



CURSO PRE-CONGRESO: GT GENESIS + GEAFEN

ESCLEROSIS MÚLTIPLE:
APROXIMACIÓN A SU TRATAMIENTO.
PRINCIPALES RECOMENDACIONES DE LAS GUÍAS
BASADAS EN EVIDENCIAS

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ESCLEROSIS MÚLTIPLE: APROXIMACIÓN A SU TRATAMIENTO. PRINCIPALES RECOMENDACIONES DE LAS GUÍAS BASADAS EN EVIDENCIAS



La enfermedad



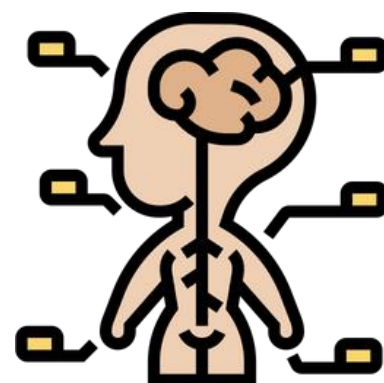
Tratamiento de la EM



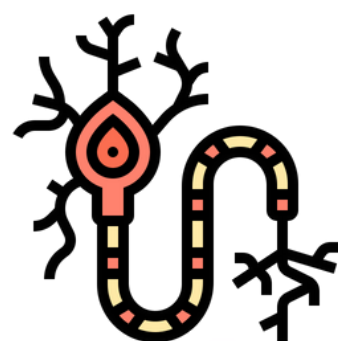
Evaluando las guías clínicas



Guías clínicas disponibles
y recomendaciones



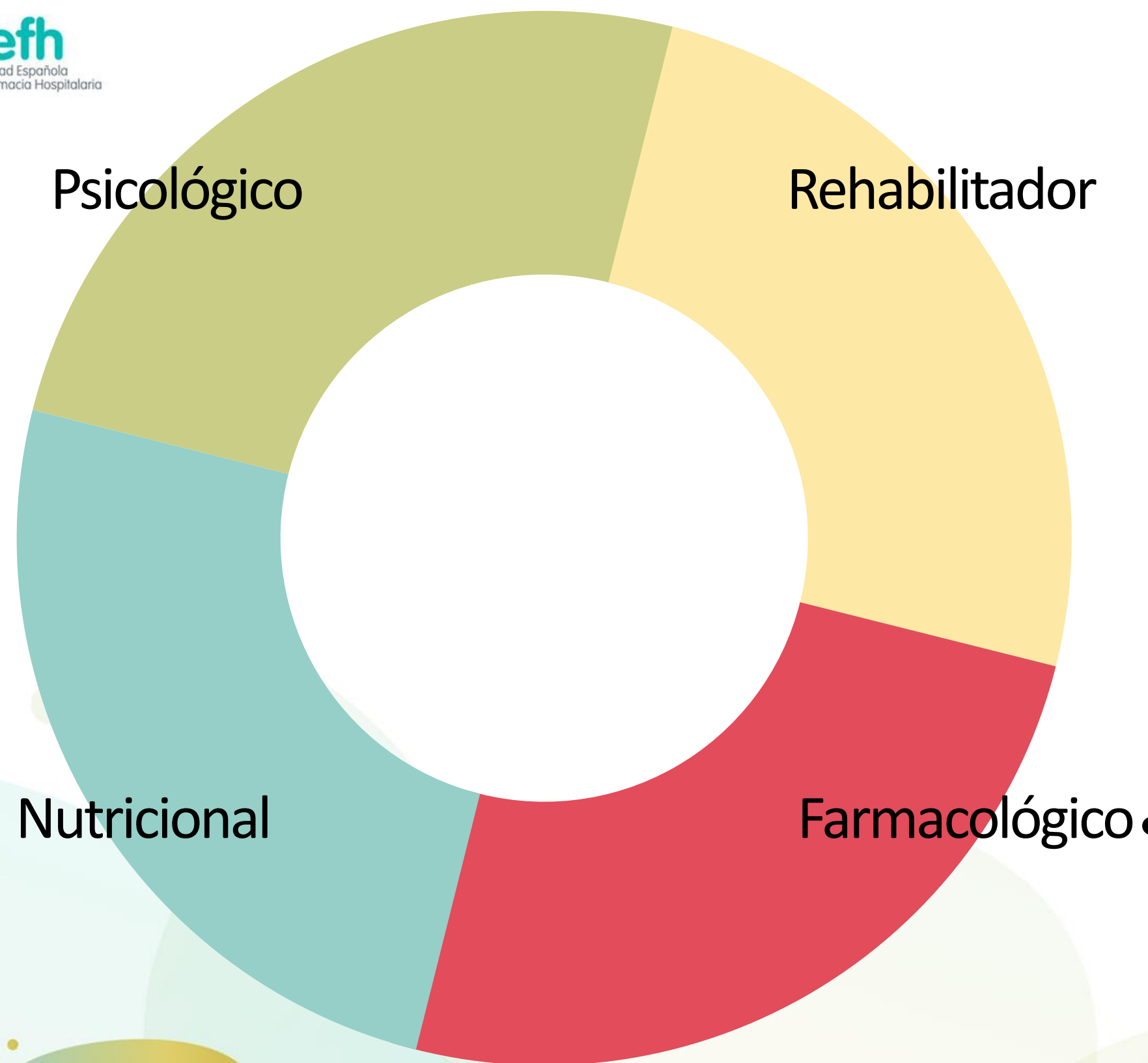
Enfermedad **INFLAMATORIA CRÓNICA Y PROGRESIVA**, que cursa con **BROTOS**, y daña el **SISTEMA NERVIOSO**



- **Brotos: inflamación aguda** que se inicia en los ganglios en respuesta a un estrés (infección), activación y liberación de células del SI que pasan la BHE y que penetran en el cerebro produciendo desmielinización axonal.



- **Progresión: inflamación crónica** que produce un daño difuso del SN, principal causa de progresión de la discapacidad.



Tratamiento del brote



Tratamiento sintomático



Tratamiento modificador de la enfermedad: **FAME** disminuir progresión de la enfermedad

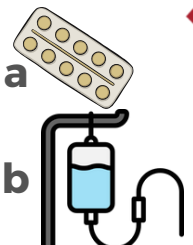
1995
Interferon Beta-1b



2006
Natalizumab



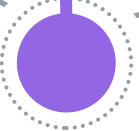
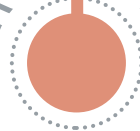
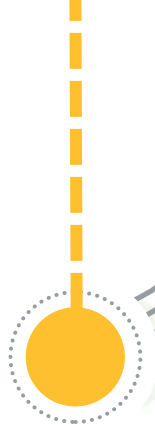
2013
Teriflunomida
Alemtuzumab



2018
Ocrelizumab



Ponesimod
Fumarato de Diroximel
Ofatumumab
Natalizumab SC



2001
Acetato de glatiramer
Mitoxantrona



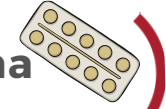
2011
Fingolimod



2014
PegInterferon Beta-1a
Dimetil Fumarato



2017
Cladribina



2020
Siponimod
Ozanimod



INFLAMACIÓN SNC

- Inhibidores TK de Bruton
- Anticuerpos Anti-CD40
 - Ácido Alfa-Lipoic

FUTURE

REMIELINIZACIÓN SNC

Desinhibición reparación SNC

- Elezanumab
- Opicinumab

Promueven la reparación del SNC

- Proteoglicanos
 - Niacina
- Antagonistas receptor muscarínico
 - Temelimab

NEUROPROTECCIÓN

- Masitinib
- Ibudilast
- Metformina
- Clomipramina
- Receptor-interacting protein Kinase 1



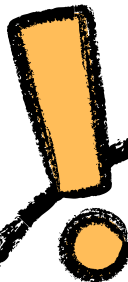
Guías Clínicas o Guía de Práctica Clínica (GPC)

“Directrices desarrolladas sistemáticamente para ayudar a los médicos y pacientes a tomar decisiones sobre la atención médica adecuada para circunstancias clínicas específicas”



?? Proporcionan respuestas a preguntas de la práctica diaria, incluidas áreas donde la evidencia es escasa, sin limitar la libertad de decisión


Preguntas/controversias en EM




¿Escalada
ó
inducción?



¿Importa la potencia
ó
el momento de inicio?



¿Cuándo deben los
pacientes recibir un
tratamiento modificador
de la enfermedad?



¿Cuándo se debe
suspender el tratamiento
modificador de la
enfermedad?



¿Qué tratamiento
modificador de la
enfermedad?

¿Todo vale? ¿Cualquier GPC publicada?



Posibles beneficios

Las directrices basadas en evidencia desarrolladas rigurosamente minimizan los daños potenciales.

Las guías clínicas son sólo una opción para mejorar la calidad de la atención.



Posibles perjuicios.

Falta de rigurosidad, influencia, fin erróneo



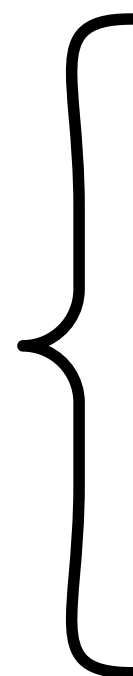
Evaluando la calidad de las GPC



Instrumento de Evaluación de Directrices, Investigación y Evaluación (AGREE II)

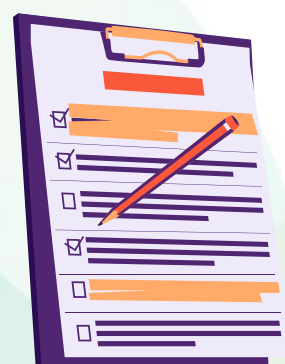
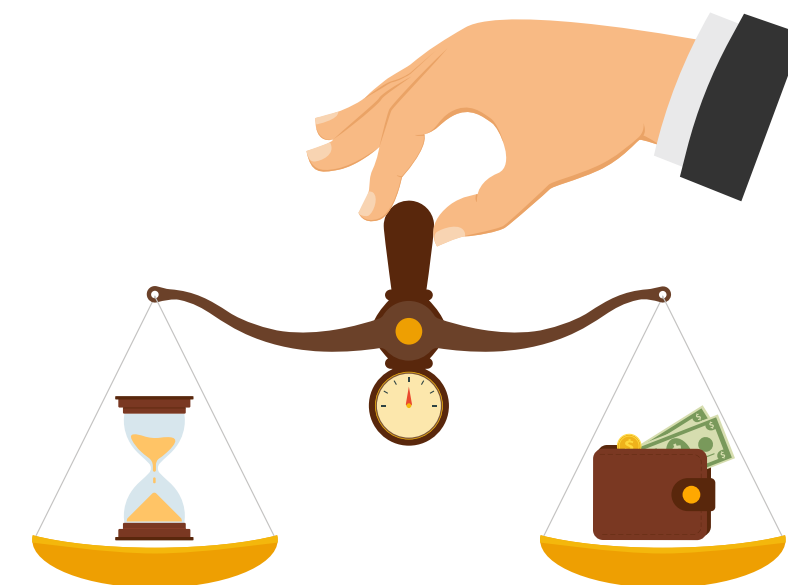


Marco metodológico para la evaluación, elaboración y presentación de GPC



6 dominios

- Alcance y objetivos
- Participación de los implicados
 - Rigor en la elaboración
- Claridad de la presentación
 - Aplicabilidad
- Independencia editorial



Lista de verificación RIGHT
(Reporting Items for Practice Guidelines in Healthcare)

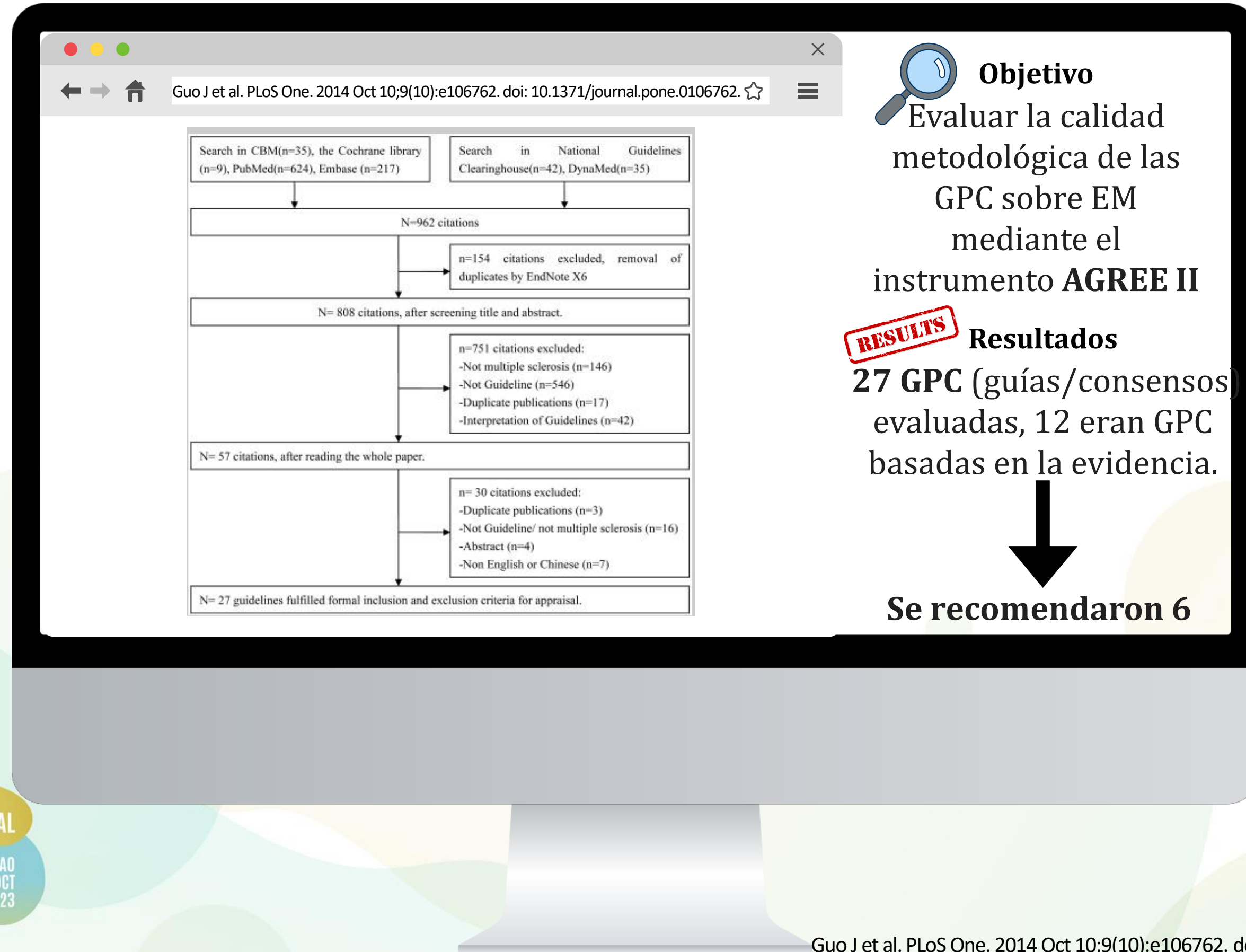


Lista con 8 dominios (22 elementos)

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SEFH

BILBAO
5-7 de OCT
2023

Revisión sistemática de guías de práctica clínica relacionadas con la esclerosis múltiple



Fuertemente Recomendadas
(+ 4 ítems >50%)



Sellner J, Boggild M, Clanet M, Hintzen RQ, Illes Z, et al. (2010) **EFNS guidelines on diagnosis and management of neuromyelitis optica**. European Journal of Neurology 17: 1019-1032.

Goodin DS, et al. (2002) **Disease modifying therapies in multiple sclerosis: report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology and the MS Council for Clinical Practice Guidelines**. Neurology 58(2): 169-78.

Goodin DS (2008) **Assessment: the use of natalizumab (Tysabri) for the treatment of multiple sclerosis (an evidence-based review): report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology**. Neurology 71(10): 766-73.

French JA, et al. (2010) **Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology. Evidence report: the efficacy and safety of mitoxantrone (Novantrone) in the treatment of multiple sclerosis: Report of the Therapeutics and Technology Assessment Subcommittee of the American Academy of Neurology**. Neurology 74(18): 1463-70.

Filippi M et al. (2008) **Use of Imaging in Multiple Sclerosis, in European Handbook of Neurological Management** (eds R. Hughes, M. Brainin and N. E. Gilhus), Blackwell Publishing, Inc., Malden, Massachusetts, USA.

American Association of Neuroscience Nurses (AANN), Association of Rehabilitation Nurses (ARN), International Organization of Multiple Sclerosis Nurses (IOMSN) (2011). Nursing management of the patient with multiple sclerosis. Glenview (IL): American Association of Neuroscience Nurses (AANN), 49 p.

No recomendadas
(ningún ítem >50%)



De Stefano N, Filippi M, Miller D, Pouwels PJ, Rovira A, et al. (2007) **Guidelines for using proton MR spectroscopy in multicenter clinical MS studies**. Neurology 69: 1942-1952.

Fieschi C, Toso V, Liverea P, Citterio G, Ragona F, et al. (1996) **Italian Neurological Society Consensus Conference. New therapies in multiple sclerosis: beta-interferon**. Ital J Neurol Sci 17: 175-178.

Andersson M, Alvarez-Cermeño J, Bernardi G, Cogato I, Fredman P, et al. (1994) **Cerebrospinal fluid in the diagnosis of multiple sclerosis: a consensus report**. J Neurol Neurosurg Psychiatry 57: 897-902.

Palace J (2009) **Guidelines for differential diagnosis of suspected multiple sclerosis**. Neurology 3(5): 134-135.



**ECTRIMS/EAN
(2018)**

NICE (2022)

Haute Autorité de Santé (HAS)(2015)

Multiple Sclerosis Therapy Consensus Group (2021)

Sociedad Española de Neurología (2023)

**Italian Neurological Society
Associazione Italiana Sclerosi Multipla**

American Academy of Neurology (avalado por Consortium of Multiple Sclerosis Centers, the Multiple Sclerosis Association of America, and the National Multiple Sclerosis Society) (2018)

Grupo expertos MS Neurology Group of the Australian y New Zealand Association of Neurologists



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2023

Table 17 Quality evaluation of the Clinical Practice Guidelines on the treatment of MS with the AGREE II instrument (<https://www.agreetrust.org/>).

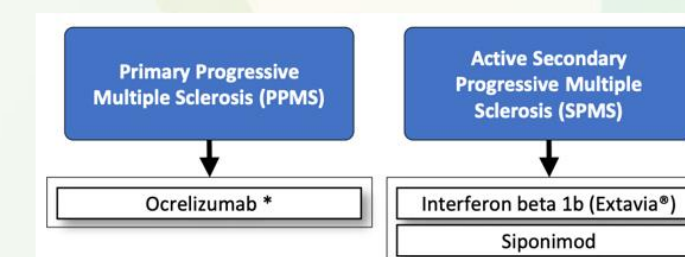
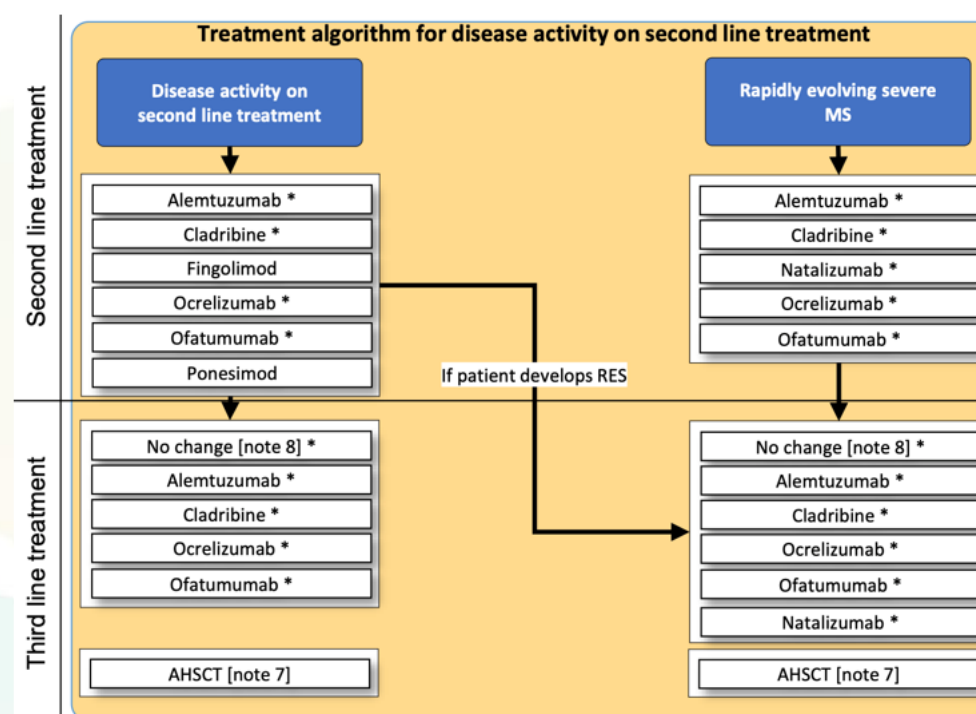
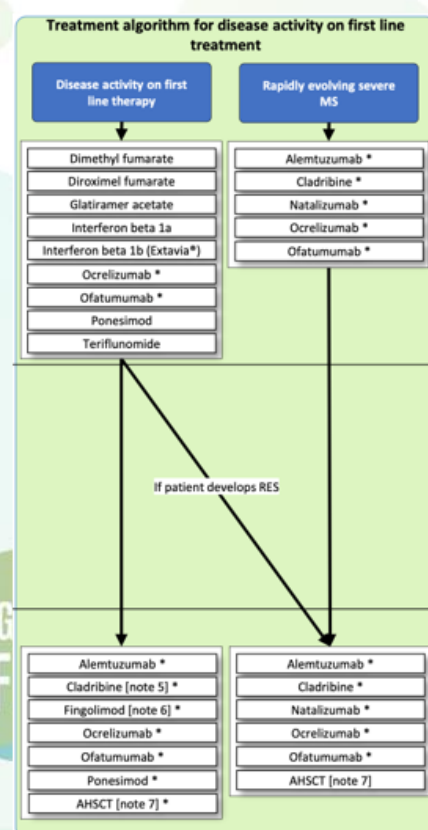
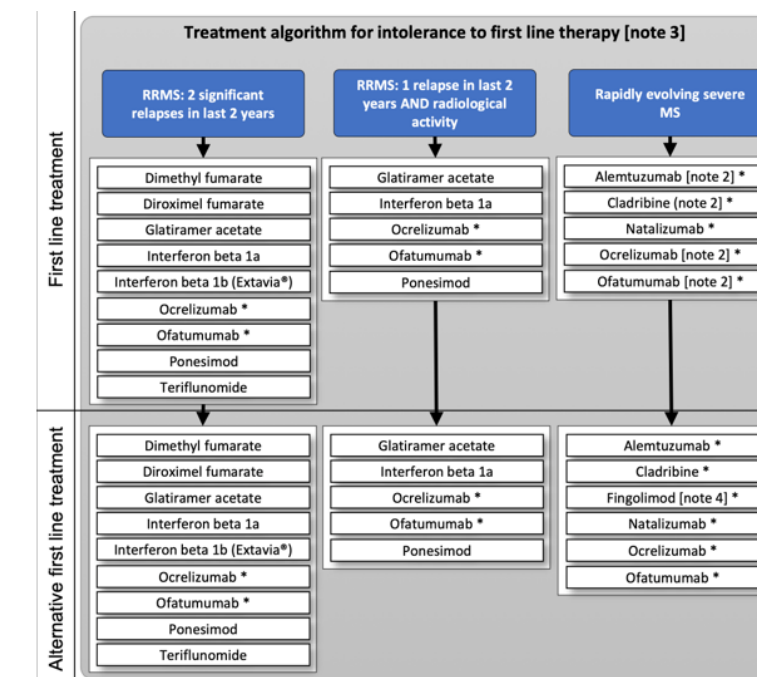
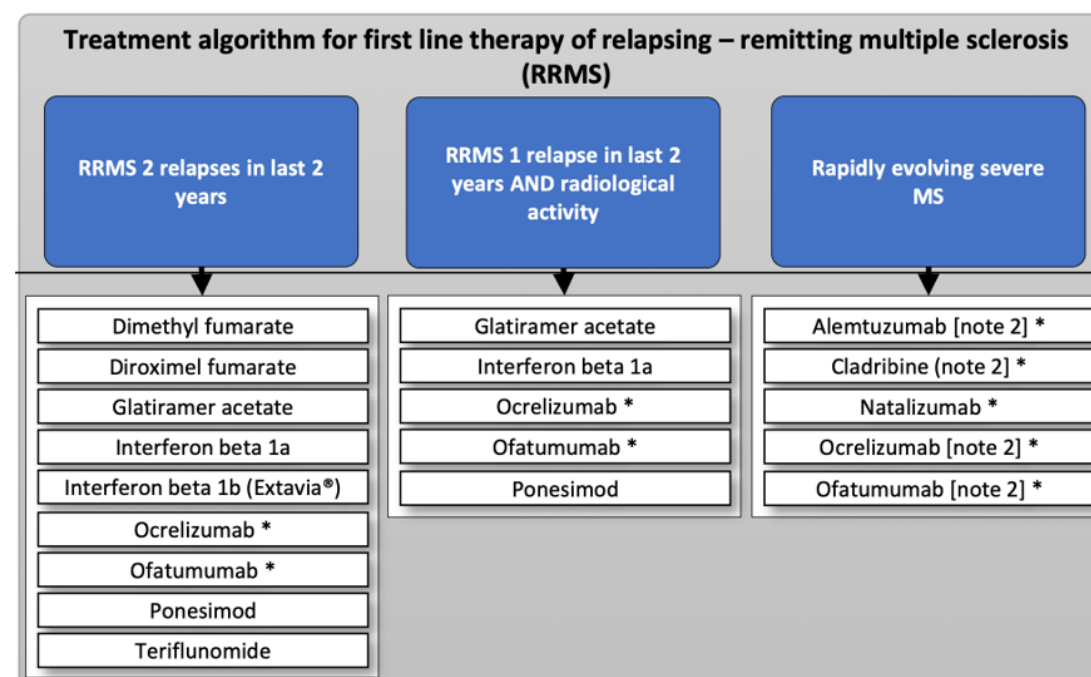
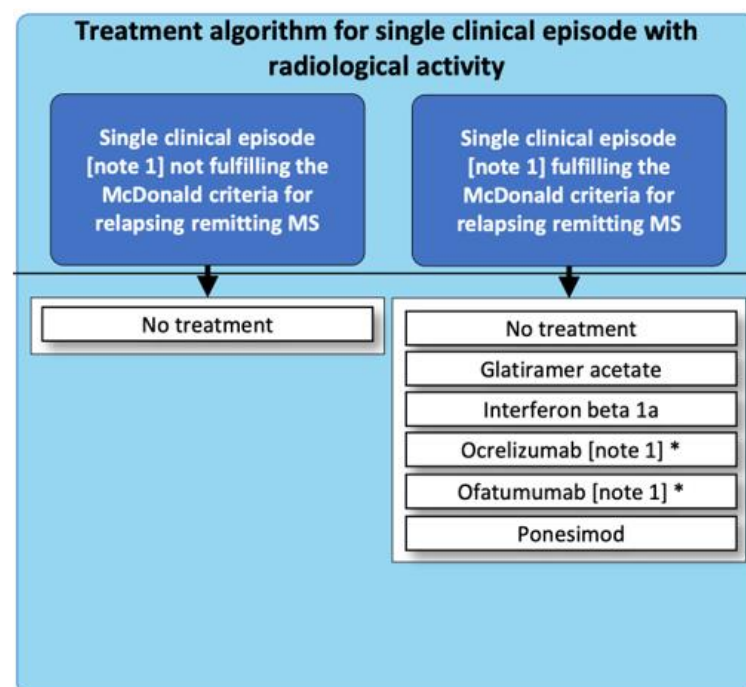
	Domain 1 Scope and Purpose	Domain 2 Stakeholders' involvement	Domain 3 Rigour of development	Domain 4 Clarity of presentation	Domain 5 Applicability	Domain 6 Editorial independence	OVERALL QUALITY
NICE 2022	100%	100%	100%	100%	100%	100%	HIGH
ECTRIMS/EAN 2018	100%	50%	90%	97%	0%	83%	HIGH
AAN 2018	100%	64%	99%	100%	0%	100%	HIGH

Score: $\geq 60\%$ effectively addressed; $< 60\%$ not effectively addressed

Rounding % $\pm 0.5\%$

Overall quality - HIGH: $\geq 60\%$ in at least 3 AGREE II domains, including domain 3; MODERATE: $\geq 60\%$ in at least 2 domains except domain 3; LOW: $< 60\%$ in two or more domains and $< 50\%$ in domain 3. (118).

Ejemplo de algoritmo terapéutico



Treatment algorithm for single clinical episode with radiological activity

Single clinical episode [note 1] not fulfilling the McDonald criteria for relapsing remitting MS

No treatment

Single clinical episode [note 1] fulfilling the McDonald criteria for relapsing remitting MS

No treatment

Glatiramer acetate

Interferon beta 1a

Ocrelizumab [note 1] *

Ofatumumab [note 1] *

Ponesimod

Treatment algorithm for first line therapy of relapsing – remitting multiple sclerosis (RRMS)

RRMS 2 relapses in last 2 years

RRMS 1 relapse in last 2 years AND radiological activity

Rapidly evolving severe MS

Dimethyl fumarate

Diroximel fumarate

Glatiramer acetate

Interferon beta 1a

Interferon beta 1b (Extavia®)

Ocrelizumab *

Ofatumumab *

Ponesimod

Teriflunomide

Glatiramer acetate

Interferon beta 1a

Ocrelizumab *

Ofatumumab *

Ponesimod

Alemtuzumab [note 2] *

Cladribine (note 2) *

Natalizumab *

Ocrelizumab [note 2] *

Ofatumumab [note 2] *

Treatment algorithm for intolerance to first line therapy [note 3]

First line treatment

RRMS: 2 significant relapses in last 2 years

- Dimethyl fumarate
- Diroximel fumarate
- Glatiramer acetate
- Interferon beta 1a
- Interferon beta 1b (Extavia®)
- Ocrelizumab *
- Ofatumumab *
- Ponesimod
- Teriflunomide

RRMS: 1 relapse in last 2 years AND radiological activity

- Glatiramer acetate
- Interferon beta 1a
- Ocrelizumab *
- Ofatumumab *
- Ponesimod

Rapidly evolving severe MS

- Alemtuzumab [note 2] *
- Cladribine (note 2) *
- Natalizumab *
- Ocrelizumab [note 2] *
- Ofatumumab [note 2] *

Alternative first line treatment

- Dimethyl fumarate
- Diroximel fumarate
- Glatiramer acetate
- Interferon beta 1a
- Interferon beta 1b (Extavia®)
- Ocrelizumab *
- Ofatumumab *
- Ponesimod
- Teriflunomide

- Glatiramer acetate
- Interferon beta 1a
- Ocrelizumab *
- Ofatumumab *
- Ponesimod

- Alemtuzumab *
- Cladribine *
- Fingolimod [note 4] *
- Natalizumab *
- Ocrelizumab *
- Ofatumumab *

Treatment algorithm for disease activity on first line treatment

Disease activity on first line therapy **Rapidly evolving severe MS**

- Dimethyl fumarate
- Diroximel fumarate
- Glatiramer acetate
- Interferon beta 1a
- Interferon beta 1b (Extavia®)
- Ocrelizumab *
- Ofatumumab *
- Ponesimod
- Teriflunomide

- Alemtuzumab *
- Cladribine *
- Natalizumab *
- Ocrelizumab *
- Ofatumumab *

If patient develops RES

- Alemtuzumab *
- Cladribine [note 5] *
- Fingolimod [note 6] *
- Ocrelizumab *
- Ofatumumab *
- Ponesimod *
- AHSCT [note 7] *

- Alemtuzumab *
- Cladribine *
- Natalizumab *
- Ocrelizumab *
- Ofatumumab *
- AHSCT [note 7]

Treatment algorithm for disease activity on second line treatment

Second line treatment

Disease activity on second line treatment

- Alemtuzumab *
- Cladribine *
- Fingolimod
- Ocrelizumab *
- Ofatumumab *
- Ponesimod

Rapidly evolving severe MS

- Alemtuzumab *
- Cladribine *
- Natalizumab *
- Ocrelizumab *
- Ofatumumab *

If patient develops RES

Third line treatment

- No change [note 8] *
- Alemtuzumab *
- Cladribine *
- Ocrelizumab *
- Ofatumumab *

AHSCT [note 7]

- No change [note 8] *
- Alemtuzumab *
- Cladribine *
- Ocrelizumab *
- Ofatumumab *
- Natalizumab *

AHSCT [note 7]

**Primary Progressive
Multiple Sclerosis (PPMS)**



Ocrelizumab *

**Active Secondary
Progressive Multiple
Sclerosis (SPMS)**



Interferon beta 1b (Extavia®)

Siponimod



Gracias por su atención
Eskerrik asko zure arretagatik
Gràcies per la seva atenció
Grazas pola súa atención

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