Βιβλιογραφική ενημέρωση ΕΕΜΜΟ 2019

Νεότερα στην Οστεοαρθρίτιδα

Δήμος Κ. Πατρίκος
Διευθυντής Ρευματολόγος
Νοσοκομείο Metropolitan
30-3-2019

Σύγκρουση συμφερόντων
Conflict of interest

Τιμητική αμοιβή καμιά για την παρούσα

Εκπαιδευτικές-ερευνητικές-συμβουλευτικές επιχορηγήσεις την τελευταία διετία:

Lilly, Amgen, Roche, UCB, MSD, Pfizer, Menarini, Novartis, Angelini Pharma, Abbvie, Bristol Myers Squibb, RAFARM

Οστεοαρθρίτιδα άκρων χειρών: Νέες κατευθυντήριες οδηγίες

Recommendation

2018 update of the EULAR recommendations for the management of hand osteoarthritis

Ανανέωση των από το 2007 υπαρχουσών

Βιβλιογραφική ανασκόπηση αποδείξεων

- Φαρμακευτικής
- Μη φαρμακευτικής
- Χειρουργικής

19 Ιατροί, ασθενείς, επαγγελματίες υγείας

10 Ευρωπαϊκές χώρες

5 Βασικές αρχές

10 Συστάσεις

Kloppenburg M. Ann Rheum Dis 2019;78:16–24.

Recommendation

2018 update of the EULAR recommendations for the management of hand osteoarthritis

		LoE*	GoR†	LoA (0–10)
Overarching principles				
A.	The primary goal of managing hand OA is to control symptoms, such as pain and stiffness, and to optimise hand function, in order to maximise activity, participation and quality of life.			9.7 (0.7)
B.	All patients should be offered information on the nature and course of the disease, as well as education on self-management principles and treatment options.			9.8 (0.8)
C.	Management of hand OA should be individualised taking into account its localisation and severity, as well as comorbidities.			9.9 (0.2)
D.	Management of hand OA should be based on a shared decision between the patient and the health professional.			9.6 (1.1)
E.	Optimal management of hand OA usually requires a multidisciplinary approach. In addition to non-pharmacological modalities, pharmacological options and surgery should be considered.			9.3 (1.2)

A. Κύριος στόχος: Έλεγχος συμπτωμάτων, βελτίωση λειτουργικότητας, δραστηριότητας, συμμετοχικότητας
B. Πληροφόρηση ασθενών (φύση, πορεία νόσου) Εκπαίδευση αυτοδιαχείρισης
C. Εξατομικευμένη διαχείριση (θέση, βαρύτητα, συννοσηρότητα)
D. Συναπόφαση
E. Πολυπαραγοντική αντιμετώπιση (μη φαρμακευτική, φαρμακευτική, χειρουργική)

Kloppenburg M. Ann Rheum Dis 2019;78:16–24.

Recommendation

2018 update of the EULAR recommendations for the management of hand osteoarthritis

Recommendations				
1.	Education and training in ergonomic principles, pacing of activity and use of assistive devices should be offered to every patient.	1b	A	9.3 (1.1)
2.	Exercises to improve function and muscle strength, as well as to reduce pain, should be considered for every patient.	1a	A	9.1 (1.6)
3.	Orthoses should be considered for symptom relief in patients with thumb base OA. Long-term use is advocated.	1b	A	9.3 (1.0)

1. Εκπαίδευση στις εργονομικές αρχές, σταδιοποίηση δραστηριοτήτων, χρήση βοηθημάτων
2. Ασκήσεις βελτίωσης λειτουργικότητας, μυϊκής ισχύος, μείωσης πόνου
3. Νάρθηκες για την ΟΑ 1ης ΚΜΚ. Μακροχρόνια.

(Παλαιά 3)

Kloppenburg M. Ann Rheum Dis 2019;78:16–24.

Recommendation

2018 update of the EULAR recommendations for the management of hand osteoarthritis

4.	Topical treatments are preferred over systemic treatments because of safety reasons. Topical NSAIDs are the first pharmacological topical treatment of choice.	1b	A	8.6 (1.8)
5.	Oral analgesics, particularly NSAIDs, should be considered for a limited duration for relief of symptoms.	1a	A	9.4 (0.9)
6.	Chondroitin sulfate may be used in patients with hand OA for pain relief and improvement in functioning.	1b	A	7.3 (2.7)
7.	Intra-articular injections of glucocorticoids should not generally be used in patients with hand OA‡, but may be considered in patients with painful interphalangeal joints§.	1a‡–1b§	A	7.9 (2.4)
8.	Patients with hand OA should not be treated with conventional or biological disease-modifying antirheumatic drugs	1a	A	8.8 (1.8)

4. Τοπικές θεραπείες προτιμώνται από συστηματικές (ασφάλεια) 1η επιλογή τοπικά ΜΣΑΦ
5. Αναλγητικά ιδιαίτερα ΜΣΑΦ ρο για περιορισμένη διάρκεια **(παλαιές 7+8)**
6. Θειϊκή χονδροϊτίνη για αναλγησία και βελτίωση λειτουργικότητας
7. Ενδαρθρικά κορτικοειδή όχι σε ΟΑ άκρων χειρών ίσως σε επώδυνες ΦΦ
8. Όχι θεραπεία με συμβατικά και βιολογικά DMARDs **(νέα)**

Kloppenburg M. Ann Rheum Dis 2019;78:16–24.

Recommendation

2018 update of the EULAR recommendations for the management of hand osteoarthritis

9.	Surgery should be considered for patients with structural abnormalities when other treatment modalities have not been sufficiently effective in relieving pain. Trapeziectomy should be considered in patients with thumb base OA and arthrodesis or arthroplasty in patients with interphalangeal OA.	5	D	9.4 (1.4)

9. Χειρουργείο σε ασθενείς με δομικές βλάβες σε αποτυχία άλλων παρεμβάσεων
Εκτομή τραπεζοειδούς για ΟΑ 1ης ΚΜΚ, αρθρόδεση ή αρθροπλαστική για ΦΦ

Kloppenburg M. Ann Rheum Dis 2019;78:16–24.

Recommendation

2018 update of the EULAR recommendations for the management of hand osteoarthritis

10.	Long-term follow-up of patients with hand OA should be adapted to the patient's individual needs.	5	D	9.5 (1.7)

10. Μακροχρόνια παρακολούθηση ανάλογα με τις ανάγκες του ασθενούς **(Νέα)**

Διαγραφή παλαιάς 4 (Χρήση θερμότητας και US)

Kloppenburg M. Ann Rheum Dis 2019;78:16–24.

Διαχείριση πόνου σε φλεγμονώδεις αρθρίτιδες και οστεοαρθρίτιδα: Νέες κατευθυντήριες οδηγίες

Recommendation

EULAR recommendations for the health professional's approach to pain management in inflammatory arthritis and osteoarthritis

Box 1 Overarching principles

- The assessment and treatment process should be guided by a patient-centred framework.
- The health professional should understand that (any type of) pain encompasses multiple and mutually interacting biological, psychological and social factors that include but are not limited to pain severity, peripheral (inflammation and joint damage) and central neurophysiological processes, physical (dis)ability, resilience and vulnerabilities (emotions, cognitions, behaviour, lifestyle), social factors (work, support, facilities, economic), sleep quality, obesity and other health risks (eg, smoking, alcoholism).
- The health professional should have basic knowledge of the pathology, treatment and sequelae of inflammatory arthritis and osteoarthritis.
- The health professional should be able to differentiate between localised and generalised pain and should know that these types of pain may coexist.

Geenen R. Ann Rheum Dis 2018;77:797–807

§ Ασθενοκεντρικό πλαίσιο αντιμετώπισης

§ Κατανόηση των πολλαπλών και αλληλοεπιδρώντων βιολογικών, ψυχολογικών, κοινωνικών παραγόντων που περιλαμβάνουν αλλά δεν περιορίζονται στη βαρύτητα του πόνου, περιφερικές και κεντρικές νευροφυσιολογικές διεργασίες, λειτουργικότητα, ευκαμπτότητα, ευπάθειες, κοινωνικές παραμέτρους, ποιότητα ύπνου, παχυσαρκία, άλλοι κίνδυνοι υγείας

§ Βασική γνώση του θεράποντα στην παθολογία, θεραπεία, συνέπειες της αρθρίτιδας

§ Ικανότητα διάκρισης των τύπων του πόνου, (εντοπισμένου γενικευμένου)

Recommendation	Level of evidence	Strength of recommendation	Level of agreement task force: mean (SD)
EULAR recommendations for the health professional's approach to pain management in inflammatory arthritis and osteoarthritis			
1. Assessment by the health professional should include the following aspects (the assessment is brief or extensive depending on factors such as available time, whether it is a first or regular consultation, and the needs of the patient):	4	D	9.3 (0.8)
Patient's needs, preferences and priorities regarding pain management and important activities, values and goals in daily life.			
Patient's pain characteristics including severity, type, spread and quality.			
Previous and ongoing pain treatments and the perceived efficacy.			
Current inflammation and joint damage as sources of pain, and whether these are adequately treated.			
Pain-related factors that might need attention: (a) the nature and extent of pain-related disability, (b) beliefs and emotions about pain and pain-related disability, (c) social influences related to pain and its consequences, (d) sleep problems and (e) obesity.			

1. Τι πρέπει να περιλαμβάνει η εκτίμηση
   - ü Ανάγκες, προτιμήσεις, προτεραιότητες ασθενούς για διαχείριση πόνου στόχους κλπ
   - ü Χαρακτηριστικά πόνου (βαρύτητα, τύπος, έκταση, ποιότητα)
   - ü Προηγούμενες και τρέχουσες θεραπείες
   - ü Παρουσία φλεγμονής ή αρθρικής καταστροφής ως πηγής πόνου και κατά πόσο θεραπεύονται επαρκώς
   - ü Παράγοντες σχετιζόμενοι με τον πόνο (φύση, έκταση ανικανότητας, κοινωνικές επιδράσεις, ύπνος, παχυσαρκία)

Geenen R. Ann Rheum Dis 2018;77:797–807

Recommendation

EULAR recommendations for the health professional's approach to pain management in inflammatory arthritis and osteoarthritis

	Level of evidence	Strength of recommendation	Level of agreement task force: mean (SD)
2. The patient should receive a personalised management plan with the aim of reducing pain and pain-related distress and improving pain-related function and participation in daily life. This plan is guided by shared decision-making, the expressed needs of the patient, the health professional's assessment and evidence-based treatment options. A stepped-care approach may include, in step 1, education and self-management support (recommendation 3); in step 2, one or more treatment options by a specialist if indicated (recommendations 4 to 9); or, in step 3, multidisciplinary treatment (recommendation 10).	4	D	9.0 (0.8)
3. The patient should receive education. * All patients have easy access to (1) educational materials (such as brochures or links to online resources with encouragement to stay active, sleep hygiene guidelines and so on), (2) psychoeducation by the health professional and (3) online or face-to-face self-management interventions.	1A	A	9.7 (0.6)

2. Προσωποποιημένο πλάνο αντιμετώπισης

Στόχος: ⇩ πόνου & σχετιζόμενων παραμέτρων (βελτίωση άγχος, λειτουργικότητα συμμετοχικότητα)

§ Θεραπευτικό πλάνο κατευθυνόμενο από:

- § Συναπόφαση
- § Ανάγκες ασθενούς
- § Εκτίμηση θεράποντα
- § ΕΒ θεραπευτικές επιλογές

§ Παροχή εκπαιδευτικού υλικού
§ Ψυχοθεραπεία από ειδικό
§ Διαδικτυακές ή δια ζώσης παρεμβάσεις αυτοδιαχείρισης

3. Όλοι οι ασθενείς πρέπει να εκπαιδεύονται

Geenen R. Ann Rheum Dis 2018;77:797–807


Πολυπαραγοντική θεραπεία
10
Μια ή
9
περισσότερες
8
επιλογές
7
από τον
6
ειδικό αν
5
ενδείκνυνται
4
Εκπαίδευση αυτοδιαχείριση
3
2
1

Recommendation EULAR recommendations for the health professional's approach to pain management in inflammatory arthritis and osteoarthritis	Level of evidence	Strength of recommendation	Level of agreement task force: mean (SD)
4. If indicated, the patient should receive physical activity and exercise. * The health professional and patient appraise whether advice to stay active, supervised physical exercise or multidisciplinary treatment is needed. * If the patient is not able to initiate physical activity and exercises without help, then consider the possibility for referral to a physiotherapist for individually tailored graded physical exercise or strength training. * If psychosocial factors such as fear of movement [71 80] or catastrophising cognitions [70] underlie a disabled, sedentary lifestyle, then consider a multidisciplinary intervention including cognitive – behavioural therapy.	1A	A	9.8 (0.8)

4. Φυσική δραστηριότητα και άσκηση

- ü Εκτίμηση ανάγκης ενεργότητας, επιβλεπόμενης άσκησης, πολυπαραγοντικής θεραπείας
- ü Σε περίπτωση αδυναμίας παραπομπή σε Φ/Θ
- ü Επί ενδείξεων συμπεριφοριολογική - γνωσιολογική θεραπεία

Geenen R. Ann Rheum Dis 2018;77:797–807

Recommendation

EULAR recommendations for the health professional's approach to pain management in inflammatory arthritis and osteoarthritis	Level of evidence	Strength of recommendation	Level of agreement task force: mean (SD)
5. If indicated, the patient should receive orthotics. * If a patient has pain during activities of daily living which impedes functioning, orthotics (such as splints, braces, gloves, sleeves, insoles and shoes), daily living aids (such as a tin opener), an assistive device (such as a cane or rollator) or ergonomic adaptation (at home, workplace) can be offered. If the patients wants to use this assistive support, then consider referral to the occupational therapist, who can proceed with several actions: offer education about appropriate ways to use joints and ergonomic principles, appraise the need for the use of an orthotic or assistive device, give advice about how to acquire it, fit the customised aid to the patient , offer training in the use of it, refer to the appropriate specialist who will do this, eg, orthopaedic shoemaker.	1A	A	8.6 (0.9)

5. Υποστηρικτικά μέσα

- ü Νάρθηκες
- ü Βακτηρίες
- ü Τροποποίηση χώρου

Geenen R. Ann Rheum Dis 2018;77:797–807

Recommendation	Level of evidence	Strength of recommendation	Level of agreement task force: mean (SD)
EULAR recommendations for the health professional's approach to pain management in inflammatory arthritis and osteoarthritis			
6. If indicated, the patient should receive psychological or social interventions. * If there are indications that social variables or psychological factors interfere with effective pain management and functional status, then consider (depending on the severity) providing basic social and psychological management support or referral to a psychologist, social worker, self-management support programme, CBT or multidisciplinary treatment. * If psychopathology (eg, depression and anxiety) is present, discuss treatment options with the patient and the patient 's primary care physician.	1A	A	9.5 (0.6)
7. If indicated, the patient should receive sleep interventions. * If sleep disturbance is reported, inquire about causes (eg, pain, persistent worrying, poor sleep habits) and offer basic education about good sleep hygiene practices. * If sleep remains (severely) disturbed, refer to a therapist or programme aimed at restoring sleep, or to a specialised sleep clinic.	1B	B	8.4 (1.1)

6. Επί ενδείξεων ψυχολογικές και κοινωνικές παρεμβάσεις
7. Παρεμβάσεις βελτίωσης ύπνου

Geenen R. Ann Rheum Dis 2018;77:797–807

Recommendation	Level of evidence	Strength of recommendation	Level of agreement task force: mean (SD)
8. If indicated, the patient should receive weight management. * If the patient is obese, explain to the patient that obesity can contribute to pain and disability. Discuss accessible weight management options with the patient or signpost appropriate specialised weight management support; for example, dietitian , psychologist, community lifestyle services or bariatric clinic/surgery.	1A	A	9.1 (1.0)
9. If indicated, the patient should receive pharmacological and joint-specific pain treatment according to recent recommendations. * Ask about the patient 's existing use of prescribed and over - the - counter pain relief including homeopathic remedies and consider if the frequency of use is safe (not over dosing) and appropriately regular. Ask or refer for further specialist or medical advice if there are concerns or if additional pharmacological treatment may be indicated.	See refs 16 17 24–29		9.5 (0.8)

EULAR recommendations for the health professional's approach to pain management in inflammatory arthritis and osteoarthritis

8. Ρύθμιση βάρους (Συσχέτιση με πόνο και ανικανότητα, παραπομπή σε ειδικό (διαιτολόγο, ψυχολόγο)
9. Φαρμακευτική και ειδική για τις αρθρώσεις θεραπεία (Κατευθύνσεις)

Geenen R. Ann Rheum Dis 2018;77:797–807

Recommendation	Level of evidence	Strength of recommendation	Level of agreement task force: mean (SD)
EULAR recommendations for the health professional's approach to pain management in inflammatory arthritis and osteoarthritis			
10. If indicated, the patient should receive multidisciplinary treatment. * If more than one treatment options are indicated, for example, to treat psychological distress in combination with a sedentary lifestyle, and if monotherapy failed, consider a multidisciplinary intervention.	4	D	8.8 (1.1)

10. Πολυπαραγοντική θεραπεία

Geenen R. Ann Rheum Dis 2018;77:797–807

Ρόλος δίαιτας και διατροφής στην αντιμετώπιση της ΟΑ

RHEUMATOLOGY

Rheumatology 2018;57:iv61–iv74
doi:10.1093/rheumatology/key011

What is the evidence for a role for diet and nutrition in osteoarthritis?

Sally Thomas[1], Heather Browne[1], Ali Mobasheri[2,3,4] and Margaret P. Rayman[1]

Οστεοαρθριτική κατά γόνυ άρθρωση

Χαμηλής ενεργότητας φλεγμονή
Αυξημένες φλεγμονώδεις κυτταροκίνες και αδιποκίνες

↑

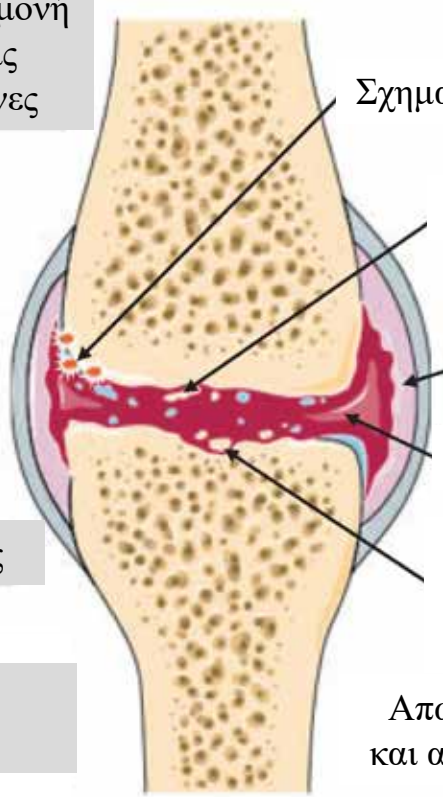
Αύξηση λιποκυττάρων

Παχυσαρκία

Ανώμαλη φόρτιση άρθρωσης

↓

Μεταβολή κυτταρικής μηχανομορφοτροπής



Σχηματισμός οστεοφύτων

Αποδόμηση χόνδρου

Φλεγμονή υμένα (υμενίτιδα)

Αποδόμηση μηνίσκου

Ανακατασκευή υποχονδρικού οστού και σκλήρυνση

Απώλεια μυϊκής μάζας και αντοχής (σαρκοπενία)

Thomas S. Rheumatology 2018;57:iv61iv74

RHEUMATOLOGY

Rheumatology 2018;57:iv61–iv74
doi:10.1093/rheumatology/key011

What is the evidence for a role for diet and nutrition in osteoarthritis?

Sally Thomas[1], Heather Browne[1], Ali Mobasheri[2,3,4] and Margaret P. Rayman[1]

Summary of dietary interventions that may be of benefit in OA

Intervention	Detail of recommended interventions	Points to note
Weight reduction in overweight or obese patients	An initial aim of 10% body weight reduction should be included in a first-line approach for obese patients with OA. Overall aim for obese/overweight patients is for BMI within the healthy range 18.5–25 kg/m^2 Dietary modification should include moderate energy restriction without compromising micronutrient intake Exercise should be encouraged including aspects of aerobic exercise, strengthening and flexibility that should be tailored to mobility	Regular clinical contact and monitoring, including dietetic input, are essential for dietary modification. Clinical input should incorporate a focus on behaviour change

Thomas S. Rheumatology 2018;57:iv61iv74

RHEUMATOLOGY

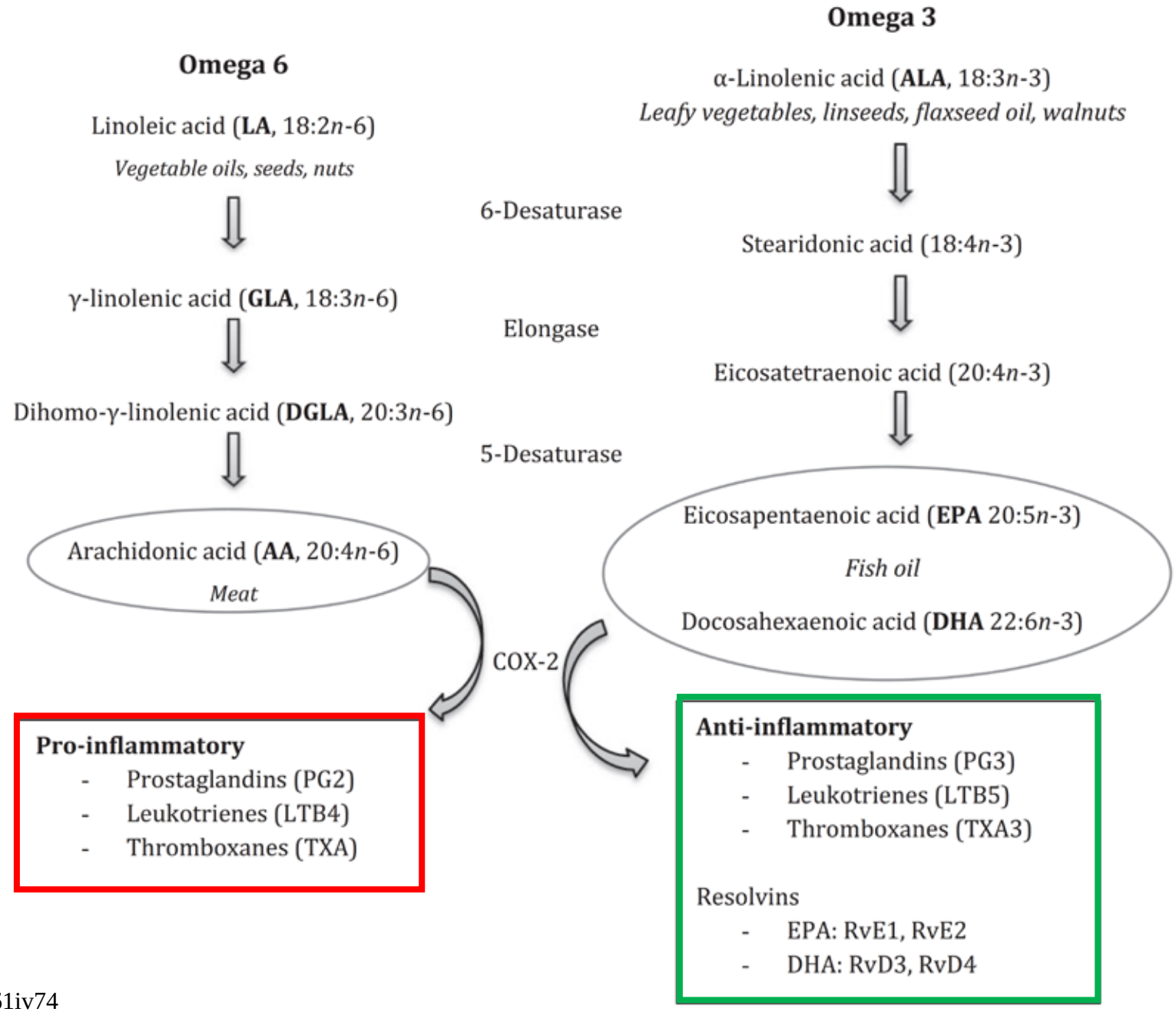
Rheumatology 2018;57:iv61–iv74
doi:10.1093/rheumatology/key011

What is the evidence for a role for diet and nutrition in osteoarthritis?

Sally Thomas[1], Heather Browne[1], Ali Mobasheri[2,3,4] and Margaret P. Rayman[1]

Summary of dietary interventions that may be of benefit in OA

Intervention	Detail of recommended interventions	Points to note
Beneficial dietary-lipid modification in OA patients	Reduce intake of *n*-6 fatty acids by substituting oils rich in mono-unsaturates such as rapeseed, canola and olive oils. Aim to increase intake of long-chain *n*-3 fatty acids via a direct source of EPA/DHA; increase intake of oily fish; aim to consume a minimum one portion per week (as in general healthy eating guidelines) and preferably two Consider a daily standard fish oil supplement (1–2 capsules/day)	Women who are pregnant or breastfeeding should avoid fish with high levels of mercury (i.e. shark, swordfish and king mackerel) [46] and should avoid cod-liver oil due to the vitamin A content [47]



Thomas S. Rheumatology 2018;57:iv61iv74

RHEUMATOLOGY

Rheumatology 2018;57:iv61–iv74
doi:10.1093/rheumatology/key011

What is the evidence for a role for diet and nutrition in osteoarthritis?

Sally Thomas[1], Heather Browne[1], Ali Mobasheri[2,3,4] and Margaret P. Rayman[1]

Summary of dietary interventions that may be of benefit in OA

Intervention	Detail of recommended interventions	Points to note
Dietary management of cholesterol, serum lipids and comorbidities, CVD and MetS	A cholesterol-lowering dietary portfolio should be advocated to patients with raised serum cholesterol (>5 mmol/l/>200 mg/dl) or LDL-C (>3 mmol/l/>100 mg/dl)[a] to reduce CHD risk with the potential for OA benefit ⩾2 g/day plant stanols/sterols [49] Reduce SFA intake to < 11% total energy (around 31 g/day for males and 24 g/day for females) Ensure daily intake of viscous fibre (e.g. oats), soy protein (25 g) and nuts (30 g) For obese/overweight patients, weight reduction[b] remains of primary importance both for OA symptom management and reduction in risk of the co-morbidities, CVD and MetS	Sources of soy protein include soy milk (7.5 g soy protein per 250 ml serving), soy/edamame beans and tofu

Thomas S. Rheumatology 2018;57:iv61iv74

RHEUMATOLOGY

Rheumatology 2018;57:iv61–iv74
doi:10.1093/rheumatology/key011

What is the evidence for a role for diet and nutrition in osteoarthritis?

Sally Thomas[1], Heather Browne[1], Ali Mobasheri[2,3,4] and Margaret P. Rayman[1]

Summary of dietary interventions that may be of benefit in OA

Intervention	Detail of recommended interventions	Points to note
To achieve adequate levels of vitamins A, C and E	Ensure adequate daily intake through consumption of rich dietary sources (see supplementary Table S2, available at *Rheumatology* online) Adult recommended intakes are shown below: Vitamin A (retinol equivalent): 650–750 μg/day (Europe [50]); 700–900 μg/day (USA [51])[c] Vitamin C: 95–110 mg/day (Europe [52]); 75–90 mg (USA [51])[c] Vitamin E (α-tocopherol equivalent): an adequate intake level of 11–13 mg/day (Europe [53]); 15 mg/day (USA [51, 107]) Only consider a multivitamin supplement if dietary intake of these nutrients is insufficient to meet dietary recommendations. Obtaining intake through diet is preferable	US guidelines suggest an additional 30 mg/day Vitamin C for smokers

RHEUMATOLOGY

Rheumatology 2018;57:iv61–iv74
doi:10.1093/rheumatology/key011

What is the evidence for a role for diet and nutrition in osteoarthritis?

Sally Thomas[1], Heather Browne[1], Ali Mobasheri[2,3,4] and Margaret P. Rayman[1]

Summary of dietary interventions that may be of benefit in OA

Intervention	Detail of recommended interventions	Points to note
To increase vitamin D intake/ status	Increase consumption of vitamin-D-rich foods, for example, oily fish, eggs (yolks), vitamin-D-fortified spreads, fortified milk, fortified cereals (see supplementary Table S2, available at *Rheumatology* online) During the summer months, daily sunlight exposure (without protective cream/lotion) of approximately 10–20 min (depending on skin type, time of day, altitude and latitude) should be sufficient to produce adequate vitamin D [54, 55] With minimal sun exposure, supplementation of 15–20 μg/day should be encouraged, based on European and American guidelines, to ensure sufficient vitamin D concentration [54, 55] Maintaining a healthy BMI, that is, between 18.5 and 25 kg/m^2, will reduce the risk of vitamin D sequestration in adipose tissue	

RHEUMATOLOGY

Rheumatology 2018;57:iv61–iv74
doi:10.1093/rheumatology/key011

What is the evidence for a role for diet and nutrition in osteoarthritis?

Sally Thomas[1], Heather Browne[1], Ali Mobasheri[2,3,4] and Margaret P. Rayman[1]

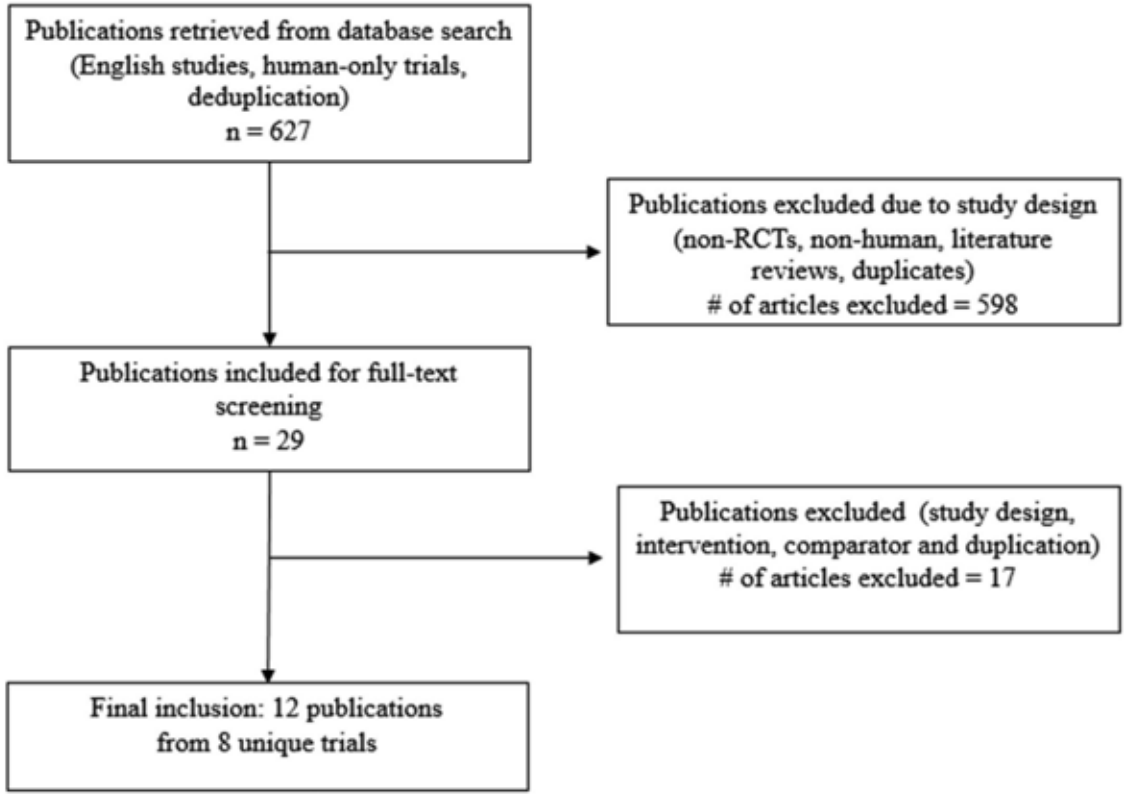
Summary of dietary interventions that may be of benefit in OA

Intervention	Detail of recommended interventions	Points to note
To increase vitamin K intake	Increase green-vegetable consumption, particularly of rich sources such as spinach, Brussels sprouts, kale and broccoli [56] (see supplementary Table S2, available at *Rheumatology* online for list of sources) Certain fats and oils (e.g. blended vegetable oil, olive oil and margarine [56]) contain small amounts of vitamin K and therefore utilizing these in cooking or as plant spreads may increase intake	The addition of a fat (such as olive oil) to a vitamin K source may increase bioavailability, as vitamin K is fat-soluble

Οστεοαρθρίτιδα γόνατος:
Εγχύσεις Υαλουρονικού vs. Υαλουρονικού και Κορτικοειδών

KNEE

:ombined intra-articular injection of corticosteroid and hyaluronic ıcid reduces pain compared to hyaluronic acid alone in the treatment ›f knee osteoarthritis

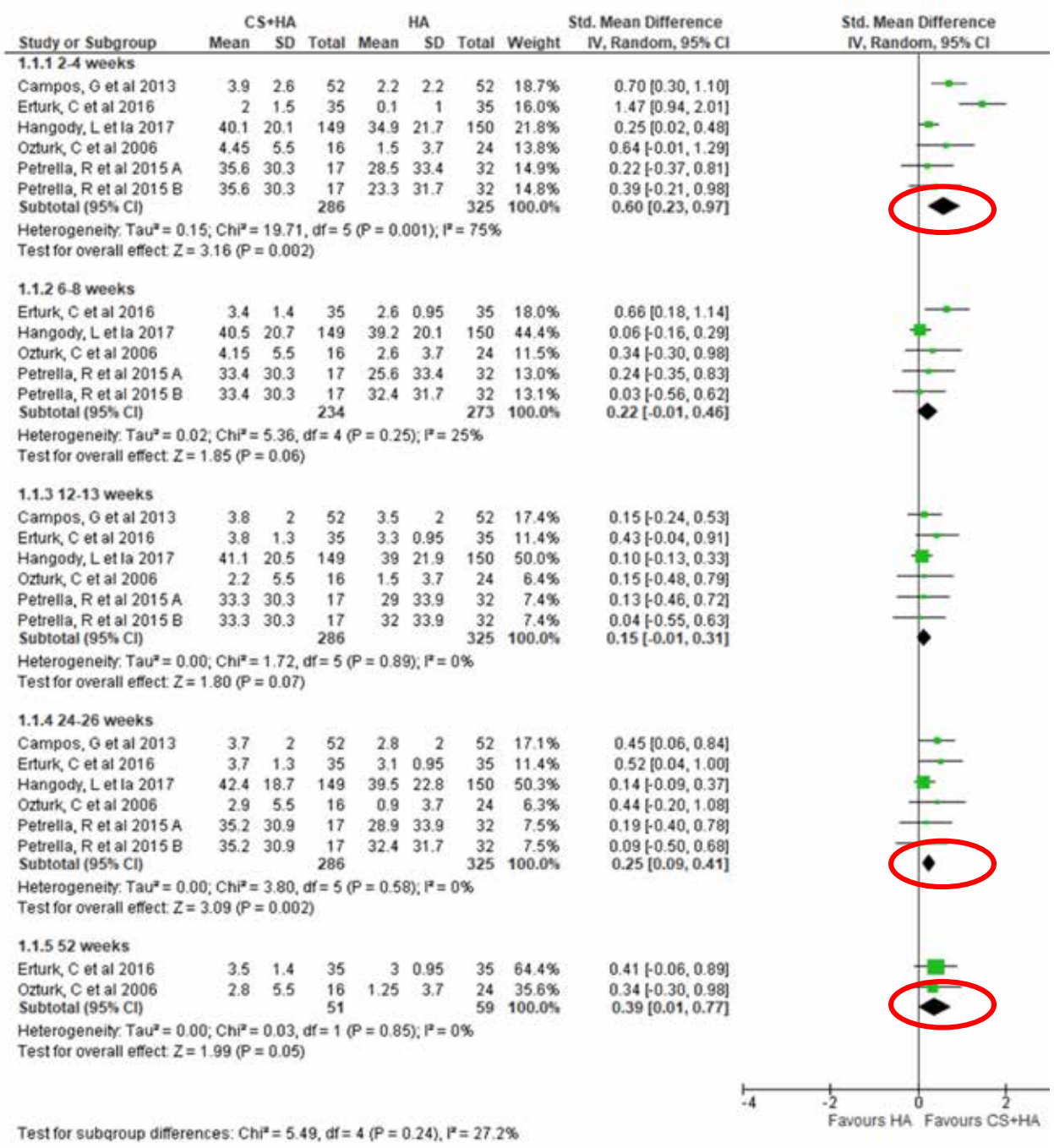


Smith C. Knee Surgery, Sports Traumatology, Arthroscopy Received: 5 May 2018 / Accepted: 18 July 2018 https://doi.org/10.1007/s00167-018-5071-7

KNEE

:ombined intra-articular injection of corticosteroid and hyaluronic
ıcid reduces pain compared to hyaluronic acid alone in the treatment
ıf knee osteoarthritis

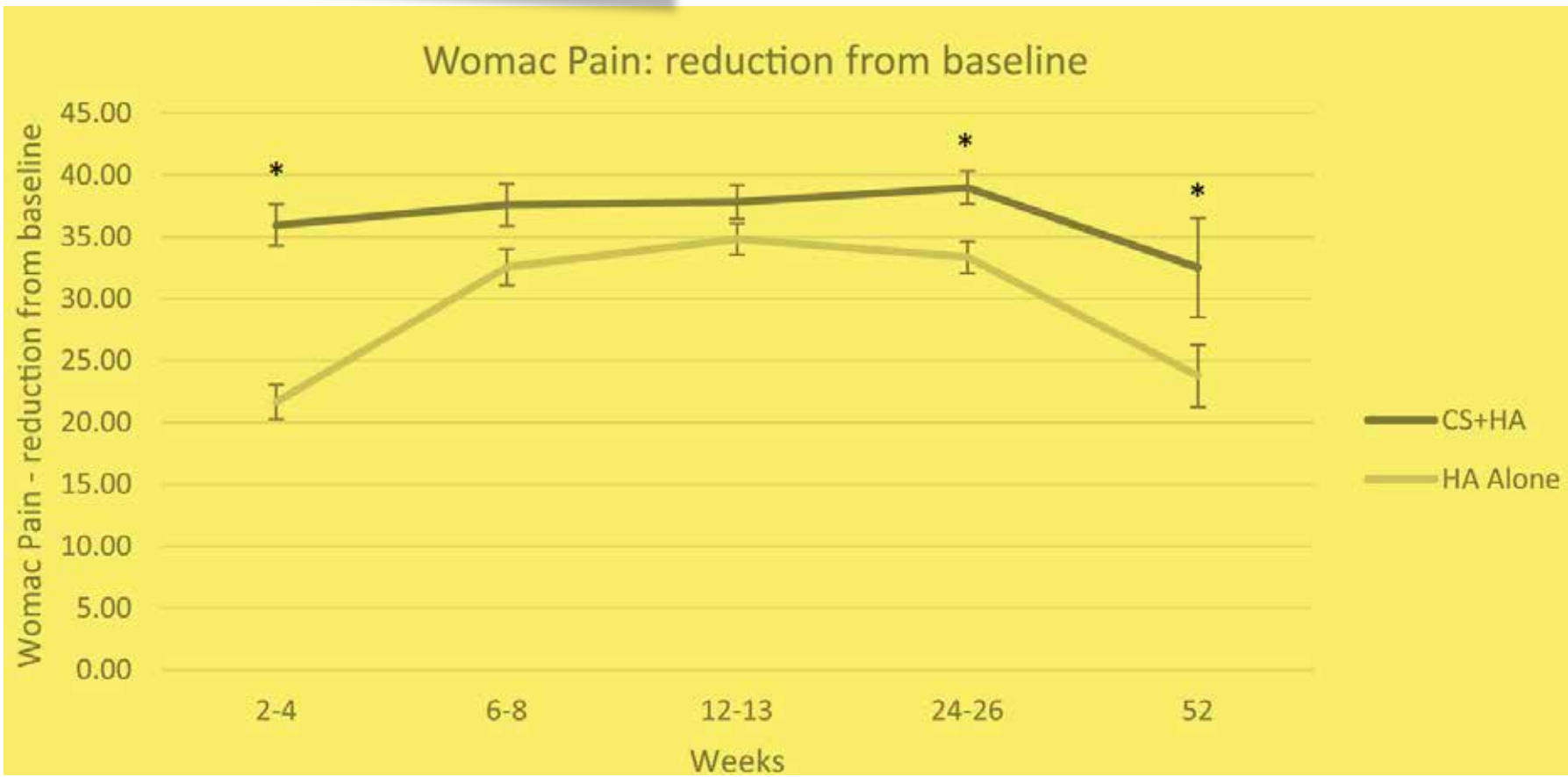
Διαφορές στην παράμετρο πόνου στην κλίμακα WOMAC από την έναρξη



Smith C. Knee Surgery, Sports Traumatology, Arthroscopy Received: 5 May 2018 / Accepted: 18 July 2018 https://doi.org/10.1007/s00167-018-5071-7

KNEE

:ombined intra-articular injection of corticosteroid and hyaluronic ıcid reduces pain compared to hyaluronic acid alone in the treatment ıf knee osteoarthritis



Smith C. Knee Surgery, Sports Traumatology, Arthroscopy Received: 5 May 2018 / Accepted: 18 July 2018 https://doi.org/10.1007/s00167-018-5071-7

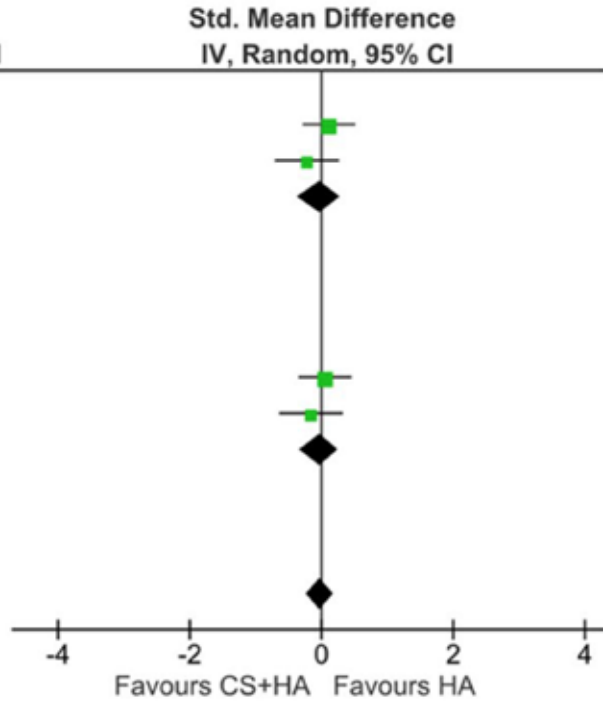
KNEE

CrossMark

:ombined intra-articular injection of corticosteroid and hyaluronic
ıcid reduces pain compared to hyaluronic acid alone in the treatment
›f knee osteoarthritis

Διαφορές στην συνολική κλίμακα WOMAC από την έναρξη

Study or Subgroup	CS+HA Mean	CS+HA SD	CS+HA Total	HA Mean	HA SD	HA Total	Weight	Std. Mean Difference IV, Random, 95% CI
1.2.1 12 weeks								
Campos, G et al 2013	36	16	52	34	19	52	29.9%	0.11 [-0.27, 0.50]
Erturk, C et al 2016	43.6	5.4	35	44.8	5.4	35	20.0%	-0.22 [-0.69, 0.25]
Subtotal (95% CI)			87			87	50.0%	**-0.02 [-0.35, 0.30]**
Heterogeneity: Tau² = 0.01; Chi² = 1.15, df = 1 (P = 0.28); I² = 13%								
Test for overall effect: Z = 0.15 (P = 0.88)								
1.2.2 24-26 weeks								
Campos, G et al 2013	38	17	52	37	19	52	30.0%	0.06 [-0.33, 0.44]
Erturk, C et al 2016	42.9	5.6	35	44	7.8	35	20.1%	-0.16 [-0.63, 0.31]
Subtotal (95% CI)			87			87	50.0%	**-0.03 [-0.33, 0.27]**
Heterogeneity: Tau² = 0.00; Chi² = 0.48, df = 1 (P = 0.49); I² = 0%								
Test for overall effect: Z = 0.21 (P = 0.84)								
Total (95% CI)			174			174	100.0%	**-0.03 [-0.24, 0.18]**
Heterogeneity: Tau² = 0.00; Chi² = 1.64, df = 3 (P = 0.65); I² = 0%								
Test for overall effect: Z = 0.24 (P = 0.81)								
Test for subgroup differences: Chi² = 0.00, df = 1 (P = 0.98), I² = 0%								



Smith C. Knee Surgery, Sports Traumatology, Arthroscopy Received: 5 May 2018 / Accepted: 18 July 2018 https://doi.org/10.1007/s00167-018-5071-7

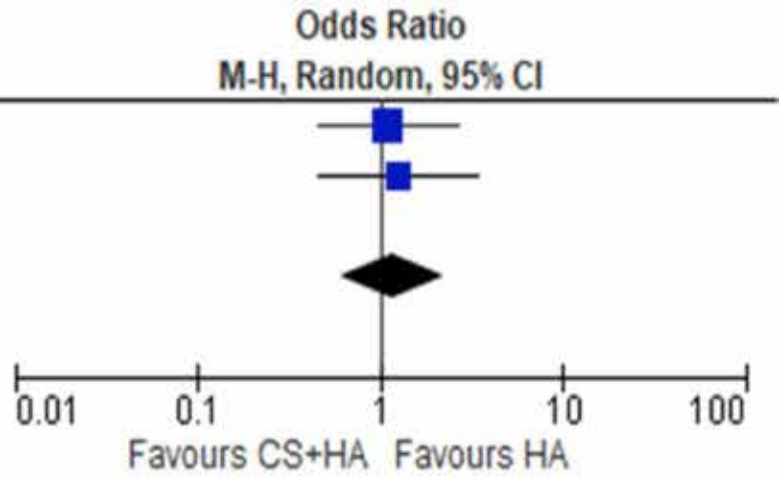
KNEE

:ombined intra-articular injection of corticosteroid and hyaluronic
ıcid reduces pain compared to hyaluronic acid alone in the treatment
›f knee osteoarthritis

Μετανάλυση OMERACT-OARSI ποσοστού ανταποκριθέντων

Study or Subgroup	CS+HA Events	CS+HA Total	HA Events	HA Total	Weight	Odds Ratio M-H, Random, 95% CI
Hangody, L et la 2017	139	149	139	150	55.7%	1.10 [0.45, 2.67]
Petrella, R et al 2015	22	34	19	32	44.3%	1.25 [0.46, 3.40]
Total (95% CI)		**183**		**182**	**100.0%**	**1.17 [0.60, 2.26]**
Total events	161		158			

Heterogeneity: Tau² = 0.00; Chi² = 0.04, df = 1 (P = 0.85); I² = 0%
Test for overall effect: Z = 0.45 (P = 0.65)



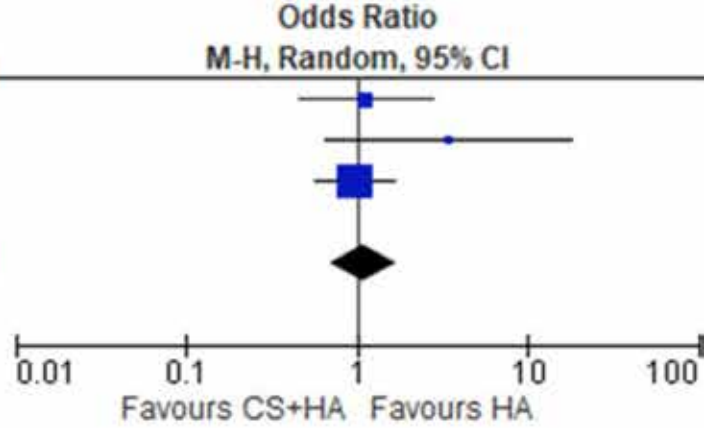
Smith C. Knee Surgery, Sports Traumatology, Arthroscopy Received: 5 May 2018 / Accepted: 18 July 2018 https://doi.org/10.1007/s00167-018-5071-7

Combined intra-articular injection of corticosteroid and hyaluronic acid reduces pain compared to hyaluronic acid alone in the treatment of knee osteoarthritis

Μετανάλυση OMERACT-OARSI ανεπιθύμητες ενέργειες

Study or Subgroup	CS+HA Events	CS+HA Total	HA Events	HA Total	Weight	Odds Ratio M-H, Random, 95% CI
Campos, G et al 2013	13	52	12	52	23.8%	1.11 [0.45, 2.73]
Erturk, C et al 2016	6	35	2	35	6.9%	3.41 [0.64, 18.25]
Hangody, L et la 2017	36	149	37	150	69.3%	0.97 [0.57, 1.65]
Total (95% CI)		**236**		**237**	**100.0%**	**1.09 [0.71, 1.70]**
Total events	55		51			

Heterogeneity: Tau² = 0.00; Chi² = 1.96, df = 2 (P = 0.37); I² = 0%
Test for overall effect: Z = 0.40 (P = 0.69)

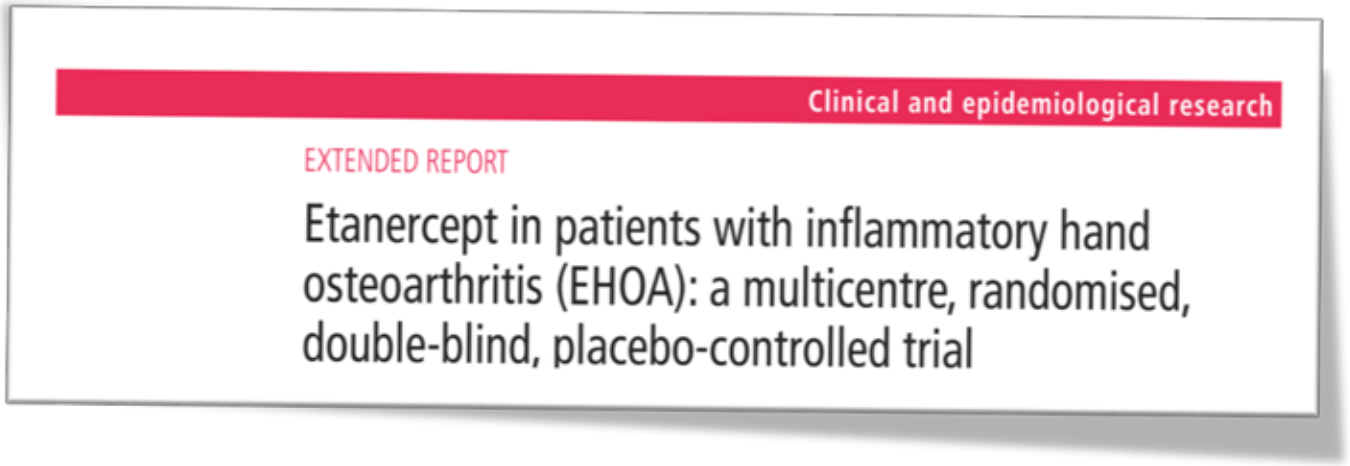


Conclusion

The results of this meta-analysis indicate that combined injections of CS and HA can safely lead to an increased reduction in pain in the first 2–4 weeks post-injection compared HA alone. Additionally, combination treatment may lead to greater reductions in pain at 24–26 and 52 weeks.

Smith C. Knee Surgery, Sports Traumatology, Arthroscopy Received: 5 May 2018 / Accepted: 18 July 2018 https://doi.org/10.1007/s00167-018-5071-7

Βιολογικές θεραπείες στην ΟΑ άκρων χειρών



- 1 έτους διπλά τυφλή πολυκεντρική ελεγχόμενη με εικονικό φάρμακο
- Συμπτωματική διαβρωτική φλεγμονώδης ΟΑ άκρων χειρών
- Έξαρση μετά ΜΣΑΦ
- Etanercept (24 εβδ 50 mg/εβδ, μετά 25 mg/εβδ) ή εικονικό. (45/45)
- Κύριο καταληκτικό σημείο: Visual Analogue Scale (VAS) πόνου 24η εβδομάδα
- Δευτερεύοντα καταληκτικά: Κλινική και ακτινολογική απάντηση
  - Ακτινογραφίες με Ghent University Scoring System GUSS
  - MRI

Kloppenburg M. Ann Rheum Dis 2018;77:1757–1764

EXTENDED REPORT

Etanercept in patients with inflammatory hand osteoarthritis (EHOA): a multicentre, randomised, double-blind, placebo-controlled trial

Table 2 Joint pain at baseline, 24 weeks and 1 year, and between-group differences at 24 weeks and 1 year in intention-to-treat and per-protocol population

	Etanercept			Placebo			Between-group difference			
	Baseline	24 weeks	1 year	Baseline	24 weeks	1 year	24 weeks	P values	1 year	P values
Intention-to-treat										
	n=45			n=45			n=90		n=90	
VAS pain	71.1 (15.7)	39.2 (24.7)	35.7 (25.1)	68.4 (12.8)	46.5 (23.4)	45.4 (25.7)	−5.7 (−15.9 to 4.5)	0.27	−8.5 (−18.6 to 1.6)	0.10
Per-protocol										
	n=32	n=32	n=28	n=38	n=38	n=33	n=70		n=61	
VAS pain	69.2 (13.9)	44.8 (22.8)	35.1 (24.4)	67.0 (13.0)	40.6 (24.7)	45.2 (26.1)	−5.6 (−16.9 to 5.6)	0.32	−11.8 (−23.0 to −0.5)	0.04

Kloppenburg M. Ann Rheum Dis 2018;77:1757–1764

EXTENDED REPORT

Etanercept in patients with inflammatory hand osteoarthritis (EHOA): a multicentre, randomised, double-blind, placebo-controlled trial

Table 3 Secondary clinical and imaging outcome measurements at baseline, and between-group differences at 24 weeks and 1 year

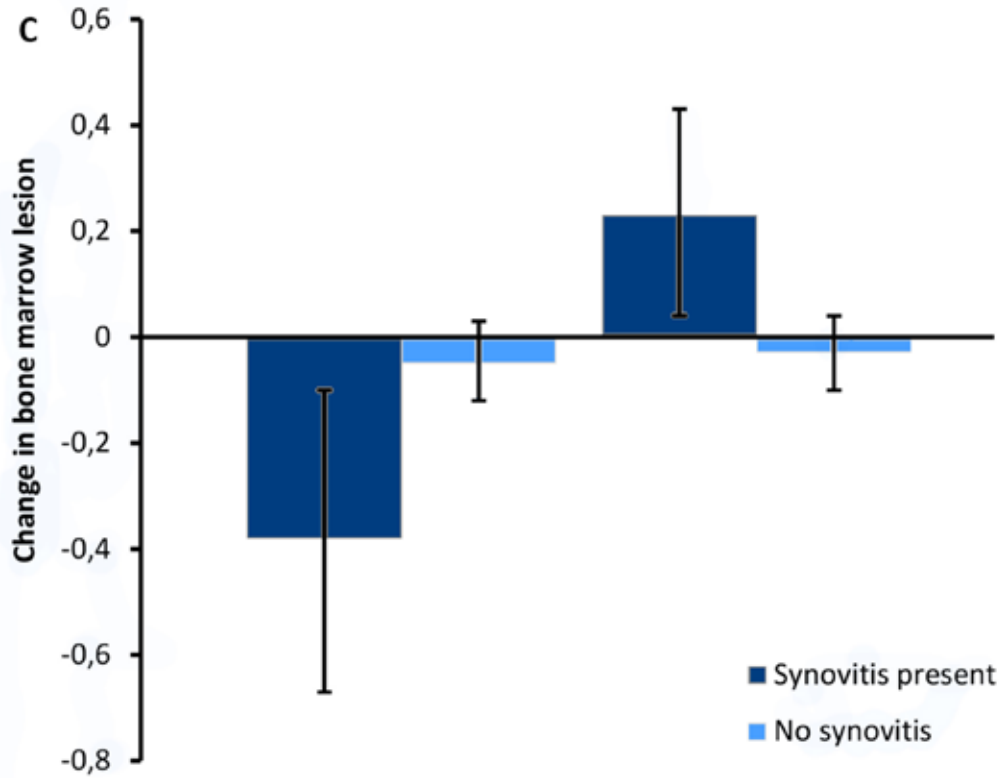
	Etanercept	Placebo	Between-group difference			
	Baseline	Baseline	24 weeks	P values	1 year	P values
Intention-to-treat						
Clinical outcomes	n=45	n=45	n=89		n=89*	
VAS patient global	63.7 (18.8)	66.3 (16.2)	−2.5 (−12.6 to 7.6)	0.62	−2.3 (−13.0 to 8.4)	0.67
VAS physician global	58.1 (16.9)	56.1 (13.6)	−4.0 (−14.9 to 6.8)	0.53	−2.8 (−17.4 to 11.6)	0.70
FIHOA	9.9 (5.9)	10.9 (9.9)	0.0 (−1.7 to 1.8)	0.97	0.0 (−2.4 to 2.3)	0.98
Grip strength	15.9 (10.8)	17.3 (11.9)	0.4 (−1.7 to 2.4)	0.74	0.0 (−2.2 to 2.1)	0.97
SF-36 PCS†	42.9 (8.4)	42.9 (9.3)			0.7 (−3.6 to 5.1)	0.11
Tender joint count	8.0 (9.0)	6.5 (4.6)	−0.4 (−1.8 to 1.0)	0.58	0.4 (−1.4 to 2.1)	0.66
Soft swollen joint count	3.0 (2.2)	2.1 (1.8)	−0.03 (−0.8 to 0.8)	0.94	−0.01 (−0.9 to 0.9)	0.99
Ultrasound	n=43	n=44	n=89		n=89	
Joints with power Doppler, median (IQR)	2.0 (1.0–3.0)	1.0 (1.0–3.0)	−0.3 (−1.04 to 0.4)	0.39	−0.01 (−0.7 to 0.7)	0.98
Joints with synovial thickening, median (IQR)	3.0 (1.0–6.0)	2.0 (1.0–5.0)	0.2 (−1.02 to 1.3)	0.07	−0.3 (−1.9 to 1.3)	0.73
Selected patient groups						
Radiographs‡§	n=23	n=31			n=54	
GUSS	287 (36)	288 (34)			2.9 (0.5 to 5.4)	0.02
MRI‡	n=10	n=10			n=20	
Synovitis	1.0 (0.5)	1.4 (0.3)			0.03 (−0.2 to 0.3)	0.81
Bone marrow lesions	0.6 (0.3)	0.7 (0.3)			−0.2 (−0.4 to −0.1)	0.001

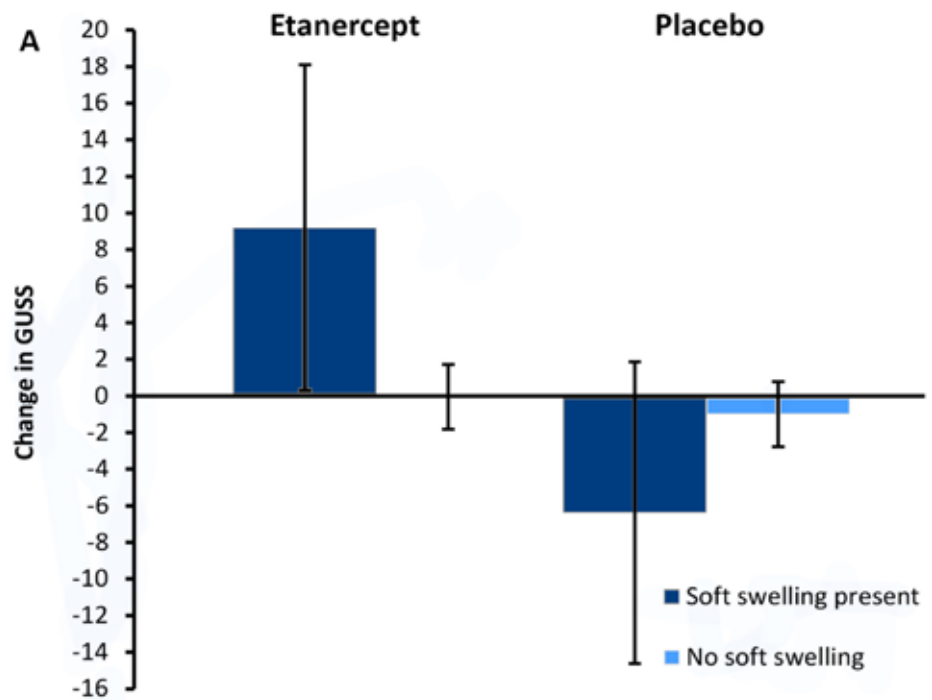
Kloppenburg M. Ann Rheum Dis 2018;77:1757–1764

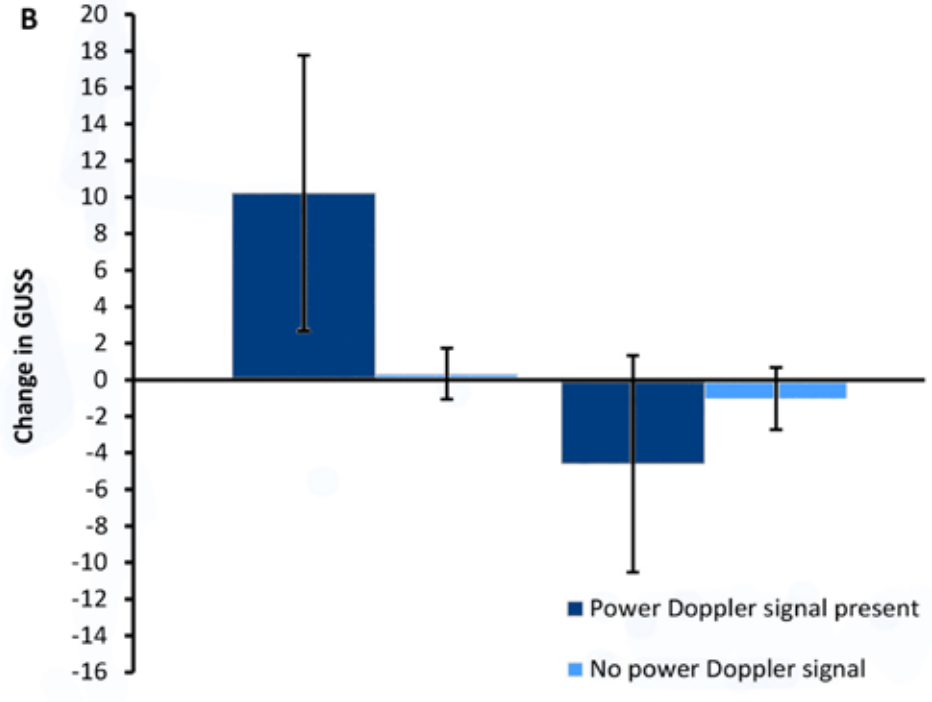
Clinical and epidemiological research

EXTENDED REPORT

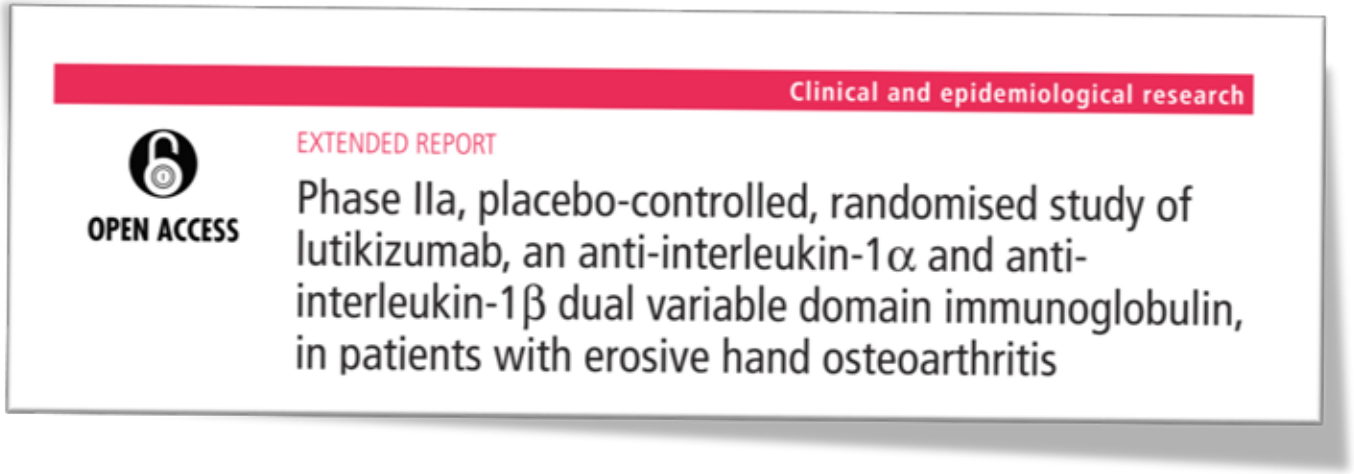
Etanercept in patients with inflammatory hand osteoarthritis (EHOA): a multicentre, randomised, double-blind, placebo-controlled trial







Kloppenburg M. Ann Rheum Dis 2018;77:1757–1764



Προκλινικές μελέτες ΟΑ ανθρώπων αλλά και μοντέλων ποντικιών:

IL1a, IL-1β μεσολαβητές:

- Υμενίτιδας
- Καταστροφής χόνδρου
- Οστικής απώλειας

Lutikizumab: DVD Ig, συνδέεται και ουδετεροποιεί την IL-1a και IL-1β

Kloppenburg M. Ann Rheum Dis 2018;0:1–8

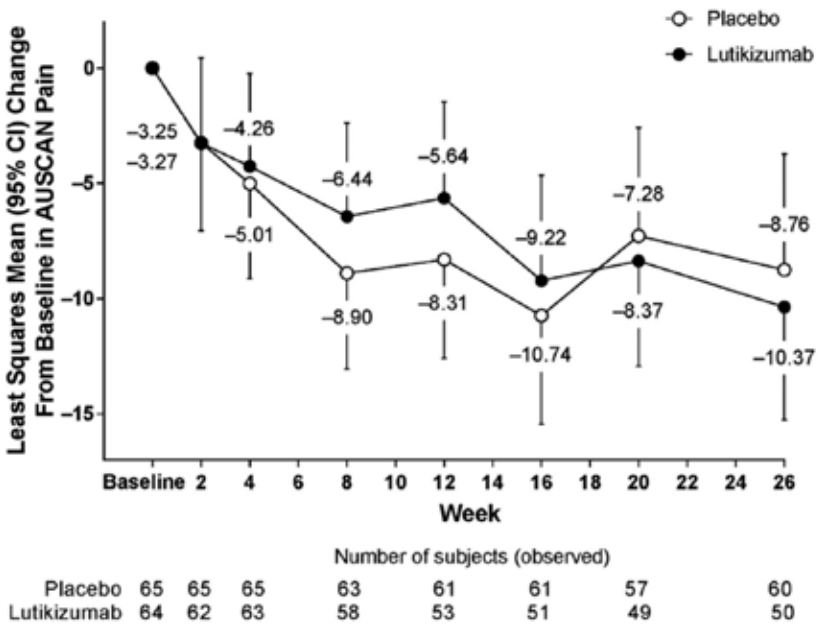
Clinical and epidemiological research

OPEN ACCESS

EXTENDED REPORT

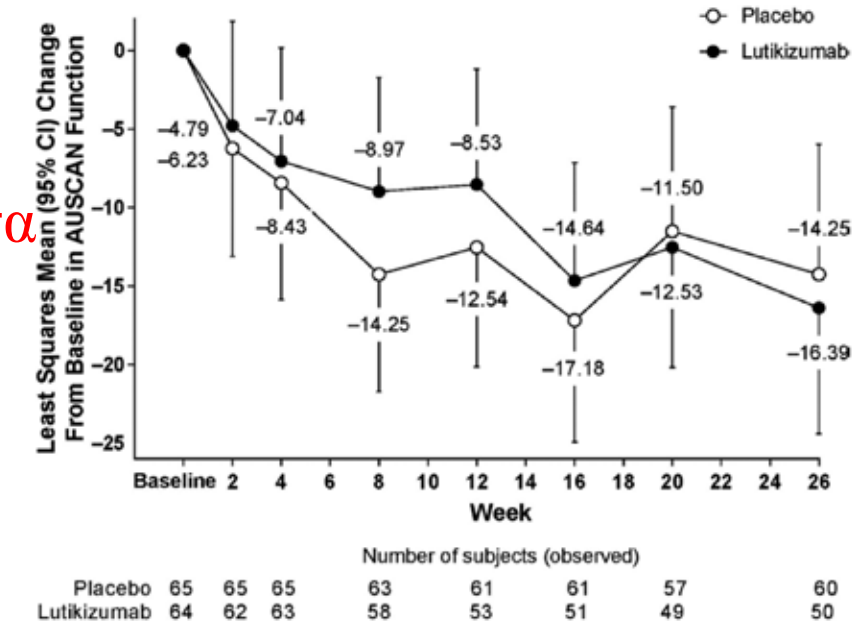
Phase IIa, placebo-controlled, randomised study of lutikizumab, an anti-interleukin-1α and anti-interleukin-1β dual variable domain immunoglobulin, in patients with erosive hand osteoarthritis

Πόνος



- Φάσης 2α μελέτη
- Διπλά τυφλή
- Ασθενείς με διαβρωτική ΟΑ άκρων χειρών
- Σύγκριση με εικονικό

Λειτουργικότητα



Kloppenburg M. Ann Rheum Dis 2018;0:1–8

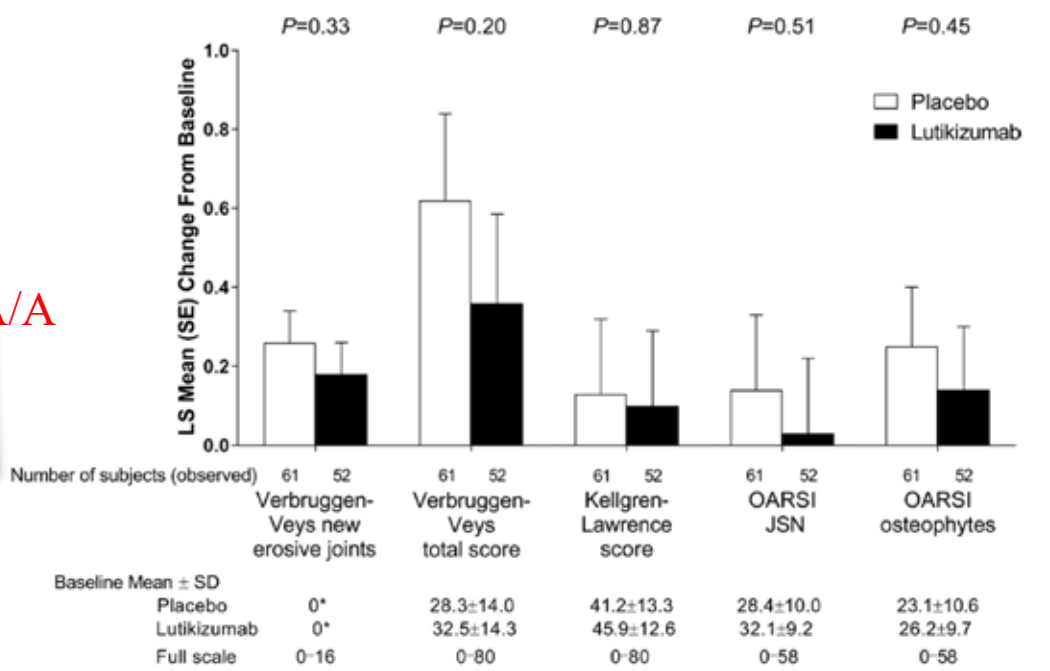
Clinical and epidemiological research

OPEN ACCESS

EXTENDED REPORT

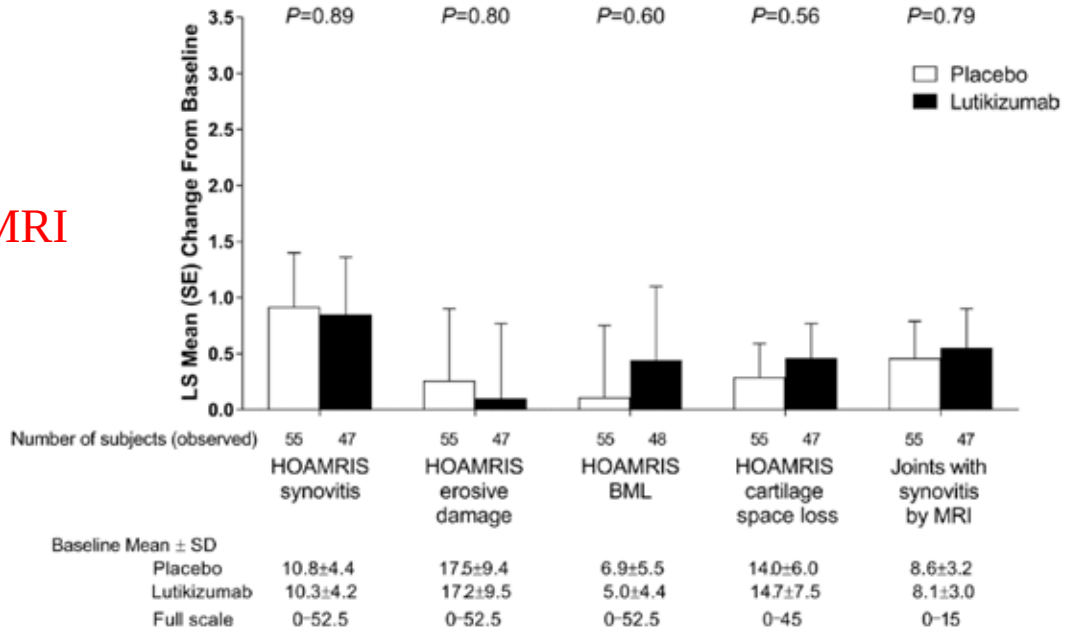
Phase IIa, placebo-controlled, randomised study of lutikizumab, an anti-interleukin-1α and anti-interleukin-1β dual variable domain immunoglobulin, in patients with erosive hand osteoarthritis

A/A



§ Καμιά σημαντική διαφορά στις δομικές αλλοιώσεις (Απεικόνιση)

MRI



OPEN ACCESS

EXTENDED REPORT

Phase IIa, placebo-controlled, randomised study of lutikizumab, an anti-interleukin-1α and anti-interleukin-1β dual variable domain immunoglobulin, in patients with erosive hand osteoarthritis

Η στόχευση της IL-1 μπορεί να μην είναι αποτελεσματική στην διαβρωτική ΟΑ των άκρων χειρών

Table 3 Safety results

AE, n (%)	Placebo (n=67)	Lutikizumab (n=64)
Any AE	59 (88)	58 (91)
Any SAE	2 (3)	2 (3)
AE leading to discontinuation	2 (3)	5 (8)
Neutropaenia leading to discontinuation	0	2 (3)
Death	0	0
Infection	34 (51)	26 (41)
Serious infection	0	0
Injection site reaction	11 (16)	23 (36)
Laboratory abnormality, n (%)		
Neutropaenia (grade 2, 3 or 4)	0	12 (19)
Grade 2: 1 to <1.5 $\times 10^9$/L	0	9 (14)
Grade 3: 0.5 to <1 $\times 10^9$/L	0	3 (5)
Grade 4:<0.5 $\times 10^9$/L	0	0
Hypertriglyceridaemia (grade 3 or 4)	0	1 (2)
Grade 3: >5.7 to 11.4 mmol/L	0	1 (2)

Journal of Pain Research

Dovepress
open access to scientific and medical research

Open Access Full Text Article

REVIEW

Knee osteoarthritis: pathophysiology and current treatment modalities

Societies recommendations			
Treatment	**OARSI**	**ACR**	**AAOS**
Exercise (land and water based)	Appropriate	Strong recommendation	Strong recommendation
Transcutaneous electrical nerve stimulation (TENS)	Uncertain	Conditional recommendation	Inconclusive
Weight control	Appropriate	Strong recommendation	Moderate recommendation
Chondroitin or Glucosamine	Not appropriate for disease modification, Uncertain	Recommended against use	Recommended against use
Acetaminophen	Without comorbidities: appropriate	Conditional recommendation	Inconclusive
Duloxetine	Appropriate	No recommendation	No recommendation
Oral NSAIDs	Without comorbidities: appropriate With comorbidities: not appropriate	Conditional recommendation	Strong recommendation
Topical NSAIDs	Appropriate	Conditional recommendation	Strong recommendation
Opioids	Uncertain	No recommendation	Recommended only tramadol
Intra-articular corticosteroids	Appropriate	Conditional recommendation	Inconclusive
Intra-articular viscosupplementation	Uncertain	No recommendation	Recommended against use


Ευχαριστώ για την προσοχή σας