On-line Table: Evolution of criteria for multiple sclerosis DIS and DIT

Name/Year	DIS	DIT
Barkhof et al/1997[57] McDonald et al/2001[58]	Three of 4 of the following: 1) One gadolinium-enhancing lesion or 9 T2-hyperintense lesions if there is no gadolinium enhancing lesion 2) At least 1 infratentorial lesion 3) At least 1 juxtacortical lesion 4) At least 3 periventricular lesions Note: One spinal cord lesion can be substituted for 1 brain lesion	1) If a first scan occurs ≥3 months after the onset of the clinical event, the presence of a gadolinium-enhancing lesion is sufficient to demonstrate dissemination in time, provided that it is not at the site implicated in the original clinical event; if there is no enhancing lesion at this time, a follow-up scan is required; the timing of this follow-up scan is not crucial, but 3 months is recommended; a new T2- or gadolinium-enhancing lesion at this time then fulfills the criterion for dissemination in time 2) If the first scan is performed <3 months after the onset of the clinical event, a second scan ≥3 months after the clinical event showing a new gadolinium-enhancing lesion provides sufficient evidence for dissemination in time; however, if no enhancing lesion is seen at this second scan, a further scan not <3 months after the first scan that shows a new T2 lesion or an enhancing lesion will suffice
Swanton et al/2006[59]	1) Retains the 4 anatomic regions that were included in the McDonald criteria –that is, periventricular, juxtacortical, infratentorial, and spinal cord 2) Reduces the minimum number of lesions and regions needed for radiologic dissemination in space, i.e. at least 1 lesion in at least 2 of the 4 regions 3) Removes gadolinium enhancement as a feature of dissemination in space–that is, only T2 lesions and their locations are considered	≥1 new T2 lesion at a 3-month follow-up (a new lesion on the 3-month scan could also contribute to dissemination in space if situated in the regions specified by the criteria)
McDonald/2010[11]	At least 1 T2 lesion in at least 2 of 4 locations characteristic of MS (juxtacortical, periventricular, infratentorial, and spinal cord) If the patient has a symptomatic brain stem or spinal cord syndrome, that lesion is excluded as a site for the DIS criteria	New T2 and/or gadolinium-enhancing damage on follow-up MR imaging, compared with a baseline scan (irrespective of time since baseline); simultaneous presence of asymptomatic gadolinium-enhancing and nonenhancing lesions at any time
MAGNIMS/2016[60]	At least 2 of 5 areas of the CNS as follows: 1) ≥3 periventricular lesions, 2) ≥1 infratentorial lesion, 3) ≥1 spinal cord lesion, 4) ≥1 optic nerve lesion, 5) ≥1 cortical/juxtacortical lesion	Simultaneous presence of both enhancing and nonenhancing MS-typical MR imaging lesions, or new T2 or enhancing MR imaging lesion compared with baseline scan (without regard for timing of baseline scan) and regardless of being symptomatic
McDonald/2017[1]	≥1 T2-hyperintense lesion (≥3 mm in long axis), symptomatic and/or asymptomatic lesions in ≥2 of the 4 following locations: 1) periventricular (≥1 lesion, unless the patient is older than 50 years, in which case it is advised to seek a higher number of lesions), 2) cortical or juxtacortical, 3) infratentorial, 4) spinal cord T2-hyperintense lesions of the optic nerve, such as those in a patient presenting with optic neuritis, cannot be used in fulfilling the 2017 revised McDonald criteria	Simultaneous presence of both enhancing and nonenhancing MS-typical MR imaging lesions or new T2 or enhancing MR imaging lesion compared with baseline scan (without regard to timing of baseline scan) and regardless of being symptomatic