15 χρόνια βιολογικοί παράγοντες στην Ψ.Α.- Επιτεύγματα και ανεκπλήρωτες ανάγκες

Αλέξιος Ηλιόπουλος

Ρευματολογικό Τμήμα ΝΙΜΤΣ

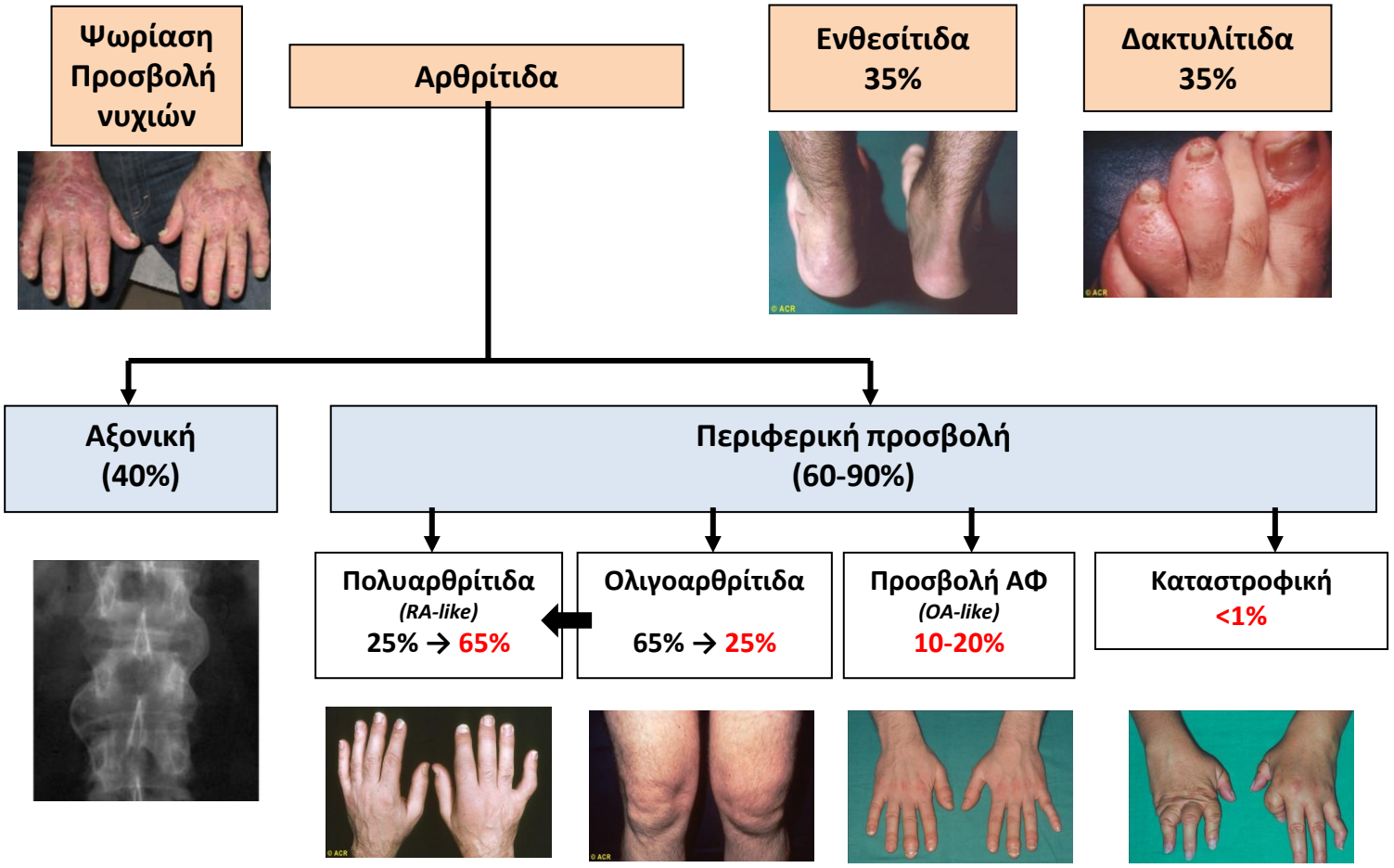
Εαρινές Ημέρες ΕΡΕ, Βόλος 1-3 Ιουνίου 2018

Σύγκρουση συμφερόντων
Conflict of interest

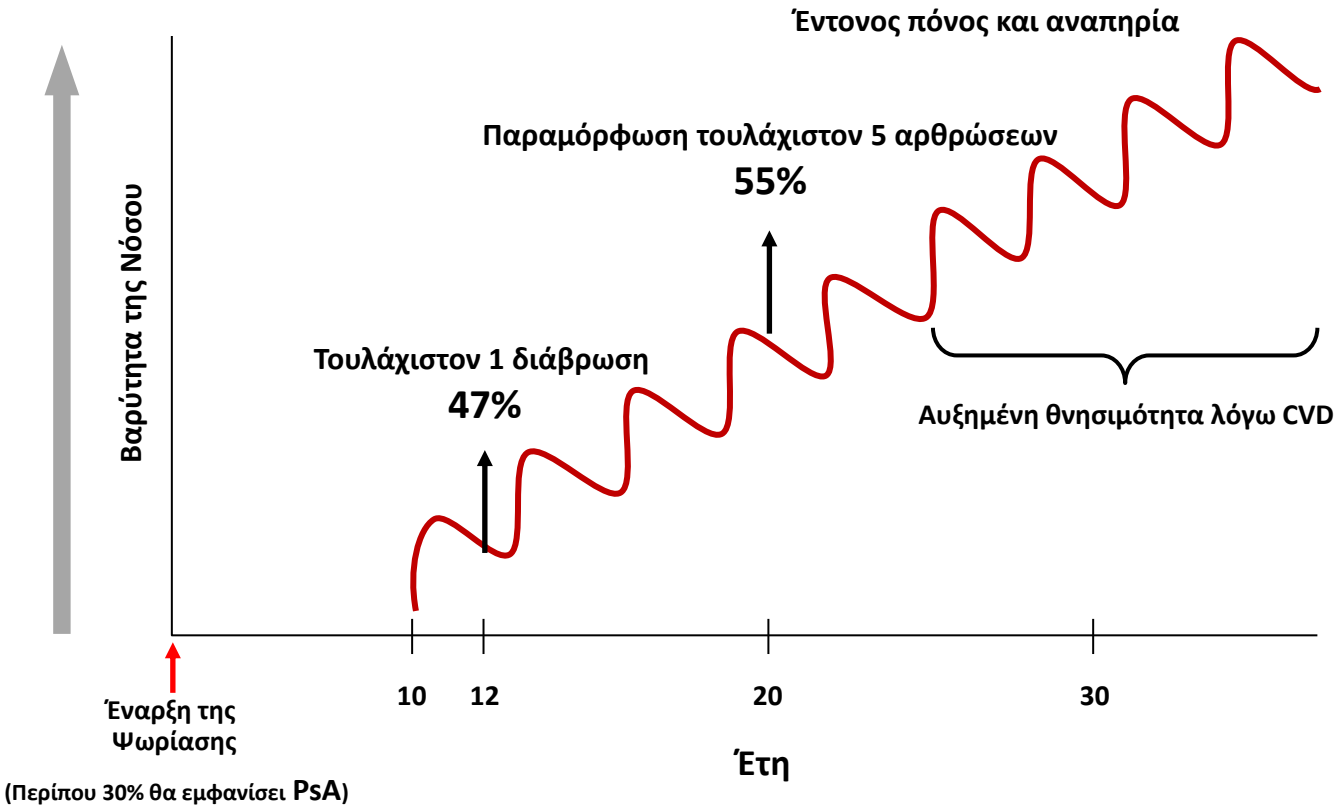
Δεν υπάρχει σύγκρουση συμφερόντων για την παρουσίαση

Εκπαιδευτικές-ερευνητικές-συμβουλευτικές επιχορηγήσεις την τελευταία διετία:
Amgen-GSK, BMS, UCB, MSD, Pfizer, Novartis, Enorasis, Abbvie

Η Ψωριασική Αρθρίτιδα είναι νόσημα με πολλές κλινικές εικόνες



Φυσική εξέλιξη της Ψωριασικής Αρθρίτιδας

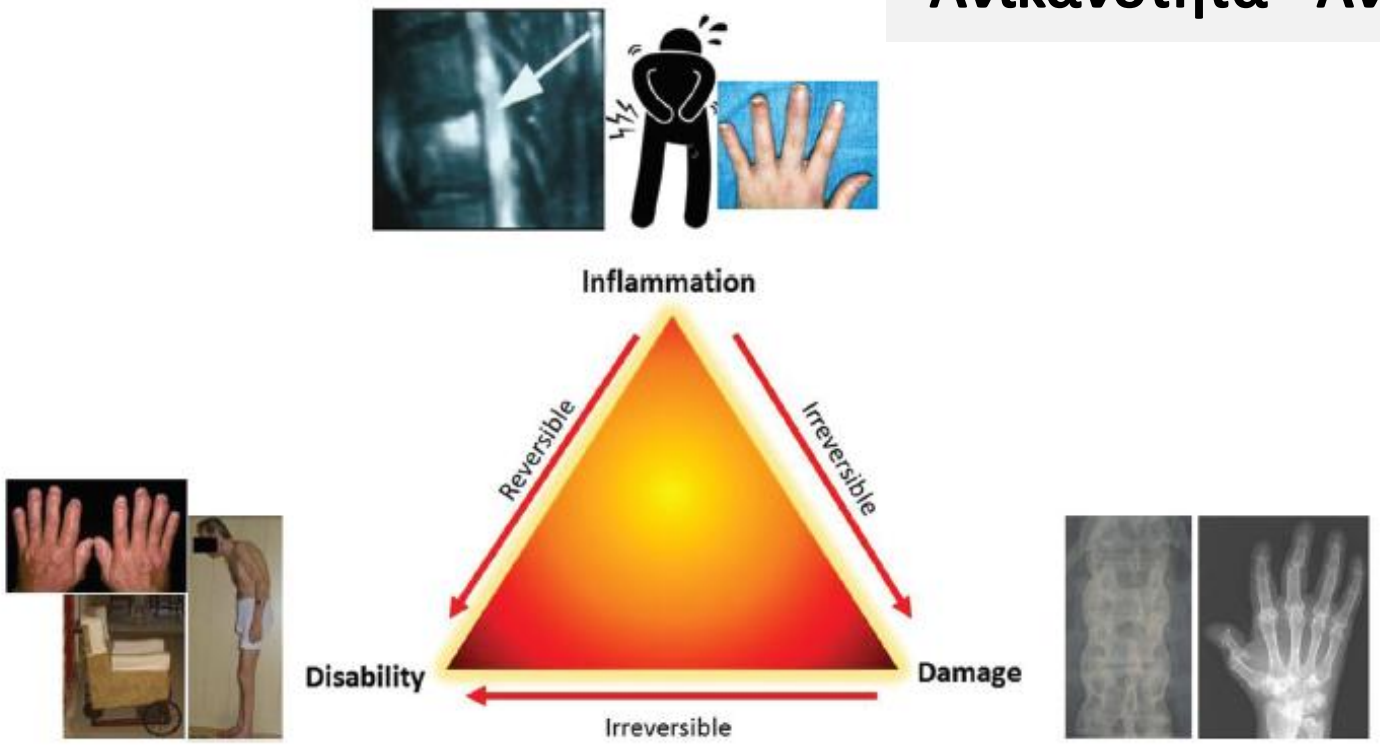


20%: Σοβαρή/Καταστροφική νόσος

Gladman DD, Ann Rheum Dis. 2005 Mar;64 Suppl 2:ii14-7

Treating axial spondyloarthritis and peripheral spondyloarthritis, especially psoriatic arthritis, to target: 2017 update of recommendations by an international task force

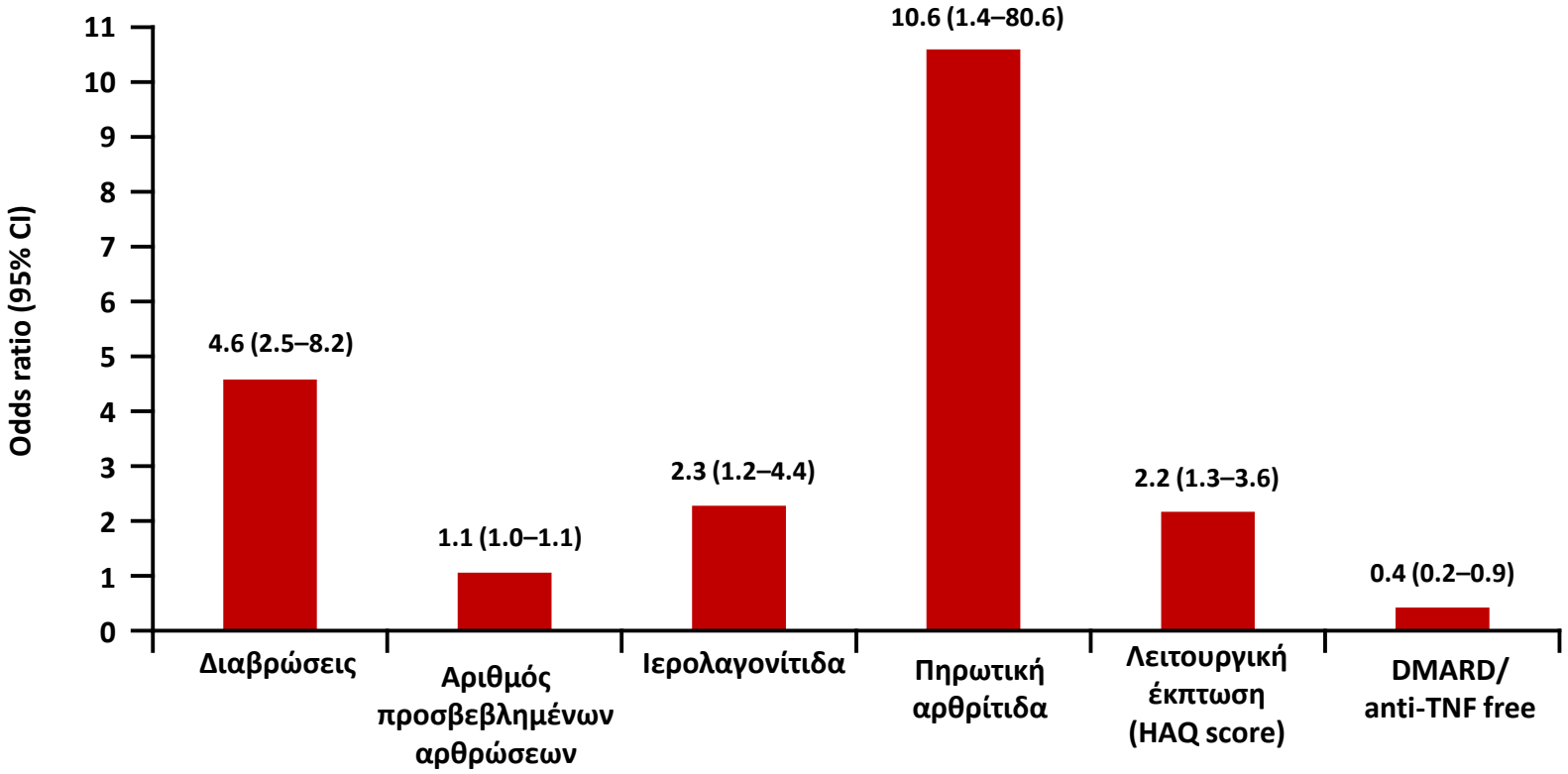
Φλεγμονή - Βλάβη
Ανικανότητα - Αναπηρία



Smolen JS, et al. Ann Rheum Dis 2017;0:1–15

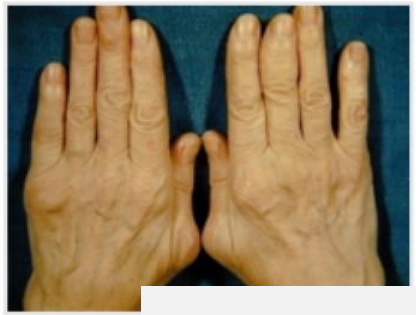
Πρώτη ανεκπλήρωτη ανάγκη: Καθυστέρηση στη διάγνωση της ΨΑ

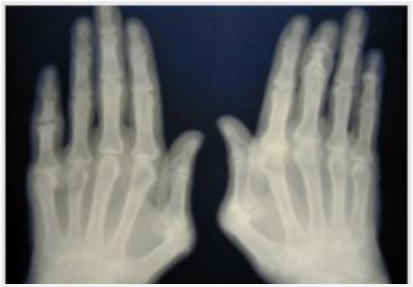
Η καθυστέρηση της διάγνωσης της ΨΑ για περισσότερους από 6 μήνες συμβάλλει στη δυσμενή εξέλιξη της νόσου

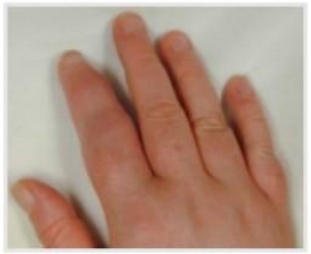


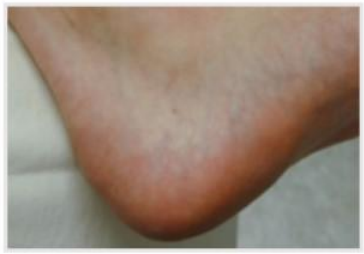
Haroon M, et al. *Ann Rheum Dis*. 2015;74:1045–50

Clinical Domains in PsA

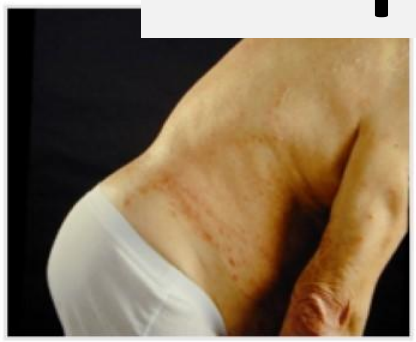


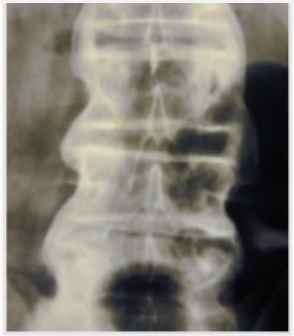


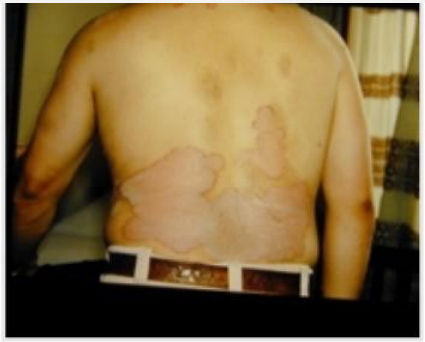


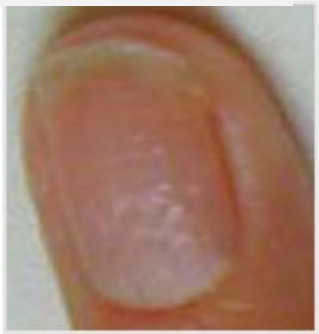


6 θεραπευτικοί στόχοι στην ΨΑ









- Axial disease
- Skin
- Nail

Images courtesy of Richard Langley, MD, FRCPC.

Medscape EDUCATION

ΨΑ: συστάσεις θεραπείας από την ομάδα GRAPPA

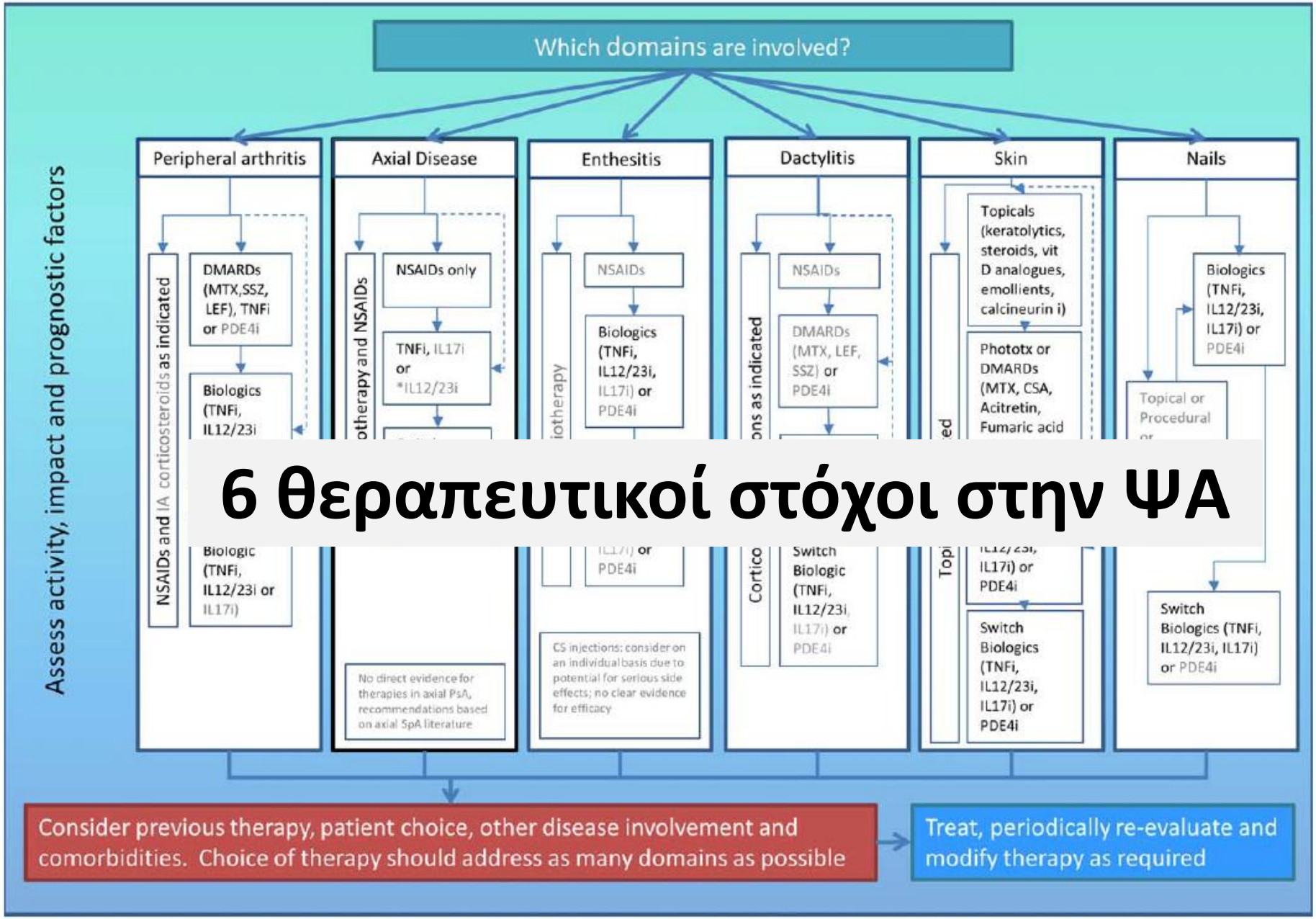
ARTHRITIS & RHEUMATOLOGY
Vol. 68, No. 5, May 2016, pp 1060–1071
DOI 10.1002/art.39573

SPECIAL ARTICLE

Group for Research and Assessment of Psoriasis and Psoriatic Arthritis 2015 Treatment Recommendations for Psoriatic Arthritis

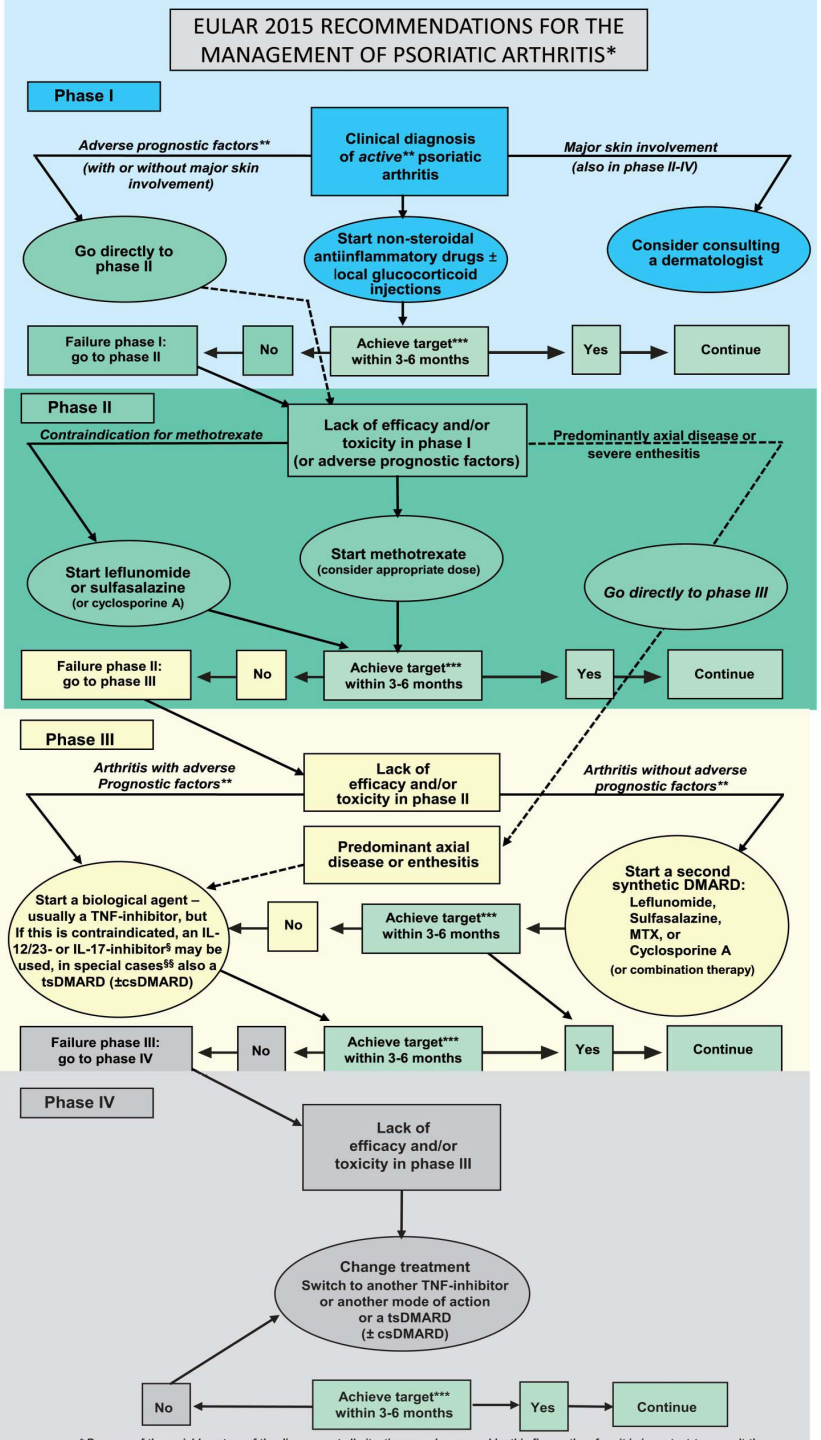
Laura C. Coates,[1] Arthur Kavanaugh,[2] Philip J. Mease,[3] Enrique R. Soriano,[4] Maria Laura Acosta-Felquer,[4] April W. Armstrong,[5] Wilson Bautista-Molano,[6] Wolf-Henning Boehncke,[7] Willemina Campbell,[8] Alberto Cauli,[9] Luis R. Espinoza,[10] Oliver FitzGerald,[11] Dafna D. Gladman,[12] Alice Gottlieb,[13] Philip S. Helliwell,[14] M. Elaine Husni,[15] Thorvardur J. Love,[16] Ennio Lubrano,[17] Neil McHugh,[18] Peter Nash,[19] Alexis Ogdie,[20] Ana-Maria Orbai,[21] Andrew Parkinson,[22] Denis O'Sullivan,[23] Cheryl F. Rosen,[24] Sergio Schwartzman,[25] Evan L. Siegel,[26] Sergio Toloza,[27] William Tuong,[28] and Christopher T. Ritchlin[29]

Coates LC, Arthritis Rheumatol 2016;68:1060-71



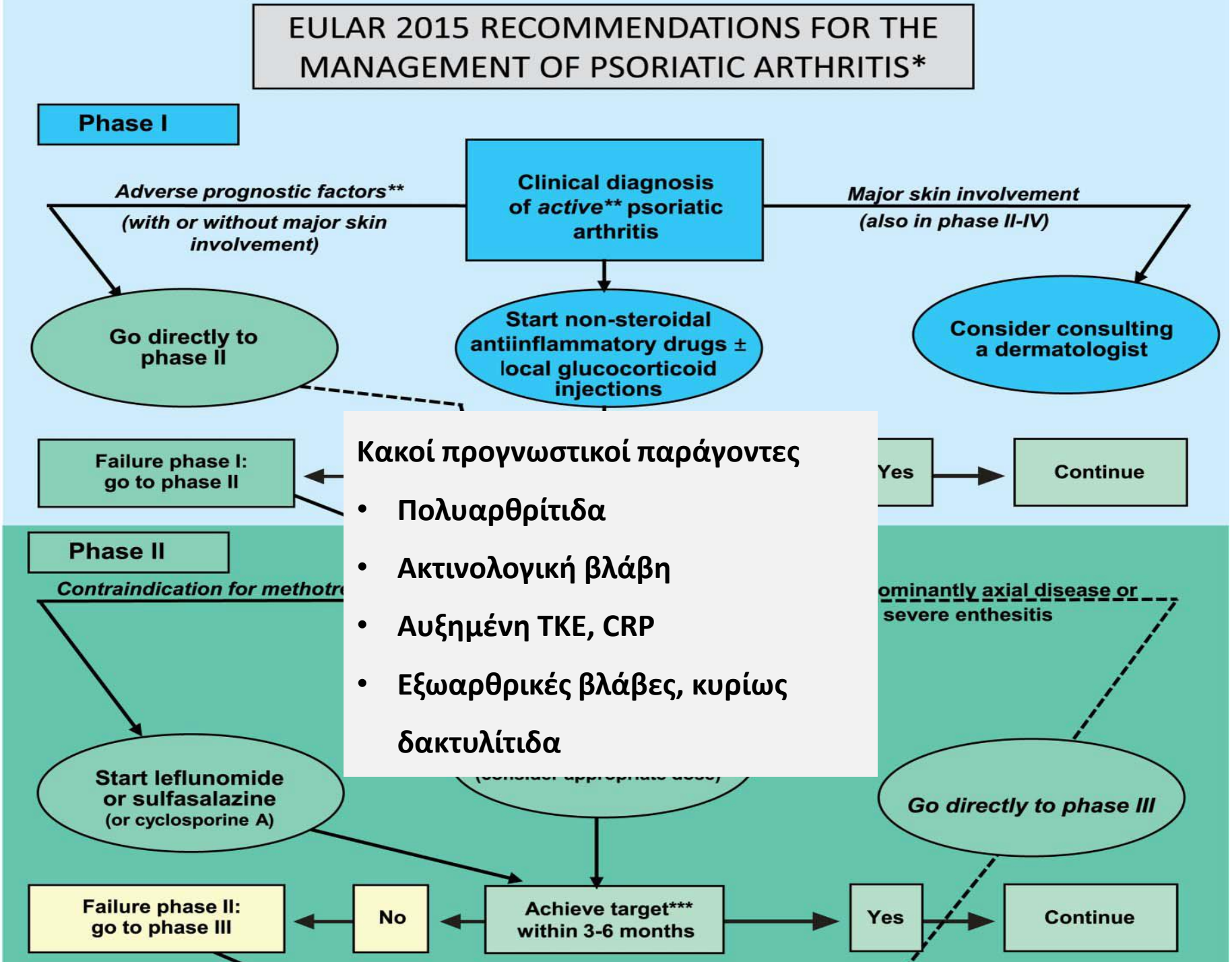
6 θεραπευτικοί στόχοι στην ΨΑ

Coates LC, Arthritis Rheumatol 2016;68:1060-71



Συστάσεις της EULAR για τον χειρισμό των ασθενών με ψωριασική αρθρίτιδα

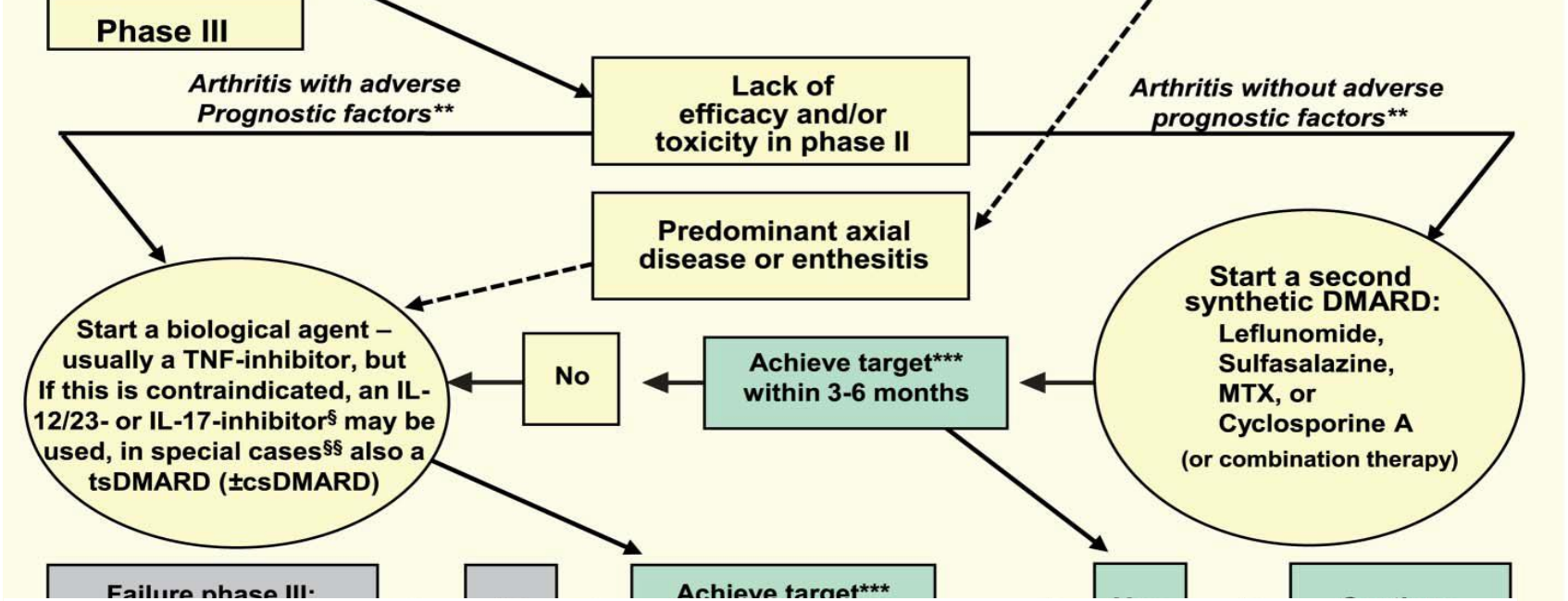
Gossec L, et al. Ann Rheum Dis 2016;75:499–510



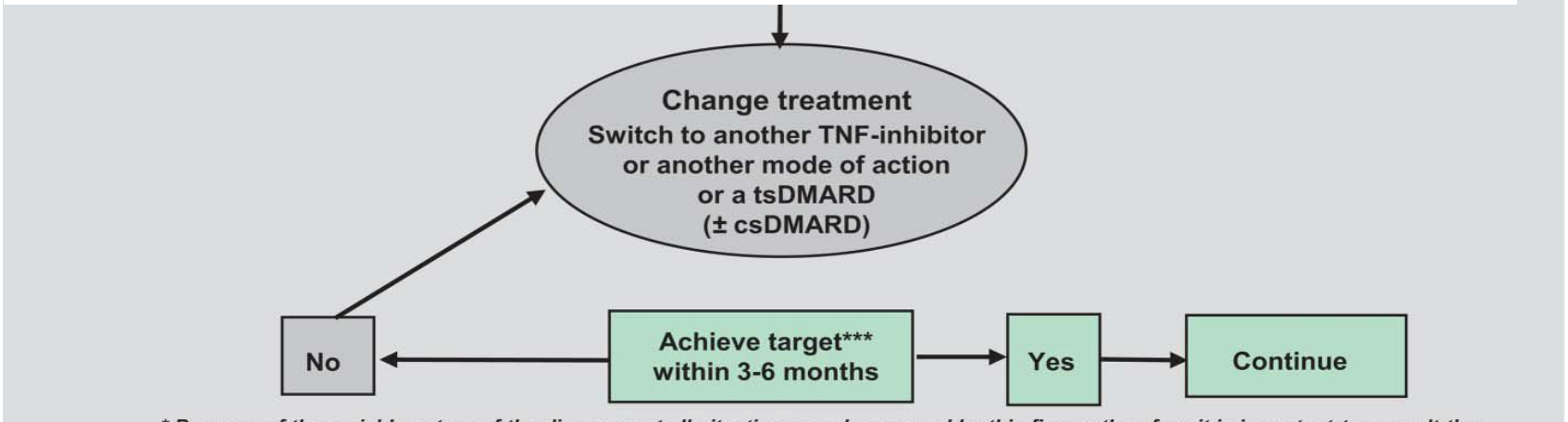
Κακοί προγνωστικοί παράγοντες

- **Πολυαρθρίτιδα**
- **Ακτινολογική βλάβη**
- **Αυξημένη ΤΚΕ, CRP**
- **Εξωαρθρικές βλάβες, κυρίως δακτυλίτιδα**

Gossec L, et al. Ann Rheum Dis 2016;75:499–510



Η διαφορά των συστάσεων της EULAR με αυτές της GRAPPA είναι ότι στις πρώτες συστήνεται η αντι-TNF αγωγή σαν πρώτη επιλογή βιολογικού παράγοντα στην ΨΑ, ενώ σε αυτές τις GRAPPA προτείνονται και άλλοι βιολογικοί παράγοντες σαν πρώτη επιλογή, ανάλογα με τις ενδείξεις



Gossec L, et al. Ann Rheum Dis 2016;75:499–510

Ψωριασική αρθρίτιδα - Θεραπεία 2018

Η κλασική θεραπεία

- NSAIDs
- DMARDs :
  - Methotrexate
  - Sulfasalazine
  - Cyclosporine (?)
  - Leflunomide
  - anti–TNF-a παράγοντες

Νεότερες θεραπείες

- Ustekinumab (IL-12/IL-23 i)
- Apremilast (ts DMARD)
- Secukinumab (IL-17i)

Νέες θεραπείες

- Ixekizumab (IL-17i)
- Tofacitinib

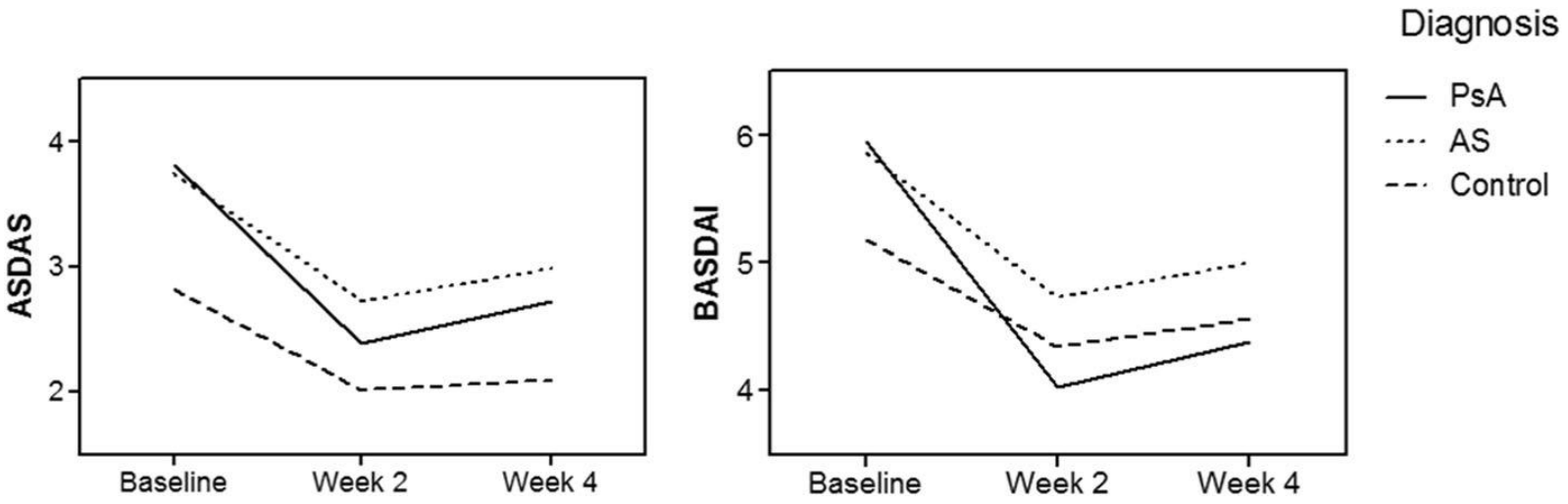
Μελλοντικές θεραπείες

- …..

RESEARCH ARTICLE Open Access

Inflammatory back pain in psoriatic arthritis is significantly more responsive to corticosteroids compared to back pain in ankylosing spondylitis: a prospective, open-labelled, controlled pilot study

Τα κορτικοειδή έχουν καλύτερο αποτέλεσμα στην αξονική ΨΑ παρά στην ΑΣ



All patients received a single, intra-muscular dose of depot corticosteroid injection (triamcinolone acetonide 80 mg)

Haroon et al. Arthritis Research & Therapy (2018) 20:73

RHEUMATOLOGY

Rheumatology 2012;51:1368–1377
doi:10.1093/rheumatology/kes001
Advance Access publication 17 February 2012

Original article

MTX στην ΨΑ

A randomized placebo-controlled trial of methotrexate in psoriatic arthritis

Gabrielle H. Kingsley[1,2], Anna Kowalczyk[1], Helen Taylor[1], Fowzia Ibrahim[1], Jonathan C. Packham[3], Neil J. McHugh[4], Diarmuid M. Mulherin[5], George D. Kitas[6], Kuntal Chakravarty[7], Brian D. M. Tom[8], Aidan G. O'Keeffe[8], Peter J. Maddison[9] and David L. Scott[1,10]

Global index	OR (95% CI)	*P*-value
PsARC	1.77 (0.97, 3.23)	0.06
ACR20 responders	2.00 (0.65, 6.22)	0.23
DAS-28 responders	1.70 (0.90, 3.17)	0.10

Rheumatology key messages

- Low-dose oral MTX does not improve synovitis in active PsA.
- MTX has borderline symptom-modifying properties.
- There is insufficient evidence to support the use of MTX as a standard treatment for PsA.

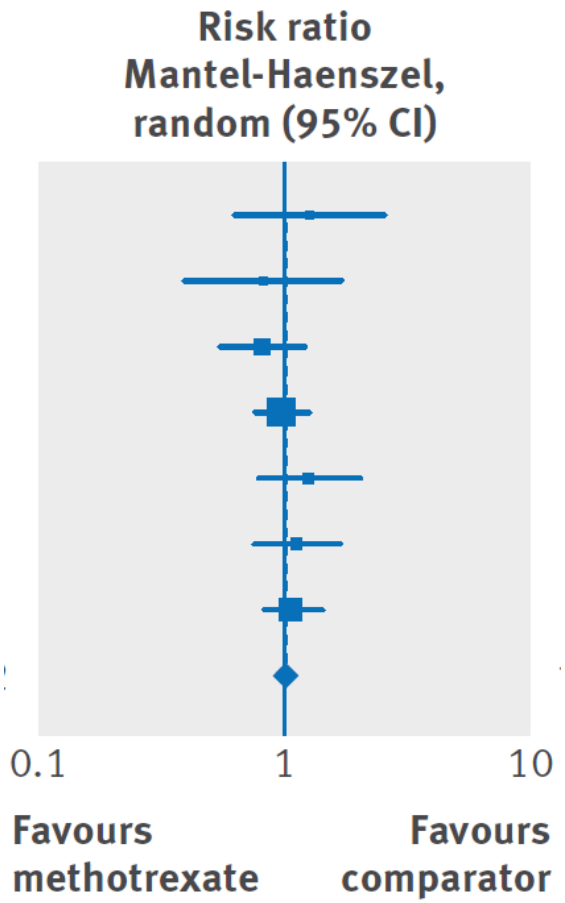
Rheumatology 2012;51:1368-1377

Methotrexate use and risk of lung disease in psoriasis, psoriatic arthritis, and inflammatory bowel disease: systematic literature review and meta-analysis of randomised controlled trials

Richard Conway,[1, 2] Candice Low,[3] Robert J Coughlan,[1] Martin J O'Donnell,[2] John J Carey[1, 2]

Μεθοτρεξάτη και πνευμονική νόσος σε ψωρίαση, ψωριασική αρθρίτιδα και ΙΦΝΕ

In the current study we found no increased risk of lung disease in methotrexate treated patients with psoriasis, psoriatic arthritis, or inflammatory bowel disease. These findings, coupled with those of a previous study in rheumatoid arthritis, suggest that methotrexate related lung disease is rare, if it exists at all



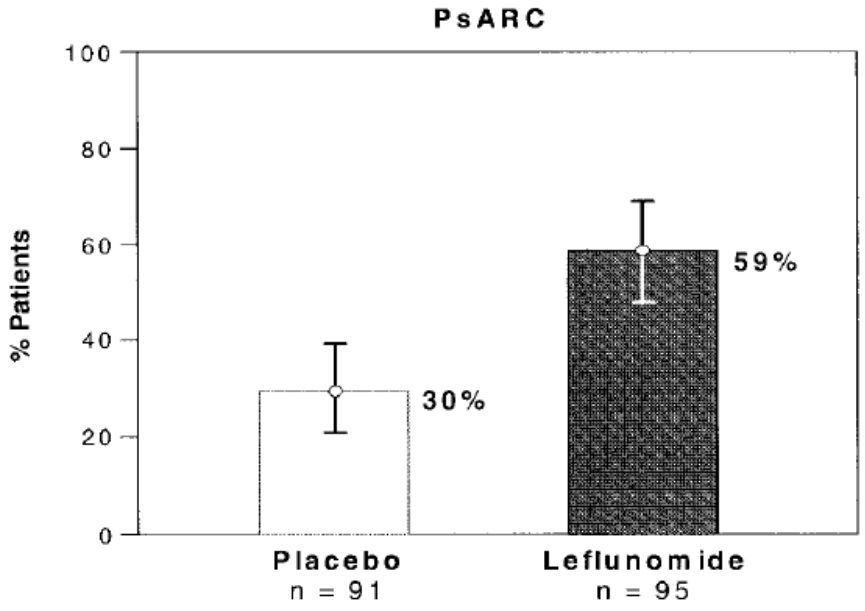
Conway R, BMJ 2015;350:h1269

Efficacy and Safety of Leflunomide in the Treatment of Psoriatic Arthritis and Psoriasis

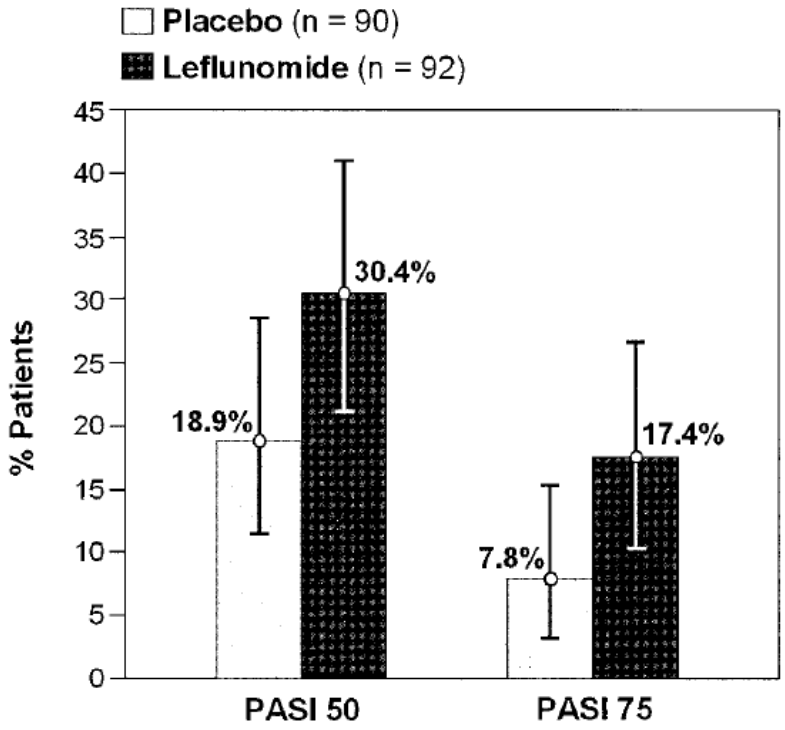
A Multinational, Double-Blind, Randomized, Placebo-Controlled Clinical Trial

Λεφλουνομίδη στην ΨΑ

Η μόνη RCT: 95 Ασθενείς, 24 εβδομάδες



Assessment, treatment group	Improvement/ response, %	Deterioration, %	P
Modified ACR20			
Placebo (n = 80)	20.0	NA	0.0138
Leflunomide (n = 80)	36.3		



Kaltwasser JP, Arthritis Rheum. 2004;50:1939-50

Clinic Rev Allerg Immunol
DOI 10.1007/s12016-016-8582-3

Κυκλοσπορίνη στην Ρευματολογία: αλληλεπιδράσεις

The Use of Cyclosporine A in Rheumatology: a 2016 Comprehensive Review

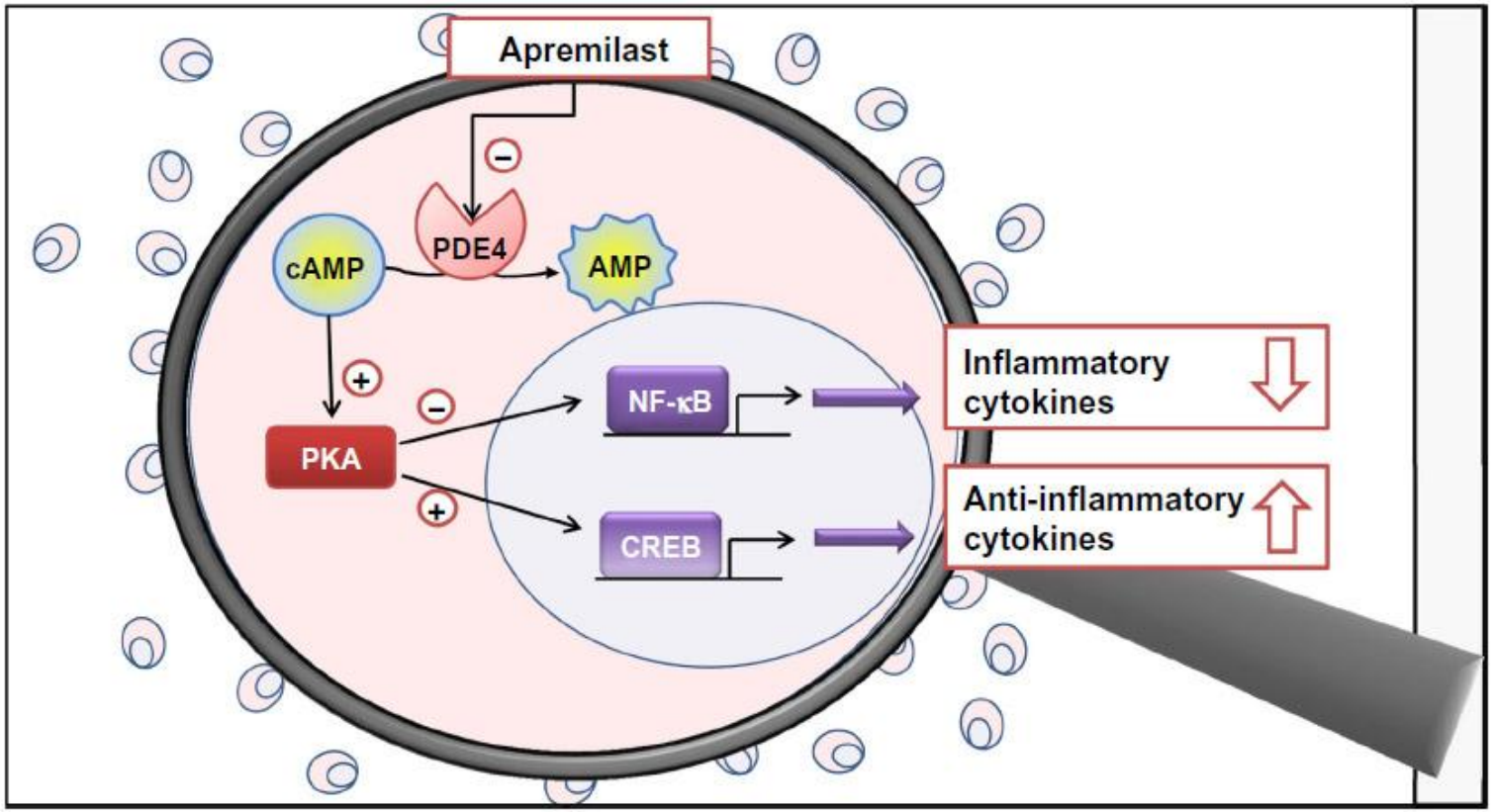
Table 12 The interaction of cyclosporine A with other pharmacological compounds

Increased CyA blood levels	Decreased CyA blood levels	Enhanced nephrotoxicity
Allopurinol		
Anti-malarials		
Bosentan		
Clarythromycin	Barbiturates	
Diltiazem	Carbamazepin	Aminoglycosides
Erythromycin	Rifampin	Amphotericin B
Fluconazole	Rifabutin	Ciprofloxacin
Imatinib	Isoniazid	Sulfonamides
Ketoconazole	Nafcillin	ACE inhibitors
Methylprednisolone (high dose)	Sulfasalazine	
Methotrexate		
Nicardipine		
Verapamil		

CyA has been shown to be more effective in the management of psoriatic arthritis (PsA) as compared with RA. In the 2008 treatment guidelines for PsA, CyA is recommended in the management of moderate or severe peripheral arthritis, moderate to severe skin and nail disease. Clinical improvement becomes usually evident after 3–4 weeks of treatment with CyA; response of both skin and joint involvement is dose-related, with the lowest optimal effective maintenance dose being around 3 mg/kg

Chighizola CB, Clin Rev Allergy Immunol. 2017 Jun;52(3):401-423.

Ειδική θεραπεία στην ΨΑ: Το Apremilast (Otezla)



Το Apremilast αναστέλλει την μέσω της φωσφοδιεστεράσης 4 (PDE4) μετατροπή του κυκλικού AMP σε AMP, επομένως μειώνει έμμεσα την φλεγμονώδη απάντηση μέσω της ελαττωμένης έκφρασης των φλεγμονωδών κυτταροκινών και της αυξημένης έκφρασης των αντιφλεγμονωδών κυτταροκινών

Chemical structure of apremilast[14]

ARD Online First, published on January 20, 2016 as 10.1136/annrheumdis-2015-207963
Clinical and epidemiological research

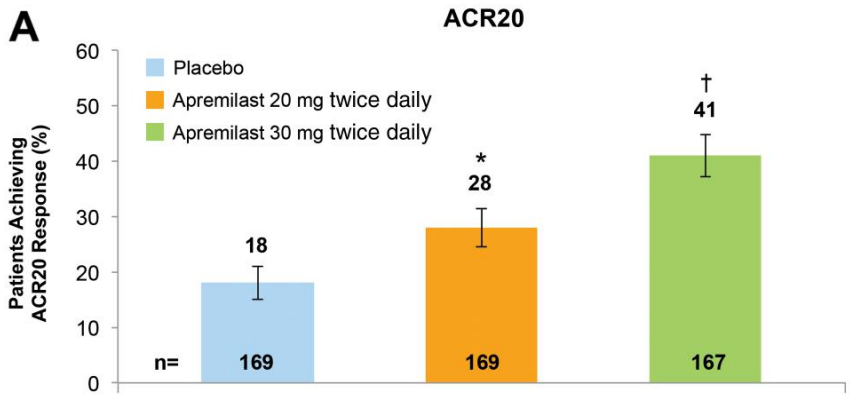
OPEN ACCESS

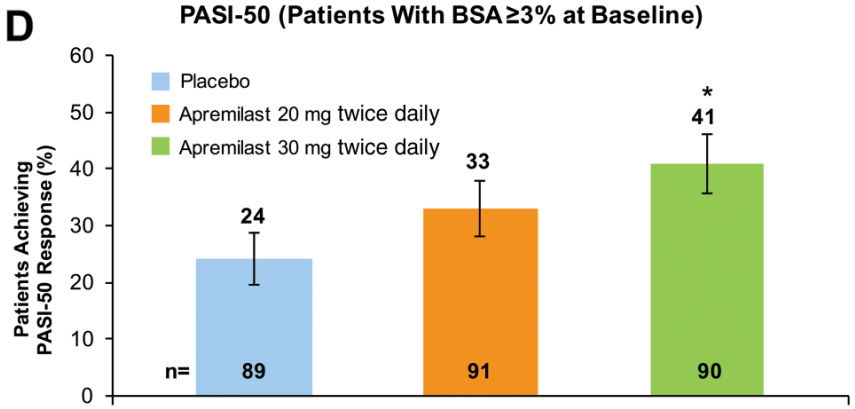
EXTENDED REPORT

Apremilast, an oral phosphodiesterase 4 inhibitor, in patients with psoriatic arthritis and current skin involvement: a phase III, randomised, controlled trial (PALACE 3)

Christopher J Edwards,[1] Francisco J Blanco,[2] Jeffrey Crowley,[3] Charles A Birbara,[4] Janusz Jaworski,[5] Jacob Aelion,[6] Randall M Stevens,[7] Adele Vessey,[7] Xiaojiang Zhan,[7] Paul Bird[8]

Apremilast στην ΨΑ





Αποτελέσματα σε ACR20 PASI-50 την εβδομάδα 16

Edwards CJ, et al. Ann Rheum Dis 2016;0:1–9

ARD Online First, published on January 20, 2016 as 10.1136/annrheumdis-2015-207963
Clinical and epidemiological research

OPEN ACCESS

EXTENDED REPORT

Apremilast, an oral phosphodiesterase 4 inhibitor, in patients with psoriatic arthritis and current skin involvement: a phase III, randomised, controlled trial (PALACE 3)

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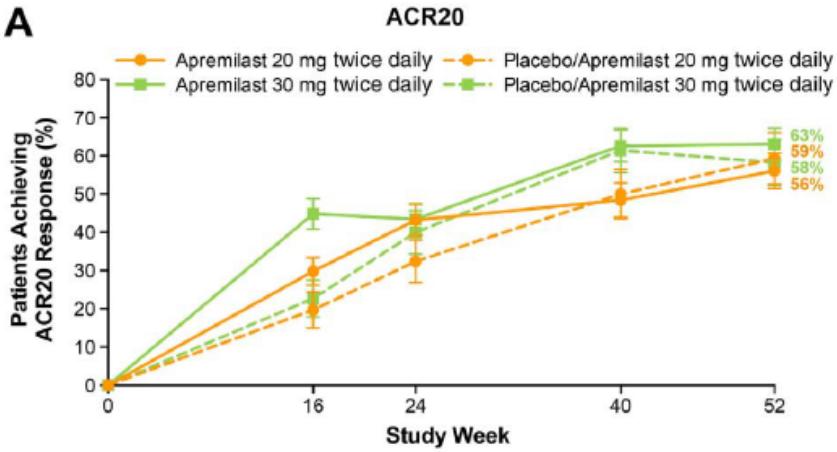
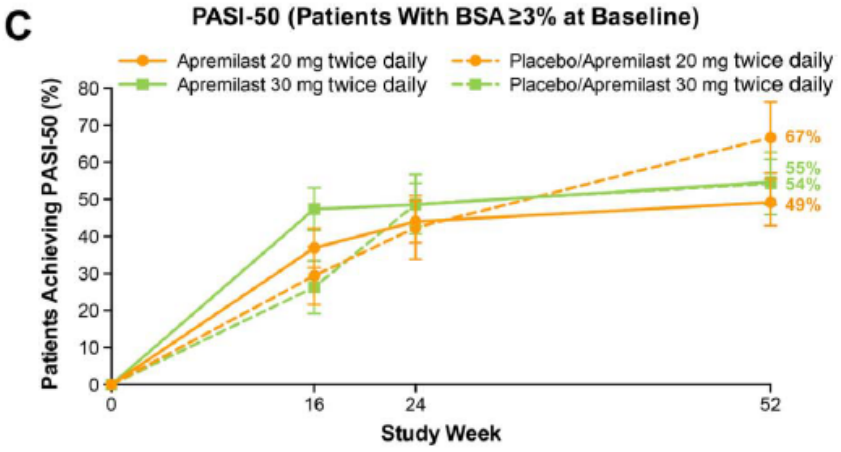
Apremilast στην ΨΑ



Apremilast 20 mg twice daily, n/m	48/161	63/146	60/124	65/116
Apremilast 30 mg twice daily, n/m	69/154	63/145	82/131	80/127
Placebo/Apremilast 20 mg twice daily, n/m	14/71	23/71	31/62	32/54
Placebo/Apremilast 30 mg twice daily, n/m	17/75	30/75	43/70	39/67



Apremilast 20 mg twice daily, n/m	31/84	33/75	31/63
Apremilast 30 mg twice daily, n/m	37/78	36/74	35/64
Placebo/Apremilast 20 mg twice daily, n/m	10/34	14/33	16/24
Placebo/Apremilast 30 mg twice daily, n/m	10/38	19/39	19/35

Αποτελέσματα σε ACR20 PASI-50 την εβδομάδα 52

Το 63% που έλαβαν apremilast 30 mg έφθασαν σε ACR20 απάντηση την εβδομάδα 52

Edwards CJ, et al. Ann Rheum Dis 2016;0:1–9

Apremilast στην ΨΑ: Ασφάλεια

	Week 0–24*			Week 0–52†	
		Apremilast		Apremilast	
	Placebo n=168	20 mg twice daily n=170	30 mg twice daily n=167	20 mg twice daily n=241	30 mg twice daily n=242
Overview of AEs, n (%)					
Any AE	83 (49)	100 (59)	104 (62)	160 (66)	165 (68)
Any serious AE	9 (5)	3 (2)	6 (4)	13 (5)	10 (4)
Any AE leading to drug withdrawal	10 (6)	13 (8)	12 (7)	22 (9)	14 (6)
Death	0 (0)	0 (0)	0 (0)	0 (0)	0 (0)
AEs reported by ≥5% of patients in any treatment group, n (%)					
Diarrhoea	3 (2)	26 (15)	26 (16)	32 (13)	33 (14)
Nausea	9 (5)	19 (11)	23 (14)	24 (10)	36 (15)
Headache	8 (5)	16 (9)	20 (12)	26 (11)	26 (11)
URTI	3 (2)	11 (7)	12 (7)	21 (9)	20 (8)
Nasopharyngitis	2 (1)	7 (4)	4 (2)	12 (5)	10 (4)
Vomiting	1 (0.6)	5 (3)	8 (5)	8 (3)	12 (5)
Serious AEs reported by ≥2 patients in any treatment group, n (%)					
Acute pancreatitis	2 (1)	0 (0)	0 (0)	0 (0)	0 (0)
Psoriatic arthropathy	2 (1)	1 (0.6)	1 (0.6)	2 (0.8)	1 (0.4)
Select laboratory assessments, n/m‡ (%)					
ALT >150 U/L	0/167 (0)	0/168 (0)	2/164 (1)	2/238 (0.8)	2/238 (0.8)
Creatine (male >156, female >126 μmol/L)	1/167 (0.6)	0/168 (0)	0/164 (0)	1/238 (0.4)	0/238 (0)
Haemoglobin (male: decrease >2.0 and value <10.5 g/dL; female: decrease >2.0 and value <10.0 g/dL)	0/165 (0)	1/162 (0.6)	0/161 (0)	1/232 (0.4)	3/236 (1)
Leucocytes <2.0, 10^9/L	0/165 (0)	0/162 (0)	1/161 (0.6)	0/238 (0)	2/238 (0.8)
Neutrophils <0.75, 10^9/L	1/164 (0.6)	1/161 (0.6)	0/161 (0)	1/238 (0.4)	0/238 (0)
Platelets <75, 10^9/L	0/165 (0)	0/162 (0)	0/161 (0)	0/238 (0)	0/238 (0)

Edwards CJ, et al. Ann Rheum Dis 2016;0:1–9

Η πραγματικότητα των βιολογικών θεραπειών το 2018

- Οι αντι-TNF παράγοντες
  - Ο διαλυτός υποδοχέας Etanercept
  - Τα 4 μονοκλωνικά αντισώματα και τα βιο-ομοειδή τους
    - Infliximab
    - Adalimumab
    - Certolizumab pegol
    - Golimumab
- Ο αναστολέας της IL-12/23, Ustekinumab
- Ο αναστολέας της IL-17, Secukinumab

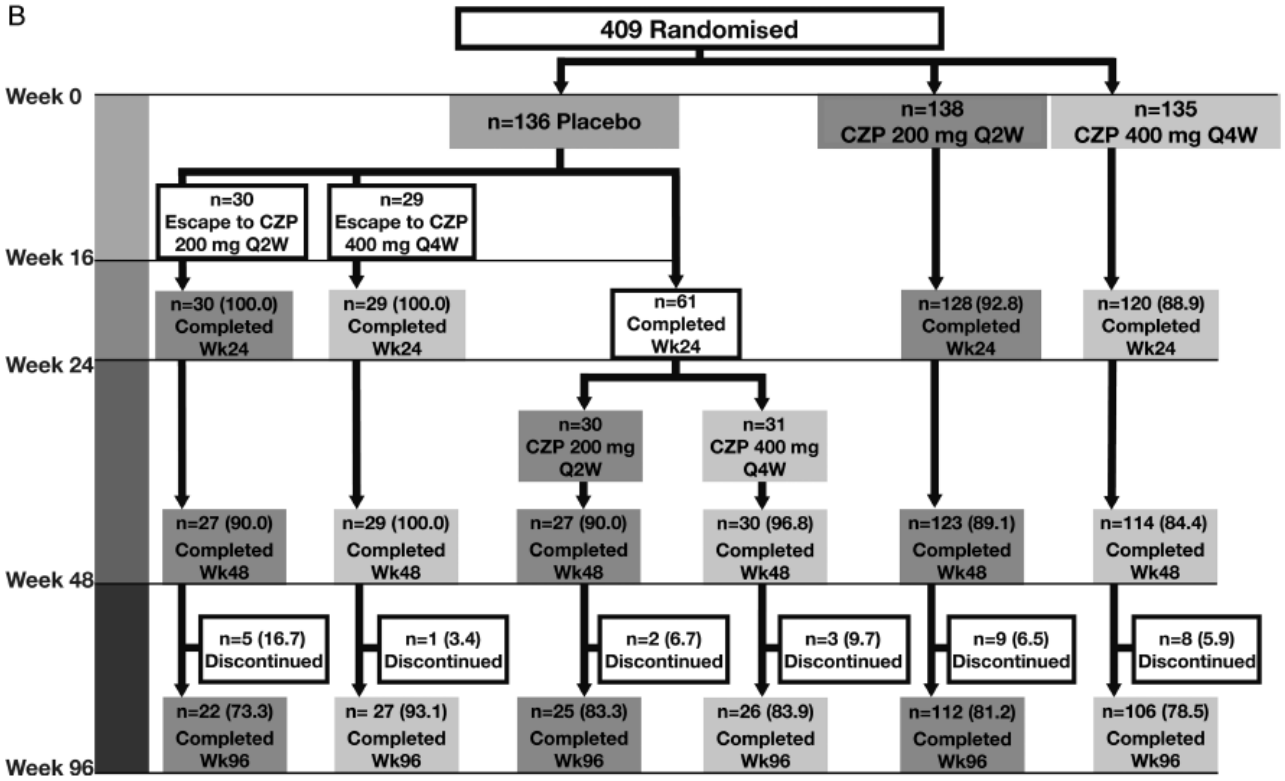
RMD Open
Rheumatic & Musculoskeletal Diseases

EXTENDED REPORT

Effect of certolizumab pegol over 96 weeks in patients with psoriatic arthritis with and without prior antitumour necrosis factor exposure

P Mease,[1] A Deodhar,[2] R Fleischmann,[3] J Wollenhaupt,[4] D Gladman,[5] P Leszczyński,[6,7] P Vitek,[8] A Turkiewicz,[9] M Khraishi,[10] O FitzGerald,[11] R Landewé,[12] M de Longueville,[13] B Hoepken,[14] L Peterson,[15] D van der Heijde[16]

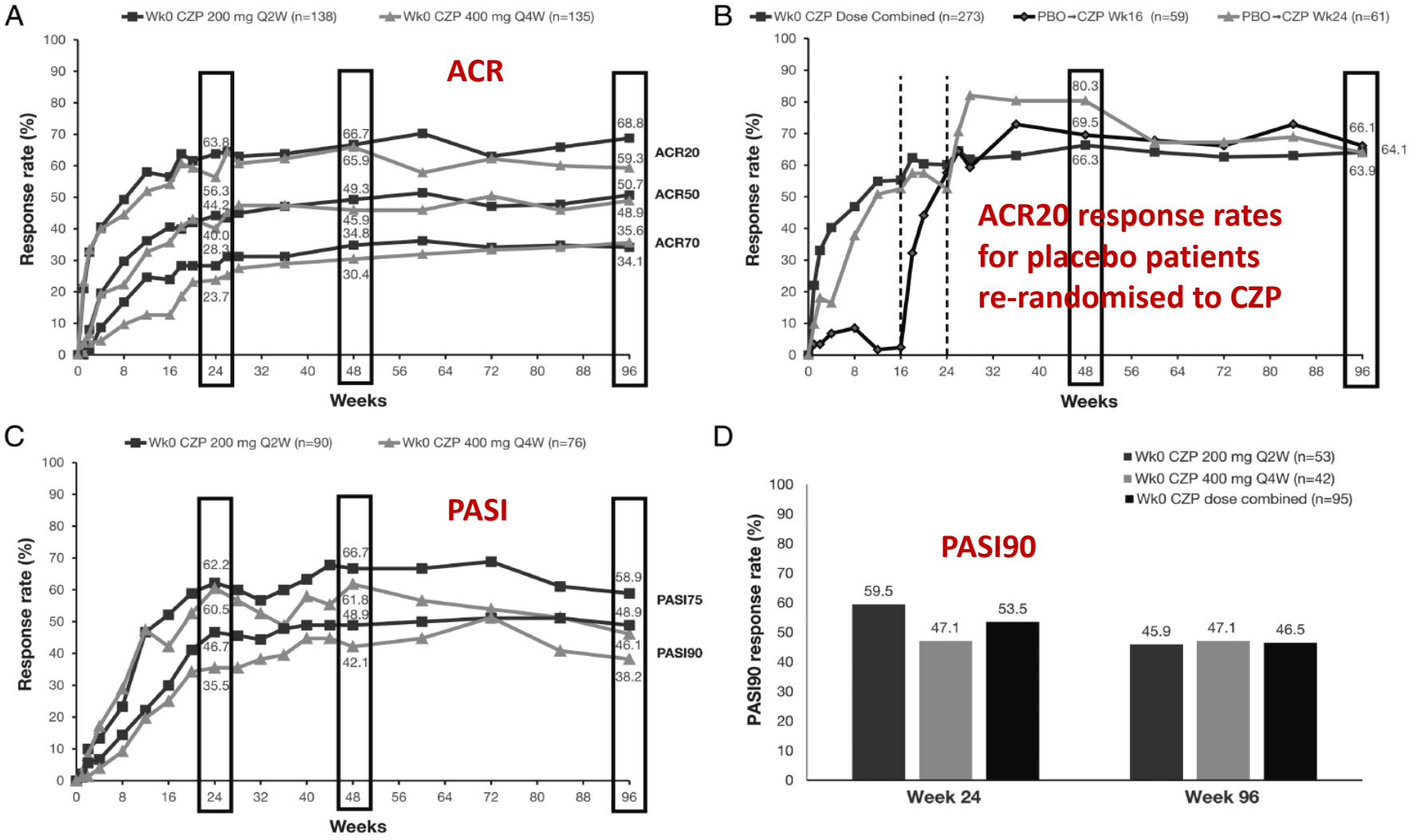
Certolizumab pegol επί 96 εβδομάδες στην ΨΑ



- Ασθενείς με ενεργό νόσο
- Το 20% είχε λάβει πριν 1 TNF παράγοντα
- Διατηρήθηκε η προϋπάρχουσα αγωγή με DMARDS σε σταθερή δόση

Mease P, et al. RMD Open 2015;1:e000119

Certolizumab pegol επί 96 εβδομάδες στην ΨΑ



Mease P, et al. RMD Open 2015;1:e000119

Certolizumab pegol επί 96 εβδομάδες στην ΨΑ

Table 7 TEAEs during 96 weeks of the RAPID-PsA trial

	CZP 200 mg Q2W N=198 n (%) [ER]	CZP 400 mg Q4W N=195 n (%) [ER]	All CZP N=393 n (%) [ER]
Any TEAE	175 (88.4) [339.2]	170 (87.2) [320.0]	345 (87.8) [329.8]
TEAEs by intensity*			
Mild	151 (76.3)	148 (75.9)	299 (76.1)
Moderate	113 (57.1)	103 (52.8)	216 (55.0)
Severe	23 (11.6)	22 (11.3)	45 (11.5)
Drug-related TEAEs	82 (41.4)	86 (44.1)	168 (42.7)
Infections†	125 (63.1) [95.6]	113 (57.9) [96.9]	238 (60.6) [96.2]
Upper respiratory infections‡	25 (12.6) [13.7]	31 (15.9) [13.7]	56 (14.2) [13.7]
Serious infections	7 (3.5) [2.6]	9 (4.6) [4.0]	16 (4.1) [3.3]
Serious TEAEs	31 (15.7) [13.4]	36 (18.5) [15.7]	67 (17.0) [14.5]
Death	3 (1.5)	3 (1.5)	6 (1.5)
Withdrawal due to TEAEs§	22 (11.1)	14 (7.2)	36 (9.2)

Οι λοιμώξεις παραμένουν η σημαντικότερη ανεπιθύμητη ενέργεια της αντι-TNF αγωγής

Mease P, et al. RMD Open 2015;1:e000119

TNF Inhibitors: ACR20 Responses

Απάντηση στην αντι-TNF αγωγή στην ΨΑ με παράμετρο την αρθρίτιδα

% Responders

	Adalimumab 2/3 (n=315)*	Certolizumab 3 (n=409)†	Etanercept 2 (n=60)*	Etanercept 3 (n=205)*	Golimumab (n=405)‡	Infliximab 2 (n=100)†	Infliximab 3 (n=200)§
Rx	58	58	74	59	52	69	58
PBO	14	24	14	15	8	8	11

*12 weeks; †16 weeks; ‡24 weeks; §14 weeks

Mease PJ, et al. *Lancet.* 2000;356:385-390; Antoni CE, et al. *Arthritis Rheum.* 2005;52:1227-1236; Mease PJ, et al. *Arthritis Rheum.* 2004;50:2264-2272; Antoni C et al. *Ann Rheum Dis.* 2005;64:1150-1157; Mease PJ, et al. *Ann Rheum Dis.* 2005;52:3279-3289; Kavanaugh A, et al. *Arthritis Rheum.* 2007;66:498-505; Mease PJ, et al. *Ann Rheum Dis.* 2014;73:48-55.

BMJ

RESEARCH

Comparison of two etanercept regimens for treatment of psoriasis and psoriatic arthritis: PRESTA randomised double blind multicentre trial

Διπλασιασμός της δόσης του Etanercept στην ΨΑ

Etanercept 50 mg twice weekly (n=379) or 50 mg once weekly (n=373) for 12 weeks

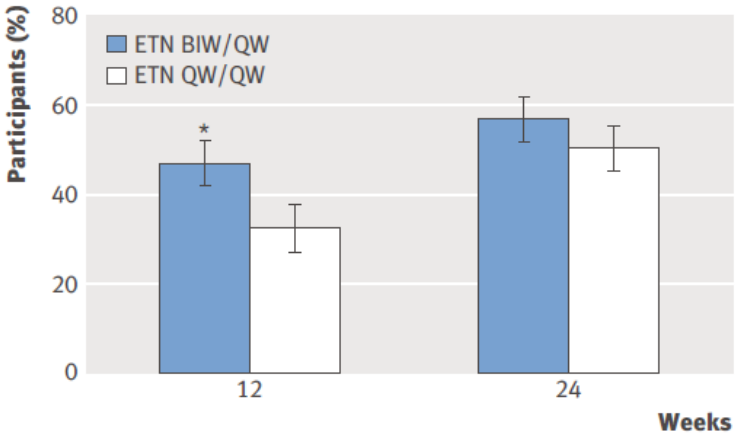
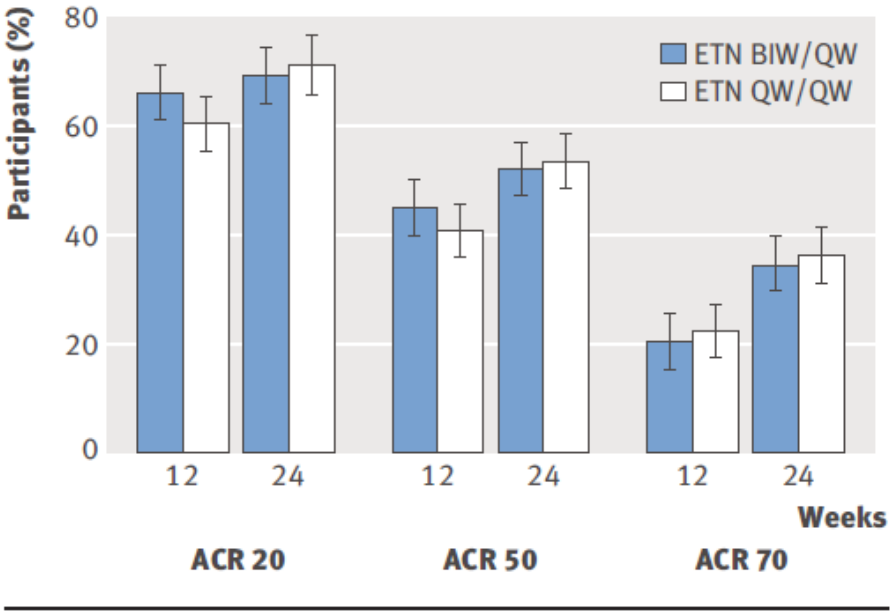


Fig 2 | Physician's global assessment of psoriasis: participants achieving "clear" or "almost clear" responses at 12 weeks (*P<0.001) and 24 weeks. BIW=twice weekly; QW=once weekly



Ο διπλασιασμός της δόσης του Etanercept στην ΨΑ επιφέρει βελτίωση στην ψωρίαση και καθόλου στην αρθρίτιδα

Sterry W, BMJ 2010;340:c147

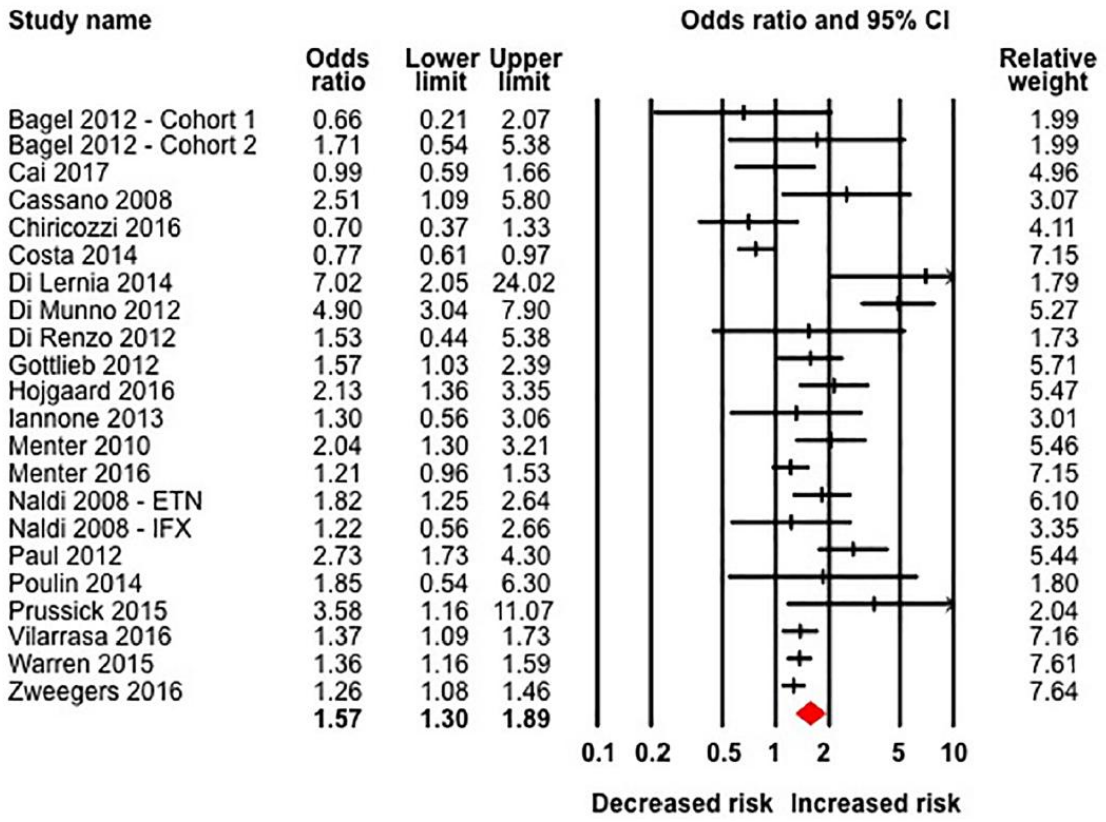
PLOS ONE

RESEARCH ARTICLE

Obesity and response to anti-tumor necrosis factor-α agents in patients with select immune-mediated inflammatory diseases: A systematic review and meta-analysis

Η παχυσαρκία είναι αρνητικός προγνωστικός παράγοντας στην αντι-TNF αγωγή

Obesity and Failure of Anti-TNF Therapy - Psoriasis-Psoriatic Arthritis



Population pharmacokinetic studies of all anti-TNF agents have identified high body weight as a risk factor associated with increased clearance of drug, resulting in shorter half-life and lower serum trough drug concentrations. This effect might be related to rapid proteolysis and to a «TNF-sink» phenomenon, wherein the clearance of a monoclonal antibody that binds to membrane antigen is faster at low doses as the unbound targets «sop up» antibody, serving as a sink. This may explain why patients with obesity treated even weight-based regimens such as infliximab, had inferior response to therapy.

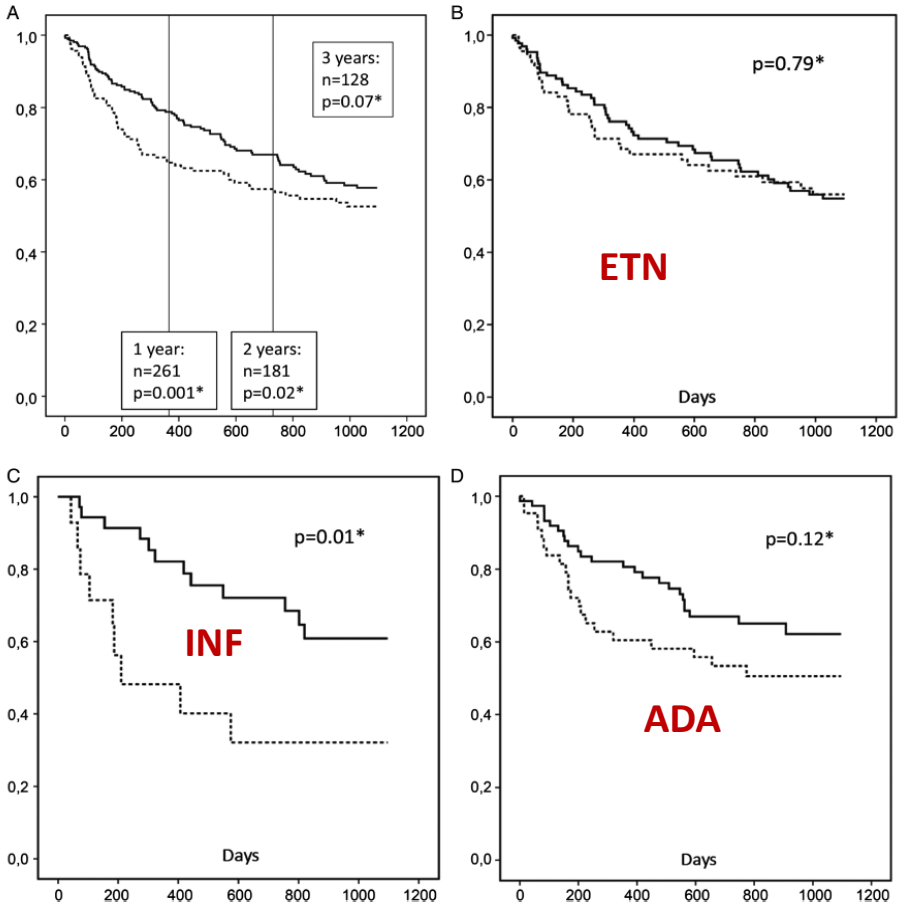
Singh S, PLoS One. 2018 May 17;13(5):e0195123

EXTENDED REPORT

The role of methotrexate co-medication in TNF-inhibitor treatment in patients with psoriatic arthritis: results from 440 patients included in the NOR-DMARD study

Karen Minde Fagerli,[1] Elisabeth Lie,[1] Désirée van der Heijde,[1,2] Marte Schrumpf Heiberg,[1] Åse Stavland Lexberg,[3] Eric Rødevand,[4] Synøve Kalstad,[5] Knut Mikkelsen,[6] Tore K Kvien[1]

TNF μόνο ή μαζί με MTX στην ΨΑ;

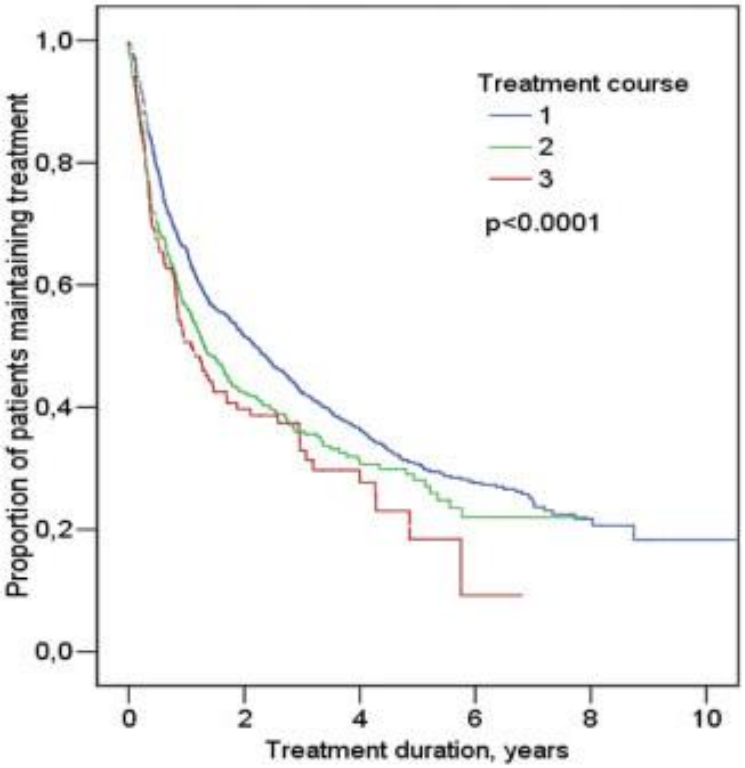


Η μακροχρόνια επιβίωση των αντι-TNF παραγόντων επηρεάζεται από την ταυτόχρονη χορήγηση MTX

Fagerli KM, et al. Ann Rheum Dis 2014;73:132–137

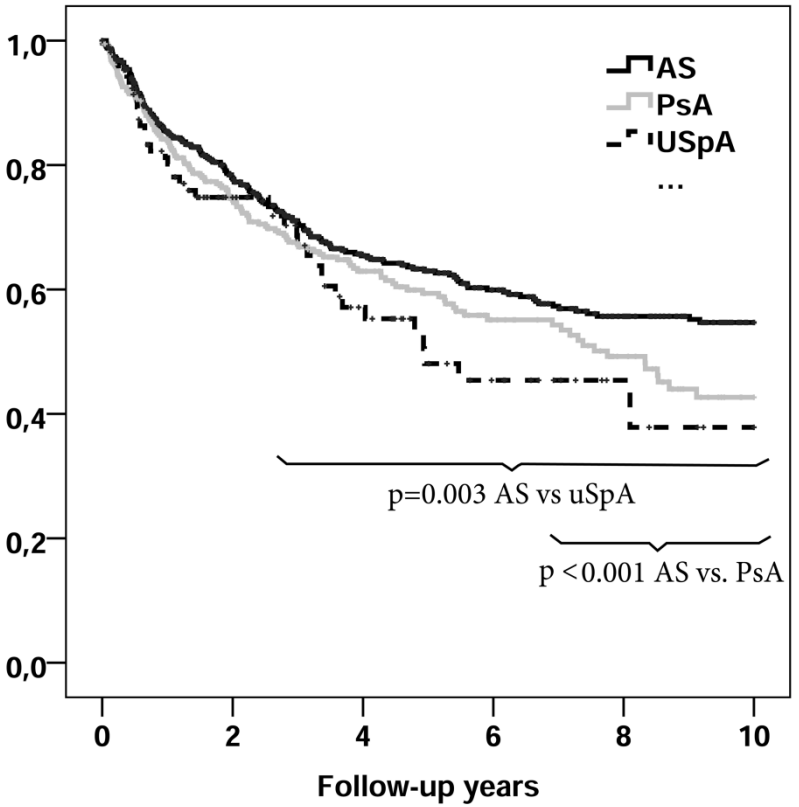
Επιβίωση της αντι-TNF αγωγής στην ΨΑ

Danish Nationwide DANBIO Registry



Glintborg B, Arthritis Rheum. 2013;65:1213-23

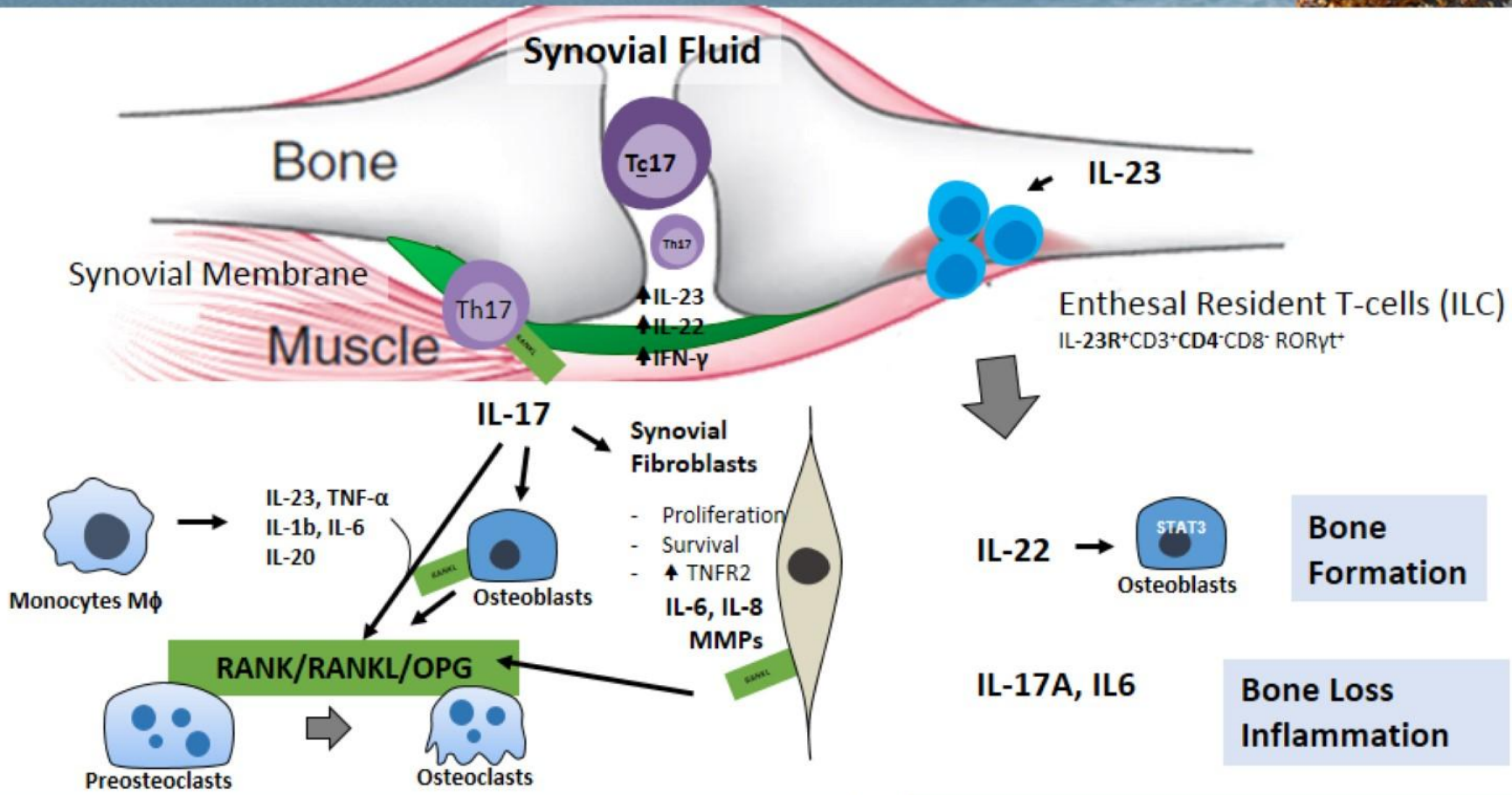
Clinical diagnosis



AS	561	342	226	169	128	92
PsA	375	219	132	72	51	25
uSpA	108	55	31	15	6	2

Flouri ID, J Rheumatol. 2018 Apr 1.

The IL-23/IL-17 Axis in Joint Inflammation and Enthesitis: PsA



ARTHRITIS

Hypothetical, based on PSA & SpA. Autoimmunity vs Autoinflammation?

ENTHESITIS

Mouse model. Relevant in humans?

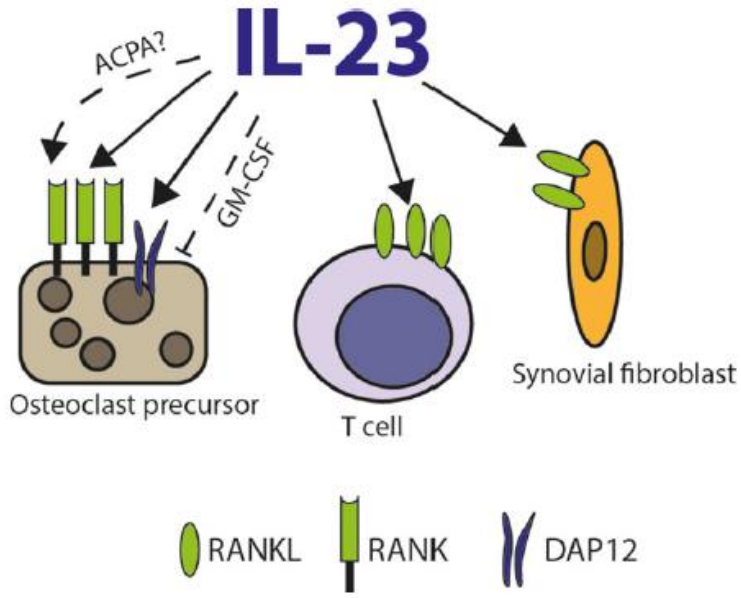
Sherlock JP. *Nat Med*. 2012;18:1069-1076; Lories RJ, McInnes IB. *Nat Med*. 2012;18:1018-1019; Lubberts E. *Nat Rev Rheumatol*. 2015;11:415-429; Fitzgerald O, Winchester R. *Arthritis Rheumatol*. 2014;66:1077-1080; Raychaudhuri SP, Raychaudhuri SK. *Clin Rheumatol*. 2016;35:1437-1441; Suzuki E, et al. *Autoimmun Rev*. 2014;13:496-502; Paine A, Ritchlin C. *Curr Opin Rheumatol*. 2016;28:66-75.

European Journal of Immunology HIGHLIGHTS

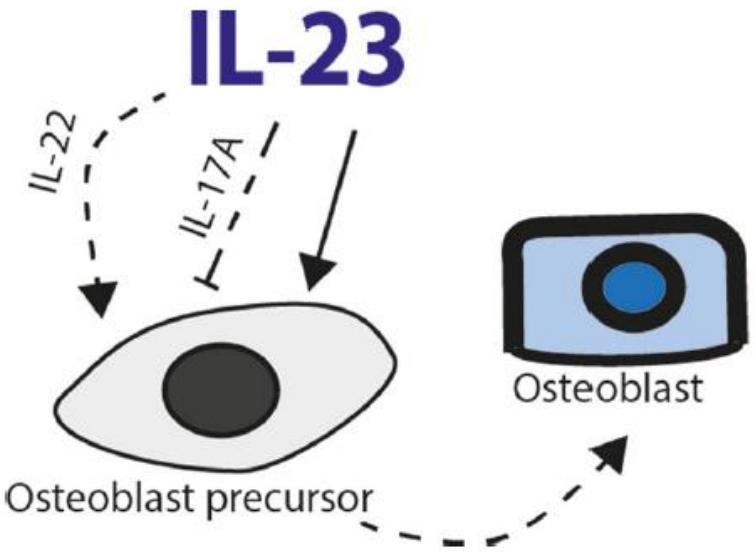
REVIEW

The role of IL-23 receptor signaling in inflammation-mediated erosive autoimmune arthritis and bone remodeling

ΨΑ: οστική απορρόφηση και οστική παραγωγή μέσω της IL-23



IL-23 can stimulate osteoclastogenesis in several ways: (i) increase of RANK expression on osteoclast precursor cells; (ii) increase of RANKL expression on T-helper cells or fibroblasts; (iii) activation of DAP12 ITAMs.



IL-23 acts directly on osteoblast precursor cells to stimulate formation of osteoblasts. IL-23 can indirectly inhibit or stimulate osteoblast formation via IL-17 or IL-22 respectively.

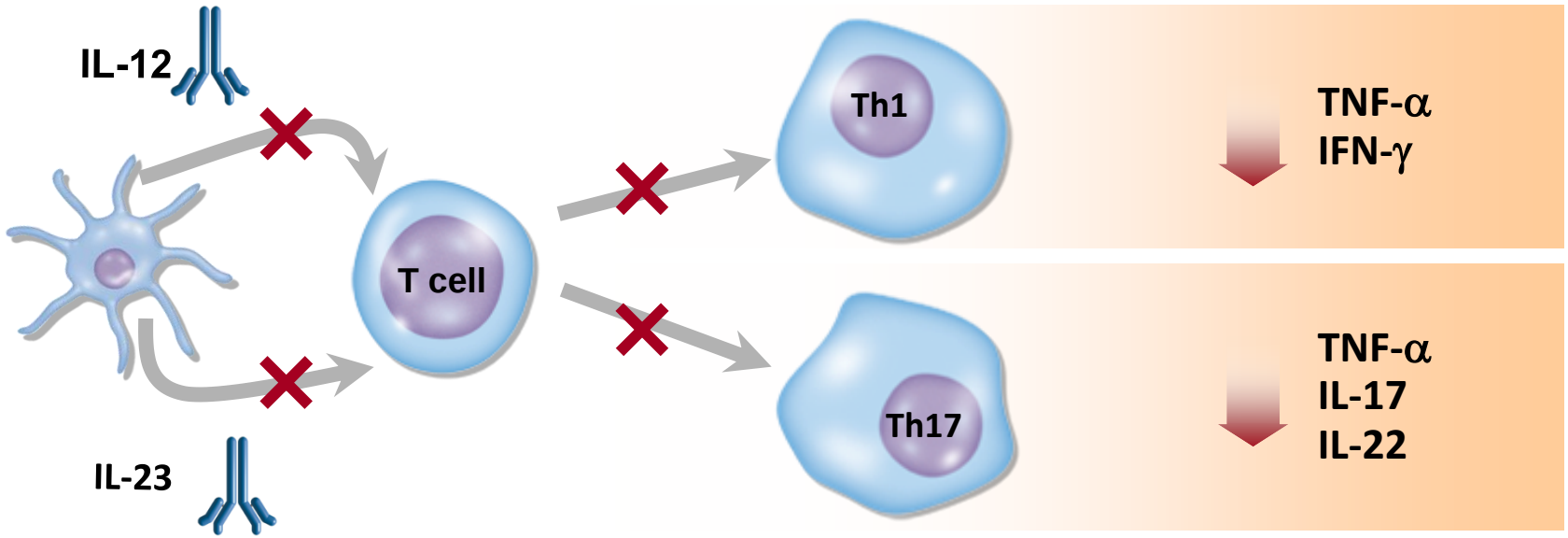
Razawy W, Eur. J. Immunol. 2018. 48: 220–229

Ustekinumab: Μηχανισμός δράσης

Το αντίσωμα συνδέεται στην υπομονάδα p40 των IL-12 και IL-23, αποτρέποντας την σύνδεσή με τους κυτταρικούς τους υποδοχείς στην επιφάνεια του κυττάρου

Αποτρέπεται η διαφοροποίηση και κλωνική επέκταση των Th1 και Th17

Μείωση της παραγωγής των κυτταροκινών της φλεγμονής



1. Gately MK, et al. Annu Rev Immunol. 1998;16:495-521.
2. Wilson NJ, et al. Nat Immunol. 2007;8(9):950-7.
3. Nickoloff BJ, Nestle FO. J Clin Invest. 2004;113(12):1664-75.
4. Nestle FO et al. J Invest Dermatol. 2004; 123:xiv-xxv.

Treatment With Ustekinumab, an IL-12/IL-23 Inhibitor

PSUMMIT 1*

	PBO (n=189)	UST 45 mg (n=205)	UST 90 mg (n=204)
ACR20	22.8	42.4‡	49.5‡
ACR50	8.7	24.9‡	27.9‡
ACR70	2.4	12.2§	14.2‡
PASI 75	11	57.2‡	62.4‡

PSUMMIT 2†

	PBO (n=80)	UST 45 mg (n=103)	UST 90 mg (n=105)
ACR20	20.2	43.7‖	43.8‖
ACR50	6.7	17.5¶	22.9
ACR70	2.9#	6.8	8.6
PASI 75	5	51.3‖	55.6‖

*Patients were bio-naive; †PSUMMIT 2 patients could have had previous anti-TNF experience (PBO: n=62 [59.6%]; 45 mg: n=60 [58.3%]; 90 mg: n=58 [55.2%]); ‡*P* <.0001 vs PBO; §*P* =.0001; ‖*P* <.001; ¶*P* <.05; #*P* <.01

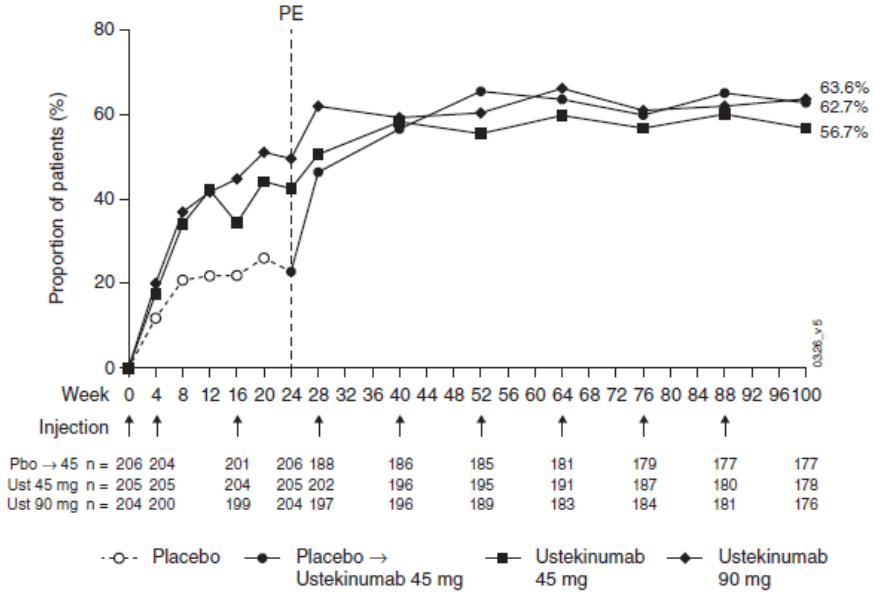
McInnes IB, et al. *Lancet*. 2013;382:780-789.
Ritchlin C, et al. *Ann Rheum Dis*. 2014;73:990-999.

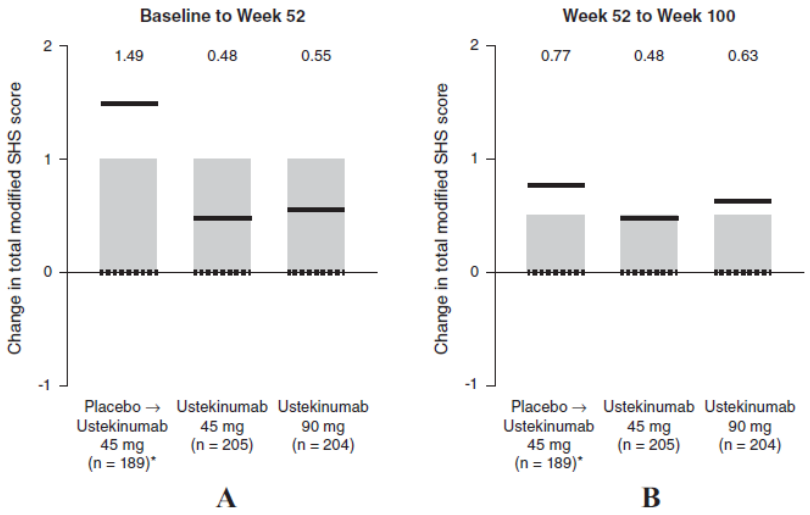
Ustekinumab: αποτελέσματα στα 2 έτη

Maintenance of Clinical Efficacy and Radiographic Benefit Through Two Years of Ustekinumab Therapy in Patients With Active Psoriatic Arthritis: Results From a Randomized, Placebo-Controlled Phase III Trial

ARTHUR KAVANAUGH,[1] LLUÍS PUIG,[2] ALICE B. GOTTLIEB,[3] CHRISTOPHER RITCHLIN,[4] SHU LI,[5] YUHUA WANG,[5] ALAN M. MENDELSOHN,[5] MICHAEL SONG,[5] YAOWEI ZHU,[5] PROTON RAHMAN,[6] AND IAIN B. McINNES,[7] ON BEHALF OF THE PSUMMIT 1 STUDY GROUP

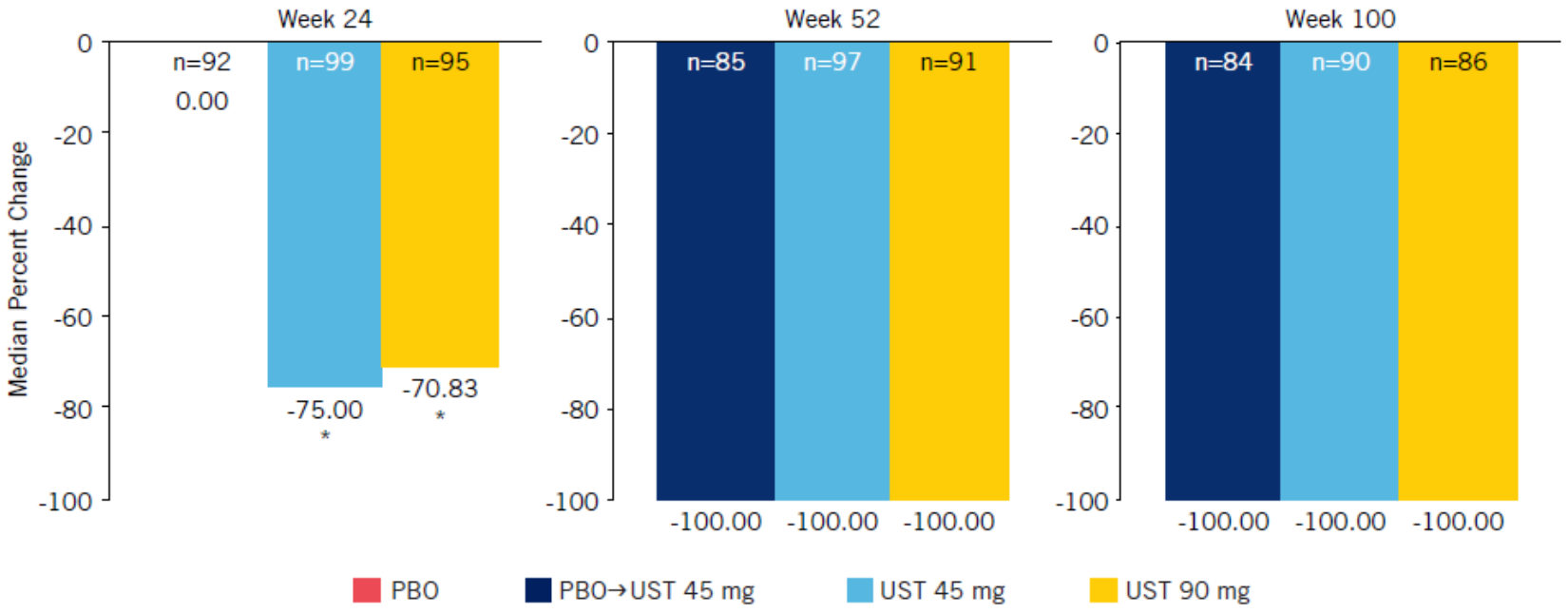
ACR20 απάντηση και μεταβολή ακτινολογικής εικόνας μετά διετή αγωγή με ustekinumab σε ασθενείς με ενεργό ΨΑ





Kavanaugh A, Arthritis Care Res 2015;67:1739-49

PSUMMIT I: Ποσοστό διάμεσης μεταβολής της βαθμολογίας της δακτυλίτιδας σε σχέση με την αρχική τις εβδομάδες 24, 52, και 100



*p<0.001

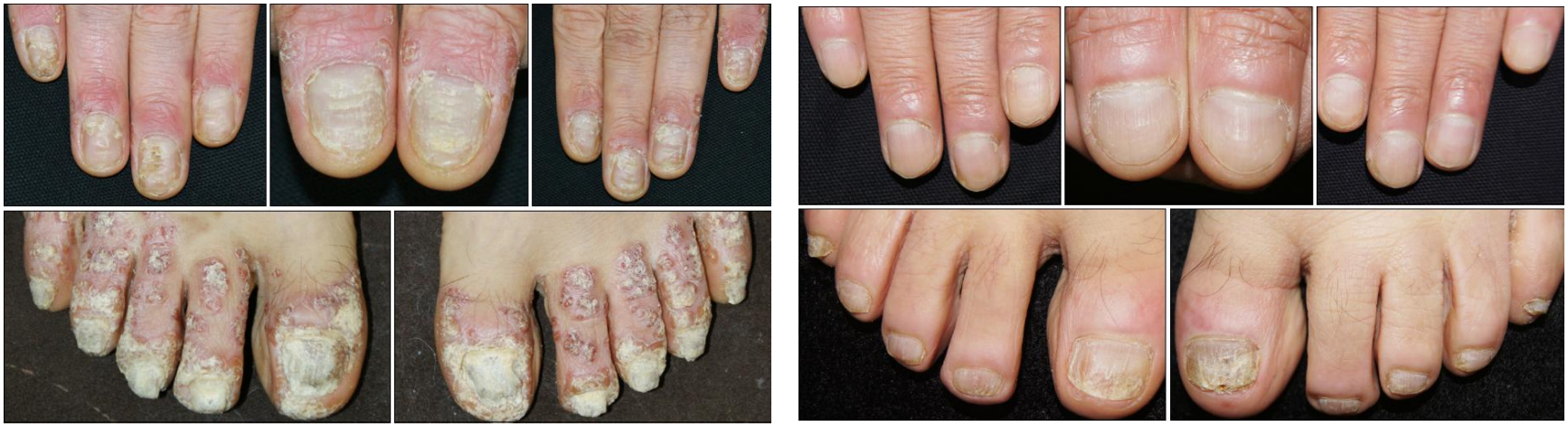
- Εκτίμηση της δακτυλίτιδας στα 20 δάκτυλα,
- Βαθμολογία 0-3 ανά δάκτυλο,
- Συνολική βαθμολογία 0-60 ανά ασθενή

Kavanaugh et al. Poster presentation, ACR 2013

Η ψωριασική ονυχία συνοδεύει συχνά την ΨΑ και είναι δύσκολο να θεραπευθεί

Πριν την αγωγή με Ustekinumab

Μετά την αγωγή με 4 ενέσεις Ustekinumab



Ασθενής με ΨΑ μικρών αρθρώσεων και παράλληλη ψωριασική ονυχία

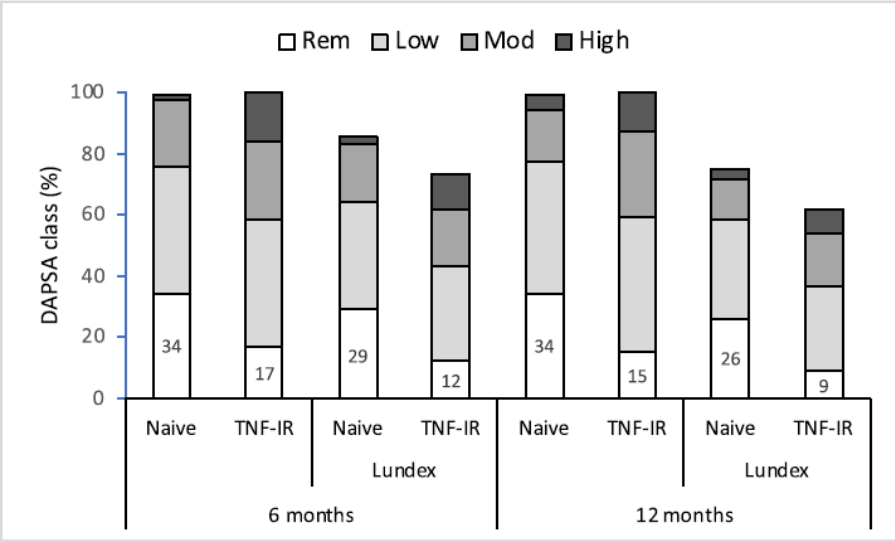
Byun SY, Ann Dermatol 2016; 28: 94-97

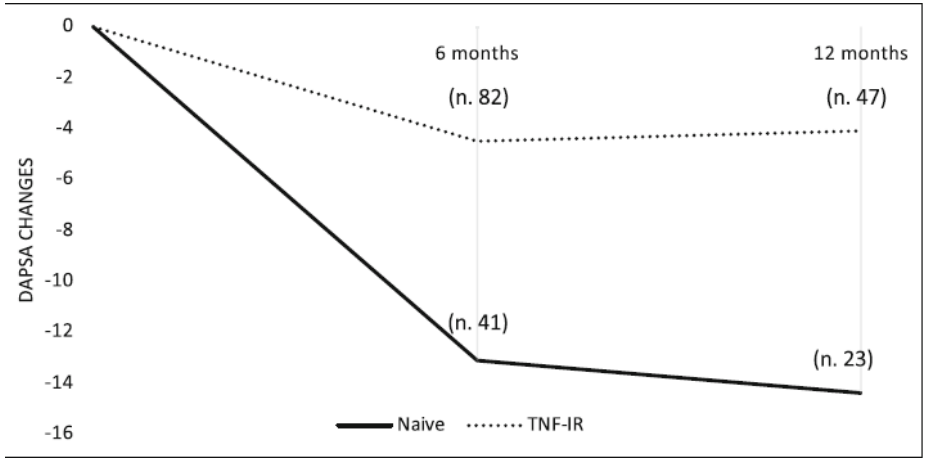
Clinical Rheumatology
https://doi.org/10.1007/s10067-018-3989-2

ORIGINAL ARTICLE

Drug survival and effectiveness of ustekinumab in patients with psoriatic arthritis. Real-life data from the biologic Apulian registry (BIOPURE)

Μακροχρόνια επιβίωση του ustekinumab στην ΨΑ

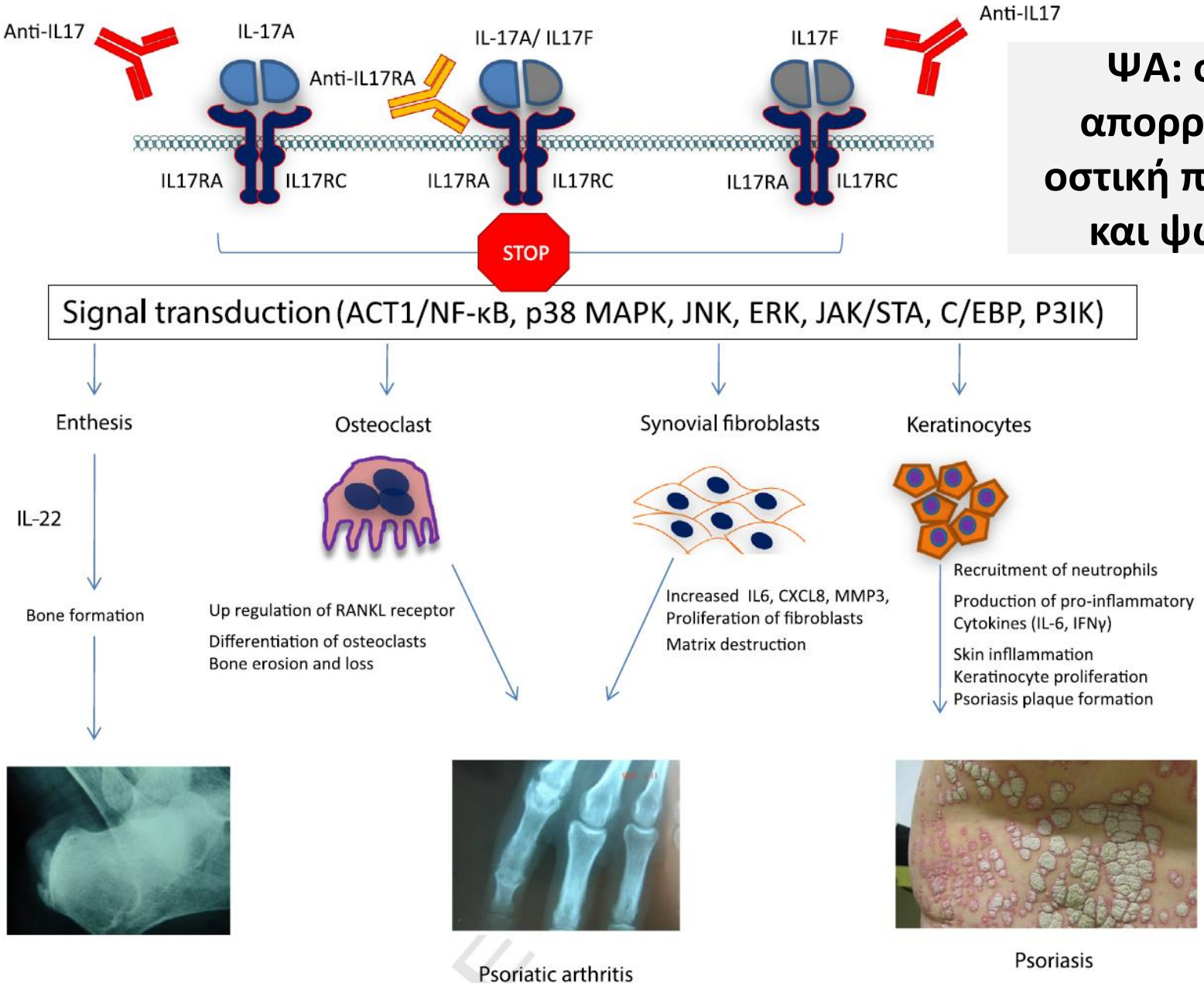




Of 160 PsA patients starting ustekinumab, 54 were naïve and 106 were TNF-IR. Twelve-month drug survival was significantly higher in naïve (87%) than in TNF-IR (68%, p = 0.01). Baseline co-therapy with methotrexate did not increase the persistence on ustekinumab.

Iannone F, Clin Rheumatol. 2018;37:667-675

ΨΑ: οστική απορρόφηση, οστική παραγωγή και ψωρίαση



Sakkas LI, Autoimmun Rev. 2017;16:10-15

Contents lists available at ScienceDirect

Autoimmunity Reviews

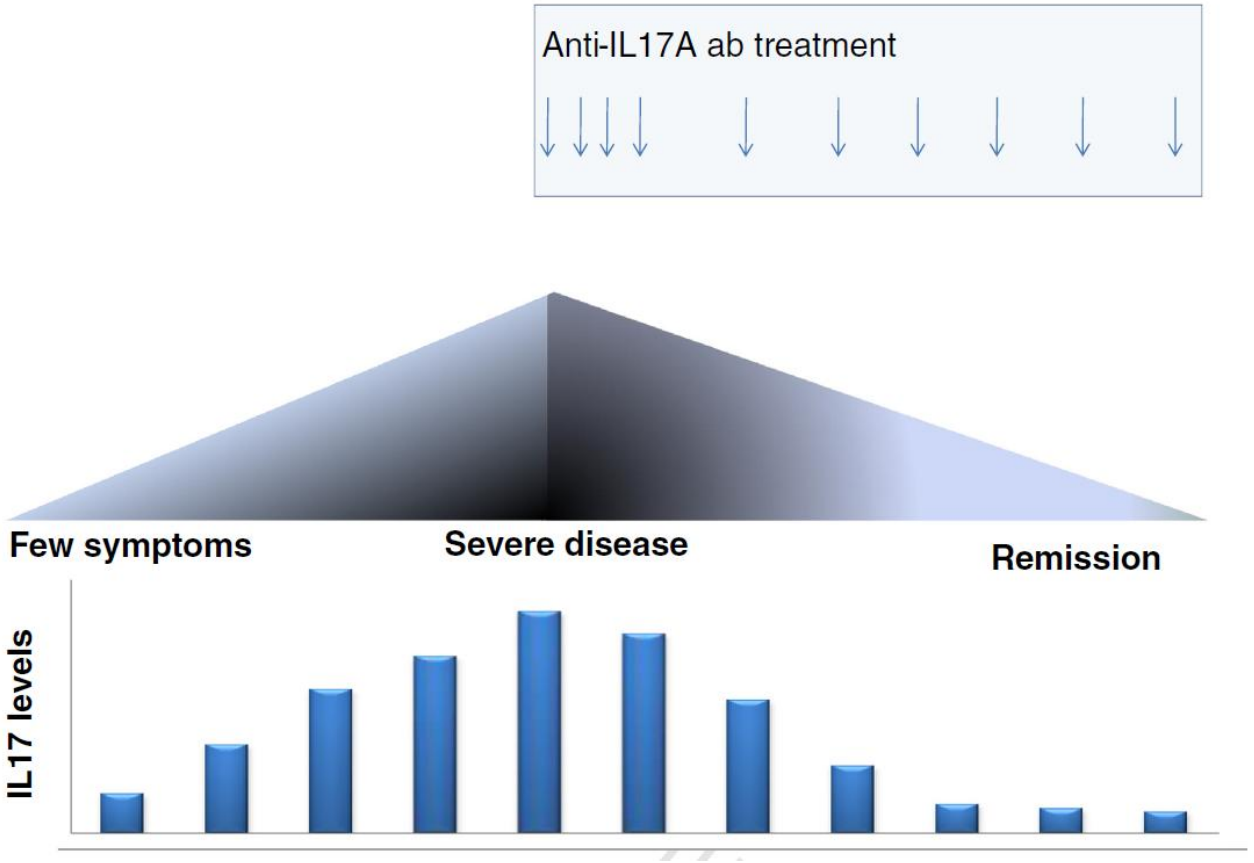
journal homepage: www.elsevier.com/locate/autrev

Review

Are psoriasis and psoriatic arthritis the same disease? The IL-23/IL-17 axis data

Lazaros I. Sakkas *, Dimitrios P. Bogdanos

Τα επίπεδα της IL-17 πριν και μετά την αγωγή αντιστοιχούν στην πορεία της νόσου



Sakkas LI, Autoimmun Rev. 2017;16:10-15

Lancet: Μελέτη Φάσης ΙΙΙ στην ΨΑ

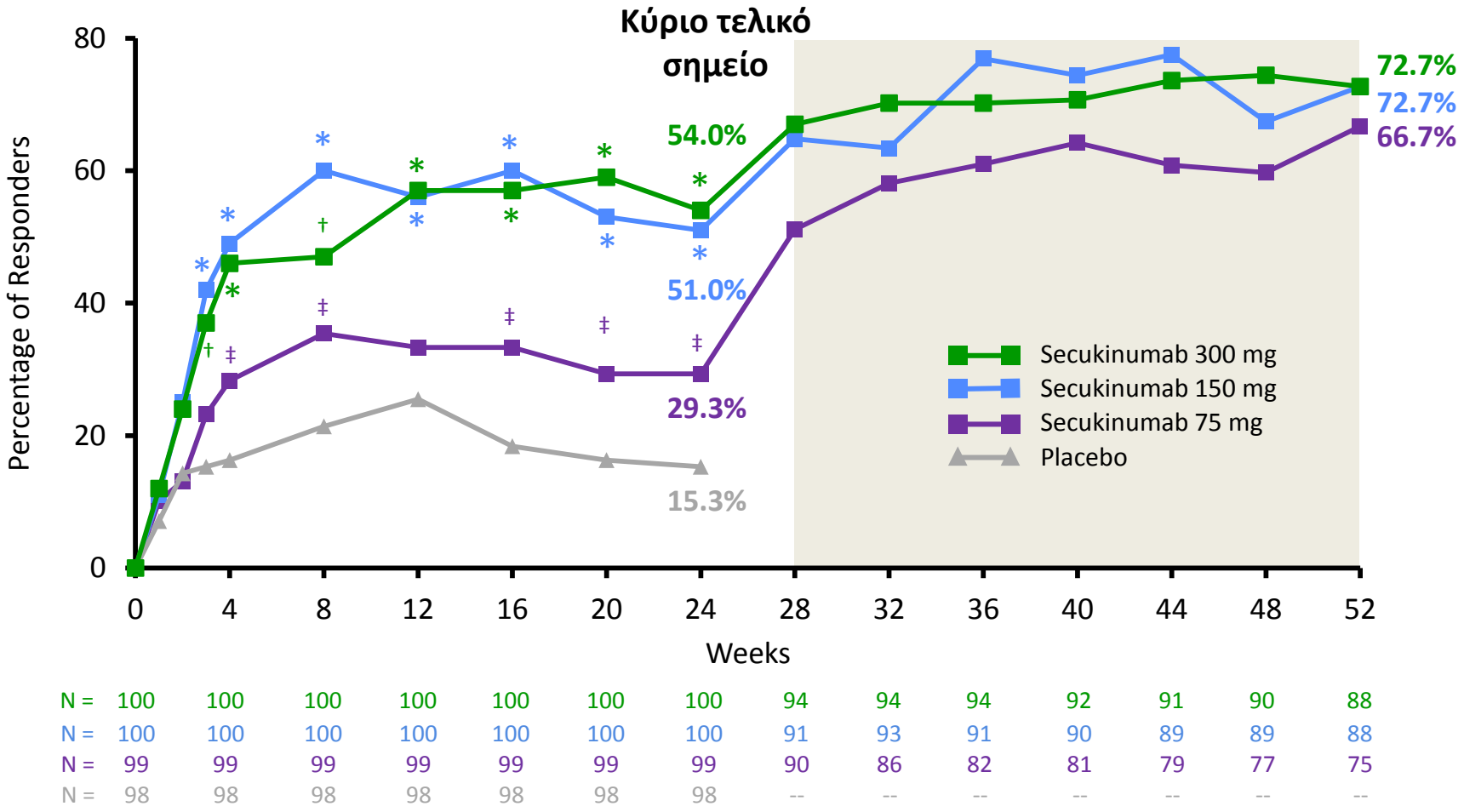
Secukinumab, a human anti-interleukin-17A monoclonal antibody, in patients with psoriatic arthritis (FUTURE 2): a randomised, double-blind, placebo-controlled, phase 3 trial

Iain B McInnes, Philip J Mease, Bruce Kirkham, Arthur Kavanaugh, Christopher T Ritchlin, Proton Rahman, Désirée van der Heijde, Robert Landewé, Philip G Conaghan, Alice B Gottlieb, Hanno Richards, Luminita Pricop, Gregory Ligozio, Manmath Patekar, Shephard Mpofu, on behalf of the FUTURE 2 Study Group

www.thelancet.com **Published online June 29, 2015** **http://dx.doi.org/10.1016/S0140-6736(15)61134-5**

McInnes IB, et al. *Lancet*. 2015. pii: S0140-6736(15)61134-5

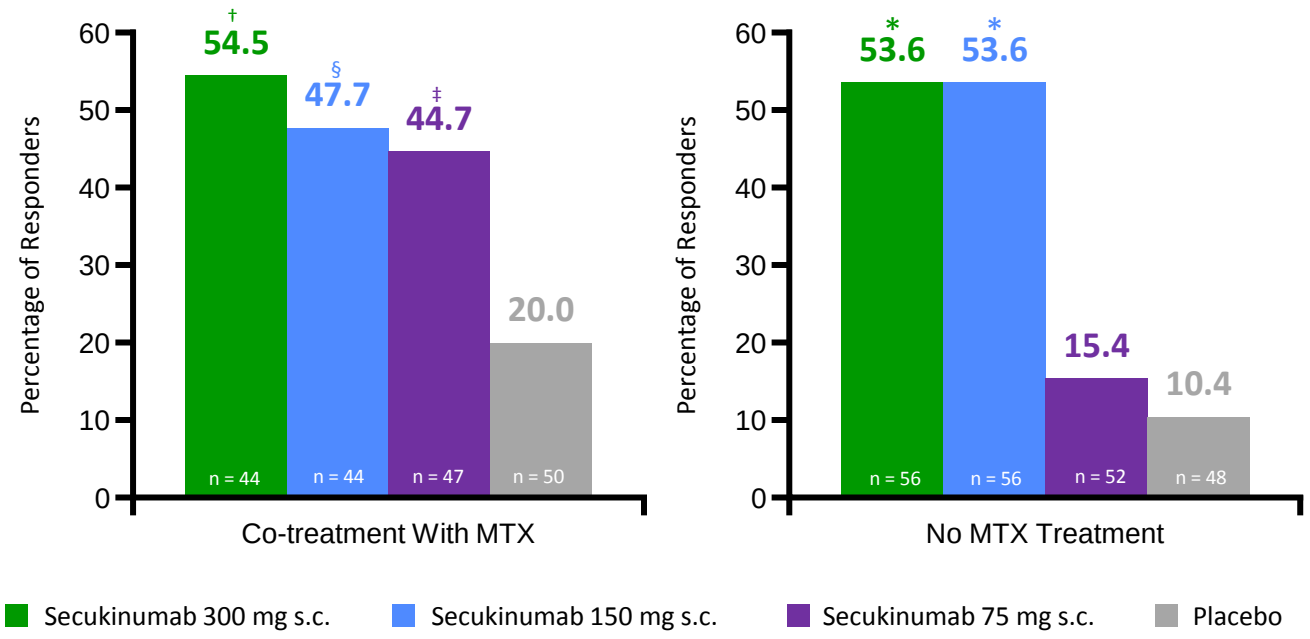
ACR 20 μέχρι την εβδομάδα 52



N =	100	100	100	100	100	100	100	94	94	94	92	91	90	88
N =	100	100	100	100	100	100	100	91	93	91	90	89	89	88
N =	99	99	99	99	99	99	99	90	86	82	81	79	77	75
N =	98	98	98	98	98	98	98	--	--	--	--	--	--	--

*$P < 0.0001$; †$P < 0.001$; ‡$P < 0.05$ vs. placebo (P-values at Week 24 adjusted for multiplicity of testing)
Nonresponder imputation up to Week 24. Observed data from Week 28–52
McInnes IB, et al. *Lancet.* 2015: E-pub ahead of print

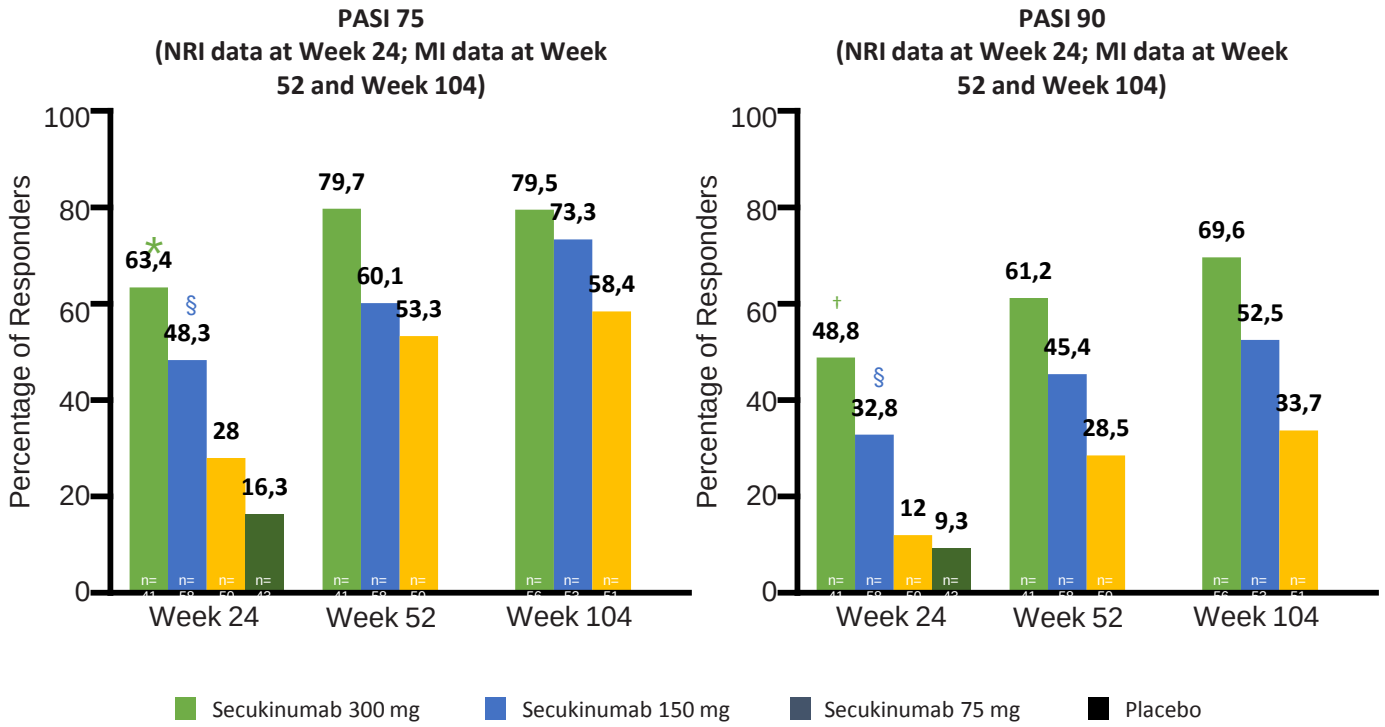
ACR 20 Ανταπόκριση στην εβδομάδα 24, με ή χωρίς την συγχορήγηση MTX



***P* < 0.0001; †*P* < 0.001; §*P* < 0.01; ‡*P* < 0.05 vs. placebo**
Missing values were imputed as nonresponse (nonresponder imputation) up to Week 52

McInnes IB, et al. *Lancet*. 2015 Jun 26. pii: S0140-6736(15)61134-5

FUTURE 2: Το Secukinumab 150 & 300 mg παρέχει σημαντική και παρατεταμένη βελτίωση στις κλίμακες PASI 75 και PASI 90 στην Εβδομάδα 104 (Συνολικός πληθυσμός)



McInnes IB, et al. *Lancet*. 2015;386:1137–46;
McInnes IB, et al. Poster presentation at the American College of Rheumatology (ACR) 2016 Annual Scientific Meeting, Washington DC, USA.

*$P < 0.0001$; †$P < 0.001$; §$P < 0.01$ vs. placebo
P-values at Week 24 adjusted for multiplicity of testing
Data from subjects with psoriasis ≥ 3% body surface area at baseline.

Original Article

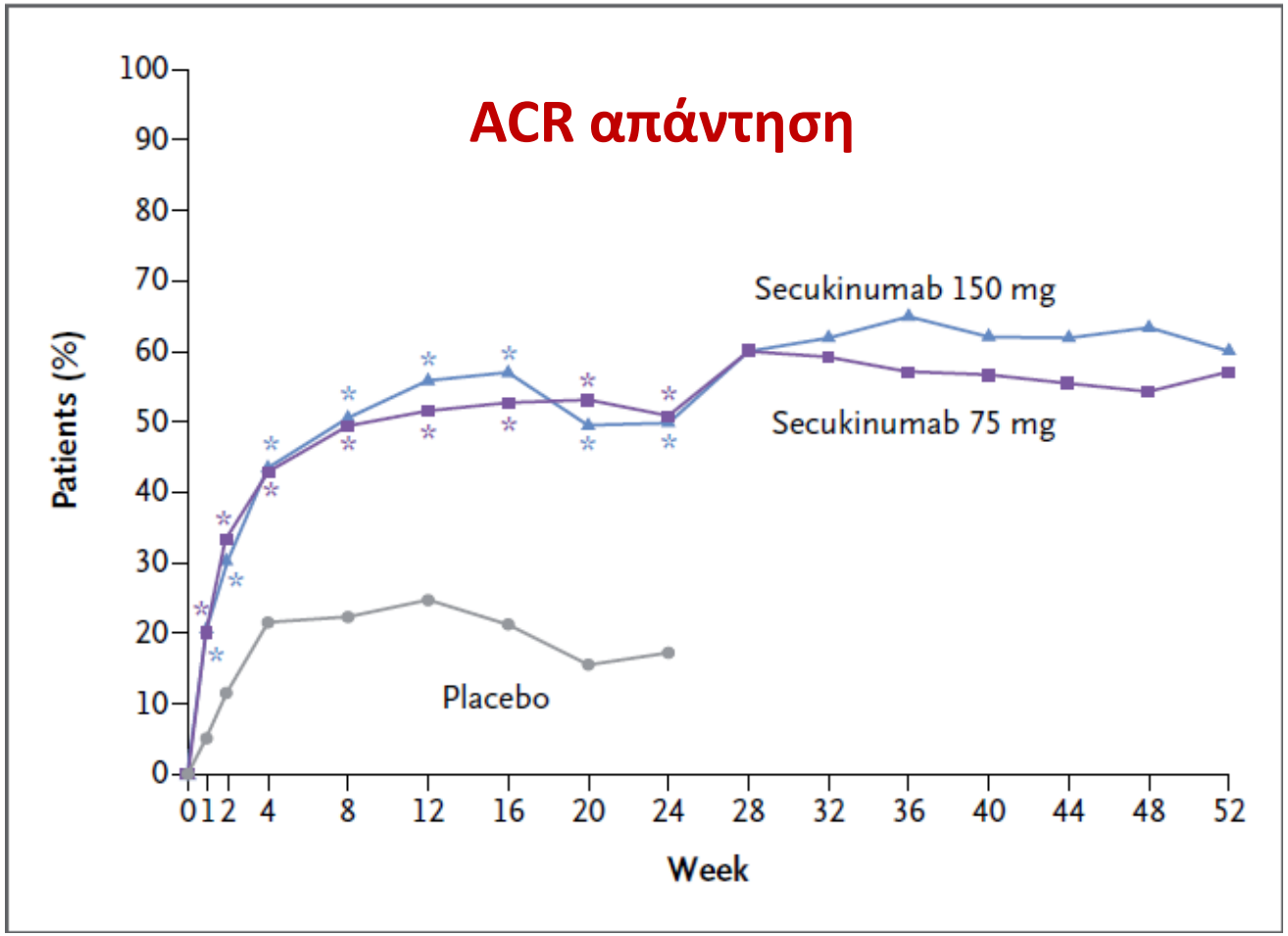
Secukinumab Inhibition of Interleukin-17A in Patients with Psoriatic Arthritis

Philip J. Mease, M.D., Iain B. McInnes, Ph.D., Bruce Kirkham, M.D., Arthur Kavanaugh, M.D., Proton Rahman, M.D., Désirée van der Heijde, M.D., Ph.D., Robert Landewé, M.D., Ph.D., Peter Nash, M.B., B.S., Luminita Pricop, M.D., Jiacheng Yuan, Ph.D., Hanno B. Richards, M.D., Shephard Mpofu, M.D., for the FUTURE 1 Study Group

N Engl J Med
Volume 373(14):1329-1339
October 1, 2015

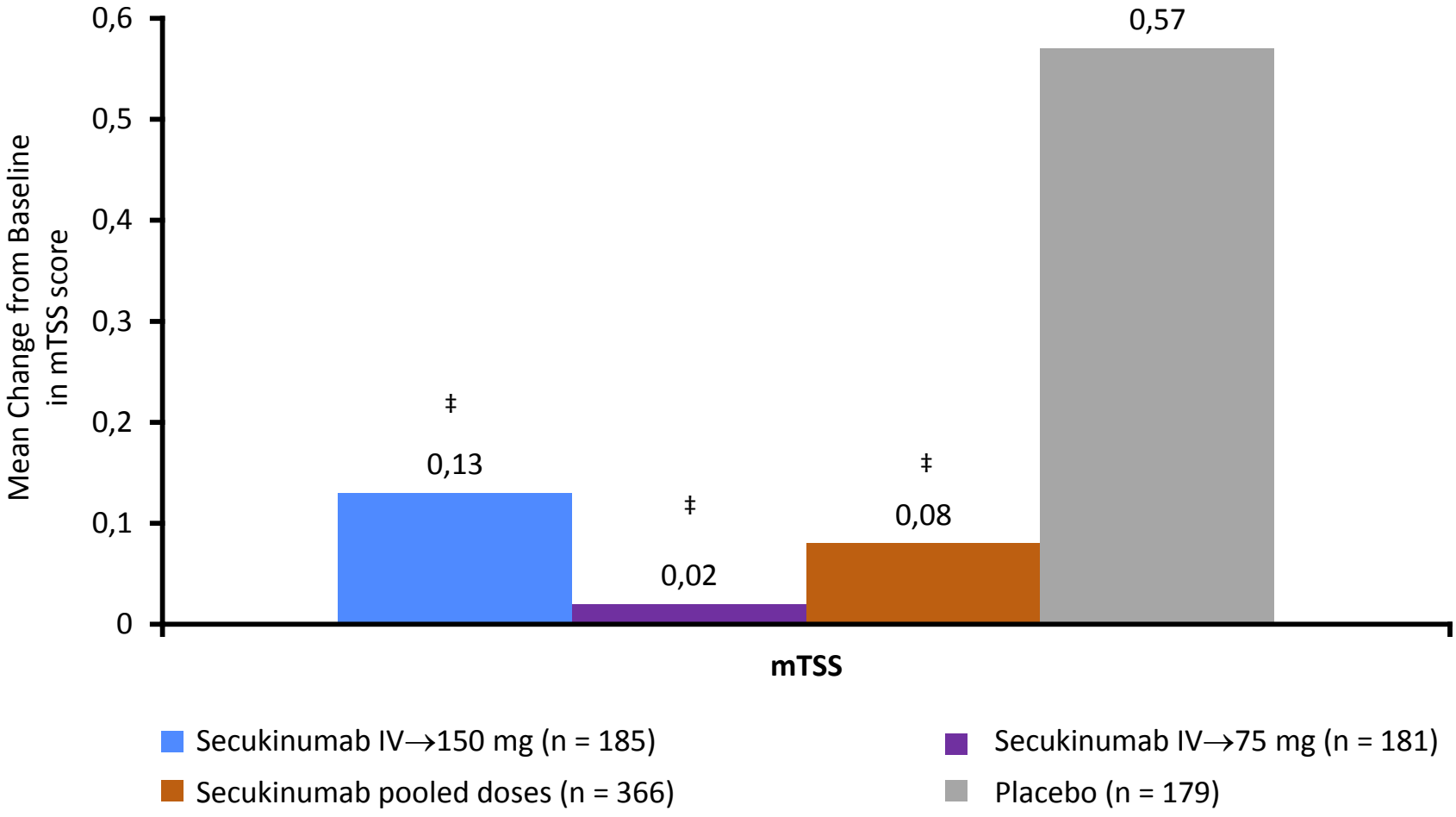
The NEW ENGLAND JOURNAL of MEDICINE

Secukinumab Inhibition of Interleukin-17A in Patients with Psoriatic Arthritis



Mease PJ, et al. *N Engl J Med* 2015;373:1329–39

Αναστολή της ακτινολογικής εξέλιξης της νόσου την εβδομάδα 24



‡P < 0.05 vs. placebo (*P*-values at Week 24 adjusted for multiplicity of testing)

Mease PJ, et al. *N Engl J Med* 2015;373:1329–39

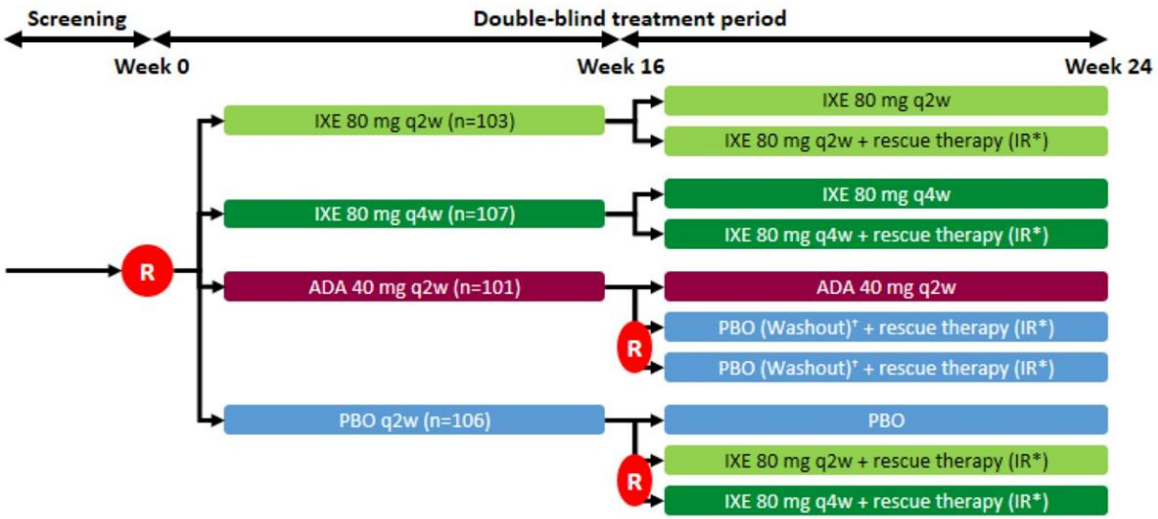
Ixekizumab, νέος IL-17 αναστολέας σε μελέτη ενεργού ΨΑ έναντι placebo και Adalimumab

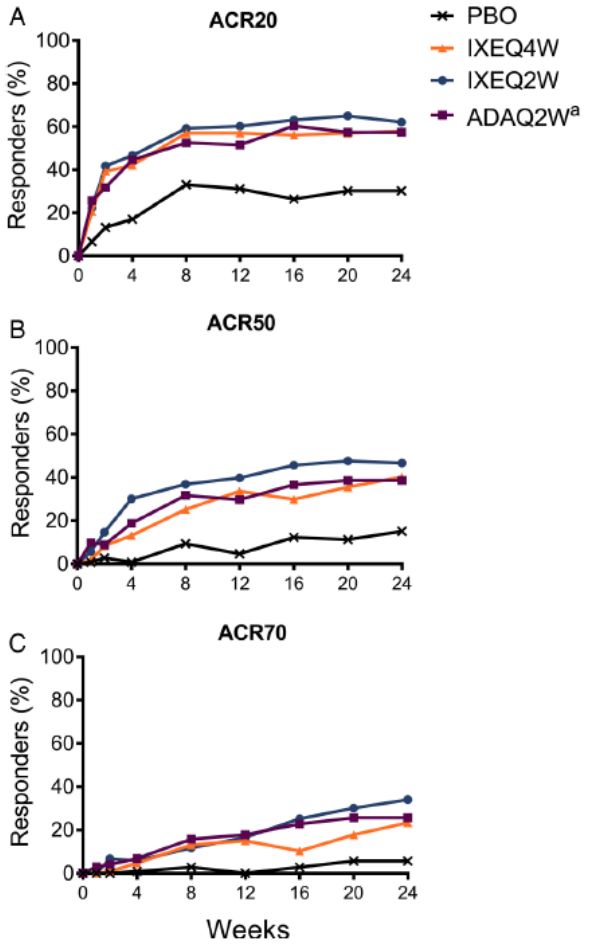
ARD Online First, published on September 6, 2016 as 10.1136/annrheumdis-2016-209709
Clinical and epidemiological research

OPEN ACCESS

EXTENDED REPORT

Ixekizumab, an interleukin-17A specific monoclonal antibody, for the treatment of biologic-naive patients with active psoriatic arthritis: results from the 24-week randomised, double-blind, placebo-controlled and active (adalimumab)-controlled period of the phase III trial SPIRIT-P1

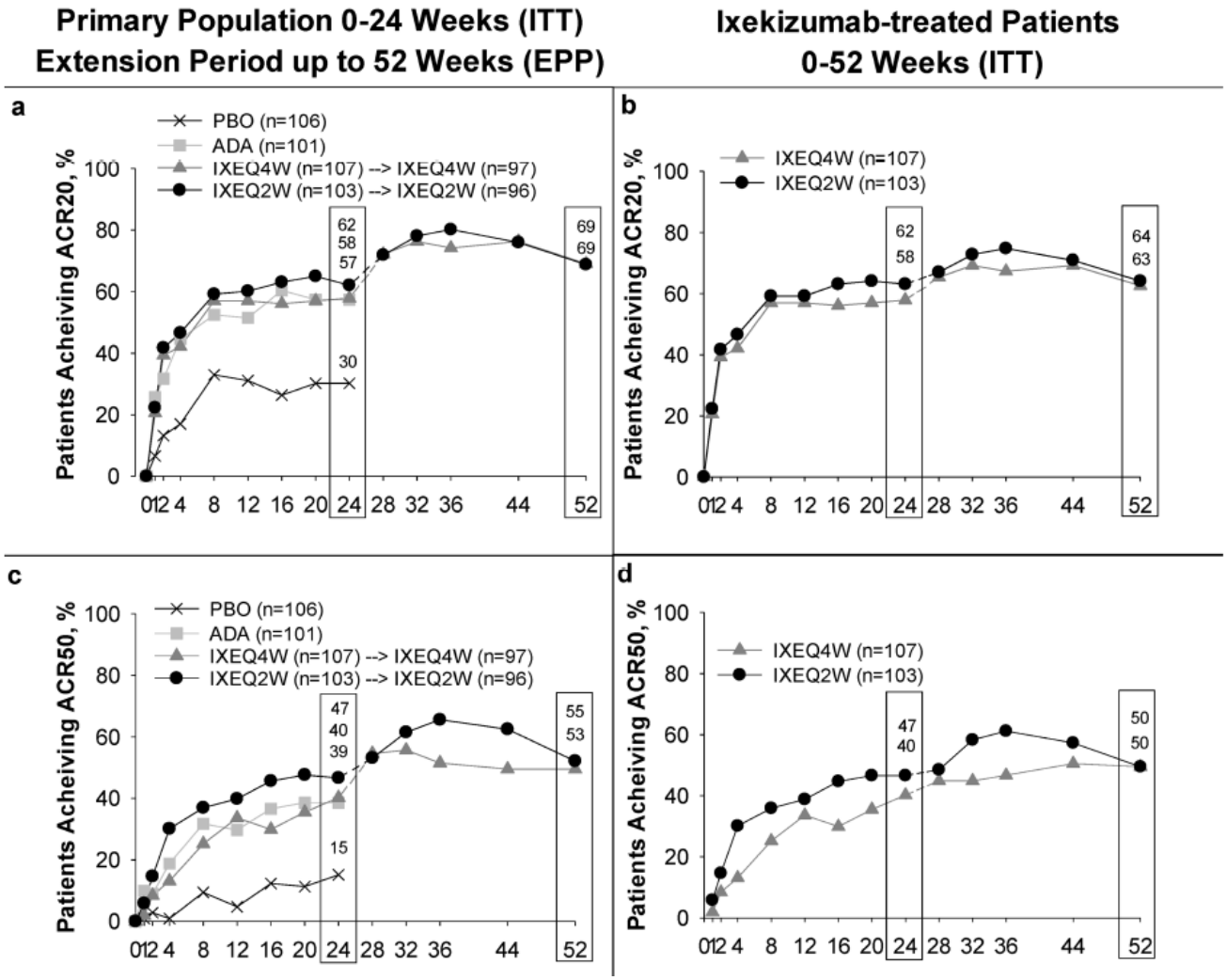




Mease PJ, et al. Ann Rheum Dis 2016;0:1–9

The Journal of Rheumatology

Ixekizumab, νέος IL-17 αναστολέας σε μελέτη ενεργού ΨΑ έναντι placebo και Adalimumab

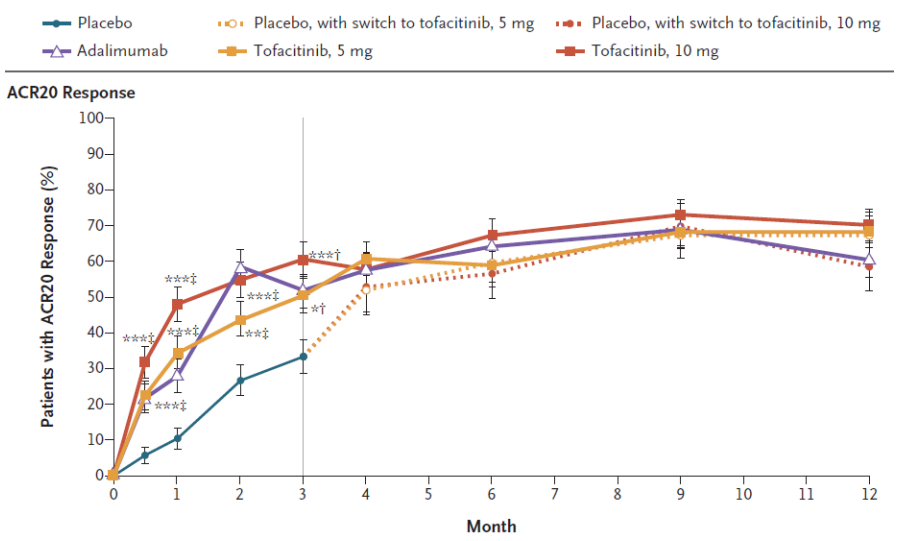


Désirée van der Heijde, J Rheumatol 2018;45;367-377

ORIGINAL ARTICLE

Tofacitinib or Adalimumab versus Placebo for Psoriatic Arthritis

P. Mease, S. Hall, O. FitzGerald, D. van der Heijde, J.F. Merola, F. Avila-Zapata, D. Cieślak, D. Graham, C. Wang, S. Menon, T. Hendrikx, and K.S. Kanik

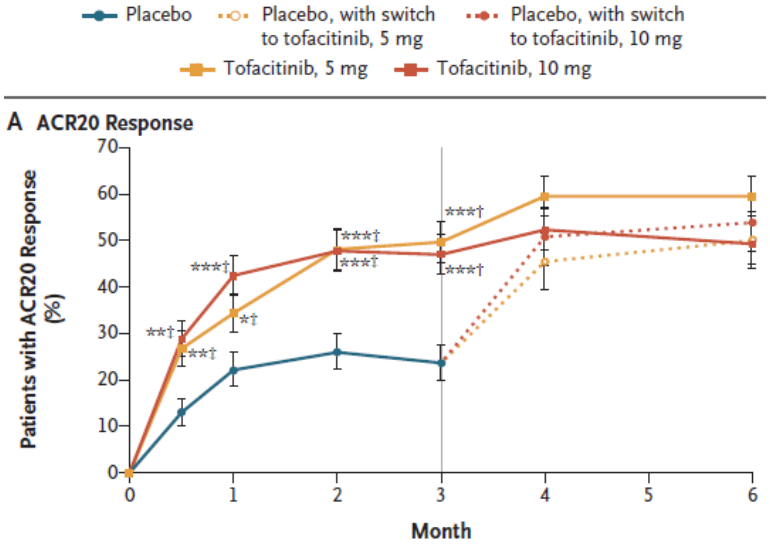


Mease P, N Engl J Med 2017;377:1537-50

ORIGINAL ARTICLE

Tofacitinib for Psoriatic Arthritis in Patients with an Inadequate Response to TNF Inhibitors

Dafna Gladman, M.D., William Rigby, M.D., Valderilio F. Azevedo, M.D., Ph.D., Frank Behrens, M.D., Ricardo Blanco, M.D., Andrzej Kaszuba, M.D., Ph.D., Elizabeth Kudlacz, Ph.D., Cunshan Wang, Ph.D., Sujatha Menon, Ph.D., Thijs Hendrikx, Ph.D., and Keith S. Kanik, M.D.



Dafna Gladman, N Engl J Med 2017;377:1525-36

Tofacitinib στην ΨΑ

Βιολογικοί παράγοντες στην ΨΑ

	Psoriatic arthritis	Psoriasis	Ankylosing spondylitis	Inflammatory bowel disease
bDMARDs				
Etanercept	EMA, FDA	EMA, FDA	EMA, FDA	PoC (for CD) failed
Infliximab	EMA, FDA	EMA, FDA	EMA, FDA	EMA, FDA
Adalimumab	EMA, FDA	EMA, FDA	EMA, FDA	EMA, FDA
Golimumab	EMA, FDA	..	EMA, FDA	EMA (for UC), FDA (for UC)
Certolizumab pegol	EMA, FDA	Phase 3	EMA, FDA	FDA (for CD)
Ustekinumab	EMA, FDA	EMA, FDA	Phase 3 failed	EMA (for CD), FDA (for CD)
Secukinumab	EMA, FDA	EMA, FDA	EMA, FDA	PoC (for CD) failed
Ixekizumab	EMA, FDA	EMA, FDA	Phase 3	..
Brodalumab	Phase 2	EMA, FDA	..	..
Guselkumab	Phase 2	EMA, FDA	..	..
Abatacept	EMA, FDA	Phase 2	PoC failed	PoC (for CD and UC) failed
tsDMARDs				
Apremilast	EMA, FDA	EMA, FDA	Phase 3 failed	Phase 2 (for UC)
Tofacitinib	FDA	Phase 3	Phase 2	Phase 2 failed

Filip Van den Bosch, Laura Coates, Lancet 2018; 391: 2285–94

Current Rheumatology Reports (2018) 20:36
https://doi.org/10.1007/s11926-018-0746-0

PSORIATIC ARTHRITIS (J SCHER, SECTION EDITOR)

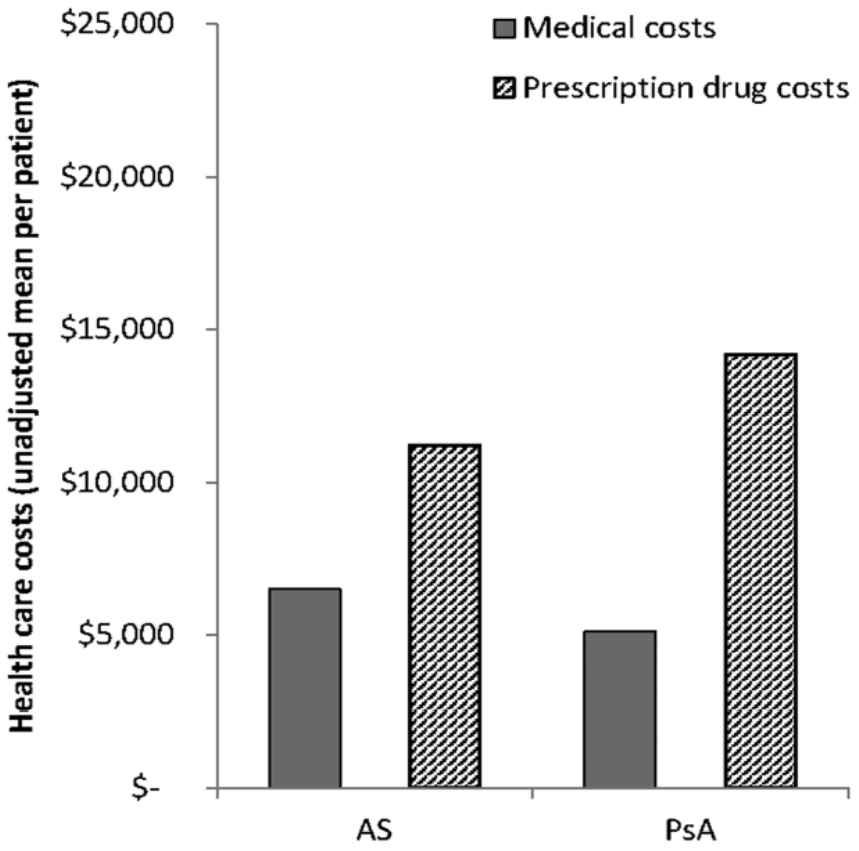
Novel Therapeutics in Psoriatic Arthritis. What Is in the Pipeline?

Νέα φάρμακα σε προχωρημένο στάδιο κλινικής έρευνας στην ΨΑ

- **Brodalumab** inhibits IL-17RA, and hence potentially exerts a broader inhibition including IL-17A, IL-17F, and IL-25 (IL-17E).
- **Bimekizumab** is a novel humanized monoclonal antibody that binds both IL- 17A and IL-17F
- **Guselkumab**, a new IL-23 inhibitor (IL-23i) monoclonal antibody
- **Risankizumab** is another IL-23i, a humanized IgG1 monoclonal antibody
- **Tildrakizumab** also a humanized IgG1 antibody targeting IL-23 p19
- **Clazakizumab**, a monoclonal antibody against IL-6
- **IV golimumab** in GO-VIBRANT study, had significantly greater improvements in the signs and symptoms of PsA
- **Filgotinib** is a new selective JAKi directed against JAK1
- **Upadacitinib** (ABT-494) is another selective JAK1 inhibitor
- **Neihulizumab**/AbGn-168H is a humanized antibody which preferentially induces apoptosis of late-stage activated T cells

Elalouf O, Current Rheumatology Reports (2018) 20:36

Συνολικό ετήσιο ιατρικό και φαρμακευτικό κόστος της ψωριασικής αρθρίτιδας και αγκυλοποιητικής σπονδυλίτιδας



Μέσο ιατρικό κόστος κατά την διάρκεια παρακολούθησης 12 μηνών από βάση δεδομένων με χιλιάδες ασθενείς στις ΗΠΑ. Στο ιατρικό κόστος υπολογίζονται οι νοσηλείες, οι επισκέψεις στα επείγοντα και στα εξωτερικά ιατρεία. Τα συνταγογραφούμενα φάρμακα περιλαμβάνουν βιολογικά και μη βιολογικά φάρμακα, οι τιμές σε δολάρια ΗΠΑ.

Greenberg JD, Rheumatol 2016;43:88–96

RHEUMATOLOGY

53, 263, 300

Original article

doi:10.1093/rheumatology/keu398

Ανεκπλήρωτες ανάγκες σε PA, ΨΑ

Quality of life and unmet needs in patients with inflammatory arthropathies: results from the multicentre, observational RAPSODIA study

N (%)	Overall (n = 741)	RA (n = 327)		PsA (n = 214)	
		Biologic treated (n = 220)	Biologic eligible (n = 107)	Biologic treated (n = 147)	Biologic eligible (n = 67)
Pain/swelling in hand/foot joint	444 (59.9)	150 (68.2)	97 (90.7)	80 (54.4)	54 (80.6)
Pain in different joint	333 (44.9)	87 (39.5)	67 (62.6)	56 (38.1)	37 (55.2)
Lumbar pain	330 (44.5)	74 (33.6)	46 (43.0)	52 (35.4)	36 (53.7)
Cervical pain	332 (44.8)	77 (35.0)	59 (55.1)	59 (40.1)	31 (46.3)
Reduction of joint movement	440 (59.4)	118 (53.6)	86 (80.4)	71 (48.3)	49 (73.1)
Joint stiffness on waking up	443 (59.8)	109 (49.5)	86 (80.4)	78 (53.1)	50 (74.6)
Limited dexterity	477 (64.4)	135 (61.4)	80 (74.8)	88 (59.9)	47 (70.1)
Difficulty in taking or gripping/squeezing something	376 (50.7)	131 (59.5)	88 (82.2)	65 (44.2)	38 (56.7)
Limited ability for daily activities	357 (48.2)	109 (49.5)	69 (64.5)	56 (38.1)	39 (58.2)
Difficulty walking	330 (44.5)	99 (45.0)	64 (59.8)	56 (38.1)	38 (56.7)
Decreased ability in leisure activities	377 (50.9)	105 (47.7)	60 (56.1)	68 (46.3)	36 (53.7)
Difficulty sleeping	270 (36.4)	69 (31.4)	56 (52.3)	42 (28.6)	33 (49.3)
Fatigue	463 (62.5)	126 (57.3)	82 (76.6)	87 (59.2)	49 (73.1)
Weakness	335 (45.2)	94 (42.7)	68 (63.6)	57 (38.8)	33 (49.3)
Malaise	240 (32.4)	67 (30.5)	51 (47.7)	36 (24.5)	26 (38.8)
Fever	26 (3.5)	6 (2.7)	5 (4.7)	2 (1.4)	5 (7.5)

Rheumatology key messages

- Collaborative care improves outcomes in patients with rheumatic diseases.
- Italian patients with rheumatic disease have a number of unmet health care needs.
- Biologic therapy improves outcomes and work productivity in patients with rheumatic diseases.

Giacomelli R, Rheumatology (Oxford). 2015;54:792-7

RHEUMATOLOGY

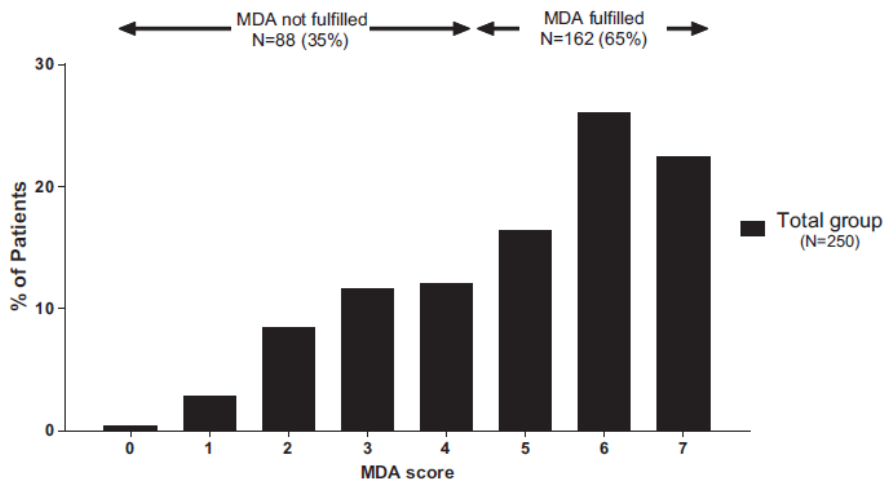
Original article

doi:10.1093/rheumatology/kex183

Residual disease activity in psoriatic arthritis: discordance between the rheumatologist's opinion and minimal disease activity measurement

Υπολειπόμενη δραστηριότητα της νόσου στην ΨΑ

Fig. 1 Minimal disease activity score



Patients were considered not in MDA (MDA⁻) with a score of 0, 1, 2, 3 or 4 points and in MDA (MDA⁺) with a score of 5, 6 or 7 points. MDA: minimal disease activity.

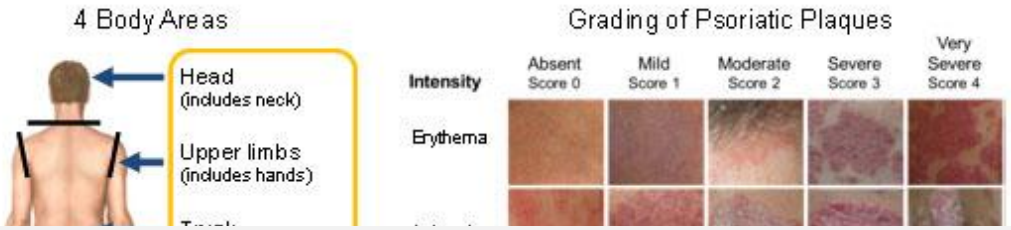
Ένας ασθενής ταξινομείται σαν ελάχιστη δραστηριότητα νόσου όταν πληροί 5 από τα 7 κριτήρια: αριθμός επώδυνων αρθρώσεων ≤1; διογκωμένων ≤ 1; PASI ≤1 ή επιφάνεια σώματος ≤3; Αναλογική κλίμακα πόνου ασθενή (VAS) ≤15; Συνολική εκτίμηση δραστηριότητας νόσου ασθενή VAS ≤20; Ερωτηματολόγιο εκτίμησης υγείας ≤0.5; Επώδυνα σημεία ενθέσεων ≤1.

MDA: Minimal Disease Activity (GRAPPA)

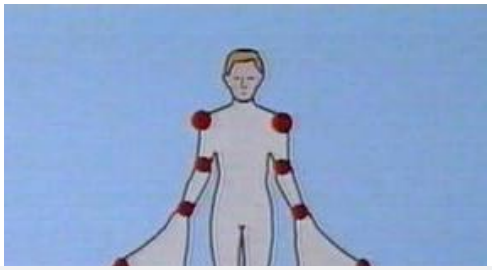
van Mens LJJ, Rheumatology (Oxford). 2018;57:283-290

Αξιολόγηση του θεραπευτικού αποτελέσματος στην ΨΑ

PASI



DAS28



Επιπλέον στην ΨΑ:

- **disease activity in psoriatic arthritis (DAPSA)**
- **clinical disease activity in psoriatic arthritis (cDAPSA)**
- **minimal disease activity (MDA)**
- **psoriatic arthritis disease activity score (PASDAS)**
- **very low disease activity (VLDA) for residual disease activity**

	• Physician global assessment • Patient pain assessment • Physical disability score • Serum levels of acute phase reactants

	And
	• Improvement in at least 1 of 2 joint scores • No worsening in any criteria

Ανεκπλήρωτες ανάγκες στην ΨΑ

Domain	Unmet need	Current position	Implication
Genetics	Are there any genetic markers for severity or treatment response?	HLA subtypes including *B*27:05:02* (*enthesitis*, dactylitis and symmetrical sacroiliitis), *B*08:01:01-C*07:01:01* (*joint fusion, asymmetrical sacroiliitis*), linked to individual phenotypes in PsA [11] HLA-B39, HLA-B27 in the presence of HLA-DR7 and HLA-DQw3 in the absence of HLA-DR7 associated with disease progression [30]	Clinicians could use genetic information for prognosis and targeted treatment
Triggers	What is the exact pathogenic trigger behind the development of PsA?	Role of microbiome in triggering PsA, with lack of gut biodiversity in PsA patients possibly linked to inflammation [16, 17]	Microbiome might provide therapeutic target
Biomarkers	Are there any biomarkers to aid diagnosis and predict severity or treatment response?	Potential serum biomarkers include ITGB5, M2BP and CRP [12]. Urinary biomarkers could identify inflammatory articular disease [23]	Can be used by non-specialists to aid in diagnosis and to support personalised approach to treatment
Screening	Are there any tools which are both highly specific and sensitive for detecting early PsA?	Current questionnaires, e.g. PEST have low specificity [31]	Earlier diagnosis and better prognosis
Screening	Can pre-disease be identified by imaging?	Ultrasound identifies enthesial abnormalities, but exact implications of this remains unclear	Earlier diagnosis and better prognosis
Diagnosis	Recognition of inflammatory musculoskeletal disease in application of CASPAR criteria	No reliable clinical scoring system	Easier application of CASPAR in studies and in clinical practice
Dactylitis	What is the trigger behind dactylitis?	Theory that trauma may lead to dactylitis (deep Koebner phenomenon) No evidence that plantar pressure important in toe dactylitis [19]	Reduction of risk of trauma may reduce dactylitis prevalence
Enthesitis	No reliable clinical indices	Current indices have poor correlation to imaging enthesitis except at the Achilles	More reliable outcome measurements for enthesitis
Treatment	Are current treatment strategies adequate?	TICOPA completed [18], etanercept and methotrexate combination study [clinicaltrials.gov NCT02376790] underway, golimumab and methotrexate studies for use in early PsA [32] and for treatment of dactylitis [clinicaltrials.gov NCT02065713] ongoing. Other studies on drug sequencing, i.e. which class of drug for first biologic	Updated treatment guidelines with more effective therapeutic strategies particularly for early PsA and for domains such as dactylitis
Treatment	Does early intensive treatment improve outcomes?	TICOPA improved outcomes at 12 months but long term unknown Observational data suggests that earlier treatment improves long-term outcomes	Better outcomes
Treatment	Are systemic steroids (intra-articular and intramuscular) effective without causing skin flare?	Anecdotal reports of skin flare with the use of oral steroids TICOPA demonstrated small numbers of individual flares but no group differences [33]	Evidence for use of this class of drugs
Treatment	Lack of evidence for conventional synthetic DMARDs	Weak evidence for sulphasalazine and methotrexate, only one study for leflunomide	Evidence for use of this class of drugs
Treatment	Are there any advances in treatment which could be applied to PsA?	Studies examining new treatments which include bimekizumab(IL-17 ClinicalTrials.gov identifier NCT02141763), metformin (as add-on therapy ClinicalTrials.gov identifier NCT02188654), brodalumab (IL-17 receptor A ClinicalTrials.gov identifier NCT02024646), guselkumab (IL-23 inhibitor ClinicalTrials.gov identifier NCT02319759), faecal microbiota transplantation (ClinicalTrials.gov identifier NCT03058900), neihulizumab (T cell apoptosis inducing antibody ClinicalTrials.gov identifier NCT02267642), filgotinib (JAK 1 inhibitor ClinicalTrials.gov identifier NCT03101670), risankizumab (IL-23A ClinicalTrials.gov identifier NCT02986373),upadacitinib (JAK 1 inhibitor ClinicalTrials.gov identifier NCT03104374), tildrakizumab (IL-23 inhibitor ClinicalTrials.gov identifier NCT02980692), GSK3050002 (CCL20 blocker ClinicalTrials.gov identifier NCT02671188), perakizumab (IL-17A ClinicalTrials.gov identifier NCT01199809)	Additional therapeutic options available if treatment failure or intolerance to traditional therapies

Mahmood F, Clin Rheumatol. 2018;37:297-305

RHEUMATOLOGY

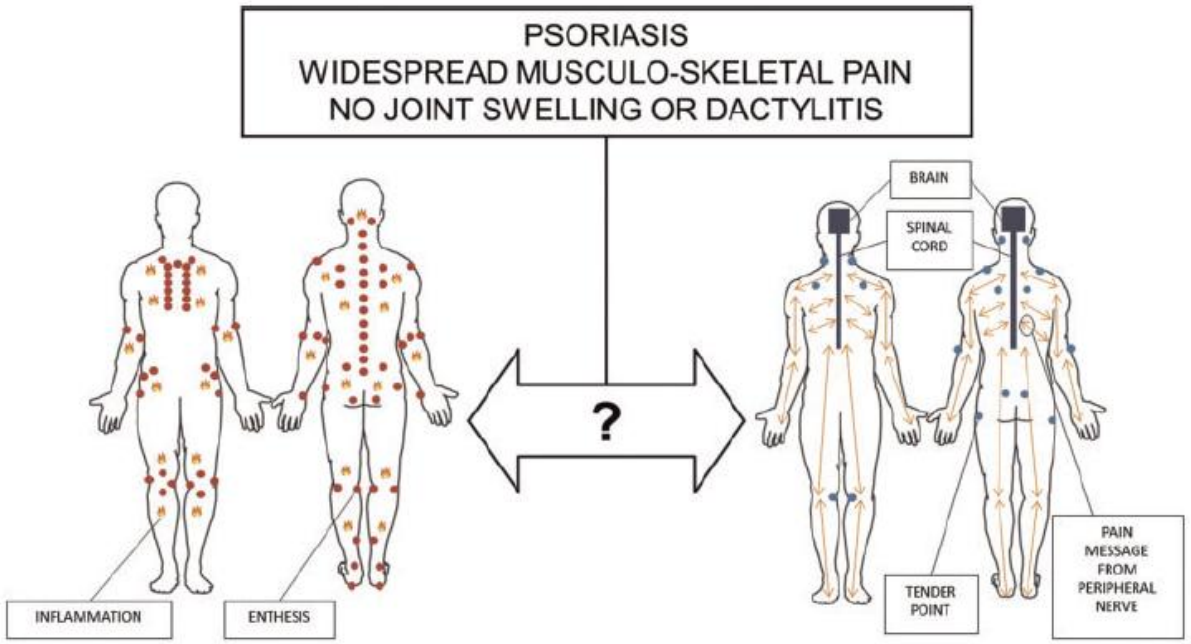
Review

doi:10.1093/rheumatology/kex079

The problem in differentiation between psoriatic-related polyenthesitis and fibromyalgia

Antonio Marchesoni[1], Gabriele De Marco[2,3], Mira Merashli[4], Frank McKenna[5], Ilaria Tinazzi[6], Helena Marzo-Ortega[2,3] and Dennis G. McGonagle[2,3]

Ανεκπλήρωτες ανάγκες στην ΨΑ: Ενθεσίτιδα ή Ινομυαλγία;



MULTI-ENTHESITIC PsA

- Stiffness after prolonged immobility
- Anterior chest wall pain
- Heel swelling
- Favourable response to:
  - NSAIDs
  - Biologics
  - DMARDs?

FMS

- Somatoform symptoms:
  - Sleep disturbancies
  - Cognitive impairment
  - Anxiety
  - Migraine
  - Raynaud's phenomenon
  - Irritable bowel
- Indifference to emotional stimulations

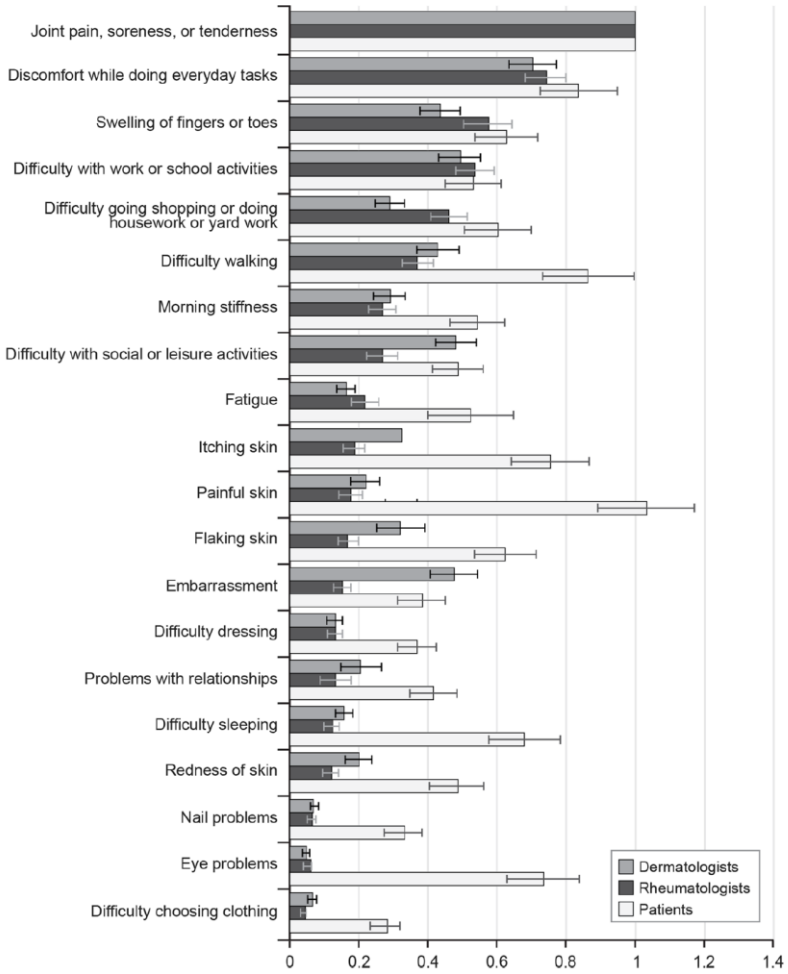
Features related to enthesitic psoriatic arthritis (PsA, on the left) and FM syndrome (FMS, on the right). The two conditions could dynamically fade into each other over time. Inflammatory markers, such as CRP, may be normal. Sensitive imaging investigations may yield uncertainties.

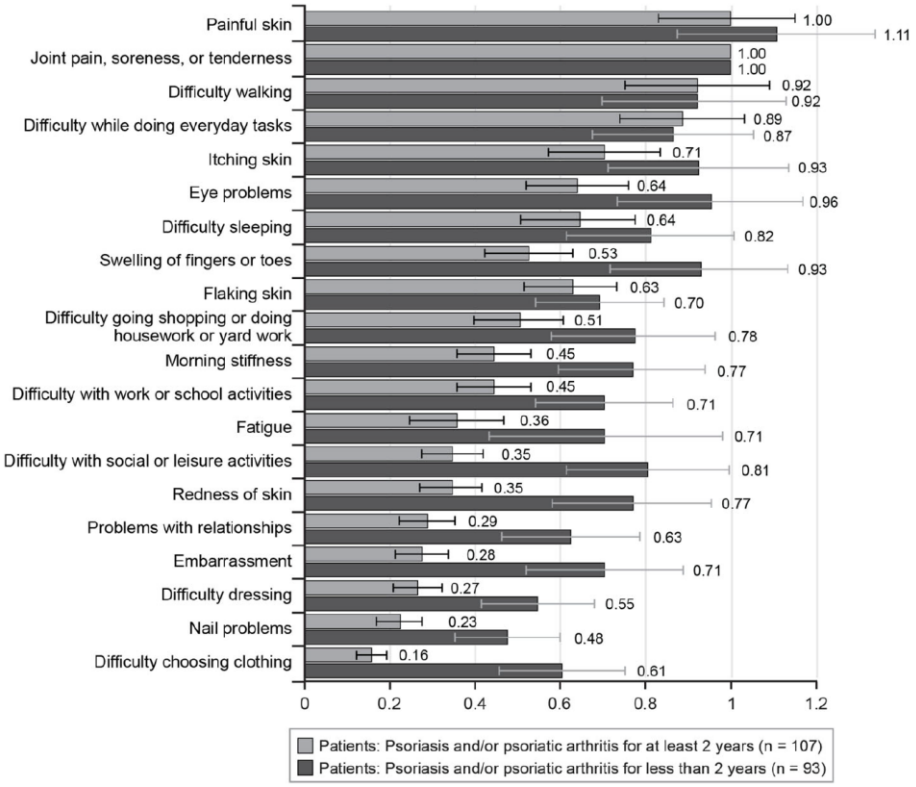
Marchesoni A, Rheumatology (Oxford) 2018 ;57:32-40

RESEARCH ARTICLE Open Access

Comparison of US patient, rheumatologist, and dermatologist perceptions of psoriatic disease symptoms: results from the DISCONNECT study

Υποκειμενικές διαγνώσεις στην ΨΑ





Husni et al. Arthritis Research & Therapy (2018) 20:102

Επιτεύγματα και ανεκπλήρωτες ανάγκες στην ΨΑ

- **Τα τελευταία 15 έτη έχει σημειωθεί δραματική βελτίωση στην αγωγή της ΨΑ με την χρήση των βιολογικών παραγόντων**
- **Η συνολική αποτελεσματικότητα των βιολογικών θεραπειών στην ΨΑ ευρίσκεται στα επίπεδα των 2/3 για κάθε παράγοντα, με παράμετρο την αρθρίτιδα**
- **Η επιβίωση κάθε βιολογικού παράγοντα στην ΨΑ διαρκεί 2-3 έτη για το ήμισυ των ασθενών**
- **Υπάρχει δυσκολία στην πρώιμη διάγνωση της νόσου λόγω έλλειψης εργαστηριακών δεικτών**
- **Η έλλειψη σαφών κλινικών και εργαστηριακών δεικτών στην ΨΑ για την αξιολόγηση και την λήψη κλινικών αποφάσεων αποτελεί πρόβλημα στην κλινική πράξη**
- **Δεν υπάρχουν αξιόπιστα κλινικά δεδομένα για την αξονική προσβολή**
- **Τα δεδομένα για την αγωγή πριν τα βιολογικά, δηλαδή την MTX, σουλφασαλαζίνη, λεφλουνομίδη είναι ανεπαρκή στην ΨΑ**