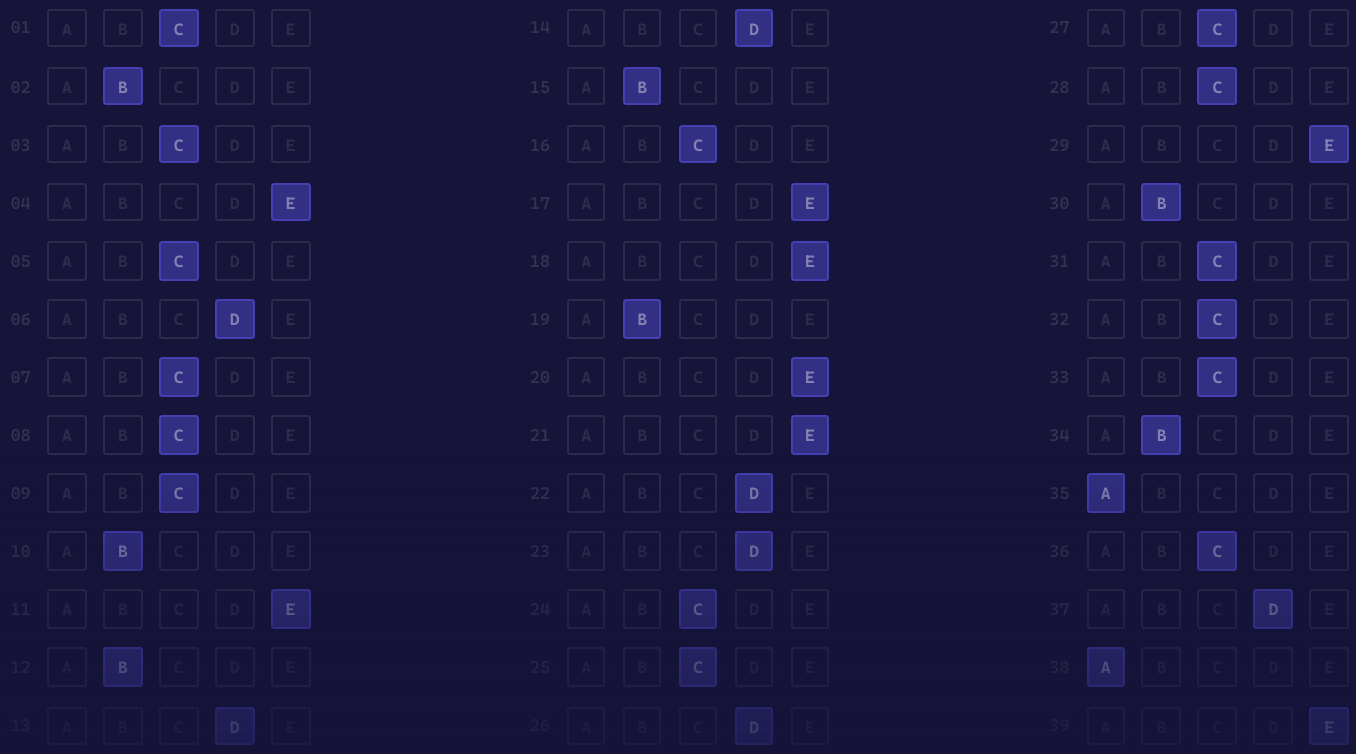
MOMETRIX
SMARTER PREP. BETTER RESULTS.



PRACTICE QUESTIONS

Consortium of Multiple Sclerosis Centers (CMSC)

MSCS

Multiple Sclerosis Specialist Certification Exam

EDITION	QUESTIONS	FORMAT
Demo	9	Limited Edition PDF

WEB www.mometrix.net

SUPPORT support@mometrix.net

Before you begin

What this is

9 practice questions for Consortium of Multiple Sclerosis Centers (CMSC) `MSCS`, each with its answer key and an explanation. Answer a question before you read its key — the explanation is worth more once you have committed.

If something looks wrong

Send us three things and we will check it:

- the exam code, `MSCS`
- the question number
- the email address on your order

Write to **support@mometrix.net**. We reply within one business day.

QUESTION 1 SINGLE CHOICE

A 32-year-old woman presents with optic neuritis. MRI of the brain shows two periventricular lesions and one juxtacortical lesion, none of which enhance with gadolinium. CSF oligoclonal bands are present. She has no prior neurologic symptoms. According to the 2017 McDonald criteria, which finding allows a diagnosis of multiple sclerosis at this presentation?

A The presence of CSF-specific oligoclonal bands satisfies dissemination in time

B The combination of periventricular and juxtacortorial lesions satisfies dissemination in space and gadolinium enhancement is not required

C A diagnosis cannot be made without a clinical relapse or new lesion on follow-up MRI

D CSF oligoclonal bands replace the need for MRI evidence of dissemination in space

ANSWER B

WHY The 2017 McDonald criteria allow a diagnosis of MS at a first clinical event when MRI demonstrates dissemination in space (lesions in ≥2 of 4 typical CNS locations: periventricular, cortical/juxtacortical, infratentorial, and spinal cord) and CSF-specific oligoclonal bands substitute for dissemination in time. The patient meets both, so enhancing lesions are not required and a follow-up relapse is not needed.

QUESTION 2 SINGLE CHOICE

Which disease-modifying therapy for relapsing multiple sclerosis works by binding the CD52 antigen on lymphocytes, resulting in prolonged depletion of CD52-positive cells?

A Natalizumab

B Ocrelizumab

C Alemtuzumab

D Fingolimod

ANSWER C

WHY Alemtuzumab is a humanized monoclonal antibody directed against the CD52 antigen expressed on lymphocytes, producing prolonged depletion of CD52-positive B and T cells. Natalizumab targets α4-integrin, ocrelizumab targets CD20 on B cells, and fingolimod is a sphingosine-1-phosphate receptor modulator.

QUESTION 3 SINGLE CHOICE

A patient with relapsing-remitting MS develops acute hemiparesis consistent with a new demyelinating lesion on MRI. After 5 days of high-dose intravenous methylprednisolone there is minimal clinical improvement. What is the most appropriate next step?

A Extend oral prednisone taper for an additional 4 weeks

B Switch to intravenous immunoglobulin

C Initiate therapeutic plasma exchange

D Start adrenocorticotropic hormone (ACTH) gel for an additional 10 days

ANSWER C

WHY When a severe relapse responds inadequately to high-dose corticosteroids, therapeutic plasma exchange is the recommended next-line therapy and has the strongest evidence for benefit in steroid-unresponsive severe relapses. ACTH gel and IVIG are not supported by equivalent evidence, and extending steroids does not address a steroid-refractory relapse.

QUESTION 4 SINGLE CHOICE

A patient with a 15-year history of relapsing-remitting MS has been relapse-free for 6 years but has experienced steadily worsening gait impairment and increasing EDSS over the past 3 years without acute attacks. Brain MRI shows no new or enhancing lesions. Which disease course best describes this patient?

A Clinically isolated syndrome

B Secondary progressive multiple sclerosis

C Primary progressive multiple sclerosis

D Relapsing-remitting multiple sclerosis with incomplete recovery

ANSWER B

WHY Steady progression of neurologic disability over ≥1 year independent of relapses in a patient who previously had a relapsing-remitting course defines secondary progressive MS. The absence of new or enhancing lesions on MRI supports progression rather than ongoing inflammatory relapse activity. Primary progressive MS requires progression from disease onset without a preceding relapsing course.

QUESTION 5 SINGLE CHOICE

Which MRI lesion location is included among the four typical central nervous system regions used to establish dissemination in space under the McDonald criteria?

A Subcortical white matter

B Optic nerve

C Juxtacortical/cortical

D Basal ganglia

ANSWER C

WHY The four typical CNS regions defined by the McDonald criteria for dissemination in space are periventricular, cortical/juxtacortical, infratentorial, and spinal cord. Subcortical white matter, the optic nerve, and the basal ganglia are not among these four regions, although the optic nerve is a clinically relevant site.

QUESTION 6 SINGLE CHOICE

Which medication, FDA-approved for the treatment of walking impairment in multiple sclerosis, is a potassium channel blocker thought to improve conduction along demyelinated axons?

A Baclofen

B Dalfampridine

C Tizanidine

D Gabapentin

ANSWER B

WHY Dalfampridine (extended-release fampridine) is a voltage-gated potassium channel blocker approved to improve walking speed in patients with MS by enhancing conduction along demyelinated axons. Baclofen and tizanidine are used for spasticity, and gabapentin is used for neuropathic pain or spasticity, not as a potassium channel blocker for walking.

QUESTION 7 SINGLE CHOICE

A 41-year-old woman with recurrent optic neuritis and transverse myelitis has a positive serum aquaporin-4 (AQP4-IgG) antibody test. What is the most likely diagnosis?

A Multiple sclerosis

B Neuromyelitis optica spectrum disorder

C Acute disseminated encephalomyelitis

D Idiopathic transverse myelitis

ANSWER B

WHY Recurrent optic neuritis and transverse myelitis combined with a positive AQP4-IgG antibody are characteristic of neuromyelitis optica spectrum disorder (NMOSD). AQP4-IgG positivity is not a feature of MS and excludes MS as the best explanation; ADEM is a monophasic disorder, and idiopathic transverse myelitis would not explain the recurrent optic neuritis.

QUESTION 8 SINGLE CHOICE

Which disease-modifying therapy for MS carries the highest established risk of progressive multifocal leukoencephalopathy (PML) due to reactivation of JC virus, particularly after prolonged treatment?

A Interferon beta-1a

B Glatiramer acetate

C Natalizumab

D Dimethyl fumarate

ANSWER C

WHY Natalizumab carries the highest established risk of PML among the MS disease-modifying therapies, and the risk increases substantially with treatment duration beyond 24 months, prior immunosuppressant use, and positive anti-JC virus antibody status. Interferon beta and glatiramer acetate have not been associated with PML, and dimethyl fumarate carries a lower, but documented, PML risk typically in the setting of lymphopenia.

QUESTION 9 MULTIPLE CHOICE

Which interventions are considered core components of comprehensive MS care as endorsed by the Consortium of Multiple Sclerosis Centers (CMSC)? (Choose two.)

A **Individualized rehabilitation with physical and occupational therapy**

B Scheduled surveillance and management of bladder and bowel dysfunction

C Curative hematopoietic stem cell transplantation as first-line therapy for all relapsing patients

D **Neuropsychological screening for cognitive impairment and depression**

ANSWER **A** · **D**

WHY The CMSC and AAN consensus on comprehensive MS care emphasizes individualized rehabilitation (physical, occupational, and speech therapy) and routine screening for cognitive dysfunction and mood disorders such as depression. Bladder and bowel dysfunction management is also part of comprehensive care. Curative hematopoietic stem cell transplantation is not a first-line therapy and is not part of standard comprehensive care recommendations.