2024 Revisions of the McDonald diagnostic Criteria for MS

The 3rd ECTRIMS Winter School is recommended for young clinicians specializing in multiple sclerosis as well as for neurology fellows, who are eager to understand the novel diagnostic criteria MS.

The Winter School aims to present and critically discuss the 2024 McDonald criteria for the diagnosis of MS. We will cover the role of optic nerve MRI, optical coherence tomography and novel imaging and fluid biomarkers in the revised criteria. Each novel recommendation will be presented in light of the current literature, and practical considerations will be made to facilitate the introduction of the novel criteria in clinical practice. The workshop will also discuss diagnostic challenges and help understanding how to apply the novel diagnostic criteria in specific MS patients.

WEDNESDAY, 15 JANUARY 2025

08.30 — **Welcome & Introduction**
O. Ciccarelli (London, UK), C. Granziera (Basel, CH)

08.45 - 09.15 — **Lecture 1: 2024 revisions of the McDonald Criteria**
X. Montalban (Barcelona, ES)

09.15 - 11.05 — **Session 1: When to apply the criteria and differential diagnoses**
Chair: J. Oh (Toronto, CA), C. Granziera (Basel, CH)

09.15 — Application of criteria to typical and atypical symptoms
M. Tintoré (Barcelona, ES)

09.35 — Application of criteria to RIS
C. Lebrun-Frenay (Nice, FR)

09.55 — Differential diagnosis: other inflammatory demyelinating diseases (MOGAD, NMOSD)
R. Marignier (Lyon, FR)

10.15 — Differential diagnosis in underrepresented populations

	M. Magyari (Copenhagen, DK)
10.35	Panel Discussion / Q&A
	Chair / All Speakers

11.05 - 11.35   **Coffee Break**

11.35 - 13.25   **Session 2: Conventional and Novel Imaging Biomarkers**
Chair: D. Reich (Bethesda, US), C. Granziera (Basel, CH)

11.35   Typical and atypical MS lesions on conventional MRI
M. Rocca (Milan, IT)

11.55   Paramagnetic rim lesions
A. Cagol (Basel, CH)

12.15   Central vein sign
J. Oh (Toronto, CA)

12.35   MAGNIMS-NAIMS-CMSC Recommendations on use of MRI
A. Rovira (Barcelona, ES)

12.55   Panel Discussion / Q&A
Chair / All Speakers

13.25 - 14.25   **Lunch Break**

14.25 - 16.15   **Session 3: The inclusion of the optic nerve as a fifth region**
Chair: L. Balcer (New York, US), G. Bsteh (Vienna, AT)

14.25   Typical and atypical optic neuritis
W. Brownlee (London, UK)

14.45   How to use OCT
L. Balcer (New York, US)

15.05   How to use optic nerve MRI
A. Toosy (London, UK)

15.25	How to use VEP *L. Leocani (Milan, IT)*
15.45	Panel Discussion / Q&A *Chair / All Speakers*
16.15 - 16.45	**Coffee Break**
16.45 - 17.55	**Session 4: Fluid Biomarkers (Oligoclonal Bands/kFLC/NfL)** Chair: H. Wiendl (Freiburg, DE), F. Zipp (Mainz, DE)
16.45	OCBs and kFLC *F. Deisenhammer (Innsbruck, AT)*
17.05	Neurofilaments, GFAP and beyond *D. Leppert (Basel, CH)*
17.25	Panel Discussion / Q&A *Chair / All Speakers*
17.55	**End of Day 1**
19.30	**Dinner at hotel**

THURSDAY, 16 JANUARY 2025

09.00 - 10.30	**Session 5: Further novelties of the new criteria** Chair: O. Ciccarelli (London, UK), D. Reich (Bethesda, US)
09.00	Multiple spinal cord lesions in prevalent spinal cord diseases *G. Arrambide (Barcelona, ES)*
09.20	Towards unification of the differences between progressive and relapsing diseases *J. Sastre - Garriga (Barcelona, ES)*
09.40	High fulfilment of DIS is sufficient for a diagnosis of MS *M. Moccia (Naples, IT)*
10.00	Panel Discussion / Q&A *Chair / All Speakers*
10.30 - 11.00	**Coffee Break**
11.00 - 12.30	**Session 6: Diagnosis in children and the elderly** Chair: B. Stankoff (Paris, FR), *M. Tintoré (Barcelona, ES)*
11.00	Difficulties when diagnosing children *Y. Hacohen (London, UK)*
11.20	MRI of the elderly *M. Inglese (Genoa, IT)*
11.40	Impact of comorbidities on diagnostic criteria *D. Chard (London, UK)*
12.00	Panel Discussion / Q&A *Chair / All Speakers*
12.30 - 14.00	**Lunch Break**

14.00 - 15.30   **Workshops 1-2** (Two groups, participants will rotate workshops)

Workshop 1: How to use the optic nerve, OCT vs. MRI vs. VEP's: challenges and practicalities
Facilitators: A. Toosy (London, UK), L. Balcer (New York, US)

Workshop 2: How to implement the new MRI susceptibility-based markers in clinical practice (CVS, PRLs)
Facilitators: A. Rovira (Barcelona, ES), D. Reich (Bethesda, US)

15.30 - 16.00   **Coffee Break**

16.00 - 17.30   **Workshops 1-2** (Two groups, participants will rotate workshops)

17.30   **End of Day 2**

19.30   **Winter School Dinner**

FRIDAY, 17 JANUARY 2025

08.45 - 10.30   **Working Groups**
Participants will work in 3 groups and will prepare projects for clinical practice and / or research that includes proposal for validation and further revisions of the McDonald criteria, or different approaches how to make the diagnosis.
Participants will receive feedback from senior investigators.

Working Group A: Clinical cases
Facilitators: M. Tintoré (Barcelona, ES), M. Inglese (Genoa, IT), W. Brownlee (London, UK)

Working Group B: Value of the different CSF tests
Facilitators: H. Wiendl (Freiburg, DE), F. Deisenhammer (Innsbruck, AT)

Working Group C: Value of the more novel MRI techniques
Facilitators: C. Granziera (Basel, CH), J. Oh (Toronto, CA), O. Ciccarelli (London, UK)

10.30 - 11.00   **Coffee Break**

11.00 - 12.00   Participants' presentations by the coordinators of the working groups (20 minutes presentation each group)

12.00 - 12.30   **Plenary Session**

Lecture 2: Clinical challenges and implementation in clinical practice
A. Solomon (Burlington, US)

12.30   Group discussion led by Facilitators and Chairs

13.00 - 13.15   **Closing remarks**
B. Stankoff (Paris, FR)

As of 13.15   **Lunch and individual departure**