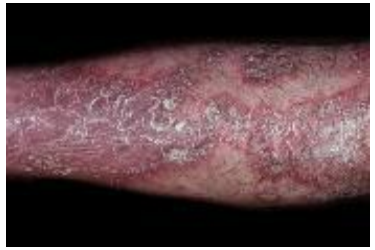
Uveitis

25–50%



Dactylitis

5-7%



Psoriasis[a]

10–25%

AS, ankylosing spondylitis; IBD, inflammatory bowel disease; PsA, psoriatic arthritis; SpA, spondyloarthritis

1. Baraliakos X, et al. Clin Exp Rheumatol 2015;33(Suppl. 93):S31–5; 2. Gladman DD, et al. Q J Med. 1987;62:127–41; 3. de Winter JJ, et al. Arthritis Res Ther 2018;18:196; 4. Kaeley GS, et al. Semin Arthritis Rheum 2018;48:263–73; 5. Polachek A, et al. Arthritis Care Res 2017;69:1685–91; 6. Sieper, J. and et al, 2017. Axial spondyloarthritis. The Lancet, 390(10089), pp.73-84

Δείκτες ενεργότητας νόσου

Treat to Target

Remission **ASDAS < 1.3** **(BASDAI<2)**

OR

LDA ASDAS < 2.1 (BASDAI<4)

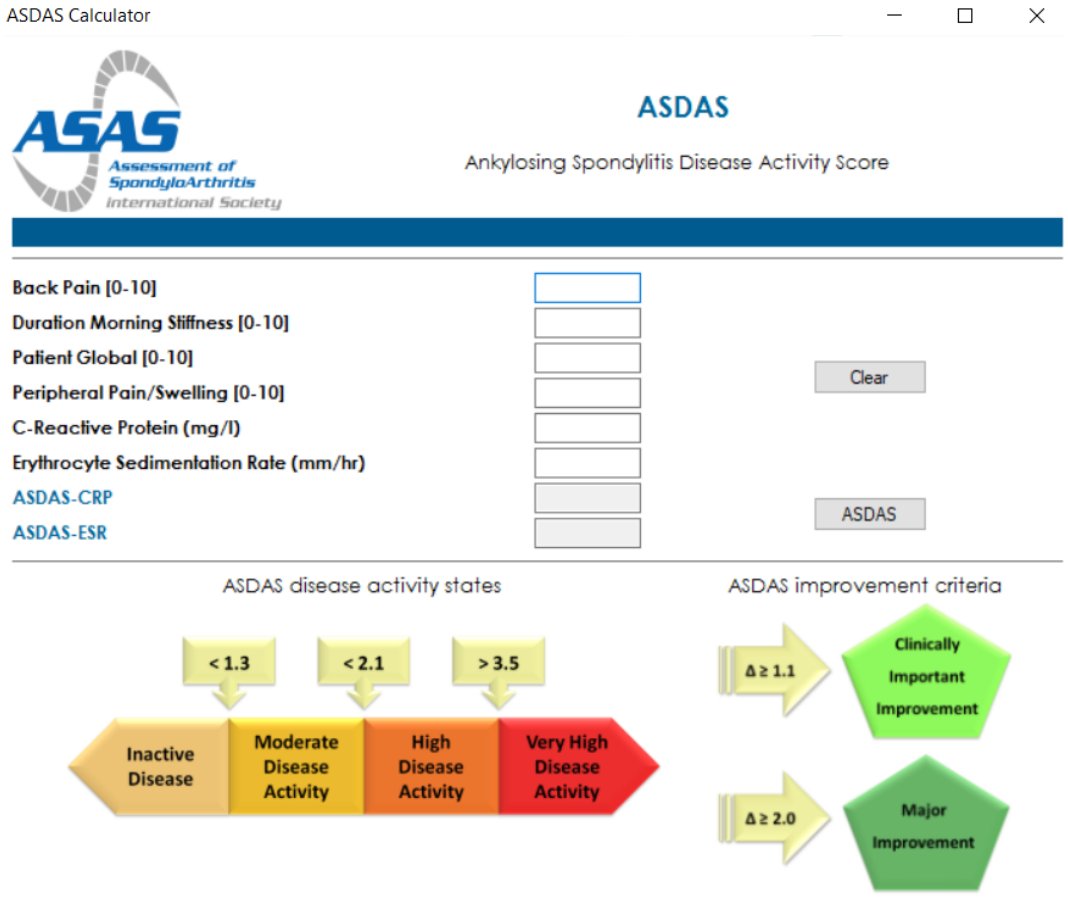


Table 1. Composite scores defining remission: potential targets of the treat-to-target strategy in axial spondyloarthritis.

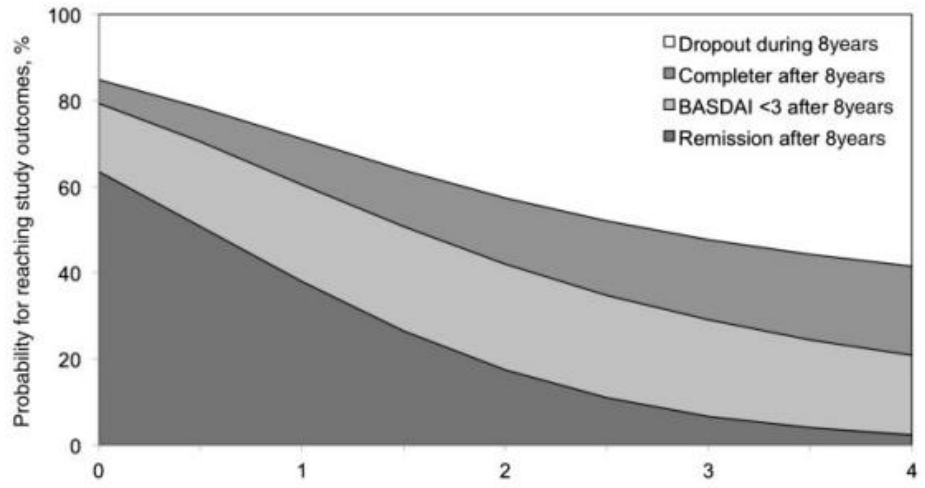
Disease activity composite scores defining remission	Target to reach	Time to reach target	Components of each composite score							
			Axial pain	Peripheral pain	Morning stiffness	Entheseal pain	Fatigue	Patient global	Physical function	ESR or CRP
ASDAS inactive disease	<1.3 or <2.1	<6 months	X	X	X			X		X
BASDAI	No validated cut-offs for remission*	<6 months	X	X	X	X	X			
ASAS-PR	<2/10 on each domain	<6 months	X		X			X	X	

Questions
(1) VAS overall level of fatigue/tiredness past week (2) VAS overall level of AS neck, back, or hip pain past week (3) VAS overall level of pain/swelling in joints other then neck, back, or hips past week (4) VAS overall discomfort from any areas tender to touch or pressure past week (5) VAS overall level of morning stiffness from time of awakening past week (6) Duration of morning stiffness from time of awakening (up to 120 minutes)

BASDAI, Bath Ankylosing Spondylitis Disease Activity Index; VAS, visual analogue scale.

Σημασία πρώιμης επίτευξης ύφεσης

- Early achievement of remission, within 12 wks from diagnosis, was the best predictor of long-term and sustained remission.
- low BASDAI at 3 months is predictive of favorable outcomes and higher drug survival after 8 years



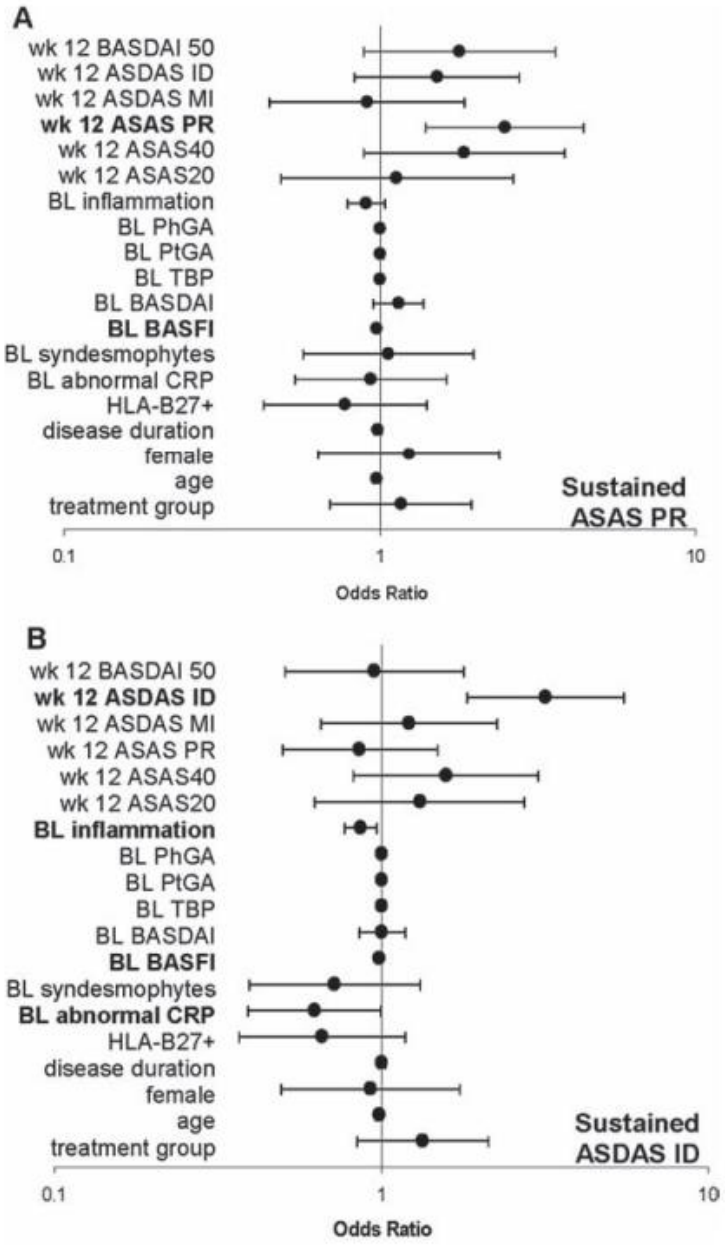


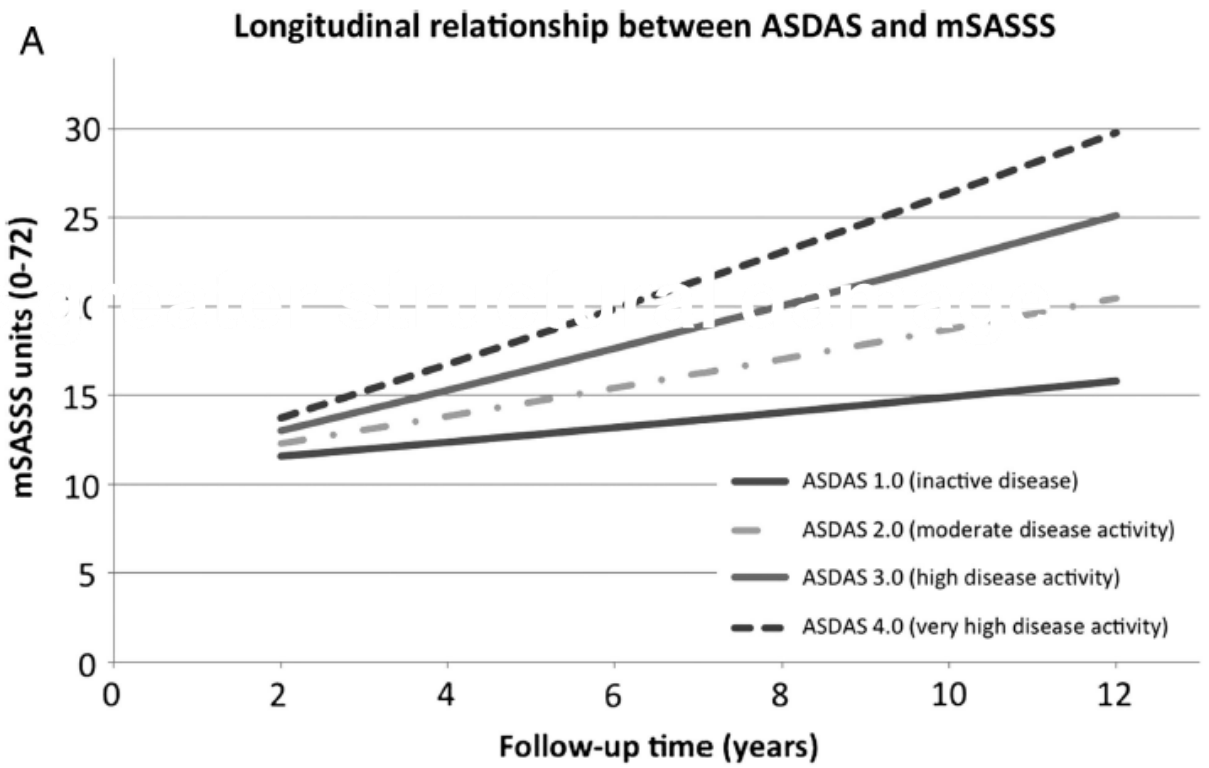
Figure 4 Odds ratio for achieving sustained remission by multivariate regression. (A) ASAS partial remission; (B) ASDAS inactive disease.

Sieper. Ann Rheum Dis 2012;71:700–706
Baraliakos et al. Rheumatology 2011;50:16901699

Υψηλότερη ενεργότητα νόσου σημαίνει περισσότερες δομικές βλάβες

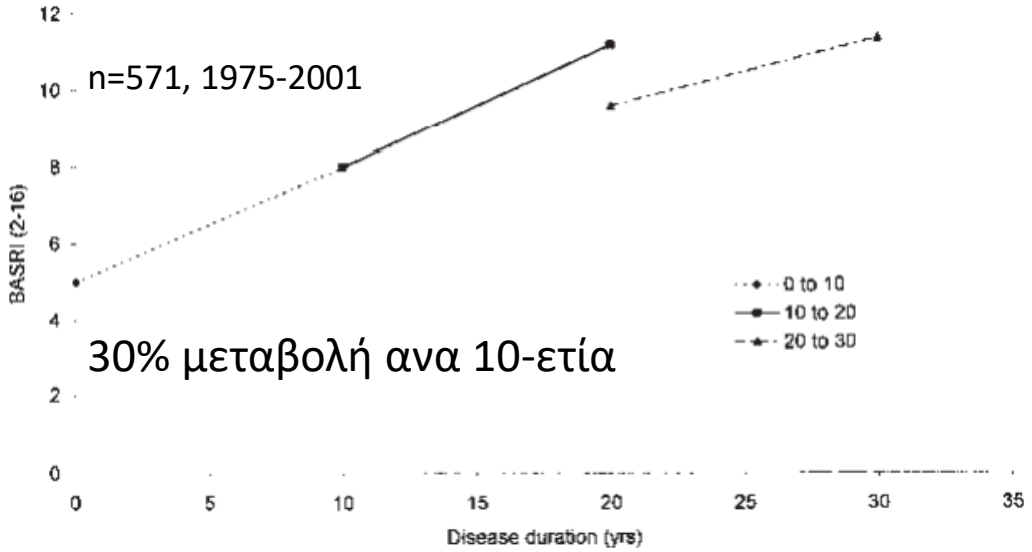
ASDAS < 1,3 ⟶ progression of 0.7 mSASSS units/2 years

ASDAS >3.5 ⟶ progression of 3.1 mSASSS units/2-year

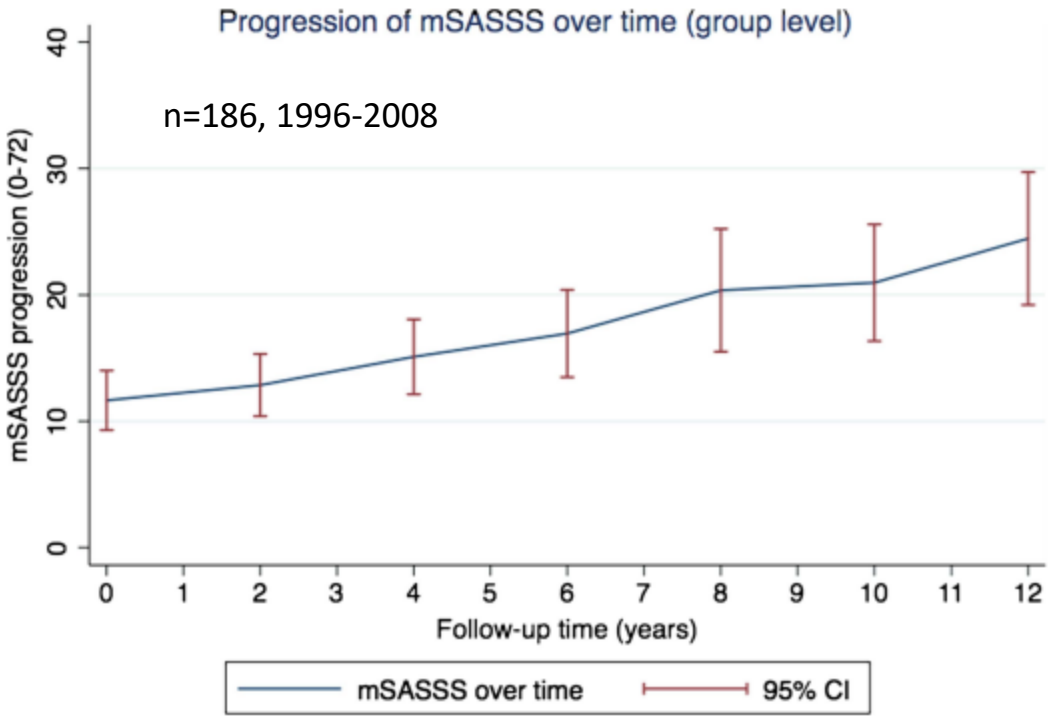


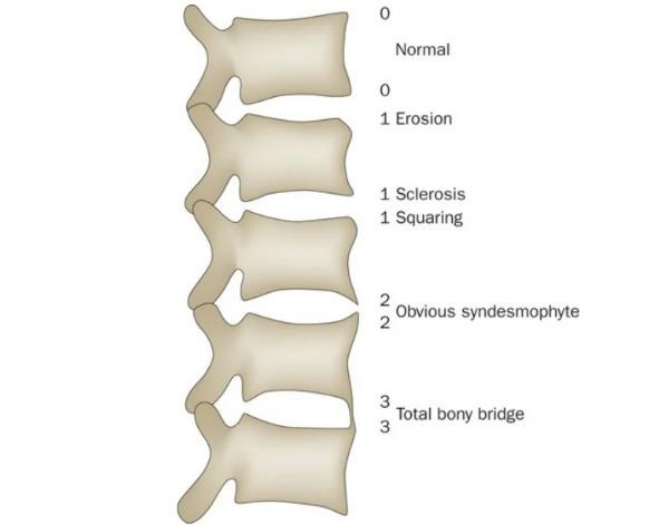
Ramiro S, et al.2014;73:1455-1461.

Η ακτινολογική εξέλιξη στην αξονική σπονδυλοαρθρίτιδα είναι γραμμική σε σχέση με το χρόνο



- 75% ασθενών είχαν ακτινολογική εξέλιξη (≥ 1 συνδεσμόφυτο)
- **Μεταβολή κατα 2 μονάδες mSASS ανα 2-ετία**





The modified Stoke Ankylosing Spondylitis Spine Score (mSASSS)

Brophy et alThe Journal of Rheumatology 2002; 29:6
Ramiro S, et al. Ann Rheum Dis 2015;74:52–59.

Περίγραμμα ομιλίας

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- Προγνωστικοί δείκτες μη επίτευξης ύφεσης

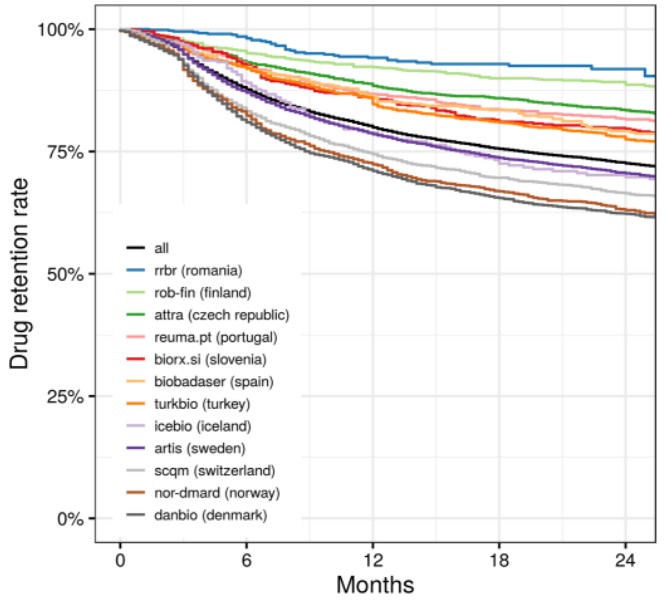
δεδομένα από μελέτης παρατήρησης/αρχεία καταγραφής ασθενών

ανάλυση επιμέρους παραγόντων

EPIDEMIOLOGICAL SCIENCE

Treatment response and drug retention rates in 24 195 biologic-naïve patients with axial spondyloarthritis initiating TNFi treatment: routine care data from 12 registries in the EuroSpA collaboration

Lykke Midtbøll Ørnbjerg,[1,2] Cecilie Heegaard Brahe,[1,2] Johan Askling,[3] Adrian Ciurea,[4] Herman Mann,[5] Fatos Onen,[6] Eirik Klami Kristianslund,[7]



Δεδομένα από 12 εθνικά αρχεία καταγραφής, συνολικά 24.195 ασθενείς

Μετά 6 μήνες χορήγησης Anti-TNFa:

50% των ασθενών πέτυχαν ASAS 40
80% BASDAI<40
33% πλήρη ύφεση
65% παραμονή στη θεραπεία στη 2-ετία

Table 3 Retention and response rates in patients with axial spondyloarthritis

	All patients	ASAS cohort*	NY cohort†	nr-axSpA cohort‡
	Retention rates	Retention rates	Retention rates	Retention rates
6 months (95% CI)	88% (87% to 88%)	89% (88% to 90%)	90% (89% to 91%)	84% (82% to 86%)
12 months (95% CI)	80% (79% to 80%)	81% (80% to 82%)	83% (82% to 85%)	73% (70% to 76%)
24 months (95% CI)	73% (72% to 73%)	74% (73% to 76%)	76% (74% to 78%)	64% (62%–67%)

	Response rates		Response rates		Response rates		Response rates	
	Crude§	LUNDEX adjusted ¶	Crude§	LUNDEX adjusted¶	Crude§	LUNDEX adjusted¶	Crude§	LUNDEX adjusted¶
ASDAS inactive disease at 6 months	33%	27%	30%	25%	25%	21%	26%	20%
ASDAS inactive disease at 12 months	35%	24%	33%	23%	29%	21%	31%	19%
ASDAS inactive disease at 24 months	38%	19%	38%	18%	32%	16%	37%	15%
BASDAI <40 at 6 months	72%	59%	73%	60%	71%	60%	64%	50%
BASDAI <40 at 12 months	75%	51%	76%	52%	73%	52%	70%	43%
BASDAI <40 at 24 months	77%	38%	79%	37%	76%	37%	71%	29%
ASAS 20/40 at 6 months	64%/49%	52%/40%	68%/54%	56%/45%	64%/48%	54%/41%	57%/42%	45%/33%
ASAS 20/40 at 12 months	67%/53%	46%/36%	70%/57%	48%/39%	66%/52%	47%/37%	63%/49%	39%/30%
ASAS 20/40 at 24 months	68%/54%	34%/27%	73%/59%	34%/28%	67%/51%	33%/25%	69%/53%	28%/22%

Ornbjerg LM, et al. Ann Rheum Dis 2019;0:1–9

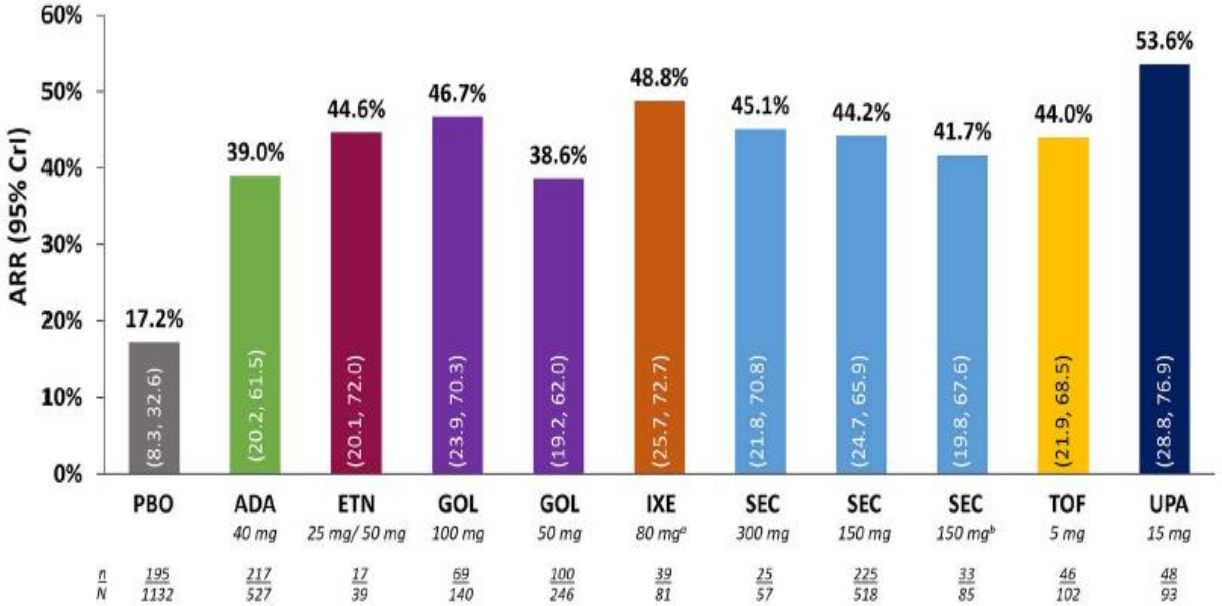
Ποσοστά κλινικής ανταπόκρισης κατά ASAS40 των διαφορετικών θεραπευτικών επιλογών για την ΑΣ

Rheumatol Ther
https://doi.org/10.1007/s40744-023-00586-6

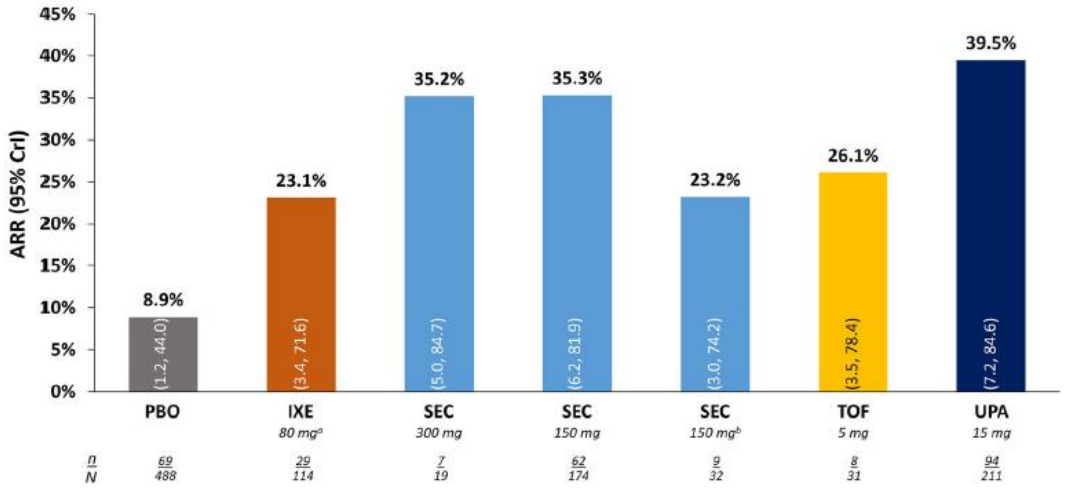
ORIGINAL RESEARCH

Clinical and Economic Benefit of Advanced Therapies for the Treatment of Active Ankylosing Spondylitis

Jessica A. Walsh · Christopher D. Saffore · Eric B. Collins · Andrew Ostor



Absolute ASAS40 response rates at week 12–16 in naive patients with AS.



Absolute ASAS40 response rates at week 12–16 in bio-IR patients with AS

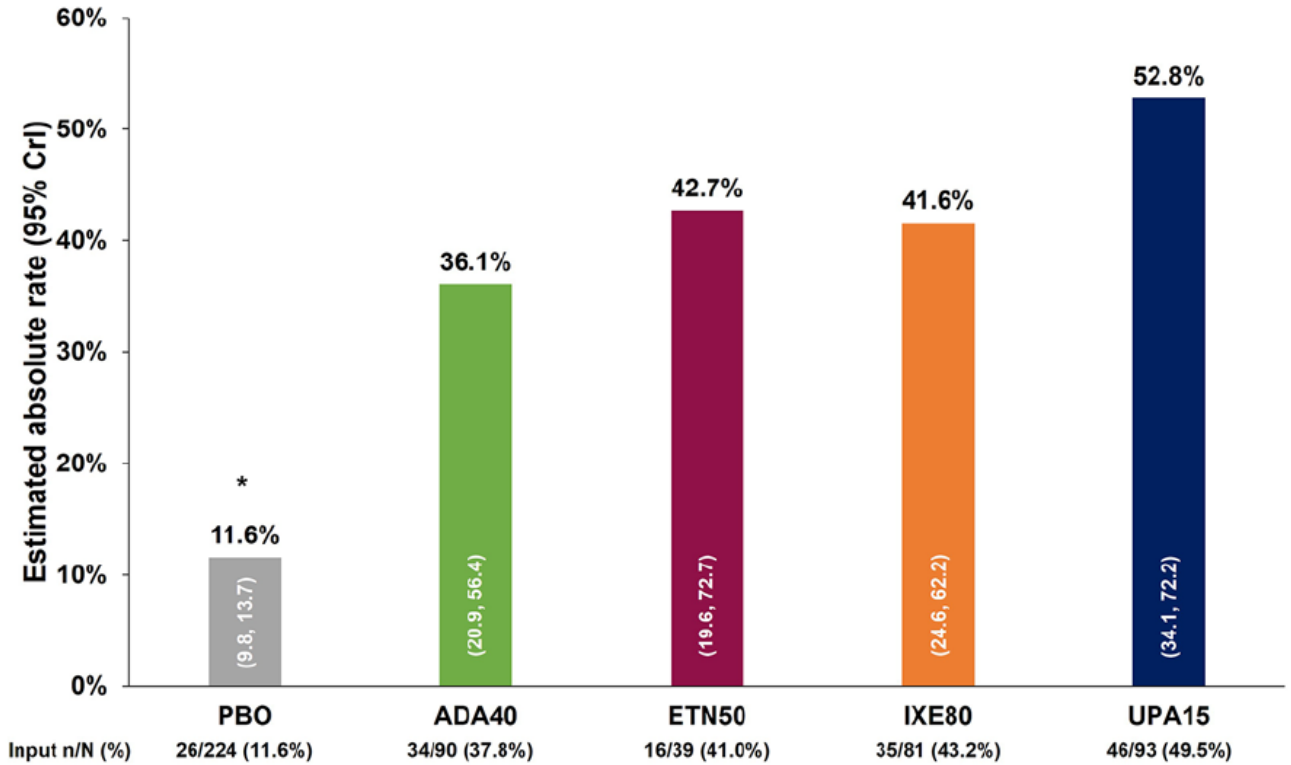
Walsh J.A. et al. Rheumatol Ther 2023

Rheumatol Ther (2024) 11:989–999
https://doi.org/10.1007/s40744-024-00685-y

ORIGINAL RESEARCH

Comparative Efficacy of Advanced Therapies in the Treatment of Radiographic Axial Spondyloarthritis or Ankylosing Spondylitis as Evaluated by the ASDAS Low Disease Activity Criteria

Xenofon Baraliakos · Christopher D. Saffore · Eric B. Collins · Bhumik Parikh ·



TNF-naive

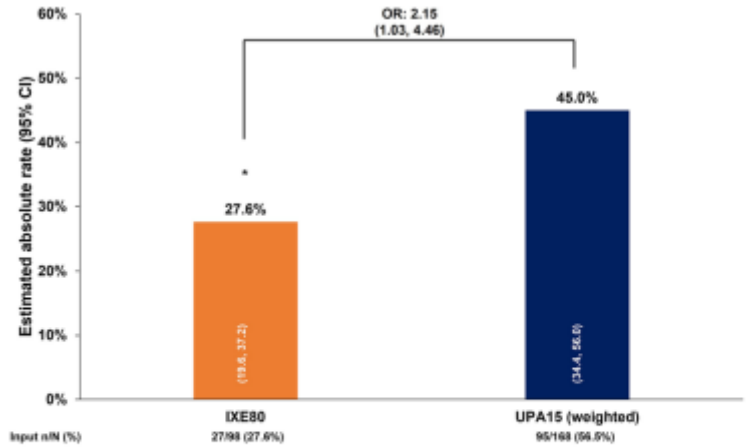


Fig. 4 Estimated ASDAS LDA absolute rates and odds ratio comparison of matched UPA15 and IXE80 at week 52 in TNFi-IR populations with AS. Input indicates

TNF-IR

OPEN ACCESS

CLINICAL SCIENCE

Janus kinase inhibitors and tumour necrosis factor inhibitors show a favourable safety profile and similar persistence in rheumatoid arthritis, psoriatic arthritis and spondyloarthritis: real-world data from the BIOBADASER registry

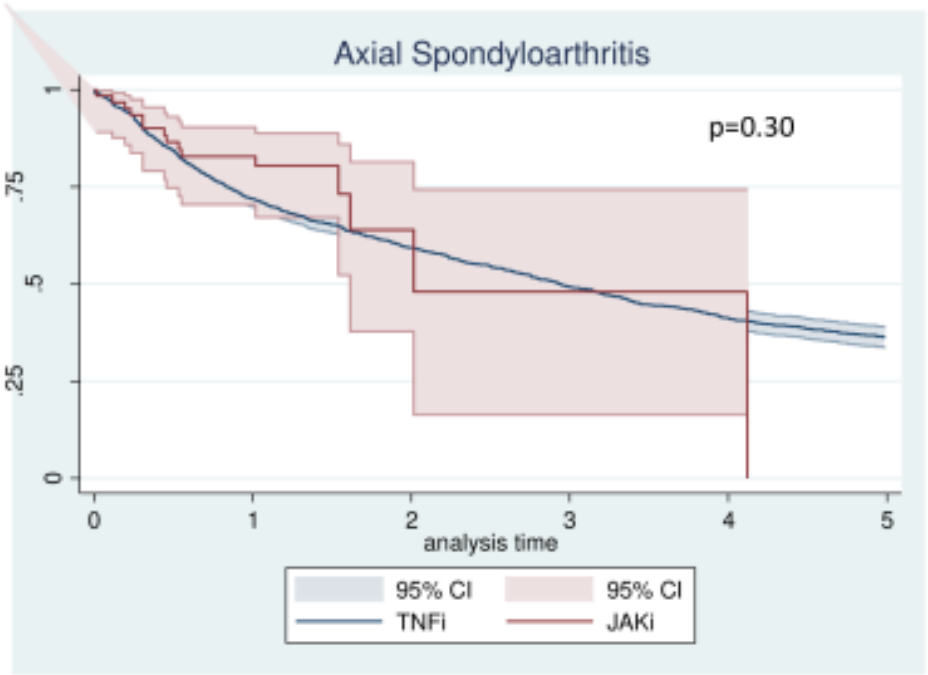
Blanca Hernández-Cruz ,[1] Lucía Otero-Varela ,[2] Mercedes Freire-González,[3]

TNF inhibitors	
Lines of treatment, n (%)	
First	1014 (47.5)
Second	547 (25.6)
Third or higher	575 (26.9)

JAK inhibitors	
Lines of treatment, n (%)	
First	1 (1.6)
Second	7 (11.3)
Third or higher	54 (87.1)

- Drug persistence at 1, 2 and 3 years was
  69%, 55% and 45% for TNFi and
  68%, 54% and 45% for JAKi (p=0.30)

- Multivariate regression models showed a lower probability of discontinuation for JAKi (HR=0.85; 95% CI 0.78–0.92)



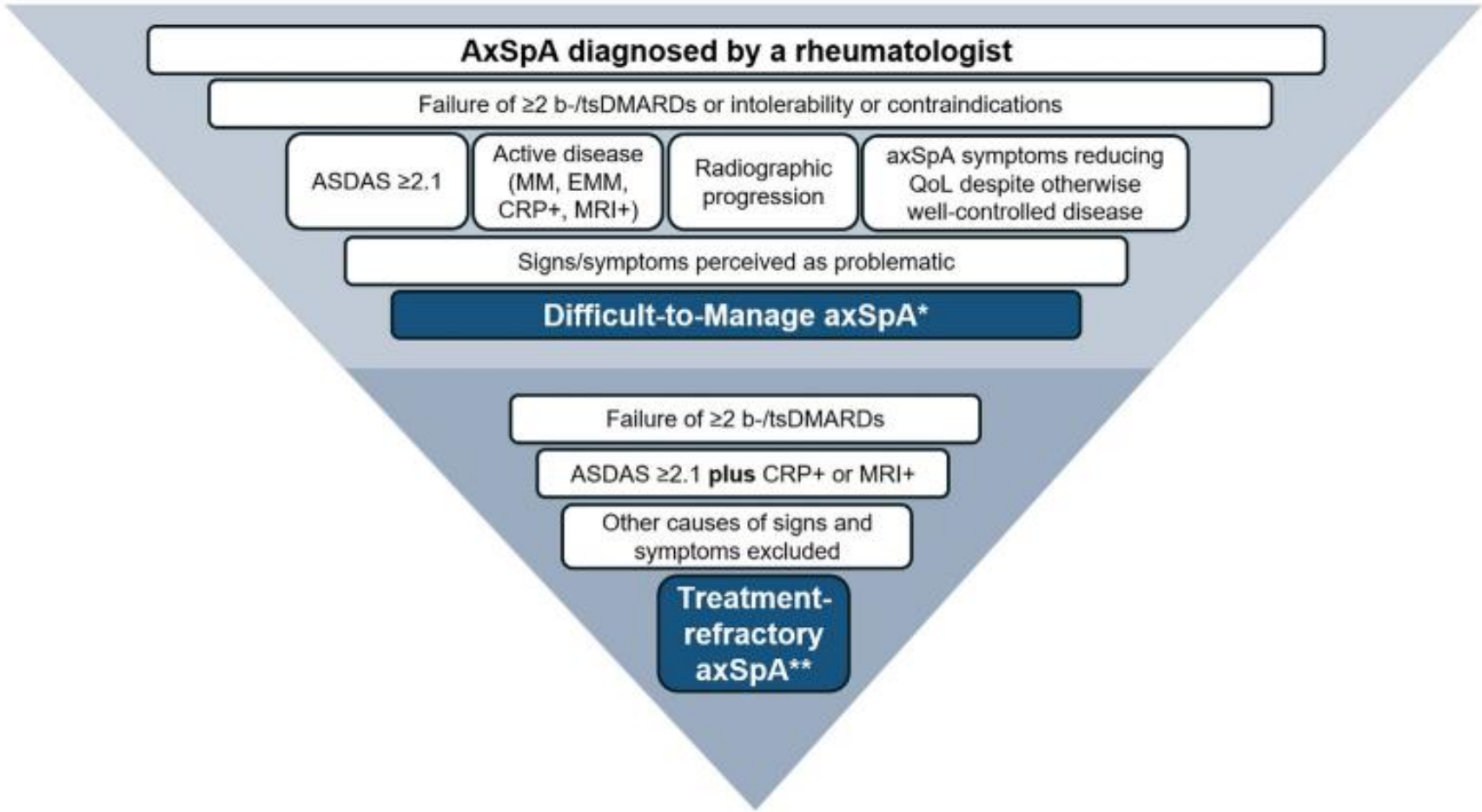
Scheepers L, d et al. Ann Rheum Dis. 2022;81:1335.
Pope J et al. ACR Open Rheumatol. 2019;1: 73–82.

- Περίπου 1/3 των ασθενών με AxSpA αποτυγχάνουν στον 1ο βιολογικό παράγοντα
- >50% αποτυγχάνουν στον 2ο βιολογικό παράγοντα
- >50% αλλάζουν βιολογική θεραπεία στη 3-ετία

Difficult to Manage (D2M) AxSpa

D. Poddubnyy et al.

Ann Rheum Dis 84 (2025) 538–546



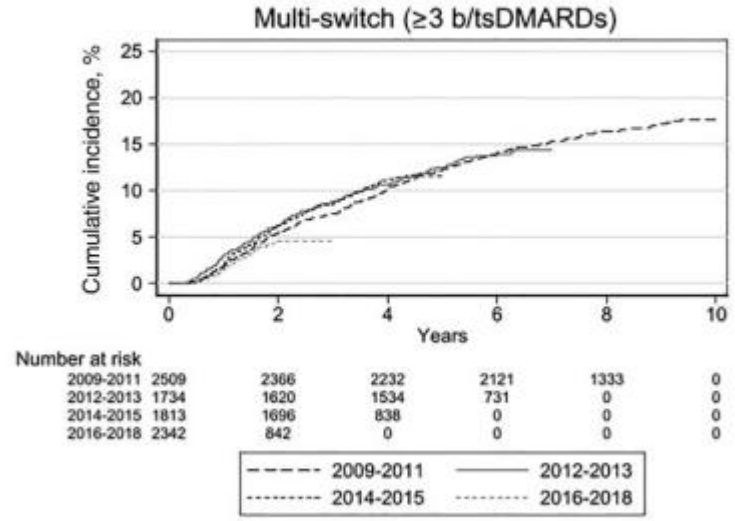
Πολλαπλές αλλαγές θεραπειών στην Αξονική Σπονδυλοαρθρίτιδα

Among 8398 patients proportions treated with 3, 4 or 5 b/tsDMARDs within 3 years' follow-up were 8%, 3% and 1%, respectively

TABLE 1 Number of patients fulfilling multi-switch definitions according to number of b/tsDMARD[a] treatment courses per patient during follow-up

Criterion	≥3 b/tsDMARDs	≥4 b/tsDMARDs	≥5 b/tsDMARDs
All included patients[b] ($n = 8398$), n (%)	922 (11)	343 (4)	121 (1)
Subgroup starting first b/tsDMARD 2009–2015[c] ($n = 6056$)	499 (8)	162 (3)	38 (1)
Lag time between stop of drug and restart of next b/tsDMARD ≤90 days (for all treatment courses), n (%)	434 (7)	142 (2)	32 (1)
At least one of the previous treatment courses stopped due to lack of effect[d], n (%)	393 (7)	146 (2)	34 (1)

FIG. 1 Cumulative incidence of becoming multi-switcher stratified by start-year of first treatment



b/ts DMARD: biologic or targeted synthetic DMARD.

Di Giuseppe et al,.Rheumatology 2022;61:3647–3656

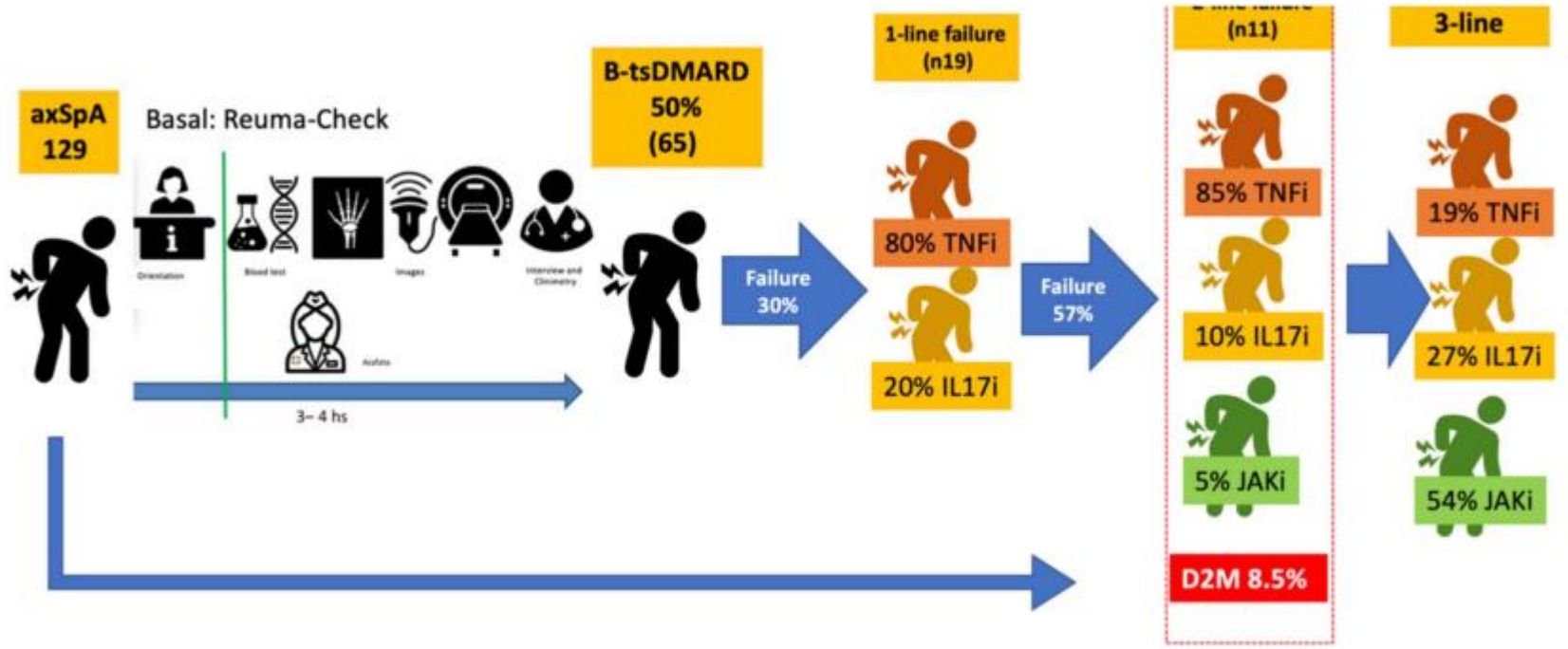
Clinical Rheumatology
https://doi.org/10.1007/s10067-025-07626-2

BRIEF REPORT

Difficult-to-Manage Axial Spondyloarthritis According to ASAS Criteria in Reuma-Check Cohort: Frequency, Predictive Factors, and Treatment Patterns

Rodrigo Garcia-Salinas[1] · Nataly Mejia-Maggi[1] · Santiago Ruta[1] · Gisela Reyes-Jara[1] · Juan Arguello[1] · Sebastián Juan Magri[1]

129 axSpA patients, 15 (12%)met criteria for D2M/refractory disease



Identification and characteristics of patients with potential difficult-to-treat psoriatic arthritis: exploratory analyses of the Greek PsA registry

Konstantinos D. Vassilakis[1], Charalampos Papagoras[2], Nikolaos Fytanidis[2], Sousana Gazi[3], Evangelia Mole[3], Michael Krikelis[3], Paraskevi V. Voulgari[4], Evripidis Kaltsonoudis[4], Nikolaos Koletsos[4], Dimitrios Boumpas[5], Pelagia Katsimpri[5], Dimitrios Katsifis-Nezis[5], Theodoros Dimitroulas[6], Nikolaos Kougkas[6], Maria Boutel[6], Petros P. Sfikakis[1], Maria G. Tektonidou[1], Chrysoula Gialouri[1], Dimitrios Bogdanos[7], Theodora Simopoulou[7], Christos Koutsianas[8], Evgenia Mavrea[8], Gkikas Katsifis[9], Konstantinos Kottas[9], Maria Konsta[10], Matthoula Tziafalia[10], Evangelia Kataxaki[11], Eleni Kalavri[12], Kalliopi Klavdianou[12], Eleftheria P. Grika[13], Charalampos Sfontouris[13], Dimitrios Daoussis[14], George Iliopoulos[14], Ilias Bournazos[15], Dimitrios Karokis[15], Konstantinos Georganas[15], Dimos Patrikos[15], Dimitrios Vassilopoulos[8], George E. Fragoulis[1,16,*]

Among 467 patients included, 77 (16.5%) were considered D2T and 390 non-D2T PsA.

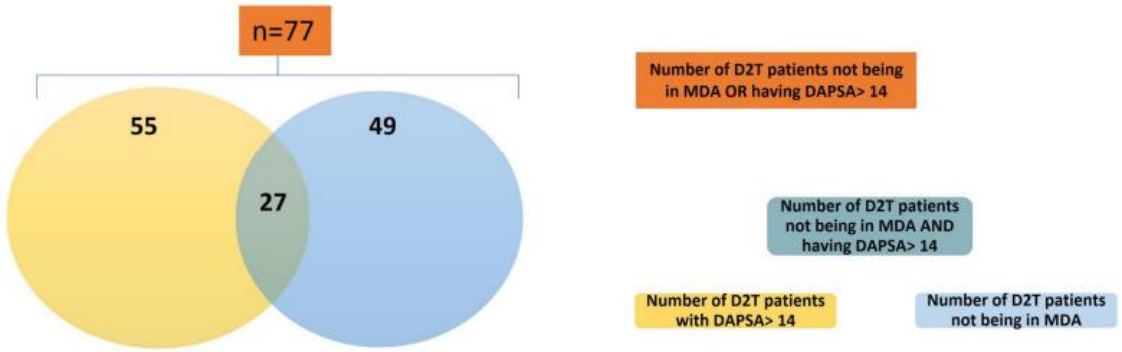
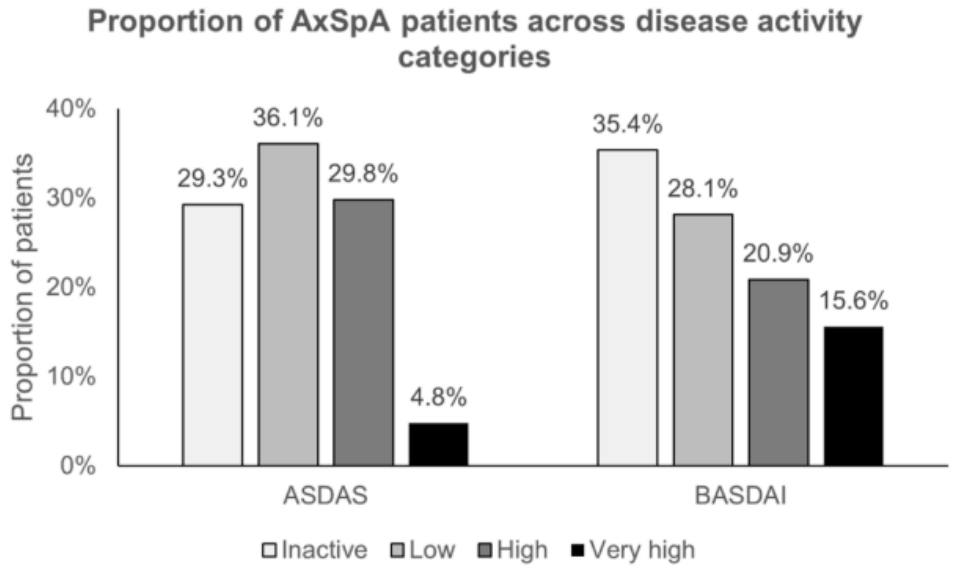


Figure 1. Schematic representation of the D2T patients included in the study. MDA: minimal disease activity; D2T: difficult-to-treat

Disease characteristics, co-morbidities and treatment response in a contemporary axial spondyloarthritis cohort: Analysis of 717 patients from the Greek AxSpA registry

Charalampos Papagoras[a,*,1], George E. Fragoulis[b,1], Nikolaos Fytanidis[a], Michael Krikelis[c],

717 patients included, 35% did not achieve remission or low disease activity



multi-b/ tsDMARD failure in psoriatic arthritis

17% (123/725) patients with PsA experienced multi-b/tsDMARD failure

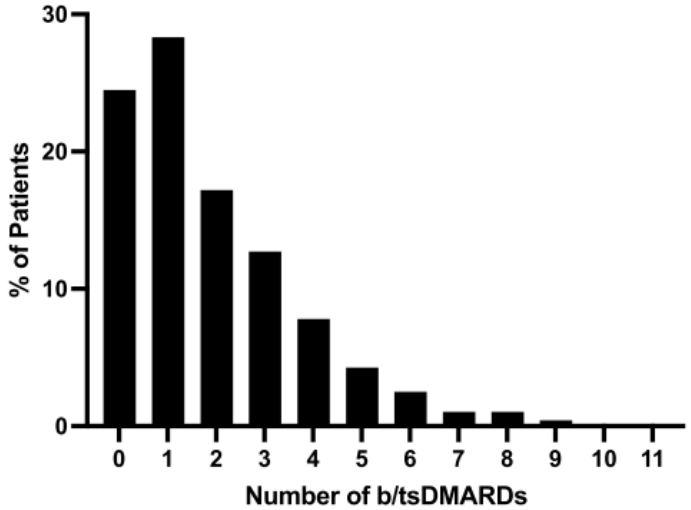
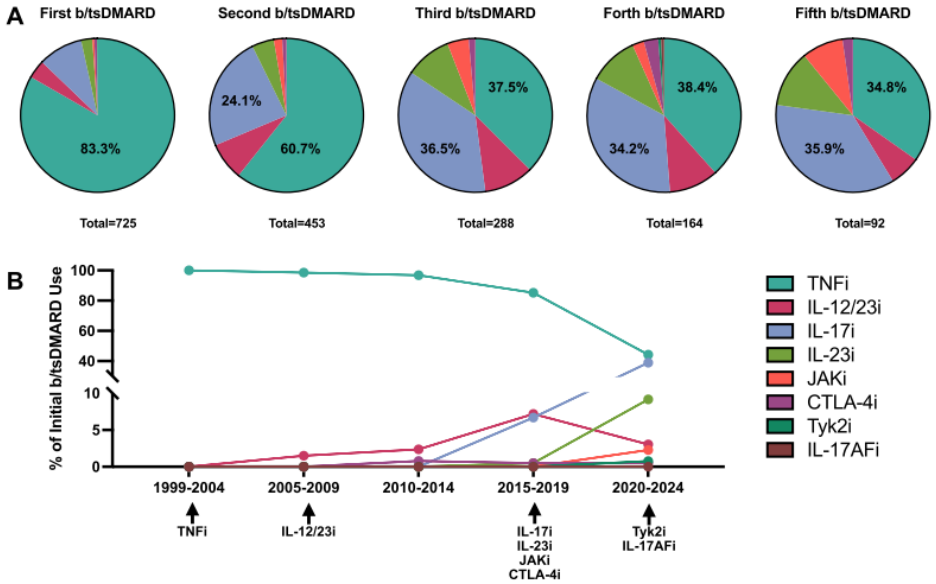


Fig. 1 Number of biologic and targeted synthetic disease modifying anti-rheumatic drugs (b/tsDMARDs) exposures



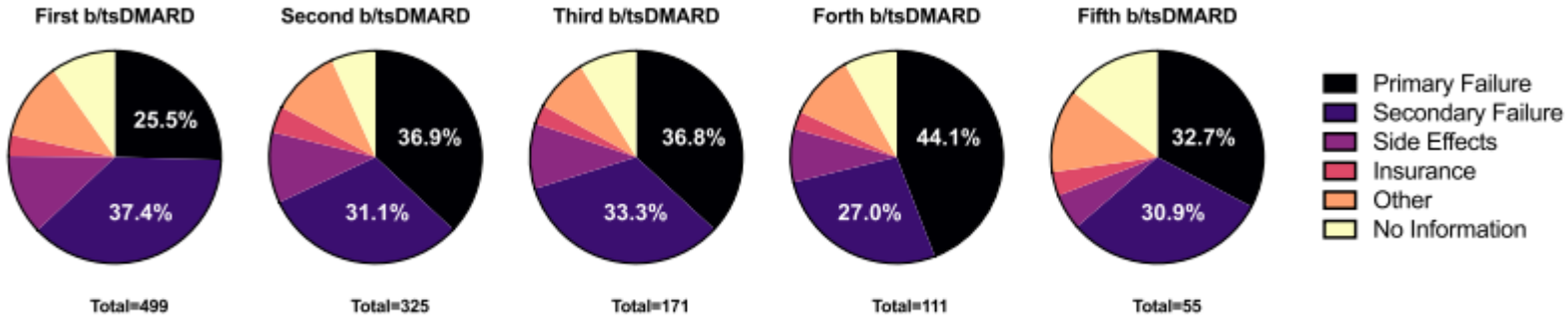


Fig. 3 Reason for discontinuing b/tsDMARD by exposure

Haberman et al. Arthritis Research & Therapy.2025;27:46

- Περίπου 1/3 των ασθενών με AxSpA αποτυγχάνουν στον 1ο βιολογικό παράγοντα
- >50% αποτυγχάνουν στον 2ο βιολογικό παράγοντα
- >50% αλλάζουν βιολογική θεραπεία στη 3-ετία
- 10-15% των ασθενών δεν επιτυγχάνουν ύφεση ή χαμηλή ενεργότητα

Περίγραμμα ομιλίας

- Ορισμός ύφεσης- Σημασία επίτευξης ύφεσης/χαμηλής ενεργότητας νόσου

- Συχνότητα μη ανταπόκρισης στη θεραπεία / difficult to manage (D2M) νόσου

- Προγνωστικοί δείκτες μη επίτευξης ύφεσης

δεδομένα από μελέτης παρατήρησης/αρχεία καταγραφής ασθενών

ανάλυση επιμέρους παραγόντων

Μη επίτευξη ύφεσης/χαμηλής ενεργότητας

- Εμμένουσα φλεγμονή
- Χρόνιες βλάβες
- Συνοσηρρότητες

Among 8398, patients treated with 3, 4 or 5 b/tsDMARDs within 3 years' follow-up were 8%, 3% and 1%, respectively

- **female gender,**
- **higher disease duration**
- **higher patient global score**
- **psoriasis**

TABLE 3 Baseline factors associated with becoming multi-switcher (treated with ≥3 b/tsDMARDs within 0–3 years' time span after start of first b/tsDMARD) (sub-group of patients with start year 2009–2015). Results of logistic regression analyses with imputation of missing data (model C and D)

	Univariable odds ratio (95% CI)	Multivariable odds ratio (95% CI)			
		Model A	Model B	Model C	Model D
Age (>41 *vs* ≤41 years)	0.81 (0.67, 0.97)[a]	0.82 (0.68, 0.98)[a]	0.83 (0.69, 1.00)[a]	0.85 (0.69, 1.03)	0.84 (0.69, 1.03)
Sex (male *vs* female)	0.50 (0.41, 0.60)[c]	0.50 (0.42, 0.60)[c]	0.51 (0.43, 0.62)[c]	0.52 (0.43, 0.63)[c]	0.56 (0.46, 0.68)[c]
Disease duration (>1.44 *vs* ≤1.44 years)	0.61 (0.49, 0.76)[c]			0.67 (0.53, 0.86)[b]	0.70 (0.54, 0.89)[b]
Symptom duration (>10 *vs* ≤10 years)	0.69 (0.56, 0.86)[c]				
BASDAI (≥5.6 *vs* <5.6)	2.25 (1.71, 2.96)[c]				
Patient VAS global, quartiles, mm					
<43					
>43–63	2.18 (1.45, 3.28)[c]				1.73 (1.15, 2.58)[b]
>63–79	3.51 (2.39, 5.14)[c]				2.43 (1.61, 3.65)[c]
>79	3.65 (2.48, 5.38)[c]				2.64 (1.74, 4.00)[c]
ASDAS (≥3.3 *vs* <3.3)	1.57 (1.19, 2.08)[b]			1.39 (1.03, 1.86)[a]	
CRP (≥7 *vs* <7 mg/l)	0.86 (0.69, 1.07)				0.90 (0.72, 1.12)
Pain, VAS (>61 *vs* ≤61 mm)	1.81 (1.44, 2.27)[c]				
Fatigue, VAS (>65 *vs* ≤65 mm)	2.12 (1.65, 2.74)[c]				
HAQ (>0.88 *vs* ≤0.88)	1.49 (1.10, 2.01)[b]			1.22 (0.90, 1.64)	1.09 (0.82, 1.44)
BASFI (>29 *vs* ≤29)	1.77 (1.31, 2.39)[c]				
BASMI (>20 *vs* ≤20)	0.82 (0.54, 1.25)				
SJC (≥1 *vs* 0)	1.22 (0.91, 1.63)			1.07 (0.79, 1.46)	1.09 (0.82, 1.44)
TJC (≥1 *vs* 0)	1.31 (1.01, 1.69)[a]				
Concomitant MTX, yes	1.29 (0.96, 1.75)			1.21 (0.86, 1.70)	1.24 (0.89, 1.73)
Concomitant SSZ, yes	0.68 (0.45, 1.02)				
Malignancy	0.78 (0.31, 1.95)				
Pulmonary disease	0.49 (0.12, 2.04)				
Congestive heart failure	0.43 (0.06, 3.15)				
Diabetes	1.34 (0.77, 2.35)				
Myocardial infarction	1.19 (0.47, 3.00)				
Chronic kidney disease	0.47 (0.15, 1.51)				
Knee or hip prosthesis	0.29 (0.04, 2.13)				
Infection	1.45 (1.16, 1.82)[b]		1.37 (1.09, 1.72)[b]	1.30 (1.03, 1.65)[a]	1.30 (1.03, 1.65)[a]
No. of previous comorbidities (≥1 *vs* 0)[d]	0.96 (0.65, 1.41)		0.92 (0.62, 1.37)	0.92 (0.62, 1.38)	0.93 (0.62, 1.40)
IBD, yes	1.02 (0.70, 1.49)		0.89 (0.61, 1.31)	0.92 (0.62, 1.34)	0.93 (0.63, 1.37)
Psoriasis, yes	1.68 (1.16, 2.42)[b]		1.54 (1.06, 2.23)[a]	1.45 (0.99, 2.12)	1.51 (1.03, 2.21)[a]
Uveitis, yes	0.61 (0.45, 0.83)[b]		0.63 (0.46, 0.86)[b]	0.72 (0.52, 0.98)[a]	0.76 (0.55, 1.05)
Smoking					
Current	Ref			1	1
Never	0.76 (0.57, 1.00)			0.91 (0.64, 1.30)	0.91 (0.63, 1.30)
Previous	0.94 (0.66, 1.33)			0.73 (0.54, 0.99)[a]	0.74 (0.54, 1.01)
Calendar year					
2009–2011	Ref				
2012–2013	1.19 (0.95, 1.49)	1.15 (0.92, 1.44)	1.13 (0.91, 1.42)	1.13 (0.90, 1.42)	1.10 (0.87, 1.39)
2014–2015	1.14 (0.91, 1.42)	1.11 (0.89, 1.39)	1.11 (0.89, 1.38)	1.12 (0.89, 1.41)	1.10 (0.87, 1.38)

Di Giuseppe et al,.Rheumatology 2022;61:3647–3656

129 axSpA patients, 15 (12%)met criteria for D2M/refractory

- **smoking**
- **normal C-Rp**
- **high disease activity at baseline**
- **psoriasis**
- **structural damage**
- **peripheral synovitis**

.

Table 1 Baseline characteristics of D2M vs non-D2M axSpA

Variable	D2M (n 11)	No-D2M (n 118)	*p*-value	RR (95% CI)
Male	18%	51%	0.05	0.35 (0.11–1.10)
Years of Education	14.3 ± 2.7	13.4 ± 3.1	0.3	
Age at Diagnosis	41 ± 13.5	41 ± 12	0.9	
Smoking	**80%**	**39%**	**0.01**	**2.05 (1.17–3.57)**
Inflammatory Back Pain (IBP)	91%	84%	0.5	1.08 (0.57–2.06)
NSAID Good Response	64%	65%	0.8	0.97 (0.54–1.73)
Anterior Chest Pain	90%	80%	0.4	1.13 (0.63–2.03)
Presence Enthesitis	40%	34%	0.6	1.17 (0.58–2.37)
Presence Arthritis	36%	21%	0.1	1.75 (0.75–4.10)
Uveitis	9%	6%	0.7	1.49 (0.18–12.38)
Inflammatory Bowel Disease (IBD)	0%	8%	0.3	0.00 (0.00–3.57)
Psoriasis	**54%**	**24%**	**0.02**	**2.26 (1.10–4.62)**
SpA Family History	81.8%	72%	0.4	1.14 (0.68–1.91)
HLA-B27 +	60%	46%	0.6	1.29 (0.68–2.44)
Erythrocyte Sedimentation Rate (ESR)	17.1 ± 8.7	19.5 ± 16.4	0.4	
C-Reactive Protein (CRP)	**1.8 ± 2**	**5.6 ± 11.3**	**0.004**	
Elevated CRP (> 5 mg/L)	73%	62%	0.4	
Structural Damage on X-ray	**54%**	**23%**	**0.01**	**2.31 (1.21–4.42)**
MRI Sacroiliac Lesions (any)	90%	85%	0.6	1.06 (0.78–1.45)
Ultrasound Enthesitis	50%	65%	0.3	0.77 (0.36–1.63)
Pain (0–10 VAS)	6.4 ± 1.36	6.8 ± 1.7	0.4	
Night Pain (0–10 VAS)	6.3 ± 2.36	5.3 ± 2.4	0.2	
Morning Stiffness (min)	43 ± 19.54	34.6 ± 27.8	0.3	
BASDAI Score (0–10)	**6 ± 1.6**	**4.5 ± 1.7**	**0.04**	
ASDAS Score (0–10)	**4 ± 1**	**3.1 ± 1.2**	**0.03**	
BASFI Score (0–10)	**5 ± 0.6**	**4.6 ± 1.4**	**0.04**	
HAQ Score (0–3)	0.8 ± 0.4	0.7 ± 0.3	0.5	
Diagnostic Delay (months)	80 ± 56.1	73.7 ± 84.3	0.7	
Bone Marrow Edema (MRI)	70%	59%	0.5	1.18 (0.85–1.64)
Fat Lesions (MRI)	33%	50%	0.8	0.67 (0.23–1.95)
Erosions (MRI)	37%	52%	0.5	0.72 (0.27–1.89)
Sclerosis (MRI)	44%	80%	0.08	0.55 (0.19–1.56)
Bone Bridges (MRI)	10%	9%	0.3	1.09 (0.91–1.30)
Chronic MRI Changes	72%	67%	0.6	1.08 (0.66–1.76)
Peripheral Synovitis on Ultrasound	**75%**	**20%**	**0.0001**	**3.75 (2.35–5.98)**
TJC	2.8 ± 2.44	1.8 ± 2.5	0.204	
SJC	1.5 ± 1.86	0.6 ± 1.5	0.042	

Garcia-Salinas et al. Clinical Rheumatology. 2025

Overall, 111/449 patients (25%) were in long term remission after 5 years (DESIR cohort)

- **female**
- **lower education level**
- **High disease activity**
- **higher PtGa**
- **HLA-B27 negative**
- **obesity**
- **No sacroiliatis in MRI**
- **enthesitis**

Vegas et al,. Rheumatology 2022;61:1487–1495

TABLE 2 Comparison of baseline characteristics according to remission or not status at 5-year follow-up after stratifying on TNF inhibitor exposure

Baseline factors	Never exposed to TNFi ($n = 247$)			Exposed to TNFi during follow-up ($n = 202$)		
	M60 remission $n = 77$ (31.2%)	M60 active disease $n = 170$ (68.8%)	*P*-value	M60 remission $n = 34$ (16.8%)	M60 active disease $n = 168$ (83.2%)	*P*-value
Baseline demographic characteristics						
Age [mean (s.d.)]	32.7 (8.3)	34.7 (8.6)	0.08	31.0 (8.2)	34.4 (9.0)	0.05
Males	42 (54.5)	71 (41.8)	0.06	24 (70.6)	69 (41.1)	$<10^{-3}$
Ethnicity			0.46			0.28
Caucasian	74 (96.1)	159 (93.5)		31 (91.2)	146 (86.9)	
Black Africa	1 (1.3)	2 (1.2)		2 (5.9)	3 (1.8)	
Asia	0 (0.0)	2 (1.2)		0 (0.0)	1 (0.6)	
Maghreb	1 (1.3)	5 (2.9)		0 (0.0)	13 (7.7)	
Other	1 (1.3)	2 (1.2)		1 (2.9)	5 (3.0)	
Education level		*(/169)*	$<10^{-4}$			$<10^{-4}$
Primary school	0 (0.0)	2 (1.2)		1 (2.9)	0 (0.0)	
Secondary school	16 (20.8)	58 (34.3)		8 (23.5)	84 (50.0)	
University for ≤3 years	27 (35.1)	56 (33.1)		8 (23.5)	53 (31.6)	
University for >3 years	34 (44.2)	53 (31.4)		17 (50.0)	31 (18.4)	
BMI [mean (s.d.)]	23.0 (3.6) *(/76)*	23.9 (4.0) *(/169)*	0.10	22.8 (3.2)	24.6 (4.4) *(/167)*	**0.02**
Active smoking	23*(/76)* (30.3)	56 *(/169)* (33.1)	0.65	13 (38.2)	67 *(/167)* (40.1)	0.83
Baseline clinical and biological characteristics						
ASAS criteria	58 (75.3)	109 (64.1)	0.08	26 (76.5)	104 (61.9)	0.11
HLA-B27+	58 (75.3)	108 (63.5)	0.06	26 (76.5)	92 (54.8)	**0.02**
History of dactylitis[a]	12 (15.6)	17 (10.0)	0.21	5 (14.7)	25 (14.88)	0.97
History of peripheral arthritis[a]	19 (24.7)	23 *(/169)* (13.6)	**0.03**	12 (35.3)	43 *(/167)* (25.8)	0.26
Tender joints [mean (s.d.)]	1.6 (1.9) *(/76)*	5.1 (5.0)	0.44	2.7 (5.2)	5.9 (8.7)	**0.04**
Swollen joints [mean (s.d.)]	0.2 (1.4) *(/76)*	0.0 (0.2)	0.34	0.3 (0.6)	0.2 (1.1)	0.74
Enthesitis index (mean (s.d.))	2.1 (4.6)	3.5 (5.1)	**0.03**	1.6 (2.9)	6.0 (5.9) *(/166)*	$<10^{-3}$
History of psoriasis[a]	14 (18.2)	24 (14.1)	0.41	7 (20.6)	31 (18.4)	0.77
History of IBD[a]	3 (3.9)	9 (5.3)	0.63	2 (5.9)	13 (7.7)	0.71
History of uveitis[a]	5 (6.5)	21 (12.3)	0.17	4 (11.8)	10 (5.9)	0.23
PtGA [mean (s.d.)]	3.4 (2.6)	4.5 (2.5) *(/168)*	$<10^{-3}$	5.0 (2.2)	6.1 (2.3) *(/166)*	$<10^{-3}$
PhGA [mean (s.d.)]	3.0 (2.0)	3.7 (1.9)	$<10^{-3}$	4.8 (2.2)	5.4 (2.0)	0.10
High CRP	14 *(/72)* (19.4)	33 *(/164)* (20.1)	0.90	18 *(/33)* (54.5)	62 *(/165)* (38.0)	0.08
ASDAS-CRP [mean (s.d.)]	2.0 (0.9) *(/72)*	2.3 (0.8) *(/161)*	$<10^{-3}$	2.8 (0.9) *(/33)*	3.1 (0.9) *(/161)*	0.13
Remission (ASDAS-CRP <1.3)	18 *(/72)* (25.0)	12 *(/161)* (7.4)	0.24	1 *(/33)* (3.0)	1 *(/161)* (0.6)	0.22
BASDAI [mean (s.d.)]	29.7 (19.8)	38.3 (18.2) *(/169)*	$<10^{-3}$	43.0 (17.5)	53.8 (17.2) *(/167)*	$<10^{-3}$
BASFI [mean (s.d.)]	15.8 (18.4)	23.7 (20.1) *(/166)*	$<10^{-3}$	27.5 (19.1)	41.1 (22.1)	$<10^{-3}$
Baseline imaging criteria						
X-ray sacroiliitis	11 (14.3)	28 *(/167)* (24.3)	0.62	11 (32.3)	36 *(/164)* (21.9)	0.20
MRI active sacroiliitis	27 *(/76)* (35.5)	60 *(/169)* (35.5)	0.99	20 (58.8)	62 *(/163)* (38.1)	**0.03**

725 patients (75%) used≥1 b/tsDMARD disease course (mean follow-up 30±32 months.
166 (17%) patients had multi-b/tsDMARD failure

- **female gender**
- **axial disease**
- **depression**
- **obesity**

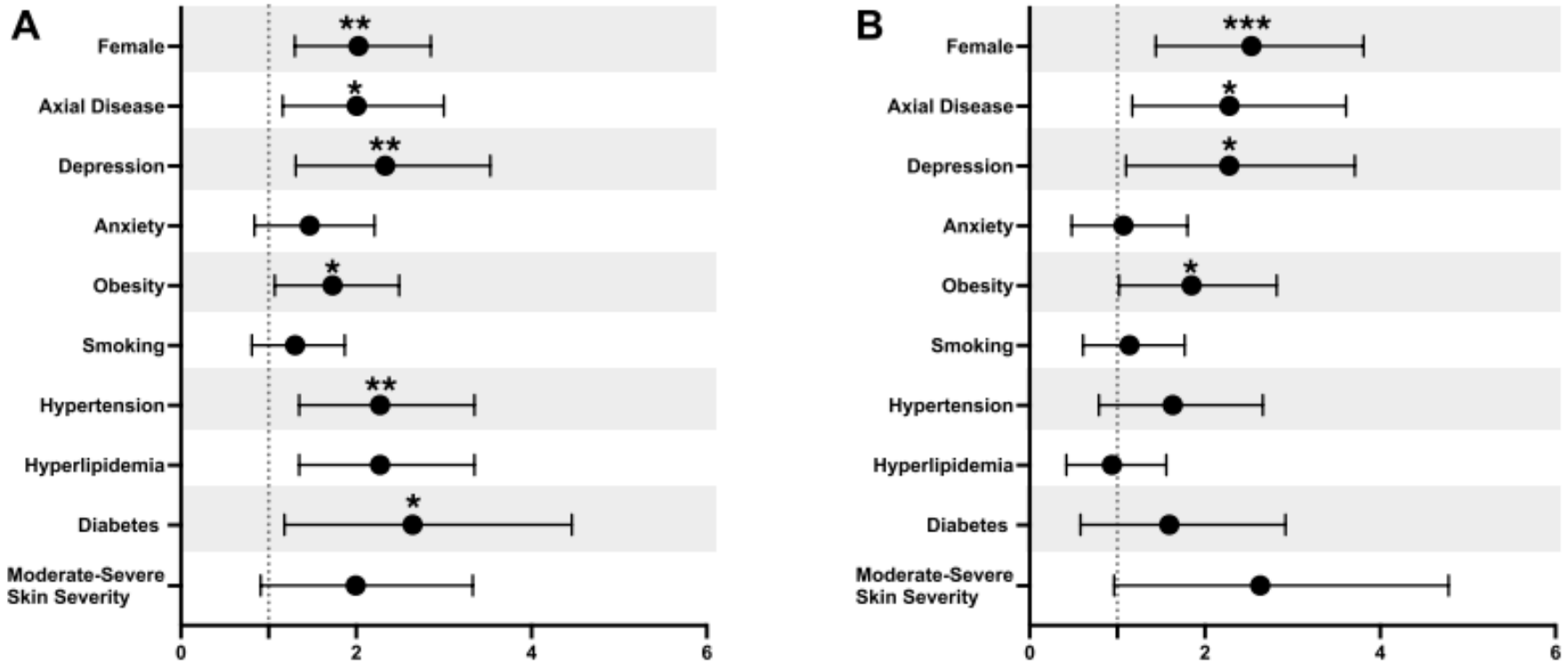


Fig. 5 Risk estimates of multi-b/tsDMARD failure psoriatic arthritis. Odds ratios are unadjusted (**A**) and adjusted (**B**) for disease duration, age, sex, depression, smoking status, obesity, and skin severity

Haberman et al. Arthritis Research & Therapy (2025) 27:46

Greek registries of PsA and AxSpa

- **female**
- **smoking**
- **obesity**
- **extensive psoriasis (BSA>3)**
- **axial disease**
- **IBD / daktylitis**

Table 2. Demographics of D2T and non-D2T PsA patients according to the main definition

Features	D2T ($N=77$)	Non-D2T ($N=390$)	*P*-values
Age, years, mean (S.D.)	54.1 (12.36)	56.8 (11.85)	0.129
Females, *n* (%)	55 (71)	223 (57)	**0.022**
BMI, kg/m^2, mean (S.D.)	31.77 (7.06)	28.95 (5.48)	**0.002**
Smoking, *n* (%)	31/74 (42)	110/375 (29)	**0.040**
Disease duration, months, mean (S.D.)	113.5 (86.60)	119.5 (93.91)	0.792
Family history of axSpA, *n* (%)	3 (4)	11 (3)	0.712
Family history of PsA, *n* (%)	4 (5)	29 (7)	0.629
Family history of psoriasis, *n* (%)	22 (29)	112 (29)	1.000
Family history of IBD, *n* (%)	0/77 (0)	5/390 (1)	1.000
Employment status, *n* (%)			**0.009**
Unemployed	14/71 (20)	33/385 (9)	
Employed	36/71 (51)	244/385 (63)	**0.047**
Retired	21/71 (29)	108/385 (28)	0.776
Educational status, *n* (%)	9/64 (14)	47/379 (12)	0.686
Primary			
Secondary	37/64 (58)	227/379 (60)	0.784
Tertiary	18/64 (28)	105/379 (28)	1.000

D2T: difficult-to-treat; axSpA: axial SpA. Significant (<0.05) *P*-values are shown in bold.

Table 4
Predictors of current ASDAS score by multivariable analysis.

Characteristic	Beta	95% CI	p- value
Age (years)	0.00	−0.01, 0.01	0.6
Sex			
Female	-	-	
Male	−0.05	−0.31, 0.21	0.7
BMI (kg/m^2)	0.04	0.00, 0.07	**0.023**
HLA- B27			
No	-	-	
Yes	−0.43	−0.69, −0.17	**0.001**
Smoking			
Never	-	-	
Former	0.05	−0.27, 0.36	0.8
Current	0.26	0.01, 0.52	**0.044**
Alcohol Consumption			
None	-	-	
1/month or less	−0.37	−0.67, −0.07	**0.015**
2–4 times/month	−0.19	−0.47, 0.09	0.2
2–3 times/week	0.32	−0.14, 0.79	0.2
4 or more/week	0.11	−0.70, 0.92	0.8
NSAID response			
No	-	-	
Yes	0.33	0.06, 0.60	**0.018**
Dactylitis (ever)			
No	-	-	
Yes	0.61	0.19, 1.0	**0.005**
Hip involvement (ever)			
No	-	-	
Yes	0.13	−0.12, 0.37	0.3
Ulcerative Colitis (ever)			
No	-	-	
Yes	−0.24	−1.5, 1.0	0.7
bDMARD number (past)	0.19	0.07, 0.30	**0.001**

This is a complete cases model using data from 252 patients for whom no missing

Vasilakis et al.,Rheumatology, 2024, 63, 2427–2432
Papagoras et al. Seminars in arthritis and Rheumatism 2025

Προγνωστικοί Παραγόντες μη ανταπόκρισης

- **Δημογραφικοί/Κοινωνικοι**

Γυναικείο φύλο

Καπνισμα

Χαμηλο κοινωνικό επίπεδο/εκπαίδευση

- **Εργαστηριακοί δείκτες**

αρνητικό HLA-B27

φυσιολογική C-RP

- **Κλινικοί**

Υψηλο ASDAS, PtGb

Εξωαρθρικές εκδηλώσεις (δέρμα, ενθέσεις, έντερο)

- **Απεικονιστικά ευρήματα**

δομικές βλάβες κατά τη διάγνωση

- **Συνοσηρότητες**

παχυσαρκία

κατάθλιψη

Περίγραμμα ομιλίας

- Ορισμός ύφεσης- Σημασία επίτευξης ύφεσης/χαμηλής ενεργότητας νόσου

- Συχνότητα μη ανταπόκρισης στη θεραπεία / difficult to manage (D2M) νόσου

- Προγνωστικοί δείκτες μη επίτευξης ύφεσης

δεδομένα από μελέτης παρατήρησης/αρχεία καταγραφής ασθενών

ανάλυση επιμέρους παραγόντων

Current Rheumatology Reports (2018) 20: 35
https://doi.org/10.1007/s11926-018-0744-2

SPONDYLOARTHRITIS (M KHAN, SECTION EDITOR)

Gender Differences in Axial Spondyloarthritis: Women Are Not So Lucky

T. Rusman[1] · R. F. van Vollenhoven[1] · I. E. van der Horst-Bruinsma[1]

between the two sexes. Furthermore, female patients show a higher diagnostic delay compared to males. Several studies indicate a higher frequency of extra-articular manifestations (EAM) in female axSpA patients, such as enthesitis, psoriasis, and inflammatory bowel disease (IBD), whereas acute anterior uveitis is more prevalent in male patients. Male AS patients more frequently show a higher Bath Ankylosing Spondylitis Radiology Index (BASRI) scores and modified Stoke Ankylosing Spondylitis Spine Scores (mSASSS) than females, which indicates that males have higher radiological damage and radiographic progression. However, disease activity (BASDAI) and quality of life (AsQol) scores are significantly higher in women, and more importantly, they have significantly lower response rates to treatment with TNF inhibitors (TNFi) and a significantly lower drug adherence.

Summary Despite the fact that men with axial SpA have a worse radiologic prognosis, women have a high disease burden, in part because they have a longer delay in diagnosis, higher disease activity, and significantly less responsiveness to treatment with TNFi.

HLA B27 / C-Rp

Table 2 Multiple adjusted Cox proportional hazard model for analysis of drug discontinuation of a first TNF inhibitor in HLA-B27 negative vs. positive patients after multiple imputation of missing covariate data

Analysis based on multiple imputation of missing data	Model 1			Model 2		
Variable	HR	95% CI	*P*	HR	95% CI	*P*
HLA-B27 negative (Ref: HLA-B27 positive)	**1.53**	**1.27; 1.83**	**<0.001**	**1.30**	**1.07; 1.58**	**0.01**
Female sex (Ref: male sex)	**1.57**	**1.33; 1.85**	**<0.001**	**1.53**	**1.28; 1.83**	**<0.001**
Family history SpA positive	0.99	0.83; 1.18	0.87	1.01	0.84; 1.21	0.92
Elevated CRP				**0.67**	**0.56; 0.79**	**<0.001**
BASDAI				1.00	0.95; 1.05	0.94
Enthesitis				1.00	0.82; 1.22	0.99
Education vocational (Ref: compulsory)				0.88	0.69; 1.12	0.31
Education academic (Ref: compulsory)				1.03	0.79; 1.35	0.81
BMI 25-30 (Ref: BMI <25)				1.14	0.94; 1.38	0.19
BMI >30 (Ref: BMI ≤25)				**1.30**	**1.02; 1.65**	**0.03**
Age				1.00	0.99; 1.01	0.52
Uveitis ever				**0.76**	**0.61; 0.94**	**0.01**
Good response to NSAIDs				0.90	0.72; 1.12	0.33
nr-axSpA (Ref: r-axSpA)				1.20	0.98; 1.47	0.08
Current smoking				1.10	0.90; 1.34	0.34

Table 3
Final baseline predictor model from stepwise logistic regression analyses of dichotomous week 12 outcomes (mITT pop

		Week 12 outcome			
		ASAS50		ASDAS-CRP Δ ≥ 1.1	
Potential predictor	Comparison	OR (95% CI)	*p*	OR (95% CI)	*p*
Baseline CRP	high vs. normal[b]	***1.45 (1.03–2.03)***	< 0.001	***3.39 (2.19–5.24)***	< 0.001
	very high vs. normal[b]	***3.24 (2.11–4.97)***		***15.32 (7.16–33.02)***	
Week 2 CRP	elevated vs normal[b]	***0.48 (0.28–0.80)***	< 0.01		
Week 4 CRP	elevated vs. normal[b]			***0.31 (0.17–0.58)***	< 0.001
Week 8 CRP	elevated vs. normal[b]	***0.57 (0.34–0.95)***	< 0.05	***0.38 (0.20–0.74)***	< 0.01
Baseline ASDAS-CRP	> 3.5 vs. 2.1 to ≤ 3.5			***2.65 (1.60–4.41)***	< 0.001
Age of onset	> 40 years vs. ≤ 40 years				
Disease duration	> 2 to ≤ 5 years vs. ≤ 2 years				
	> 5 to ≤ 10 years vs. ≤ 2 years				
	> 10 years vs. ≤ 2 years				
	> 5 years vs. ≤ 5 years	***0.70 (0.52–0.94)***	< 0.05		
HLA-B27	Positive vs. negative	***1.82 (1.21–2.74)***	< 0.01		
Baseline PtGA	> 40 to ≤ 60 vs. ≤ 40			1.59 (0.89–2.86)	< 0.05
	> 60 to ≤ 80 vs. ≤ 40			***2.57 (1.38–4.76)***	
	> 80 vs. ≤ 40			2.12 (1.00–4.50)	
Baseline BASFI	> 40 to ≤ 60 vs. ≤ 40	***0.65 (0.43–0.99)***	< 0.01	***0.58 (0.35–0.97)***	< 0.01
	> 60 to ≤ 80 vs. ≤ 40	***0.49 (0.32–0.77)***		***0.37 (0.21–0.64)***	
	> 80 vs. ≤ 40	***0.43 (0.25–0.73)***		***0.36 (0.17–0.75)***	
Baseline NBP	> 40 to ≤ 60 vs. ≤ 40				
	> 60 to ≤ 80 vs. ≤ 40				
	> 80 vs. ≤ 40				

Table 1. Factors associated with discontinuation of biologics in patients with AS

Baseline characteristics	Univariable HR (95% CI)	p-value	Multivariable HR (95% CI)	p-value
HLA-B27 positivity	0.705 (0.551, 0.901)	0.0052	0.759 (0.587, 0.980)	**0.0344**
Age, years	1.002 (0.995, 1.009)	0.5580	1.003 (0.996, 1.010)	0.4247
Male sex	0.788 (0.652, 0.953)	0.0143	0.906 (0.731, 1.123)	0.3690
Body-mass index	0.986 (0.963, 1.010)	0.2546	0.989 (0.965, 1.013)	0.3732
Symptoms duration, years	0.999 (0.988, 1.010)	0.8932	-	-

Frohlich et al.Clinical Rheumatology. 2023;42:1267–1274
Baraliakos et al.2019;48:997-1004

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EXTENDED REPORT

Higher disease activity leads to more structural damage in the spine in ankylosing spondylitis: 12-year longitudinal data from the OASIS cohort

Sofia Ramiro,[1,2] Désirée van der Heijde,[3] Astrid van Tubergen,[4,5] Carmen Stolwijk,[4,5] Maxime Dougados,[6] Filip van den Bosch,[7] Robert Landewé[1,8]

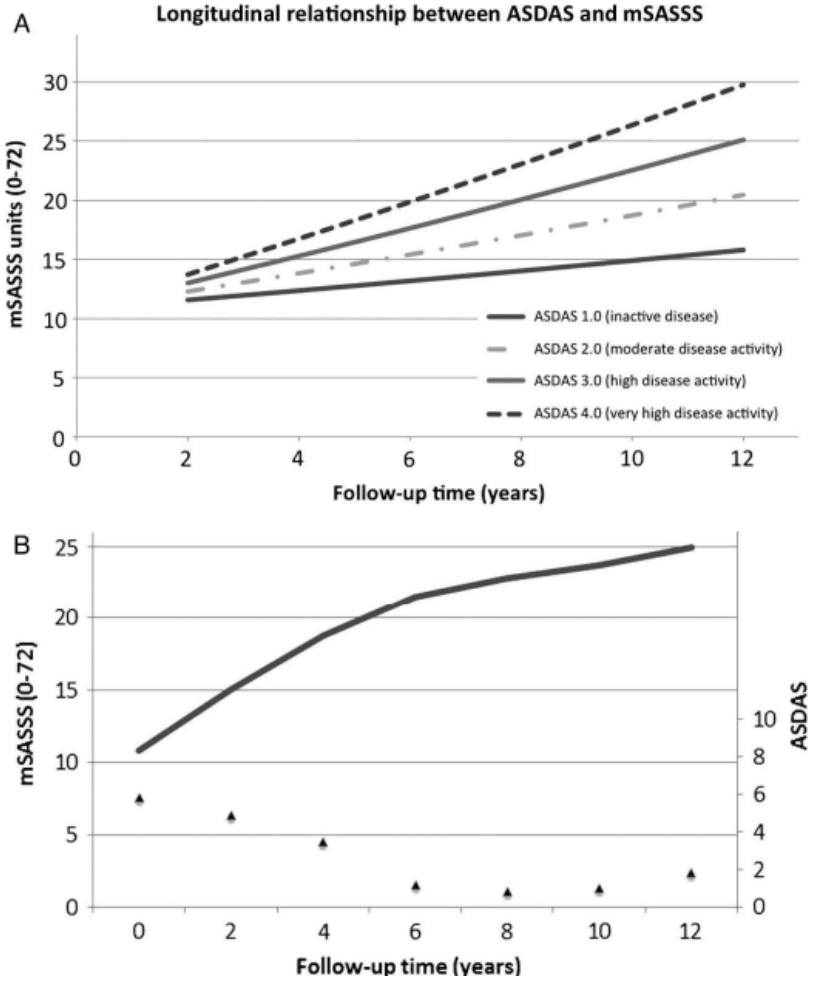


Figure 1 Longitudinal relationship (modelled) between disease activity (ASDAS) and radiographic damage (mSASSS). The graphs are two visualisations (solutions) of the same multivariable regression equation with the parameter estimates shown in table 4: $mSASSS_{\text{time point } t} = -0.27 + 1.03 * mSASSS_{t-1} + 0.72\ ASDAS_{t-1}$. The mSASSS at baseline (10.8 units) was assumed to be the intercept (mSASSS at t0). In (A), four equidistant ASDAS values, each reflecting a certain disease activity state, were chosen and a stable ASDAS level over time was assumed. In (B), fluctuating ASDAS levels over time (in a decreasing pattern) were assumed (closed triangles). ASDAS, Ankylosing Spondylitis Disease Activity Score; mSASSS, modified Stoke Ankylosing Spondylitis Spine Score.

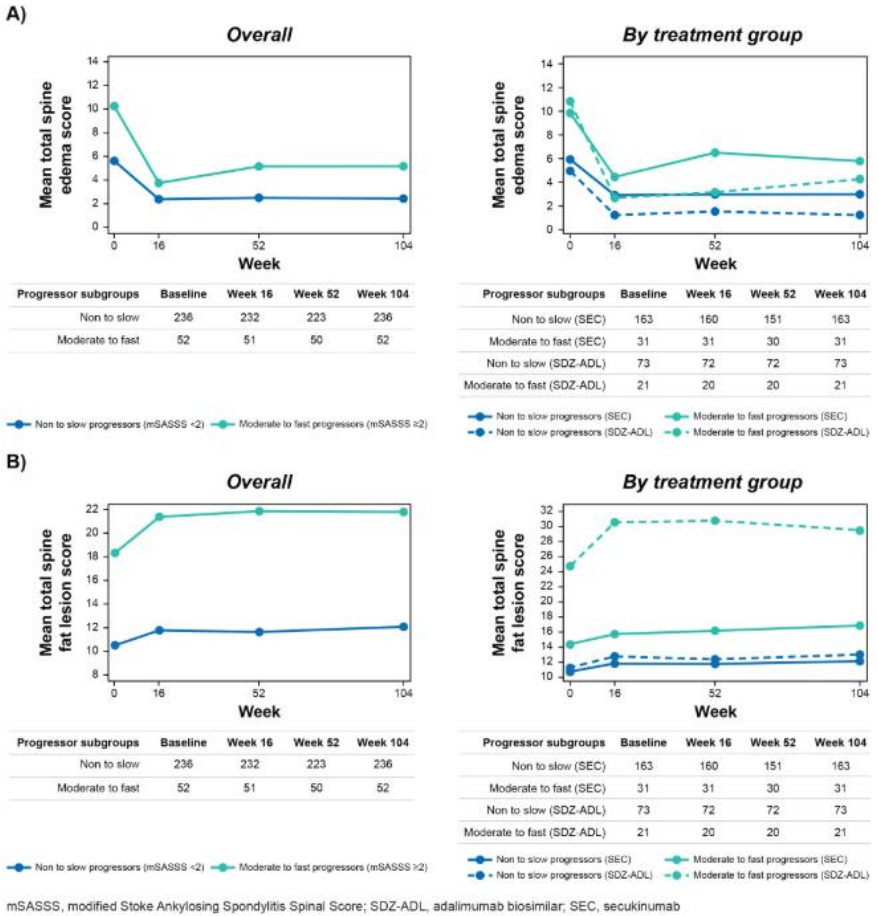
Syndesmophytes at baseline were independent predictors of future structural damage

Fast progressors had more spinal bone marrow edema and fat lesion score at baseline

Table 2. Univariable and multivariable logistic regression analyses for the development of new syndesmophytes over 2 years

Parameter at baseline (unless otherwise specified)	Univariable analysis, OR (95% CI)*				Multivariable analysis, OR (95% CI)
	SEC 150 mg N=99	SEC 300 mg N=95	SDZ-ADL 40 mg N=94	Overall N=288	Overall N=288
Age, years	1.01 (0.96, 1.06)	1.04 (0.99, 1.09)	0.98 (0.93, 1.03)	1.01 (0.98, 1.04)	–
Sex (male vs female)	3.64 (0.61, 21.66)	1.74 (0.48, 6.32)	1.38 (0.31, 6.12)	2.22 (0.92, 5.37)	1.19 (0.44, 3.24)
HLA-B27 (positive vs negative)	0.40 (0.09, 1.74)	1.00 (0.22, 4.59)	4.38 (0.21, 90.57)	1.06 (0.40, 2.83)	–
Current smoking (yes vs no)	1.45 (0.51, 4.11)	1.45 (0.45, 4.63)	2.41 (0.76, 7.68)	1.69 (0.88, 3.24)	0.97 (0.45, 2.06)
Presence of syndesmophytes (yes vs no)	6.13 (1.49, 25.25)	9.20 (1.59, 53.36)	27.61 (1.54, 496.20)	**12.00 (3.91, 36.82)**	**13.00 (3.79, 44.57)**
Elevated hsCRP, ≥5 mg/L (yes vs no)	1.92 (0.45, 8.27)	3.95 (0.67, 23.47)	11.15 (0.60, 207.47)	**4.52 (1.46, 14.05)**	**4.70 (1.33, 16.66)**
ASDAS-CRP	2.08 (1.00, 4.33)	1.30 (0.73, 2.31)	2.25 (1.05, 4.84)	**1.73 (1.18, 2.55)**	–
BASDAI	1.58 (1.04, 2.40)	0.91 (0.62, 1.33)	1.19 (0.79, 1.81)	1.19 (0.95, 1.50)	–
Baseline NSAID score	1.01 (1.00, 1.02)	1.00 (0.99, 1.01)	0.98 (0.97, 1.00)	1.00 (0.99, 1.01)	1.00 (0.99, 1.01)
NSAIDs intake score over 104 weeks	0.99 (0.94, 1.03)	1.00 (0.96, 1.05)	1.00 (0.96, 1.04)	1.00 (0.97, 1.02)	–
Total spine edema score, (range: 0–184)†	1.05 (1.01, 1.10)	1.09 (1.02, 1.16)	1.08 (1.02, 1.15)	**1.07 (1.04, 1.11)**	**1.05 (1.01, 1.09)**
Total spine fat lesions score, (range: 0–276)	1.01 (0.99, 1.04)	1.02 (0.99, 1.05)	1.01 (0.98, 1.03)	1.01 (1.00, 1.03)	1.00 (0.98, 1.02)

Figure 1. Mean total spine edema score (A) and mean total spine fat lesion score (B) in non to slow progressors vs moderate to fast progressors over 2 years



mSASSS, modified Stoke Ankylosing Spondylitis Spinal Score; SDZ-ADL, adalimumab biosimilar; SEC, secukinumab

Poddubnyy et al. ACR convergence 2024

Οστικές διαβρώσεις και υπολειπόμενος πόνος

Η παρουσία διαβρώσεων είναι προγνωστικός δείκτης υπολειμματικού πόνου

ωστόσο

δεν υπάρχει σημαντική συσχέτιση μεταξύ του αριθμού των διαβρώσεων και της έντασης του πόνου

Table 3. Predictors of moderate-to severe pain despite achieving DAS28 remission

Variable	Univariable regression analysis				Multivariable regression analysis			
	OR	95% CI		p-value	OR	95% CI		p-value
		Lower	Upper			Lower	Upper	
Presence of foot erosions	1.87	1.146	3.065	0.012	2.14	1.240	3.696	0.006
Neurological disorders	3.81	1.405	10.338	0.009	3.93	1.342	11.482	0.013
Endocrine disorders	1.46	1.010	2.117	0.044	1.48	0.988	2.229	0.057
Renal disorders	7.49	1.359	41.323	0.021	4.08	0.690	24.102	0.121
Mental illness	1.48	0.456	4.776	0.516				
Corticosteroid use	2.43	1.568	3.762	<0.001	2.37	1.489	3.775	<0.001
Prior use of bDMARDs or tsDMARDs	1.64	1.092	2.468	0.015	1.55	0.983	2.438	0.060
Current biologic agents or JAKis (reference: anti-TNF agents)								
Rituximab	1.72×10^{-08}	0	Inf	0.979				
Tocilizumab	1.95	1.344	2.817	<0.001	0.95	0.605	1.497	0.832
Abatacept	0.43	0.192	0.964	0.041	0.42	0.171	1.005	0.051
JAKis	0.30	0.106	0.844	0.023	0.26	0.086	0.809	0.020
Disease duration	1.04	1.014	1.062	0.002	1.02	0.996	1.048	0.105
Tender joint count	1.24	1.070	1.441	0.004	1.17	0.988	1.373	0.069
Swollen joint count	1.14	0.930	1.404	0.204				
ESR	0.94	0.916	0.972	<0.001	0.95	0.918	0.983	0.003

DAS28: disease activity score of 28 joints, OR: odds ratio, CI: confidence interval, bDMARDs: biologic disease modifying anti-rheumatic drugs, tsDMARDs: targeted synthetic DMARDs, JAKis: Janus kinase inhibitors, TNF: tumor necrosis factor, ESR: erythrocyte sedimentation rate.

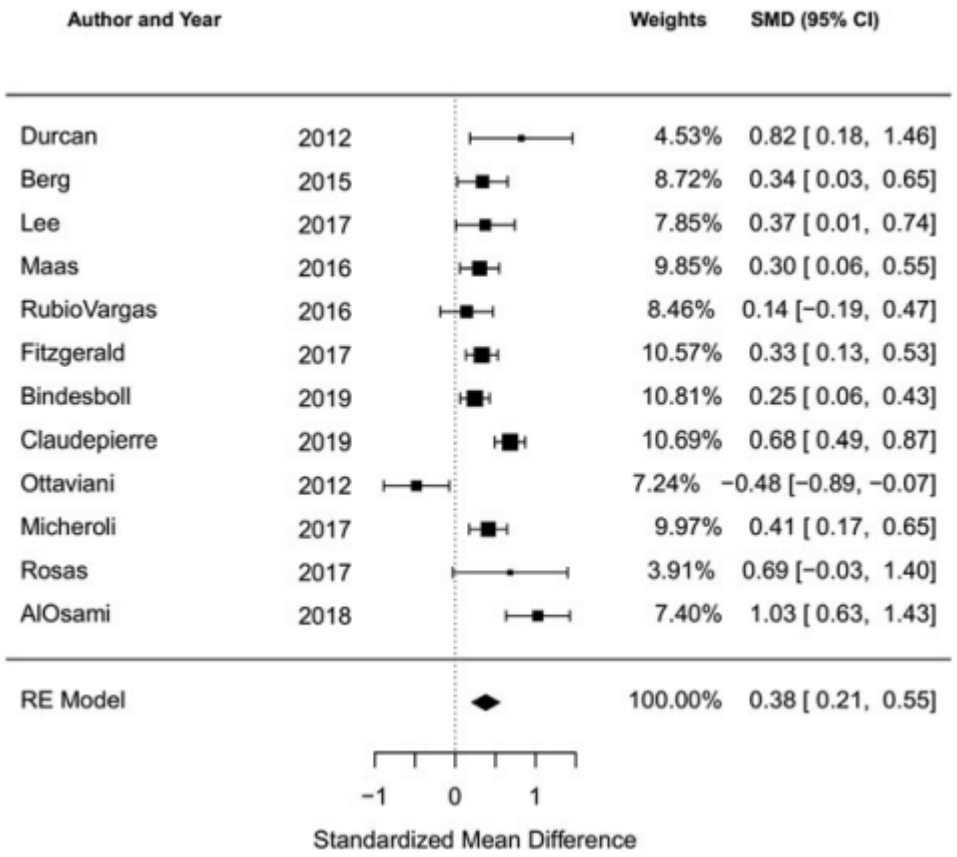
Table 5 Logistic regression for structural change in early RA

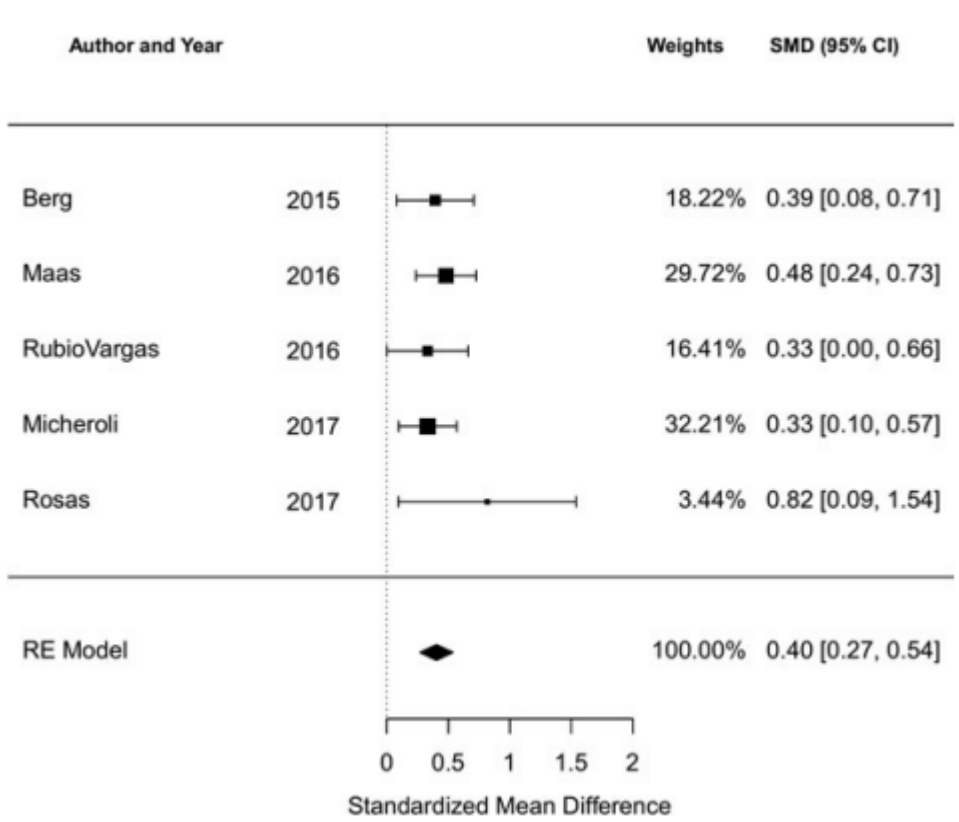
	Erosive progression (hands and feet)		Hand osteophyte progression		Foot osteophyte progression	
	aOR (95% CI)	P-value	aOR (95% CI)	P-value	aOR (95% CI)	P-value
Age, years	1.76 (0.64, 4.80)	0.271	0.78 (0.35, 1.72)	0.532	1.31 (0.53, 3.22)	0.555
Female	**4.54 (1.28, 16.08)**	**0.019**	0.77 (0.29, 2.03)	0.599	2.14 (0.75, 6.09)	0.158
DAS28	1.19 (0.34, 4.19)	0.789	1.78 (0.68, 4.68)	0.241	1.17 (0.40, 3.43)	0.782
SF36–bodily pain	0.86 (0.39, 1.89)	0.713	Not used		Not used	
SF36–mental health	**0.45 (0.20, 1.00)**	**0.049**	Not used		Not used	
SF36–vitality	1.25 (0.51, 3.01)	0.629	Not used		Not used	
DAS28-P	**0.45 (0.22, 0.90)**	**0.025**	0.77 (0.42, 1.41)	0.396	1.36 (0.71, 2.59)	0.350
RA radiographic score	Not used		0.85 (0.47, 1.54)	0.598	1.38 (0.71, 2.67)	0.343
Erosions	**2.14 (1.02, 4.50)**	**0.044**	Not used		Not used	
Hand OST	0.68 (0.30, 1.55)	0.354	**2.46 (1.26, 4.80)**	**0.008**	1.16 (0.59, 2.31)	0.670
Foot OST	0.89 (0.44, 1.83)	0.757	1.15 (0.62, 2.14)	0.652	0.64 (0.32, 1.26)	0.197
Duration of follow-up, years	1.15 (0.39, 3.35)	0.802	1.09 (0.41, 2.93)	0.865	1.83 (0.64, 5.17)	0.257

Logistic regression models, adjusted for baseline factors, and the risk of higher-than-median progression of erosions and osteophytes (n = 166). Significant results highlighted in bold.

Sarzi-Puttini et al. BMC Musculoskeletal Disorders 2002, 3:18
McWilliams et al. Rheumatology 2016;55:14771488

Υψηλότερο BMI σχετίζεται με υψηλότερο ASDAS/BASDAI





Liew JW, et al. RMD Open 2020;6:e001225

Autoimmunity Reviews
Volume 22, Issue 7, July 2023, 103357

Effect of body mass index on treatment response of biologic/targeted-synthetic DMARDs in patients with rheumatoid arthritis, psoriatic arthritis or axial spondyloarthritis. A systematic review

Chrysoula G. Gialouri [a b], Maria Pappa [a c], Gerasimos Evangelatos [a c], Elena Nikiphorou [d e], George E. Fragoulis [a c f]

- efficacy of TNF-inhibitors is affected by BMI
- limited data about IL-23is and IL17is / no indications of decreased efficacy in increased BMI
- more data needed for JAKis

Drug category	RA	PsA	SpA
Abatacept			
JAK inhibitors			
IL-17 inhibitors			
IL-23 inhibitors			
IL-6R inhibitors			
Rituximab			
TNF inhibitors			

Figure 2

Ixekizumab Concomitantly Administered With Tirzepatide in Adults With Psoriatic Arthritis and Obesity or Overweight (TOGETHER-PsA)

ClinicalTrials.gov ID NCT06588296

Official Title

Efficacy and Safety of Ixekizumab or Ixekizumab Concomitantly Administered With Tirzepatide in Adult Participants With Active Psoriatic Arthritis and Obesity or Overweight: A Phase 3b, Randomized, Multicenter, Open-Label Study (TOGETHER-PsA)

main purpose: to demonstrate that ixekizumab and tirzepatide concomitantly administered in obese/owerweigth patients with PsA have higher improvement in arthritis and weight reduction compared to ixekizumab monotherapy

RESEARCH Open Access

Prevalence of comorbidities in systemic sclerosis versus rheumatoid arthritis: a comparative, multicenter, matched-cohort study

Stylianos Panopoulos[1], Maria Tektonidou[1], Alexandros A. Drosos[2], Stamatis-Nick Liossis[3], Theodoros Dimitroulas[4], Alexandros Garyfallos[4], Lazaros Sakkas[5], Dimitrios Boumpas[6], Paraskevi V. Voulgari[2], Dimitrios Daoussis[3], Konstantinos Thomas[7], Georgios Georgiopoulos[7], Georgios Vosvotekas[8], Dimitrios Vassilopoulos[7*] and Petros P. Sfikakis[1]

Table 2 Prevalence of comorbidities in systemic sclerosis (SSc) and rheumatoid arthritis (RA) matched cohorts

Comorbidity	SSc	RA	Crude OR
Diabetes mellitus	23 (5.6)	48 (11.8)	0.45 (0.27–0.75)
Dyslipidemia	72 (17.7)	123 (30.2)	0.50 (0.36–0.69)
Arterial hypertension	131 (32.1)	125 (30.6)	1.07 (0.80–1.44)
Coronary event	11 (2.7)	15 (3.7)	0.73 (0.33–1.60)
Stroke	8 (1.9)	14 (3.4)	0.56 (0.23–1.35)
Ischemic stroke	5 (1.2)	12 (2.9)	0.40 (0.14–1.17)
Hemorrhagic stroke	3 (0.7)	2 (0.5)	1.5 (0.25–9.04)
Neoplasia	17 (4.2)	19 (4.7)	0.89 (0.46–1.74)
Chronic obstructive pulmonary disease	21 (5.2)	15 (3.7)	1.42 (0.72–2.80)
Osteoporosis	98 (24.0)	92 (22.6)	1.09 (0.79–1.50)
Depression	90 (22.1)	49 (12)	2.07 (1.42–3.03)

Therapeutic Advances in Musculoskeletal Disease Original Research

Higher depression rates and similar cardiovascular comorbidity in psoriatic arthritis compared with rheumatoid arthritis and diabetes mellitus

George E. Fragoulis, Gerasimos Evangelatos, Nikolaos Tentolouris, Kalliopi Fragkiadaki, Stylianos Panopoulos, George Konstantonis, Alexios Iliopoulos, Katerina Chatzidionysiou, Petros P. Sfikakis and Maria G. Tektonidou

Ther Adv Musculoskel Dis
2020, Vol. 12: 1–11
DOI: 10.1177/1759720X20976975

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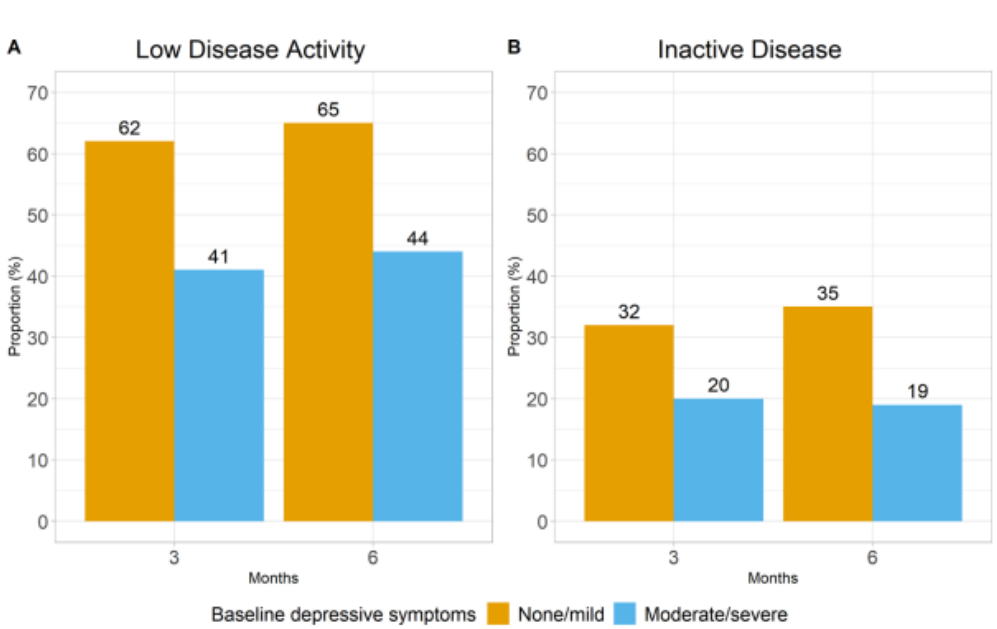
Joint Rheumatology

Table 3. Comparison of comorbidities between psoriatic arthritis,

Comorbidity	PsA *n* = 215	RA *n* = 215	DM n = 215
Smoking	76 (35.4)	62 (28.8)	85 (39.5)
Hyperlipidaemia	101 (47.0)	67 (31.2)	101 (47.0)
Hypertension	62 (28.8)	51 (23.8)	97 (45.1)
Obesity	50 (29.4)	24 (12.8)	79 (36.7)
Coronary disease	10 (4.7)	10 (4.7)	16 (7.4)
Stroke	8 (3.7)	2 (0.9)	7 (3.3)
MACEs	12 (5.6)	12 (5.6)	22 (10.2)
Osteoporosis	12 (5.6)	24 (11.2)	2 (0.9)
Depression[c]	42 (19.5)	15 (7.0)	12 (5.6)
Malignancy	12 (5.6)	7 (3.3)	–

Επίδραση της κατάθλιψης στην ανταπόκριση στην θεραπεία σε ασθενείς με AxSpA

1755 patients with axSpA (RABBIT registry). Moderate-to-severe depressive symptoms present in 29% of patients at baseline.



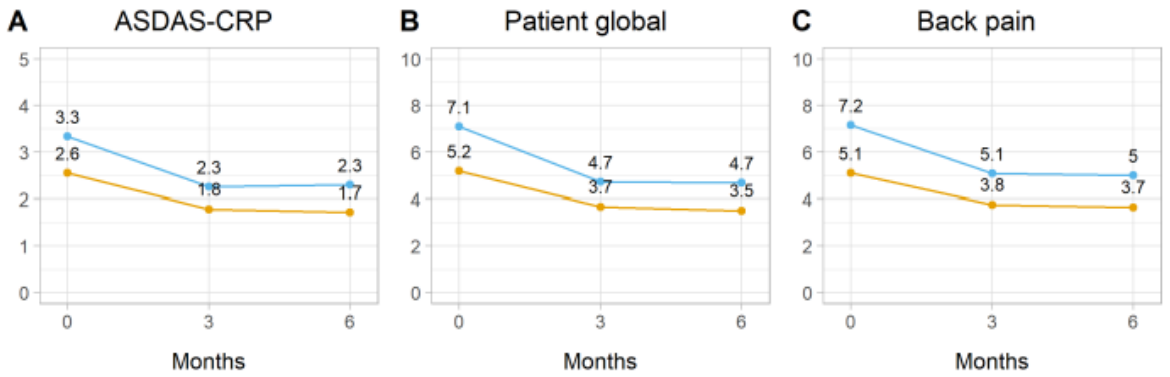
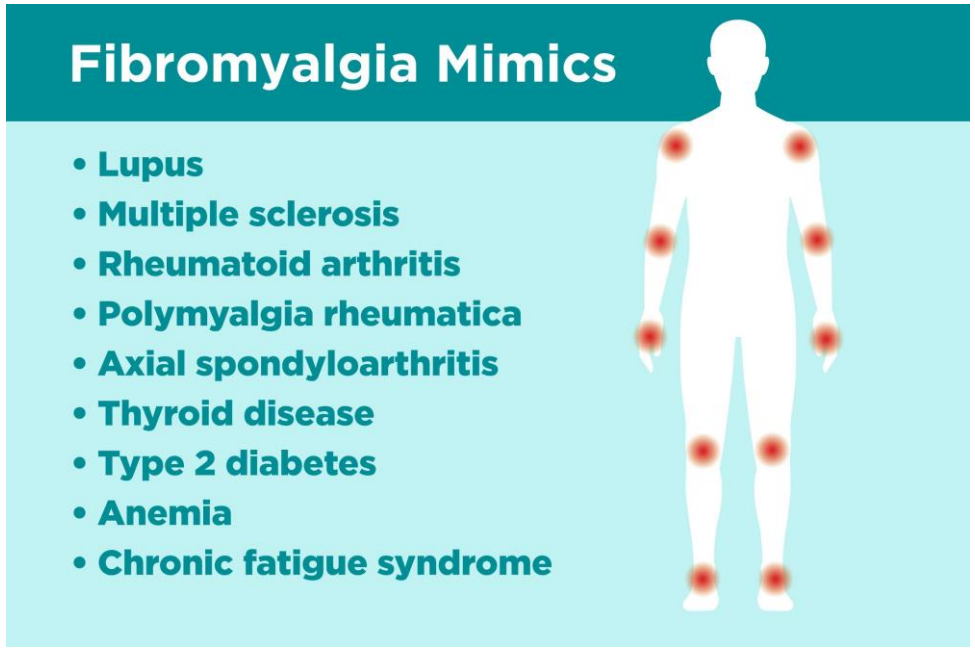


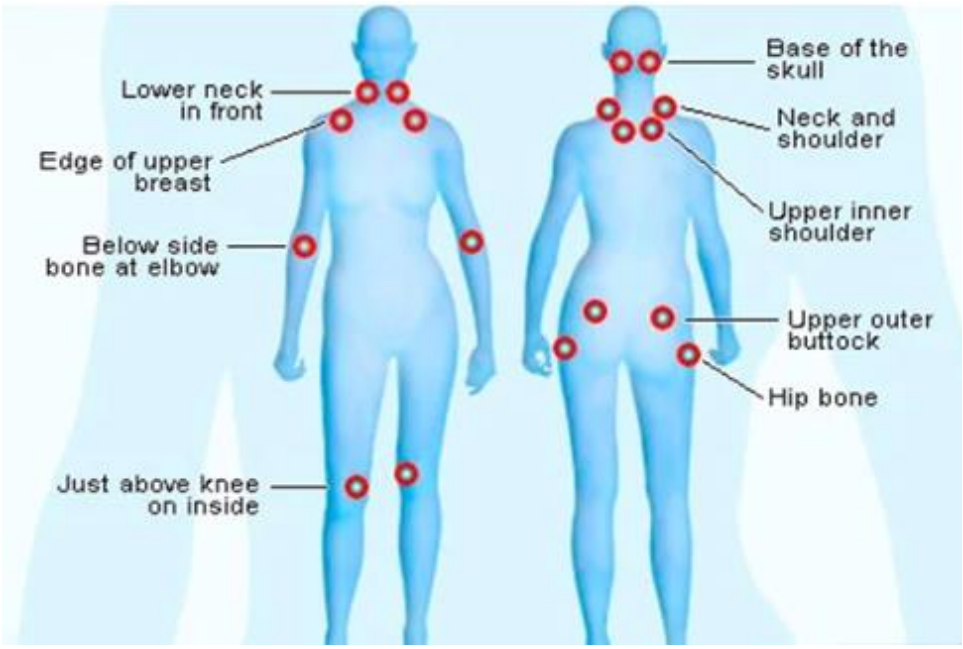
Figure 2 Patients reaching low disease activity or inactive disease based on ASDAS-CRP by baseline depressive symptoms. ASDAS-CRP, Axial Spondyloarthritis Disease Activity Score with C-reactive protein.

Reich A, et al. RMD Open 2025;11:e005422

Ινομυαλγία (= χρόνιος πόνος)

- 13-25% των ασθενων με RA ή AxSpA vs. 5% γενικό πληθυσμό
- Συνήθως συνυπάρχουν και άλλες ψυχοσωματικές διαταραχές (κατάθλιψη, αγχώδεις διαταραχές, ιδεοψυχαναγκασμός)
- διαταραχές ύπνου, χρόνια κόπωση, κεφαλαλγία, σύνδρομο ευερέθιστου εντέρου





Zhao et al. Best Pract Res Clin Rheumatol. 2019;33(3)

Ο χρόνιος πόνος συσχετίζεται ισχυρά με αυξημένους δείκτες ενεργότητας νόσου

Table 3 . Evaluation of the relationship between clinical parameters and CSI-A score in axSpA patients

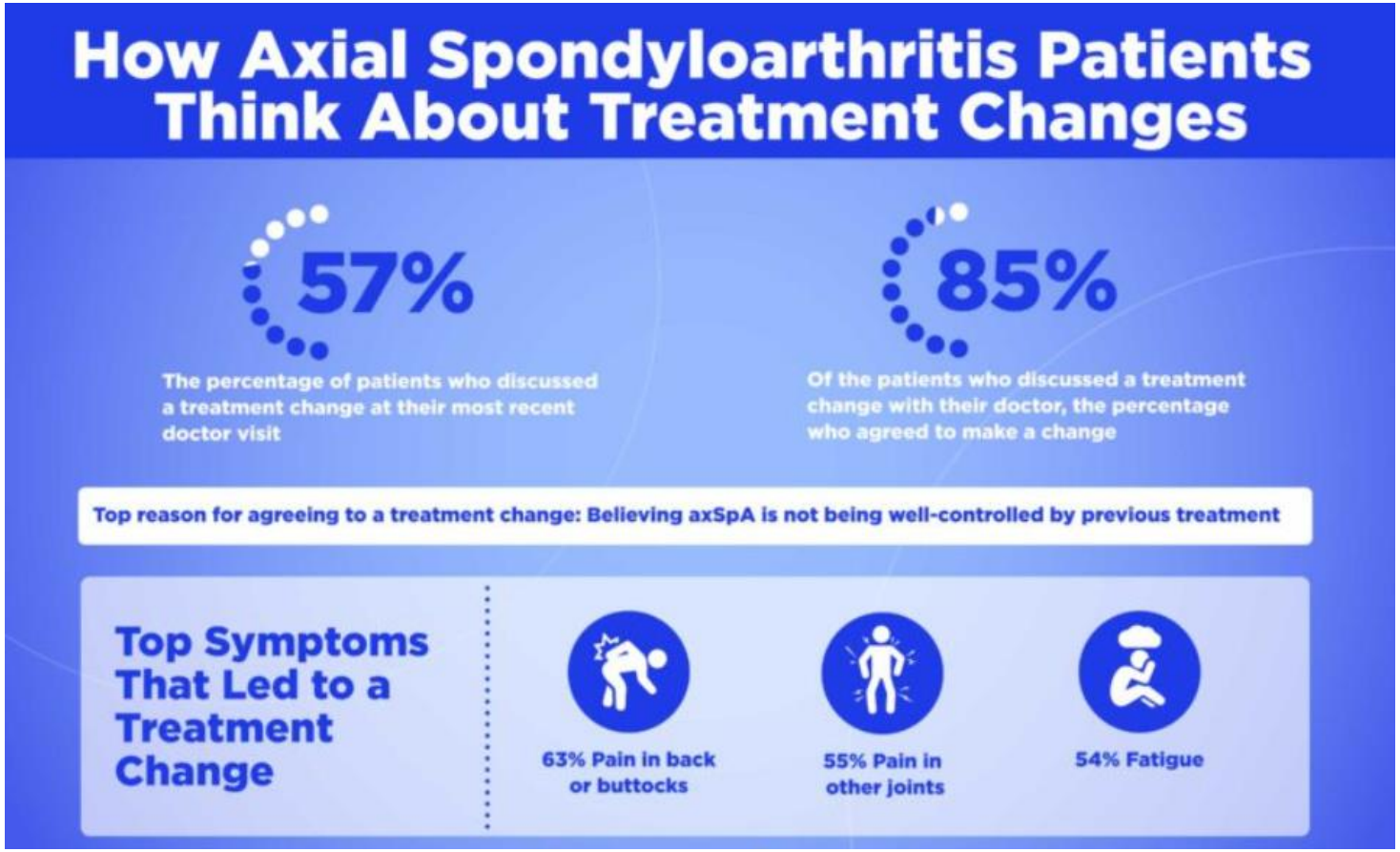
Variable	CSI-A	
	r	p-value
Age (yr)†	0.083	0.374
Disease duration (yr)	0.021	0.820
First symptom duration (yr)	0.050	0.592
Age of Inflammatory back pain onset†	−0.014	0.885
VAS-pain score	0.582	<0.001*
Patient Global Assessment score	0.608	<0.001*
Physician Global Assessment score	0.596	<0.001*
BASDAI score	0.720	<0.001*
BASFI score	0.593	<0.001*
BASMI score	0.072	0.440
ASQoL score	0.728	<0.001*
ESR (mm/h)	0.074	0.432
CRP (mg/L)	0.026	0.781
ASDAS-CRP score†	0.519	<0.001*
MASES score	0.434	<0.001*

Table 2 Effectiveness endpoints of the main analysis using the FiRST definition for fibromyalgia

Effectiveness endpoint	All patients n=508 (%)	Fibromyalgia† Yes n=192 (%)	Fibromyalgia† No n=316 (%)	Crude OR (95% CI)‡	P value*
BASDAI response¶	258/508 (50.8)	87/192 (45.3)	171/316 (54.1)	0.7 (0.5 to 1.0)	NS
ASAS 40	201/508 (39.6)	55/192 (28.6)	146/316 (46.2)	0.5 (0.3 to 0.7)	<0.001
ASAS 20	268/508 (52.8)	83/192 (43.2)	185/316 (58.5)	0.5 (0.4 to 0.8)	<0.001
ASDAS MI	117/508 (23.0)	36/192 (18.7)	81/316 (56.3)	0.7 (0.4 to 1.0)	NS
ASDAS CII	265/508 (52.2)	87/192 (45.3)	178/316 (56.3)	0.6 (0.5 to 0.9)	0.02
ΔNSAID score ≥50%	235/508 (46.3)	69/192 (35.9)	166/316 (52.5)	0.5 (0.4 to 0.7)	<0.001
ΔCRP >0 mg/L	325/508 (64.0)	112/192 (58.3)	213/316 (67.4)	0.7 (0.5 to 1.0)	NS
ASDAS MDA at 12 weeks	264/508 (52.0)	74/192 (38.5)	190/316 (60.1)	0.4 (0.3 to 0.6)	<0.001
ASDAS ID at 12 weeks	126/508 (24.8)	28/192 (14.6)	98/316 (31.0)	0.4 (0.2 to 0.6)	<0.001
NSAID score ≤10 at 12 weeks	401/508 (78.9)	140/192 (72.9)	261/316 (82.6)	0.6 (0.4 to 0.9)	0.01
CRP <6 mg/L at 12 weeks	392/508 (77.2)	145/192 (75.5)	247/316 (78.2)	0.9 (0.6 to 1.3)	NS

Senem et l. J Rheum Dis 2023; 30(3): 176-184
Moltó A, et al. Ann Rheum Dis 2017;0:1–8

Ο χρόνιος πόνος είναι από τις συχνότερες αιτίες αλλαγής θεραπείας



Ramiro S, et al. Ann Rheum Dis 2022;0:1–16. doi:10.1136/ard-2022-223296 1
Nowell et al. [abstract]. Arthritis Rheumatol. 2020; 72 (suppl 10)

Η ινομυαλγία επηρεάζει αρνητικά την επίτευξη ύφεσης και την επιβίωση των βιολογικών θεραπειών

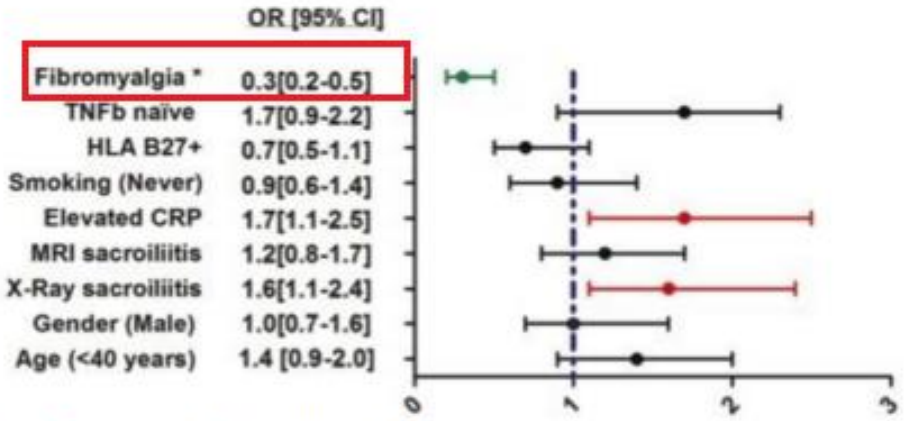


Figure 2 Forest plot: multivariable logistic regression to predict a BASDAI response according to all FM definitions. *FM definitions. Graph

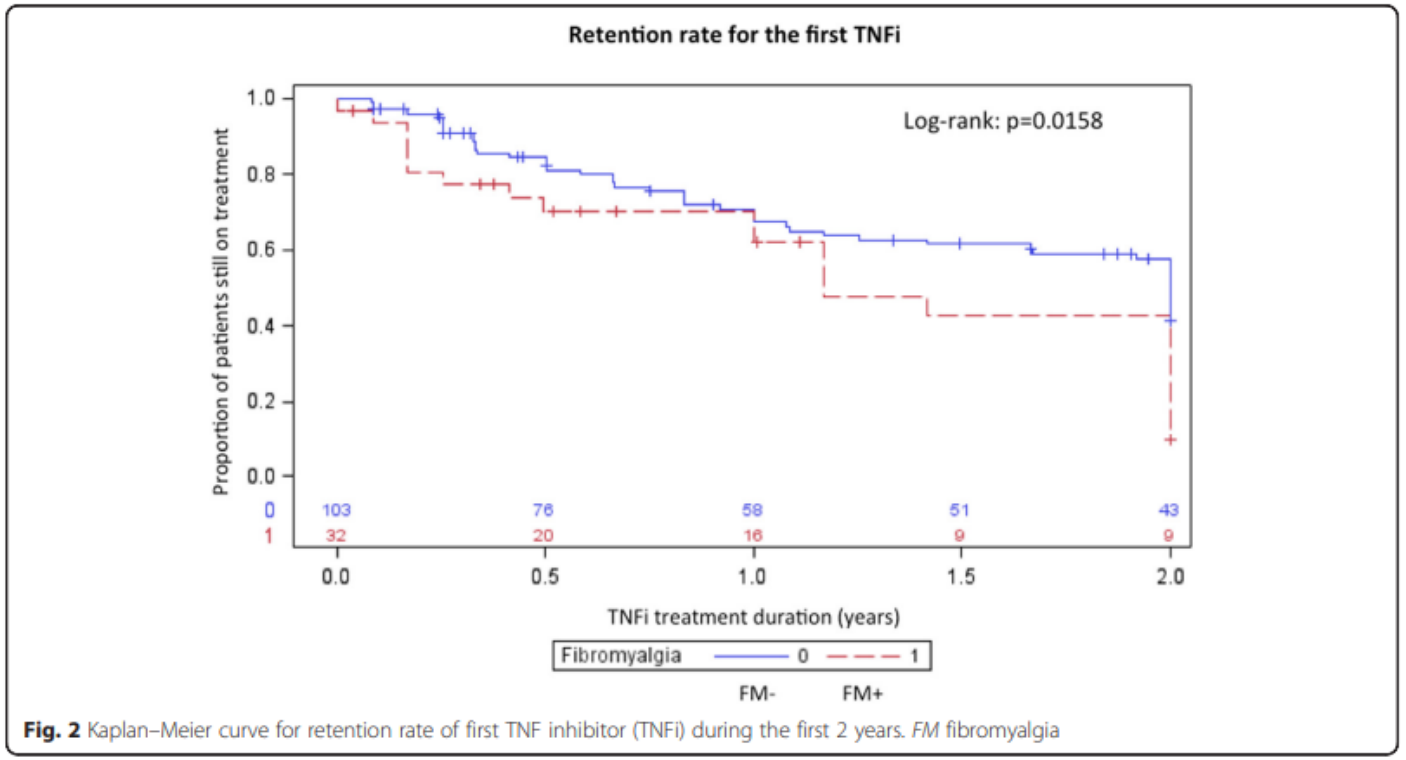


Fig. 2 Kaplan–Meier curve for retention rate of first TNF inhibitor (TNFi) during the first 2 years. *FM* fibromyalgia

Moltó A, et al. Ann Rheum Dis 2017;0:1–8
Bello et al. Arthritis Research & Therapy (2016) 18:42

Take home messages

- Η επίτευξη πρώιμης ύφεσης στην AxSpA είναι βασικός παράγοντας για τη θετική μακροχρόνια έκβαση της νόσου και την αποφυγή δομικών βλαβών

- Περίπου 1/3 των ασθενών με AxSpA αποτυγχάνουν στον 1ο βιολογικό παράγοντα και >50% αποτυγχάνουν στον 2ο βιολογικό παράγοντα ή αλλάζουν βιολογική θεραπεία στη 3-ετία

- 10-15% των ασθενών δεν επιτυγχάνουν ύφεση ή χαμηλή ενεργότητα νόσου (D2M)

- Το γυναικείο φύλο, η απουσία HLA-B27 ή αυξημένης C-RP, η υψηλή ενεργότητα νόσου η/και παρουσία δομικών βλαβών κατά τη διάγνωση και η παρουσία εξωαρθρικών εκδηλώσεων αποτελούν αρνητικούς παράγοντες επίτευξης ύφεσης ή χαμηλής ενεργότητας νόσου.

- Η παχυσαρκία και η κατάθλιψη αυξάνουν σημαντικά την πιθανότητα μη ανταπόκρισης στην θεραπεία σε ασθενείς με AxSpA.

Ευχαριστώ πολύ για τη προσοχή σας