



ΕΛΛΗΝΙΚΗ ΝΕΦΡΟΛΟΓΙΚΗ ΕΤΑΙΡΕΙΑ
HELLENIC SOCIETY OF NEPHROLOGY

25^ο Πανελλήνιο
Συνέδριο

ΝΕΦΡΟΛΟΓΙΑΣ


ΜΕΓΑΡΟ
ΔΙΕΘΝΕΣ
ΣΥΝΕΔΡΙΑΚΟ
ΚΕΝΤΡΟ

W W W . 2 5 P S N . G R

12.30-14.20 ΣΤΡΟΓΓΥΛΟ ΤΡΑΠΕΖΙ

ΣΠΕΙΡΑΜΑΤΟΝΕΦΡΙΤΙΔΕΣ

Προεδρείο: Π. Κυρικλίδου, Γ. Μουστάκας

Μεθοδολογία συγγραφής των διεθνών οδηγιών
Μ. Κωστοπούλου

ΤΕΤΑΡΤΗ 19 ΙΟΥΝΙΟΥ 2024

COI

- None for this lecture

(Κλινικές) Κατευθυντήριες οδηγίες Clinical Practice Guidelines - CPG

Ορισμός: Συστάσεις που αναπτύσσονται με **συστηματικό τρόπο** και έχουν ως στόχο την **βελτίωση της παροχής υγείας** σε κλινικό, οργανωτικό ή συστημικό επίπεδο (πολιτικές υγείας).

Φορείς συγγραφής κατευθυντήριων οδηγιών

KDIGO	Kidney Diseases Improving Global Outcomes	Global
SLANH	Sociedad Latinoamericana de Nephrologia e Hipertension	Latin America
KHA-CARI	Kidney Health Australia—Caring for Australasians with Renal Impairment	Australia, New Zealand
KDOQI	Kidney Disease Outcomes Quality Initiative	USA
CSN	Canadian Society of Nephrology	Canada
UK-RA	United Kingdom Renal Association	United Kingdom
ERA	European Renal Association	Europe

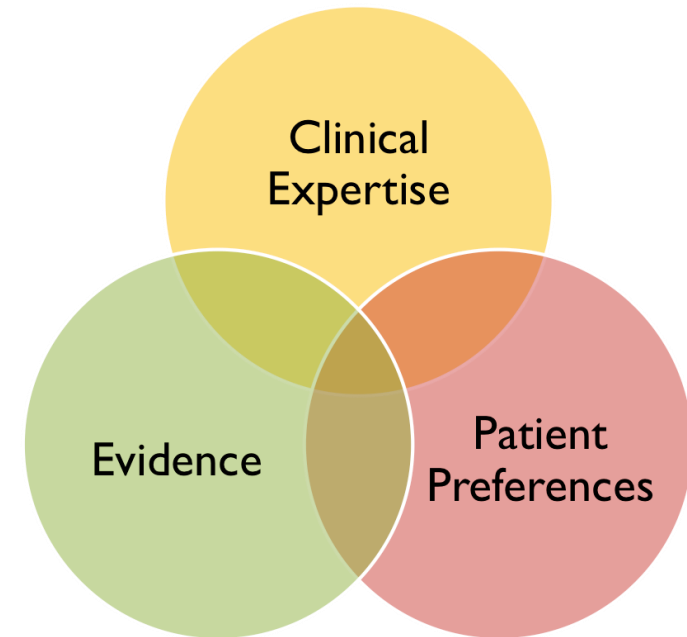
- Επιστημονικές εταιρείες
- Εθνικοί οργανισμοί
- Επαγγελματικές ενώσεις
- Μη κερδοσκοπικοί οργανισμοί

Ιστορικά

“The millennials”

- Κλινική εμπειρία
- Υπόθεση της παθοφυσιολογίας

Evidence-based practice



Μεθοδολογία συγγραφής κατευθυντήριων οδηγιών

Ο συστηματικός τρόπος που “στήνονται” οι CPG: από τις ενδείξεις στις συστάσεις



Μεθοδολογία συγγραφής κατευθυντήριων οδηγιών

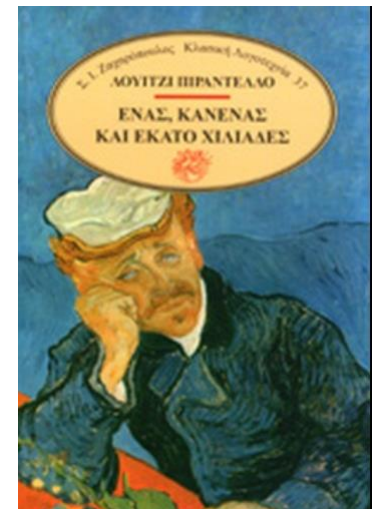
Ο συστηματικός τρόπος που “στήνονται” οι CPG: από τις ενδείξεις στις συστάσεις

Υπάρχει ΜΙΑ μέθοδος; Με άλλα λόγια υπάρχει ΕΝΑΣ συστηματικός τρόπος που αναπτύσσονται οι CPG;

Πληθώρα οδηγιών

Αλληλοεπικάλυψη οδηγιών που δημοσιεύονται από άλλους φορείς

Αμφίβολης ποιότητας οδηγίες



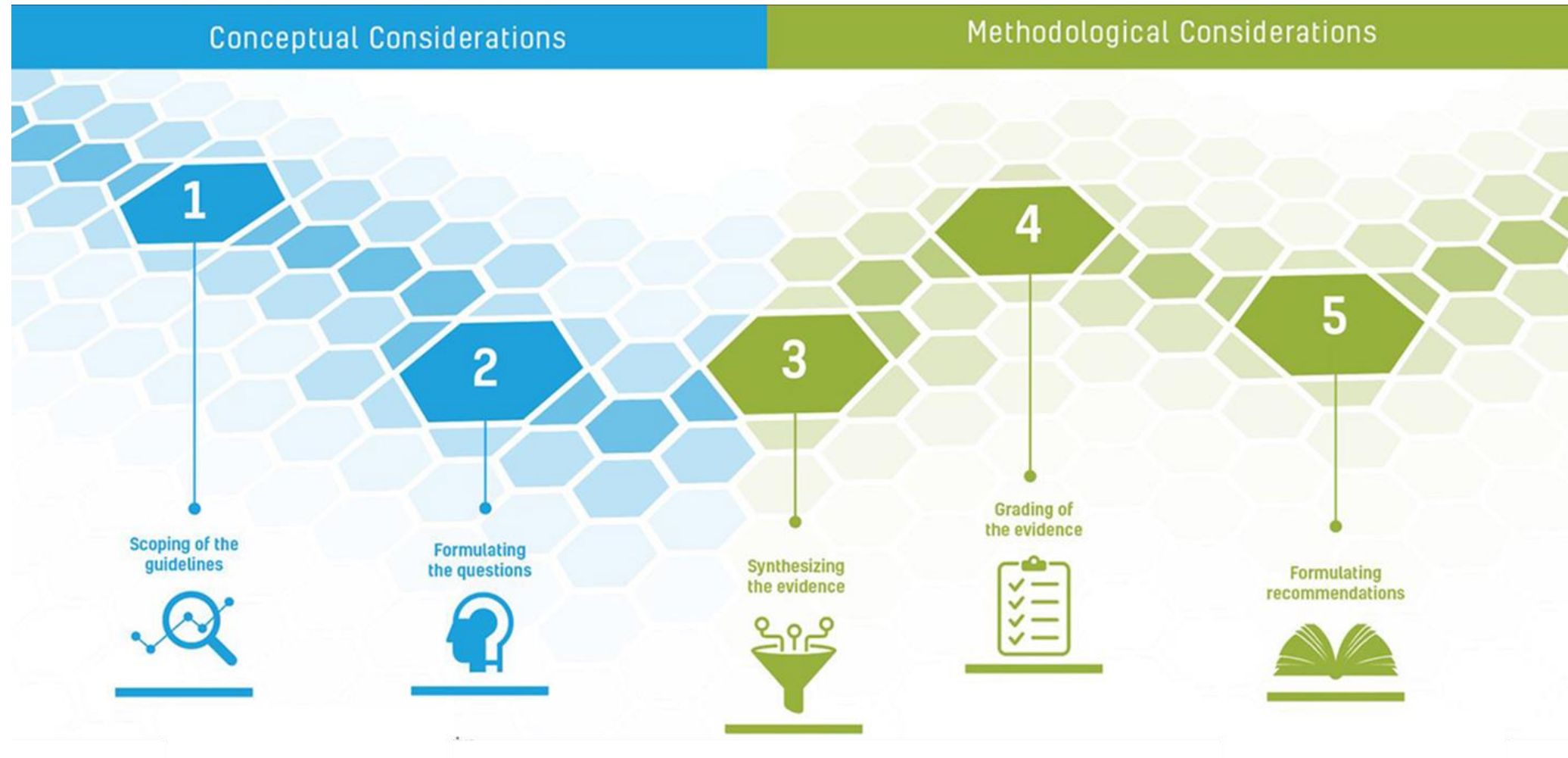
Μεθοδολογία συγγραφής κατευθυντήριων οδηγιών

Approaches to clinical guideline development in healthcare: a scoping review and document analysis

Annemarie De Leo^{1*}, Dianne Bloxsome¹ and Sara Bayes²



Μεθοδολογία συγγραφής κατευθυντήριων οδηγιών

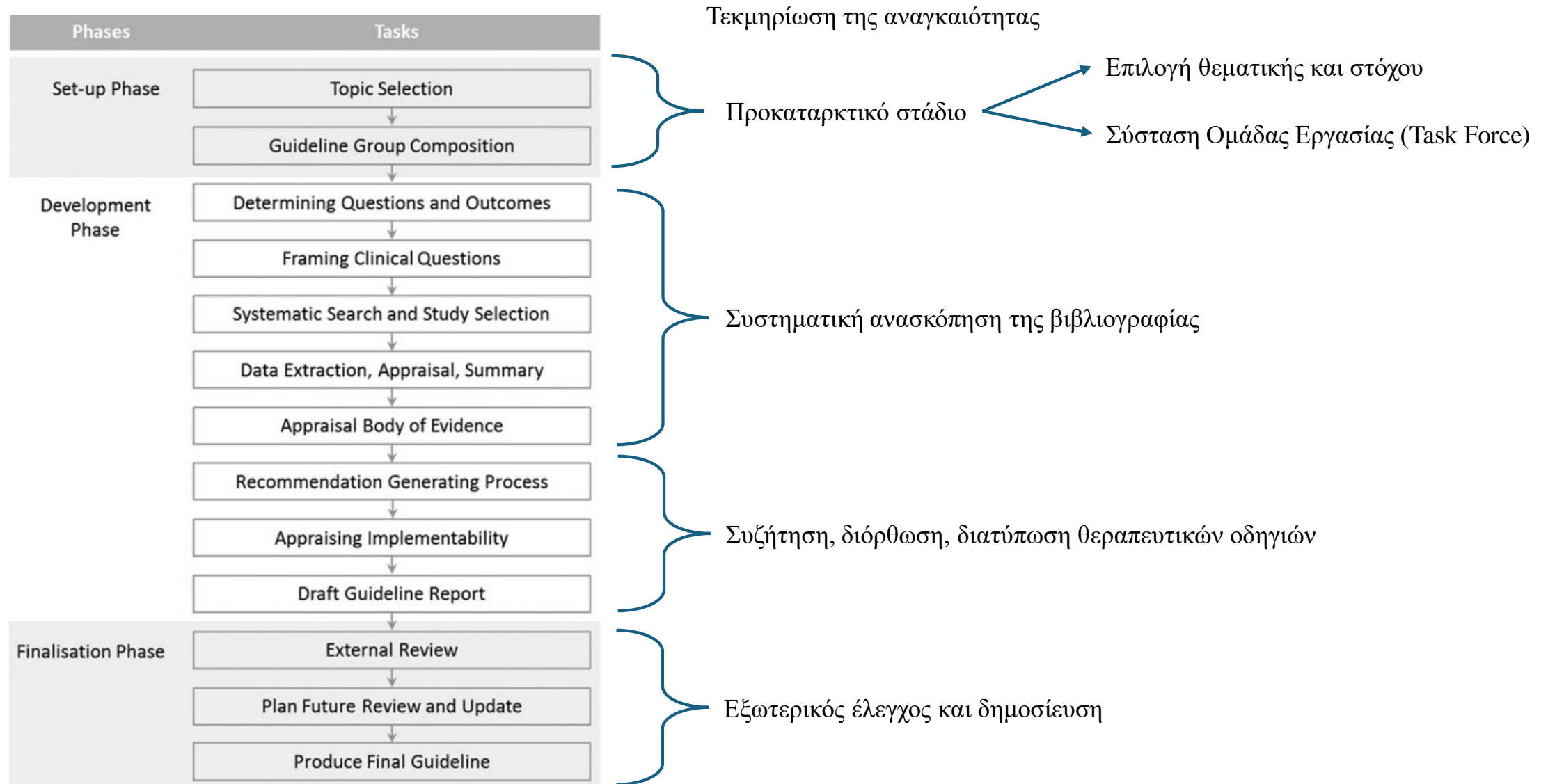


Αρχές αξιολόγησης κατευθυντήριων οδηγιών

- Σαφή περιγραφή της διαδικασίας
- Διαφανή στάδια με σκοπό την ελαχιστοποίηση της μεροληψίας (bias), της αλλοίωσης των δεδομένων και της σύγκρουσης των συμφερόντων
- Ομάδα εργασίας με συμμετοχή όλων των εμπλεκόμενων ειδικοτήτων, μεθοδολόγων, ασθενών/ληπτών της παροχής υγείας
- Συστηματική ανασκόπηση της βιβλιογραφίας
- Περίληψη και σύνθεση της πληροφορίας (evidence) σχετικά με τα οφέλη/κινδύνους που συνδέονται με κάθε οδηγία
- Περιγραφή του ρόλου που έπαιξε η κλινική εμπειρία, η γνώμη των ειδικών ή η προηγούμενη εμπειρία στη διατύπωση των οδηγιών
- Αξιολόγηση της ποιότητας των ενδείξεων (level of evidence) και της ισχύος των οδηγιών (strength of recommendations)
- Εξωτερικός έλεγχος (external review)
- Δυνατότητα ανανέωσης

****Τυποποιημένες Διαδικασίες Λειτουργίας -Standard Operating Procedures (SOP)

ERBP guideline development process.



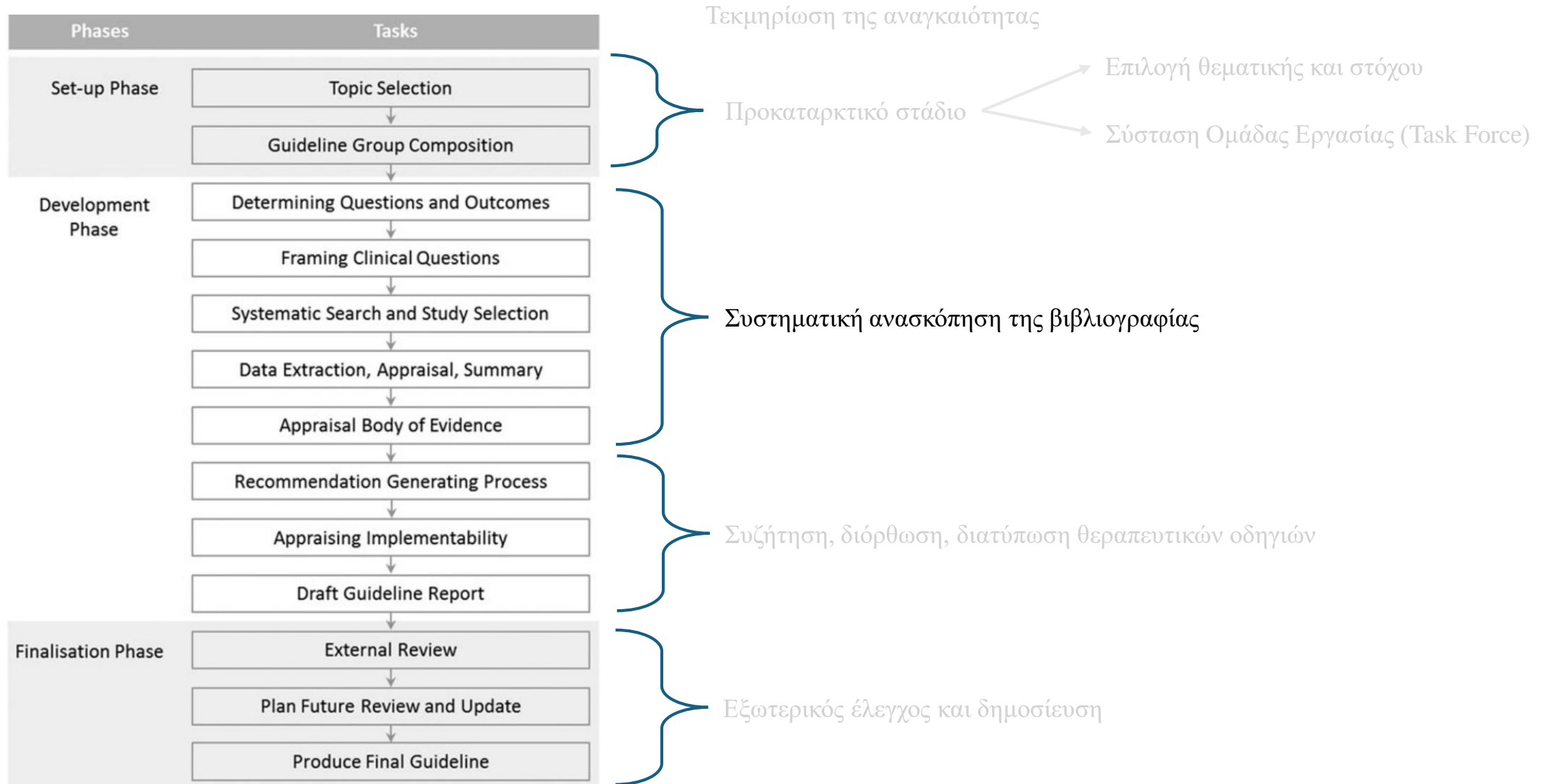
Task Force

- Ιδανικός αριθμός 20-30 άτομα (όλες οι εμπλεκόμενες ειδικότητες, μεθοδολόγοι, ασθενείς/λήπτες υγείας)

Ελαχιστοποίηση μεροληψίας, διαφανής δήλωση σύγκρουσης συμφερόντων

- **Καίριας σημασίας η σύσταση TF.** Το αποτέλεσμα τόσο της τεχνικής διαδικασίας (αναζήτηση ενδείξεων) όσο και της παραγωγικής διαδικασίας (ερμηνεία των αποτελεσμάτων και διατύπωση των συστάσεων) επηρεάζεται από την ίδια τη σύνθεση των μελών

ERBP guideline development process.





Cochrane
Library

Cochrane Database of Systematic Reviews

- Frame research question (PICO)
- Write a protocol
- Conduct a literature search (information sources, databases)
- Retrieve citations
- Screen titles/abstracts
- Retrieve full-texts
- Assess risk of bias and extract data
- Qualitative synthesis
- Meta-analysis
- Report

PICO

Define the type of Patients (population)

1. Define the condition eg patients with an autoimmune disease (which? under which criteria?)
2. Define the population setting and demographic factors (hospital? outpatient clinic? age group? sex?)

Define the type of Intervention (exposure)

1. Was it a treatment? How was it administered? When? Dosages?
2. Was it an exposure? How long did it last?

Define the Comparison

1. For controlled trials is it treatment A vs placebo? Is it treatment A vs treatment B?

Define the Outcome

1. Define how the outcome is measured (criteria, metrics, measurements, time, primary vs secondary)

PICO 1f. In patients with **SLE and active kidney involvement**, what is the evidence for the benefits and harms of therapeutic interventions including antimalarials, glucocorticoids, immunosuppressive, biological/targeted agents, plasma exchange/immunoabsorption?

Population(s)	Intervention(s)-exposure(s)	Comparison	Outcome(s)
<ul style="list-style-type: none"> • SLE patients with active kidney involvement 	<ul style="list-style-type: none"> • Glucocorticoids • Hydroxychloroquine, antimalarials • Immunosuppressive agents • Cytotoxic agents • Methotrexate • Leflunomide • Azathioprine • Cyclophosphamide • Mycophenolate • Cyclosporin • Tacrolimus • Voclosporin • Biological agents • Belimumab • Anifrolumab • Rituximab • Obinutuzumab • Ofatumumab • Ocrelizumab • Atacicept • Telaticept • Dapagliflozin • Etanercept • Adalimumab • Abatacept • Tocilizumab • Secukinumab • Ustekinumab • Anakinra • JAK inhibitors (tofacitinib, baricitinib, upadacitinib, deucravacitinib) • Proteasome inhibitors • Iberdomide • Litifilimab • Low-dose IL-2 • Daratumumab • CD19 CAR-T cells • Plasmapheresis • Plasma exchange • Immunoabsorption • Intravenous immunoglobulin • RAAS inhibitors • SGLT2 inhibitors (Dapagliflozin) 	<ul style="list-style-type: none"> • Standard of care • Mycophenolate • Azathioprine • Cyclophosphamide • Cyclosporin • Tacrolimus • Placebo • None 	<ul style="list-style-type: none"> • Disease activity improvement/worsening (SLEDAI, BILAG): renal-specific domains • Proteinuria improvement/worsening • Kidney function (serum creatinine, eGFR) improvement/worsening • Chronic kidney disease • End-stage kidney disease • Histological improvement/worsening (change in activity/chronicity indices) • Physician Global Assessment • Glucocorticoid dose/tapering • Renal response (e.g., PEER, EULAR-defined endpoints) • Renal remission (complete renal response) • Relapse, flare, time-to-flare • Treatment failure • Organ damage (including cataract, cognitive dysfunction, osteoporotic fracture, osteonecrosis, stroke, cardiovascular disease/MACEs, malignancy, diabetes) • Infection • Hospitalizations • Death • Toxicity (including retinopathy) • Thrombosis

PICO 1f. In patients with SLE and active kidney involvement, what is the evidence for the benefits and harms of therapeutic interventions including antimalarials, glucocorticoids, immunosuppressive, biological/targeted agents, plasma exchange/immunoabsorption?



History and Search Details

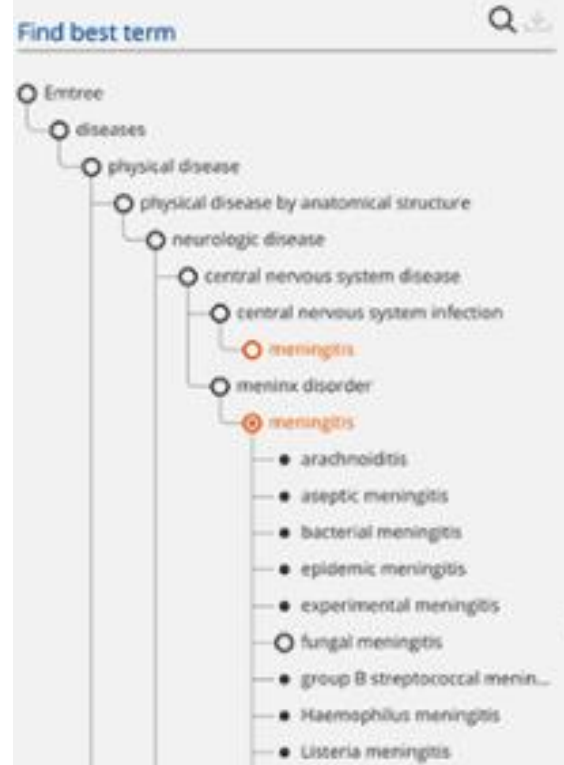
Download Delete

Search	Actions	Details	Query	Results	Time
#1	...	>	Search: ("SLE"[Title] OR "lupus"[Title]) AND ("glucocorticoid**"[All Fields] OR "glucocorticoids"[MeSH Terms] OR "steroid**"[All Fields] OR "steroids"[MeSH Terms] OR "corticosteroid**"[All Fields] OR "anti-inflammatory agents, non steroidal"[MeSH Terms] OR "non-steroidal anti-inflammatory agents"[Title] OR "nsaid"[Title] OR "nsaids"[Title] OR "nsaid s"[Title] OR ("hydroxychloroquine"[MeSH Terms] OR "hydroxychloroquine"[All Fields]) OR "antimalarial**"[All Fields] OR ("quinacrine"[MeSH Terms] OR "quinacrine"[All Fields]) OR ("methotrexate"[MeSH Terms] OR "methotrexate"[All Fields] OR "methotrexate s"[All Fields] OR "methotrexates"[All Fields]) OR ("leflunomid"[All Fields] OR "leflunomide"[MeSH Terms] OR "leflunomide"[All Fields] OR "leflunomide s"[All Fields]) OR ("calcineurin"[MeSH Terms] OR "calcineurin"[All Fields] OR "calcineurin s"[All Fields] OR "calcineurine"[All Fields] OR "calcineurins"[All Fields]) OR ("cyclosporine"[MeSH Terms] OR "cyclosporine"[All Fields] OR "ciclosporin"[All Fields] OR "ciclosporine"[All Fields] OR "cyclosporin"[All Fields] OR "cyclosporine s"[All Fields] OR "cyclosporins"[MeSH Terms] OR "cyclosporins"[All Fields] OR "cyclosporines"[All Fields]) OR ("tacrolimus"[MeSH Terms] OR "tacrolimus"[All Fields]) OR ("voclosporin"[Supplementary Concept] OR "voclosporin"[All Fields]) OR ("azathioprin"[All Fields] OR "azathioprine"[MeSH Terms] OR "azathioprine"[All Fields]) OR ("mycophenolate"[All Fields] OR "mycophenolates"[All Fields] OR "mycophenolic"[All Fields]) OR ("mycophenolate"[All Fields] OR "mycophenolates"[All Fields] OR "mycophenolic"[All Fields]) OR ("cyclophosphamide"[MeSH Terms] OR "cyclophosphamide"[All Fields] OR "cyclophosphamid"[All Fields] OR "cyclophosphamide s"[All Fields] OR "cyclophosphamides"[All Fields]) OR ("rituximab"[MeSH Terms] OR "rituximab"[All Fields] OR	17,463	03:46:21



PICO Search

Quick PICO PV Wizard Medical device Advanced Drug Disease Device Article Authors



- Population
e.g. diabetes
- Intervention
e.g. insulin
- Comparison
e.g. placebo
- Outcome
e.g. risk
- Study design (or miscellaneous)
e.g. randomized controlled trial

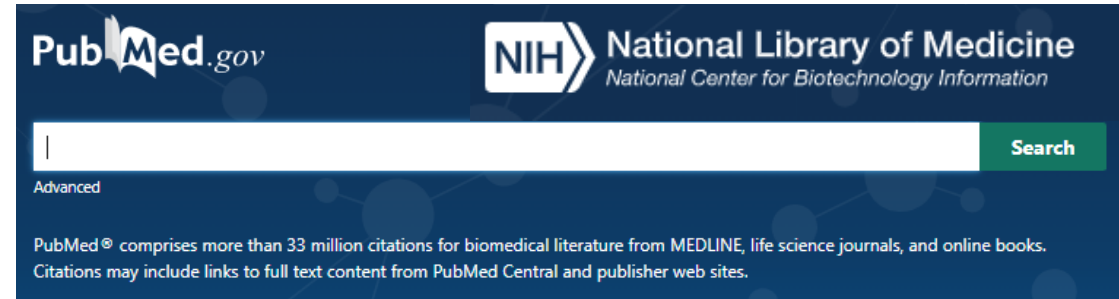
Conducting a literature search

- Major bibliographic databases

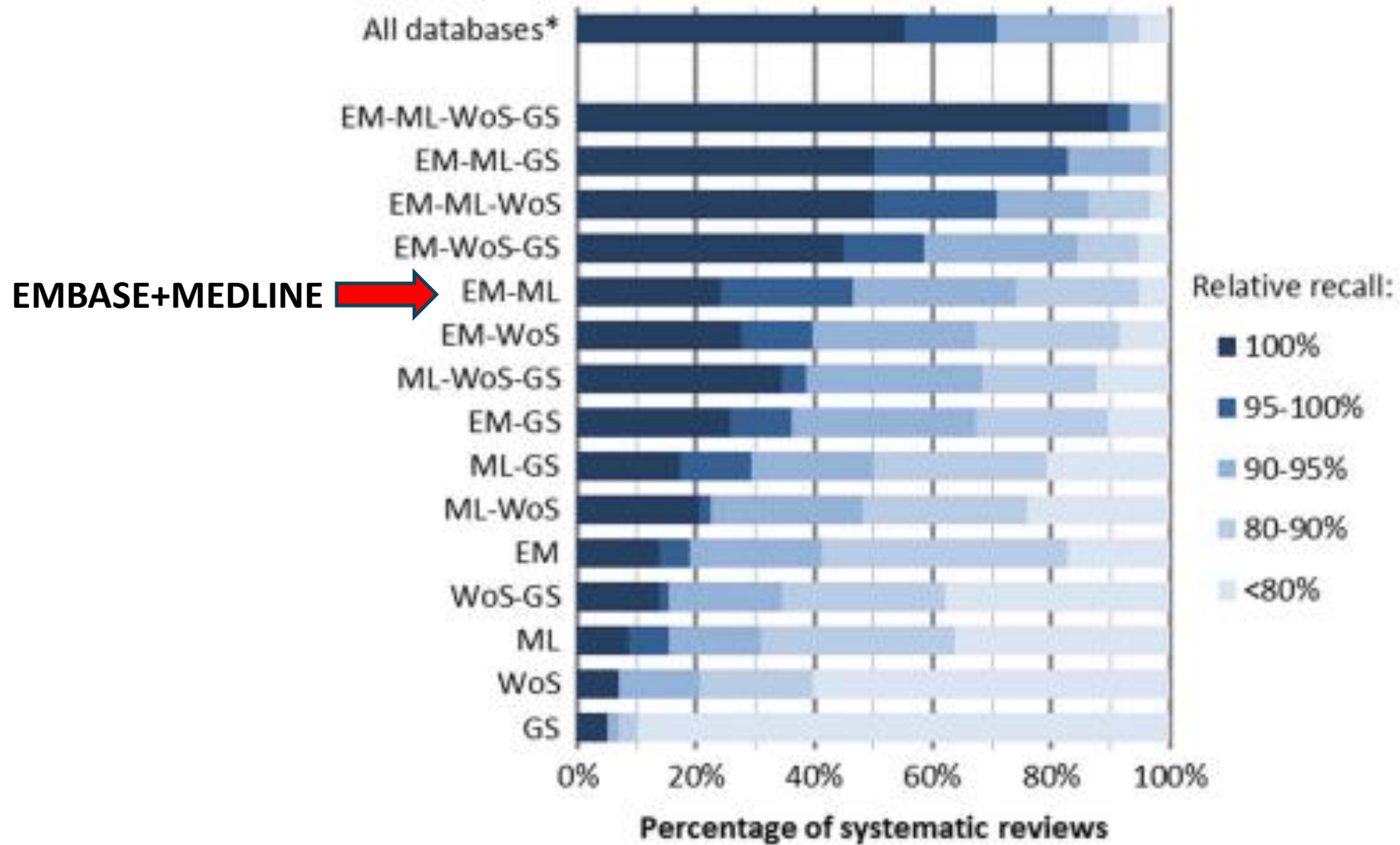
- I. MEDLINE/ PubMed
- II. EMBASE/ Elsevier
- III. CENTRAL
- IV. Subject-specific (CINAHL, PsychINFO)
- V. Citation databases (Web of Science, Scopus)
- VI. Registers of clinical trials (clinicaltrials.gov, EudraCT)

+ Gray (or grey) literature

± Hand searching



Πόσες μηχανές αναζήτησης;

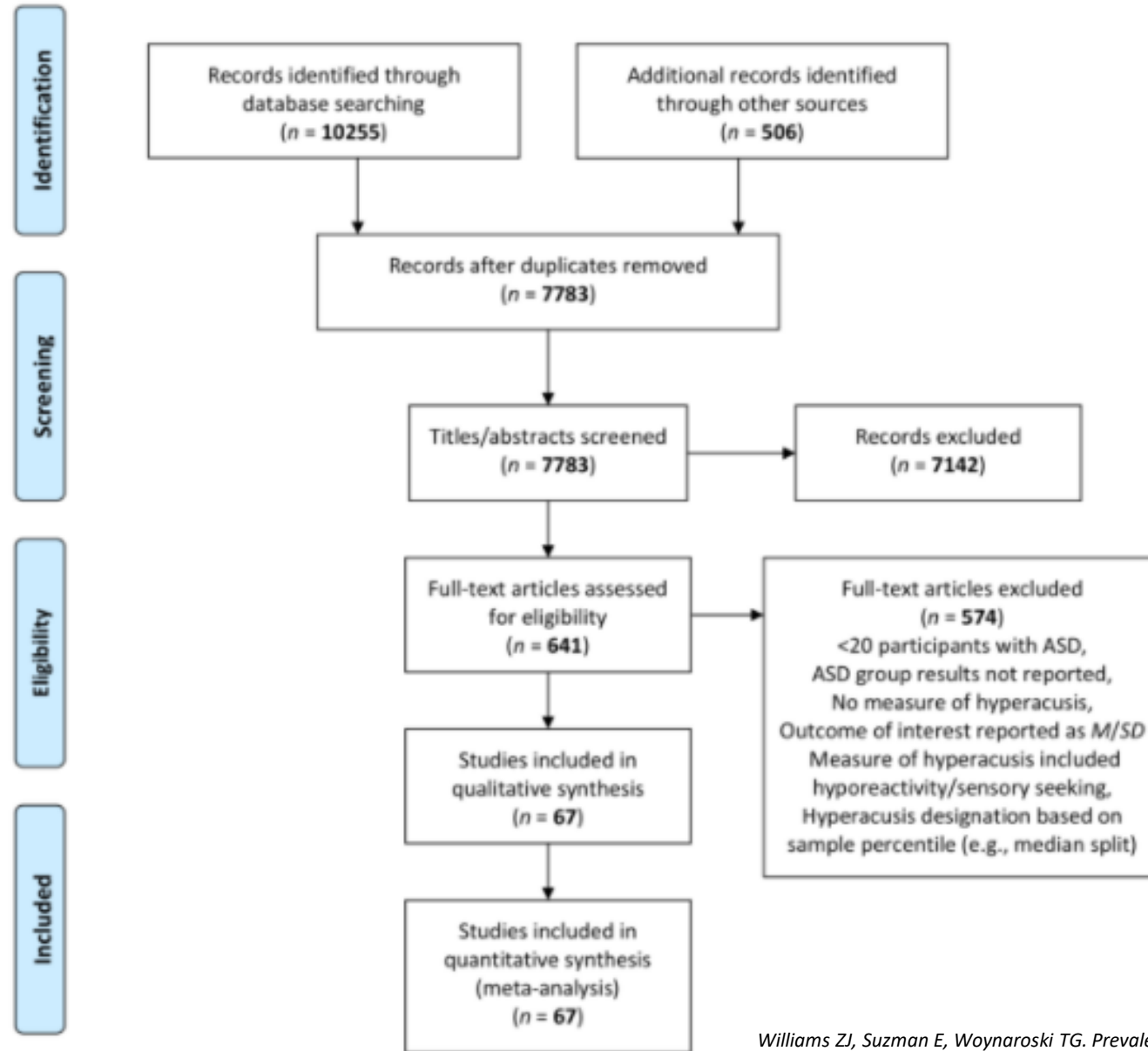


Ανάλογα με τη φύση του ερωτήματος ψάχνουμε μελέτες με τον κατάλληλο σχεδιασμό

Question	Look for evidence from:
Incidence, prevalence	Surveys, cohort studies
Therapy	Clinical trials
Screening	Clinical trials
Diagnostic accuracy	Clinical trials, cross sectional studies
Prognosis	Clinical trials, cohort studies
Harm	Clinical trials, cohort studies, case control studies
Etiology	Cohort studies, case control

Άλλα φίλτρα : γλώσσα, χρονικό εύρος, μέγεθος δείγματος...

The PRISMA flowchart



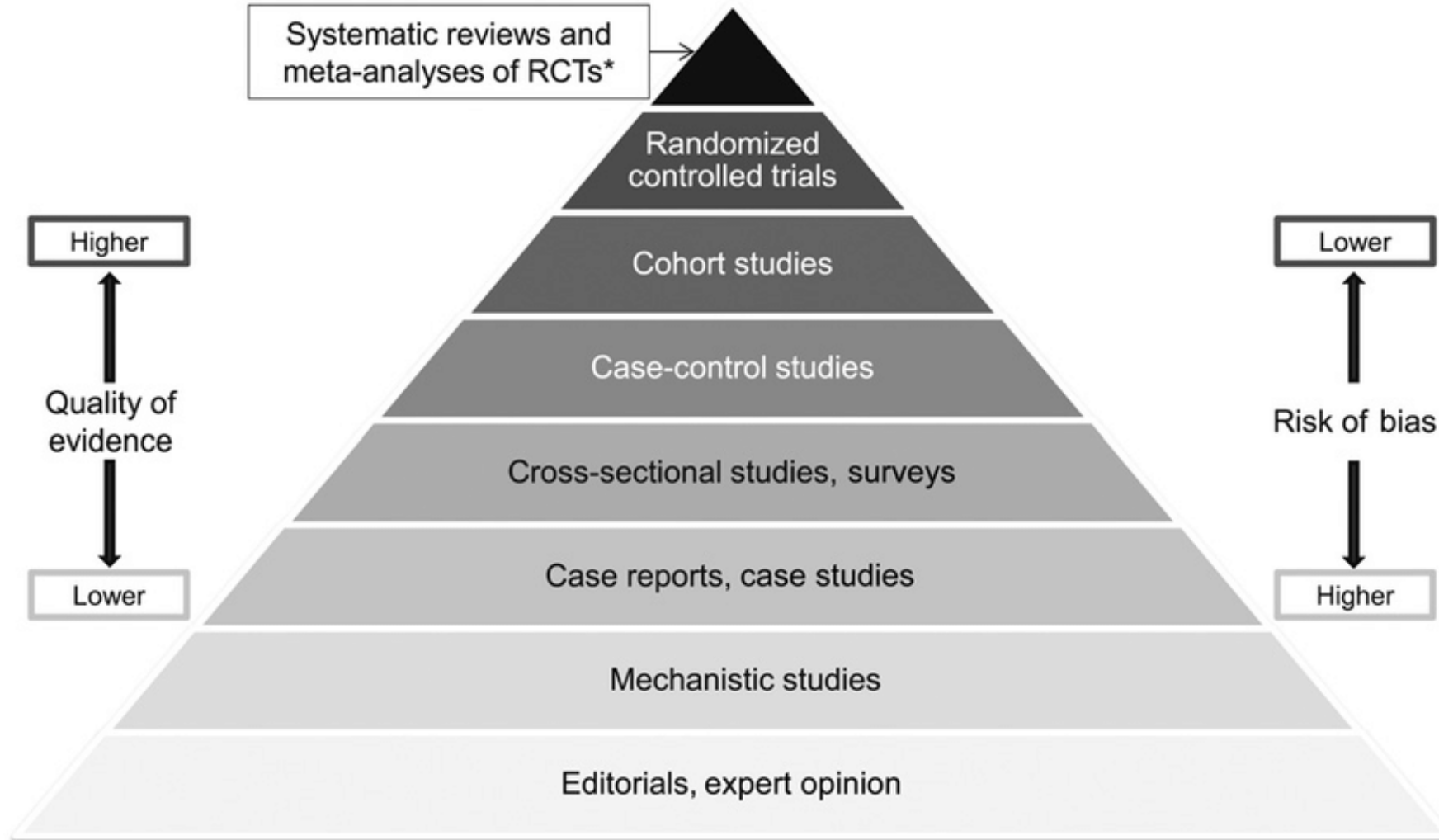
Εξαγωγή της πληροφορίας από τις επιλεγμένες μελέτες

Column	PM ID	Authors	Title	Type of Study	Link	Year	Number of patients	MF	Age	Ethnicity	Extrarenal	Class (I-V)	Previous treatment	Treatment regimen RTX	Add-on treatment	Complete /Partial Remission rate in 6mo
1	26053285	Smith et al	Efficacy and safety of off-label use of rituximab in refractory lupus: data from the Italian Multicentre Cohort Study	CS	https://www.ncbi.nlm.nih.gov/pubmed/26053285	May2003-Aug2012	68	only provided	only provided	NA		glomerulonephritis?		A:2x 1g /15d B: 4x 375 mg/m2 /week C: 4x 375 mg/m2/week followed by 2x375 mg/m2 in 1mo and in 2 months after 4th infusion Patients treated with scheme C concomitantly received	Previous treatment Only in C: CYC ,SM	
2	16947528	Smith et al	Efficacy and safety of rituximab in the treatment of resistant lupus	CS	https://www.ncbi.nlm.nih.gov/pubmed/16947528	2001-2003	6	1/5	35.5(17-5)	UK?	S(6), J(5), L(2)	?	MMF(5), AZA(1), PZ(6)	1CYC+ (4 x RTX (375mg/m2))	MMF(5), AZA(1), PZ(6)	
3	23632989	Davies et al	Efficacy and safety of rituximab in the treatment of resistant lupus	CS	https://www.ncbi.nlm.nih.gov/pubmed/23632989	Jan2004-2009	18	4/14	29(21-45)	E(6), AF(9) AS(3)		III-V	MMF(17), AZA(15), CYC(18)	500CYC + (2 x RTX 1g) +500PZ	steroids	11/18 2/18
4	26054418	Tanaka et al	Efficacy and safety of rituximab in Japanese patients with refractory SLE	CS	https://www.ncbi.nlm.nih.gov/pubmed/26054418	Jul2007-May2010	17(10 biopsy)	NR	NR	Japanese?	S(4), J(2), L(1)	III-IV(for the 10 biopsy)	MMF (2), CYC(8), AZA(5), MTX(2)	2x 1gr /15d (2doses, repeat after 6m)	MMF (2), CYC(8), AZA(5), MTX(2)	
5	23740227	Condon et al	Efficacy and safety of rituximab in patients with refractory SLE: an observational single-centre cohort study to evaluate safety and efficacy	CS	https://www.ncbi.nlm.nih.gov/pubmed/23740227	Jan2006-Nov2010	50	11/39	45(19-75)	E(20),AF(6)		58% III-V	MMF(4), CYC(2), AZA(6), MTX(2)	2x 1gr/15d, 2x 500mgSM, +MMF	MMF	32% 30%
6	22231479	Rovin et al	Efficacy and safety of rituximab in patients with refractory SLE: a randomised controlled trial	RCT	https://www.ncbi.nlm.nih.gov/pubmed/22231479	Jan2006-Jan2008	72	9/63	31.8+/-9.6	E(19), AF(20), AS(4) HIS(29)		III-V		4x 1g (d1,15,168, 182)	MMF, Cortic	
7	19478041	Liet et al	Efficacy and safety of rituximab in combination with intravenous corticosteroids in the treatment of refractory SLE	RCT	http://theumatology.com/19478041	NA	19	2/17	39.9 (24-6)	NA		III-V	MMF(3), CYC(9), AZA(7), CS 2x 1g (d1,d15)		Cortic, Corto + 750CYC in other arm	
8	17393458	Gunnarsson et al	Efficacy and safety of rituximab in combination with intravenous corticosteroids in the treatment of refractory SLE: a randomised controlled trial	CS	https://www.ncbi.nlm.nih.gov/pubmed/17393458	NA	7	0/7	30(19-43)	NA		III-IV	MMF(3), CYC(7), AZA(6), CS 4x 375mg/m2 (d2, d9,d16,d23)	Cortio + CYC	42% 14%	
9	22586177	Moroni et al	Efficacy and safety of rituximab versus oral cyclophosphamid in the treatment of refractory SLE: a randomised controlled trial	CT	https://www.ncbi.nlm.nih.gov/pubmed/22586177	Apr2006-Jan2010	10	0/10	37.4(36.5-)	NA	NA	III-V	MMF(3), CYC(9), AZA(6), CS 2x 1g (d3,d18)		Cortio+MMF/AZA(after 3 mo)	
10	16677395	Vigna-Perez et al	Efficacy and safety of rituximab in the treatment of refractory SLE: a randomised controlled trial	CS	https://www.ncbi.nlm.nih.gov/pubmed/16677395	NA	22	3/19	29.04(9-5)	NA	S(18), J(12), Sero. III-V		MMF(13), CYC(11),AZA(21),MTX 2x 0.5-1ar (d1,d15)		MMF(11),CYC(1),AZ, 5/22, 7/22 unclear	

Activate Windows
Go to Settings to activate Windows.

Αξιολόγηση μελετών

Σχεδιασμός μελετών και ποιότητα ενδείξεων



Αξιολόγηση μελετών

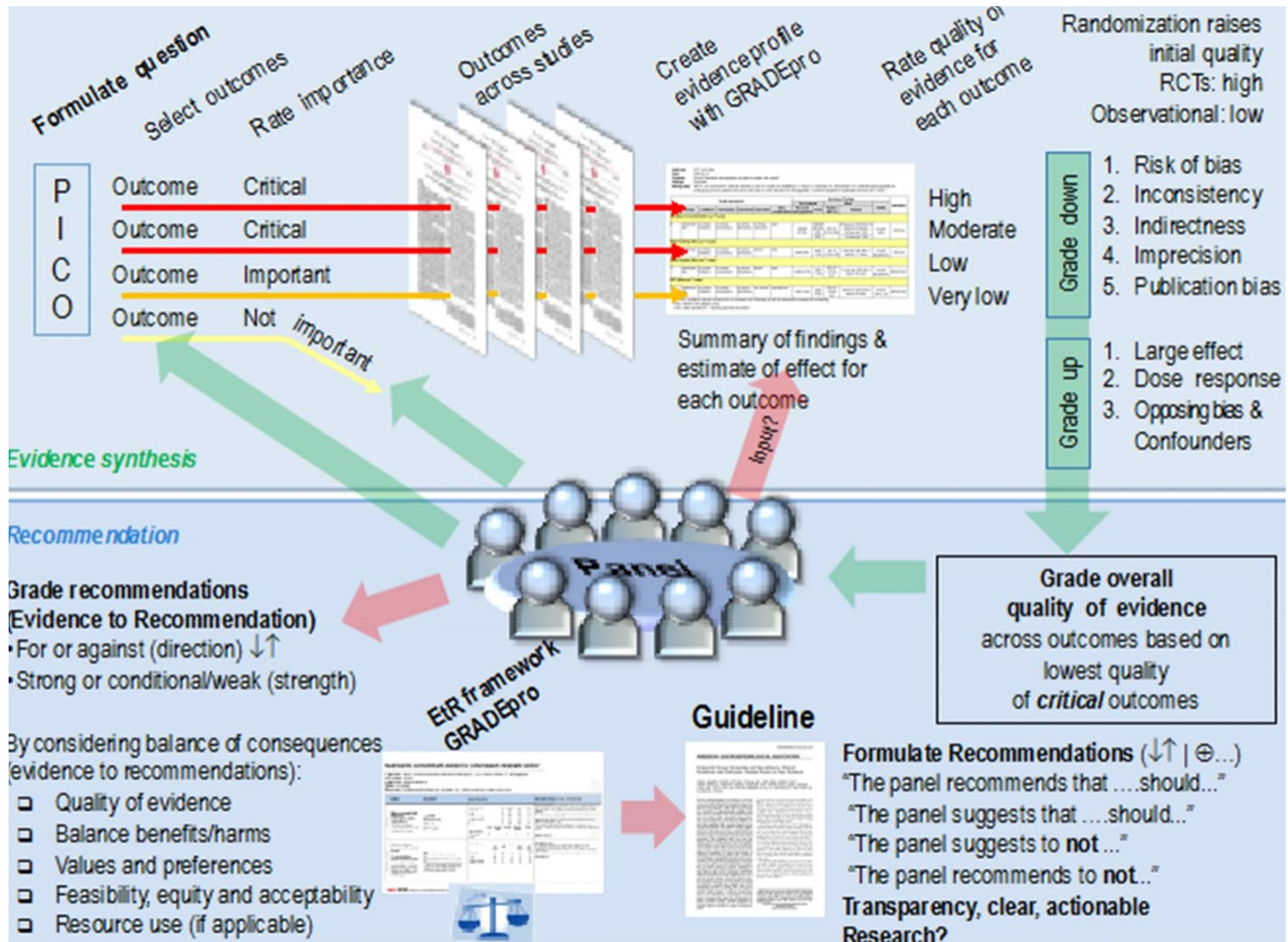
Έλεγχος μεροληψίας - Assessing risk of bias

Sources of bias in RCTs

Type of bias	Description	Relevant domains in the Collaboration's 'Risk of bias' tool
Selection bias.	Systematic differences between baseline characteristics of the groups that are compared.	<ul style="list-style-type: none">• Sequence generation.• Allocation concealment.
Performance bias.	Systematic differences between groups in the care that is provided, or in exposure to factors other than the interventions of interest.	<ul style="list-style-type: none">• Blinding of participants and personnel.• Other potential threats to validity.
Detection bias.	Systematic differences between groups in how outcomes are determined.	<ul style="list-style-type: none">• Blinding of outcome assessment.• Other potential threats to validity.
Attrition bias.	Systematic differences between groups in withdrawals from a study.	<ul style="list-style-type: none">• Incomplete outcome data
Reporting bias.	Systematic differences between reported and unreported findings.	<ul style="list-style-type: none">• Selective outcome reporting (see also Chapter 10).

Αξιολόγηση μελετών

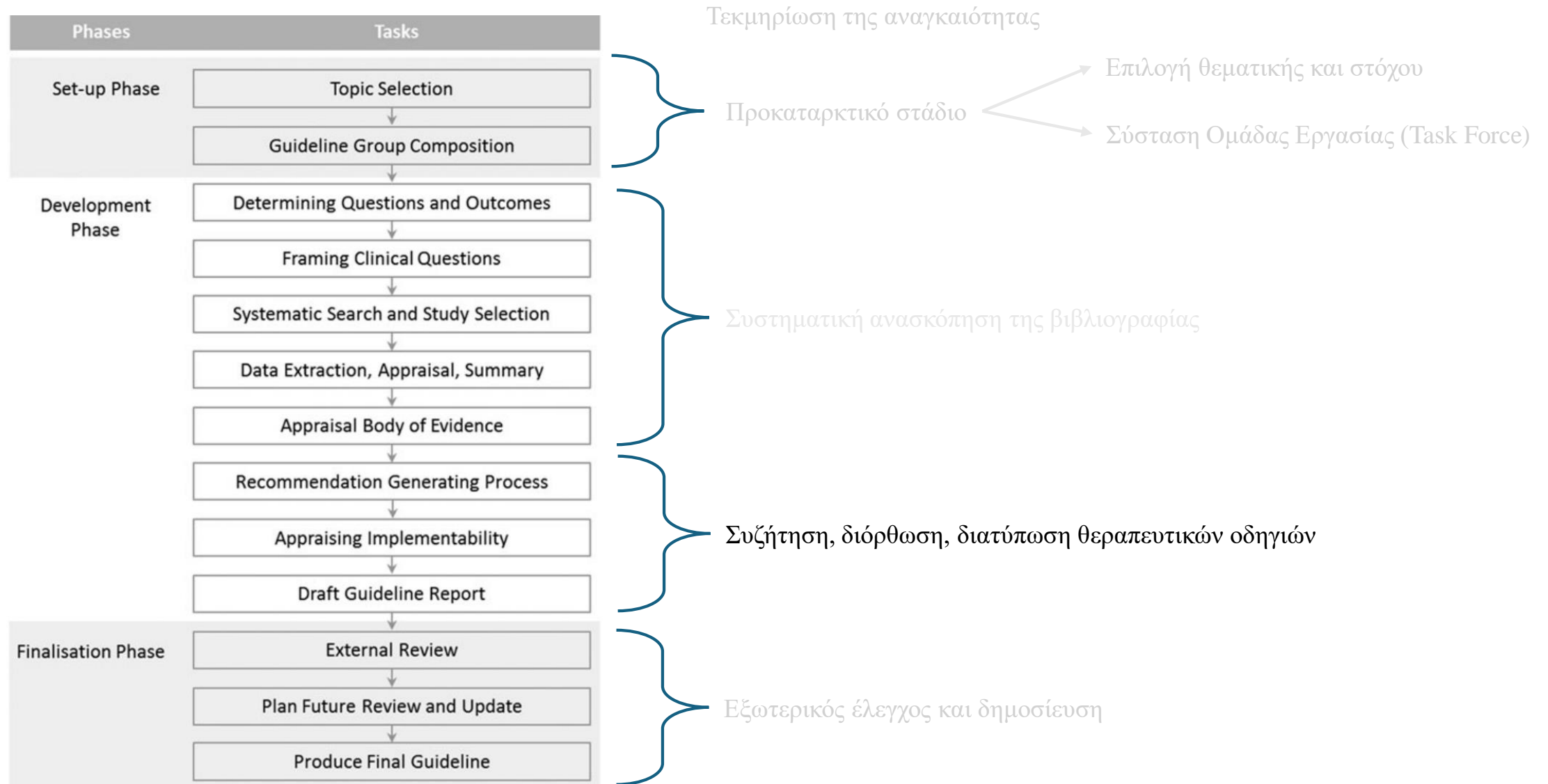
RoB 1	RoB 2
Random sequence generation <i>(selection bias)</i>	Bias arising from the randomization process
Allocation concealment <i>(selection bias)</i>	
Blinding of participants and personnel <i>(performance bias)</i>	Bias due to deviations from intended interventions
Incomplete outcome data <i>(attrition bias)</i>	Bias due to missing outcome data
Blinding of outcome assessment <i>(detection bias)</i>	Bias in measurement of the outcome
Selective reporting <i>(reporting bias)</i>	Bias in selection of the reported result
Other bias	N/A
N/A	Overall bias



Quality of evidence		Rationale
A	High	RCT or meta-analyses
B	Moderate	Downgraded RCTs or upgraded observational studies
C	Low	Well-done observational studies
D	Very low	Case series or expert opinion
Strength of recommendation		
Grade 1	Strong	We recommend
Grade 2	Weak	We suggest

Grading of the quality of evidence and strength of recommendations

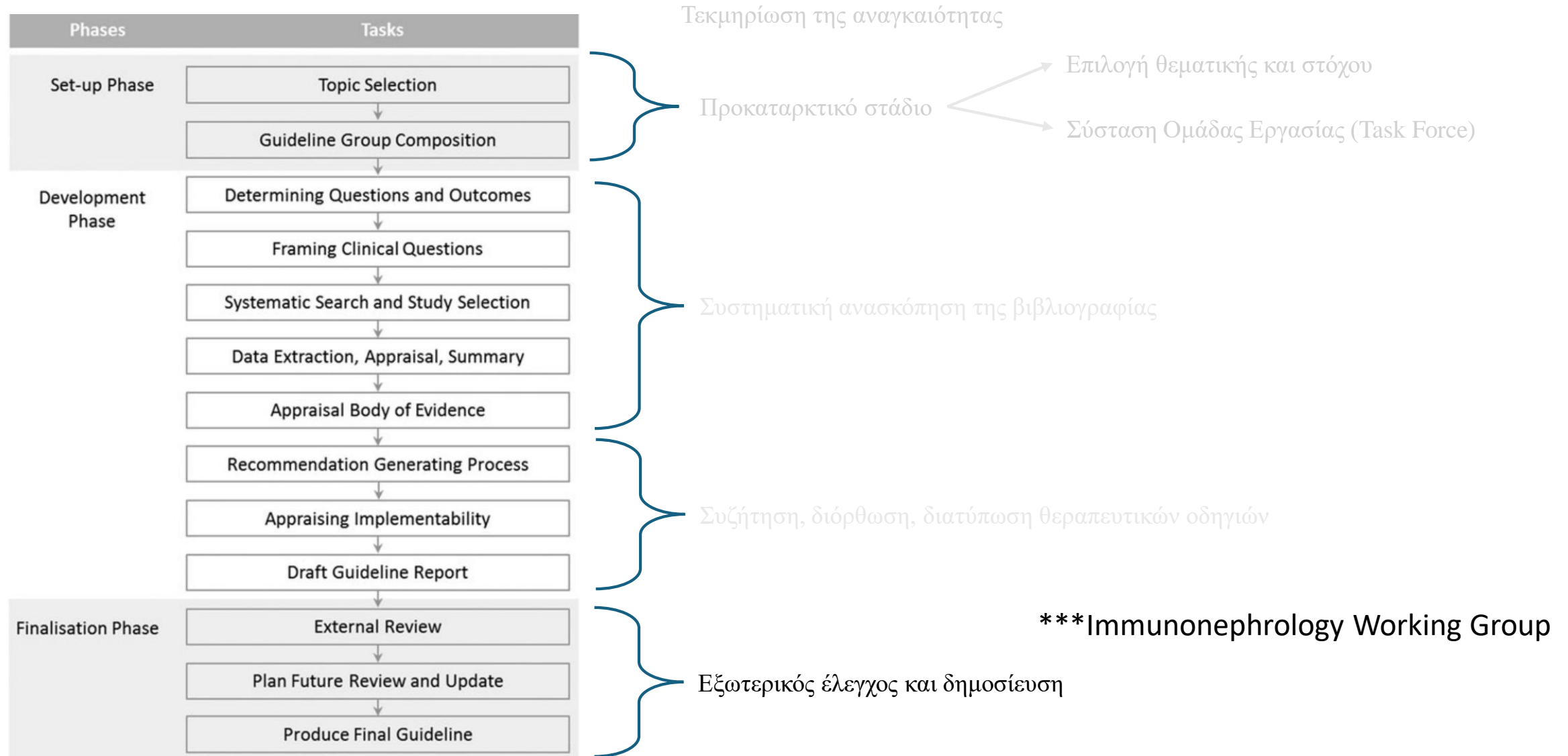
ERBP guideline development process.



Recommendation 10.2.3.1.1: We recommend that patients with active Class III or IV LN, with or without a membranous component, be treated initially with glucocorticoids plus any *one* of the following:

- i. mycophenolic acid analogs (MPAA) (1B); or**
- ii. low-dose intravenous cyclophosphamide (1B); or**
- iii. belimumab and either MPAA or low-dose intravenous cyclophosphamide (1B); or**
- iv. MPAA and a calcineurin inhibitor (CNI) when kidney function is not severely impaired (i.e., estimated glomerular filtration rate [eGFR] ≤ 45 ml/min per 1.73 m²) (1B).**

ERBP guideline development process.



Επιμέρους ζητήματα

- Οδηγίες για θέματα για τα οποία δεν υπάρχουν καλής ποιότητας δεδομένα – εξοικείωση με το σύστημα βαθμολόγησης
- Διάδοση των οδηγιών και προσαρμογή τους σε εθνικό επίπεδο
- Εφαρμογή και έλεγχος ποιότητας (βελτίωση παροχής υγείας)



Alignment and Synergy in Long-Term Vision: A Memorandum of Understanding between the European Renal Association and the Kidney Disease Improving Global Outcomes

ERA and KDIGO representatives convened on May 21st, 2022, during the 59th Congress of the European Renal Association, to sign the first Memorandum of Understanding (MoU) between the ERA and KDIGO. The MoU outlines several projects and initiatives for the global nephrology

ERA will not only write commentaries on KDIGO guidelines but will also actively help identify expert reviewers to participate in the public review period of the KDIGO guidelines.

Take home

Οι CPG πρέπει να αναπτύσσονται με έναν συστηματικό, διαφανή, προσβάσιμο και αναπαραγωγίσιμο τρόπο βασισμένο στο evidence-based practice

Η επιλογή της ομάδας εργασίας είναι βασική στη διατύπωση των ερευνητικών ερωτημάτων, την αξιολόγηση και την ερμηνεία τους

Δεν υπάρχει ένας κοινός μεθοδολογικός τρόπος συγγραφής CPG αλλά οι περισσότεροι φορείς μοιράζονται κοινές αρχές

Η διάδοση και σωστή εφαρμογή των οδηγιών απαιτεί συνεργασία εθνικών – διεθνών οργανισμών αλλά και εκπαίδευση/εξοικείωση των επαγγελματιών υγείας ώστε να διαβάζουν και να ερμηνεύουν σωστά τις εκάστοτε οδηγίες

Οι θεραπευτικές οδηγίες δεν είναι δεσμευτικές

Σας ευχαριστώ για την προσοχή σας