On-line Table 1: MRI lesion counts and clinical measures in individual patients with MS in the clinic

| Criteria | MS Diagnosis after a First Clinical Attack | | Treatment Nonresponder | |
	Dissemination in Space	Dissemination in Time	Modified Rio Score[6]	Canadian MS Working Group[5a]
Infratentorial T2 lesion	≥1	2 of the 4 are required		
Spinal cord T2 lesion	≥1			
Juxtacortical T2 lesion	≥1			
Periventricular T2 lesion	≥1			
New T2 lesion			4 (>1 year)	MRI level of concern based on new T2 or enhancing lesions (low, 1; medium, 2; high, ≥3)
Enhancing lesion		≥1 (combined with nonenhancing T2) sufficient at time of first attack (or) new MRI lesion		
Relapse			0, 1, 2	Level of concern (low, medium, high) based on rate, severity, recovery
Disease progression/disability				Level of concern (low, medium, high) based on multiple defined disability scores
Comment	Based on International Panel Criteria for MS Diagnosis[2]		Score (0–3) is based on combination of MRI + relapse criteria (eg maximum score of 3 for ≥2 relapses and ≥5 T2 lesions)	Consideration given to switching treatments if there is a high level of concern in any one domain (relapses, progression, or MRI); medium level of concern in any 2 domains; low level of concern in all 3 domains

[a] Treatment-response data based primarily on interferon trials.

On-line Table 2: Suggested MRI ordering menu for neurologists

MRI Examination Menu (Choose 1)
1) Brain diagnostic scan (includes differential but not discrete MS data)
2) Screening/monitoring of patients with possible MS (includes differential plus discrete MS data; may serve as a baseline for MS evaluation)
3) Monitoring patients with known MS (provides discrete disease activity data, but not differential)
4) Patient with known MS on natalizumab (Tysabri) (provides discrete disease activity data plus evaluates for early signs of PML)

Note:—PML indicates progressive multifocal leukoencephalopathy.

On-line Table 3: Interpretation guidelines

MS Interpretation Template
HISTORY: (multiple sclerosis—for monitoring)
TECHNIQUE: (insert text)
RESULTS: (insert text)
Definite nonenhancing new T2 lesions: (0, 1, 2, 3, 4, ≥5)
Definite new enhancing lesions: (0, 1, 2, 3, 4, 5, 6, 7, 8, 9, ≥10)
T2 lesion volume: none, mild, moderate (eg, becoming or early confluent), severe
Parenchymal volume loss: none, mild, moderate, severe
T1 black hole volume (none, mild, moderate [eg, becoming or early confluent], severe)
IMPRESSION: (findings consistent with clinical diagnosis of MS; interval development of 2 definite new T2 lesions and 1 enhancing lesion)