

Prediction of on-treatment disability worsening in RRMS with the MAGNIMS score

Supplementary data

Authors and contributions

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MSBase centres and number of included patients

MSBase centres by country	Patients (n)
Argentina	
Ineba	4
Hospital Fernandez	1
Sanatorio Allende	1
Australia	
John Hunter Hospital	169
Box Hill Hospital	168
The Royal Melbourne Hospital	82
St Andrews Place	45
Westmead Hospital	23
The Alfred Hospital	9
Royal Brisbane and Women's Hospital	7
BMRI	6
Flinders Medical Centre	6
Geelong Hospital	3
St Vincents Hospital, Fitzroy	2
The Townsville Hospital	2
Liverpool Hospital	1
Belgium	
Rehabilitation and MS-Centre Overpelt	33
Cliniques Universitaires Saint-Luc	29
AZ Alma	2
Canada	
Centre de réadaptation déficience physique Chaudière-Appalache	59
Neuro Rive-Sud	47
CHUM - Hopital Notre Dame	21
Jewish General Hospital	16
CSSS Saint-Jérôme	2
Cuba	
CIREN	12
Spain	
Hospital Universitario Virgen Macarena	95
Hospital de Galdakao-Usansolo	49
Hospital General Universitario de Alicante	11
Hospital Universitario De La Ribera	8
Hospital Universitario Virgen de Valme	3
Hospital Donostia	3
Hospital Germans Trias i Pujol	2
Hungary	

University of Debrecen	24
Veszprém Megyei Csolnoky Ferenc Kórház zrt	2
Josa András Hospital	1
Italy	
UNIVERSITY OF PARMA, IT	158
Nuovo ospedale civile s.agostino/estense	142
University of Bari	134
Neurological Institute IRCCS Mondino	94
Ospedale Clinizzato "Ss. Annunziata"	90
AORN San Giuseppe Moscati Avellino	51
Generale Provinciale Macerata	35
Aou Policlinico Vittorio Emanuele	26
Kuwait	
Amiri Hospital	170
Lebanon	
American University of Beirut Medical Center	109
Portugal	
Hospital São João	14
Tunisia	
Razi hospital	11
Turkey	
Dokuz Eylul University	209
KTU Medical Faculty Farabi Hospital	85
Bakirkoy Education and Research Hospital for Psychiatric and Neurological Diseases	8
Haydarpasa Numune Training and Research Hospital	6
Mayis University, Medical Faculty	3

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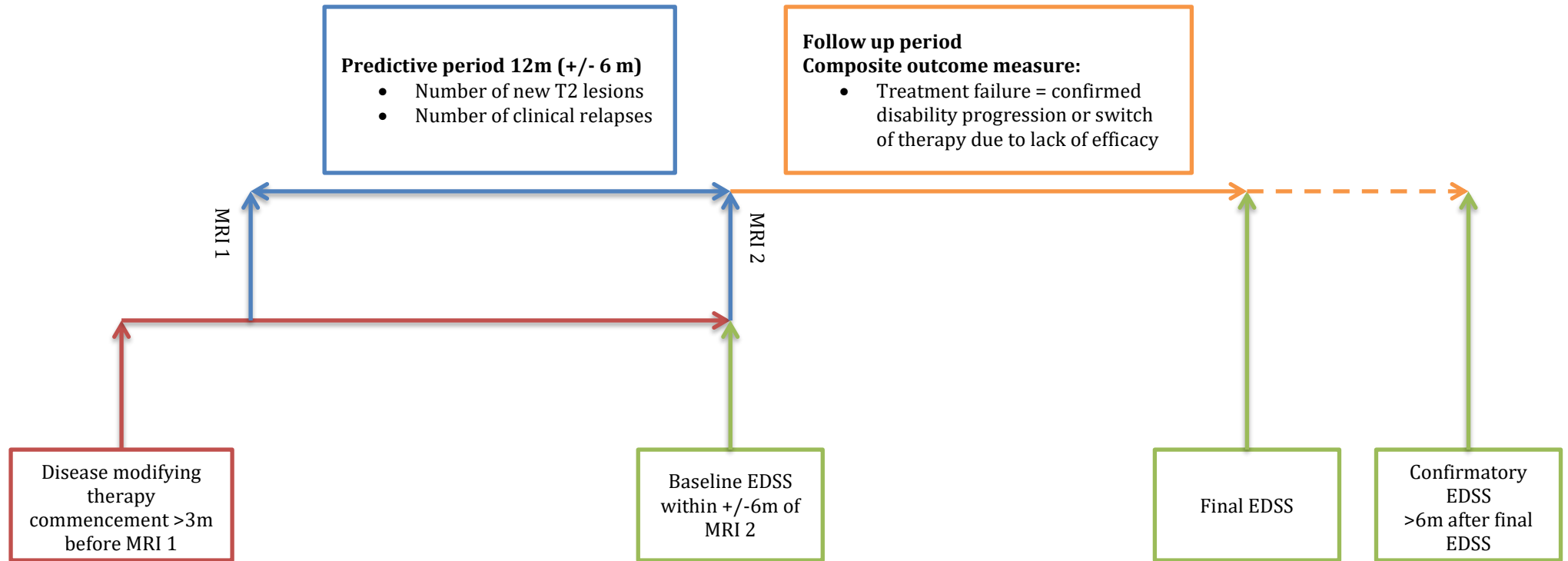
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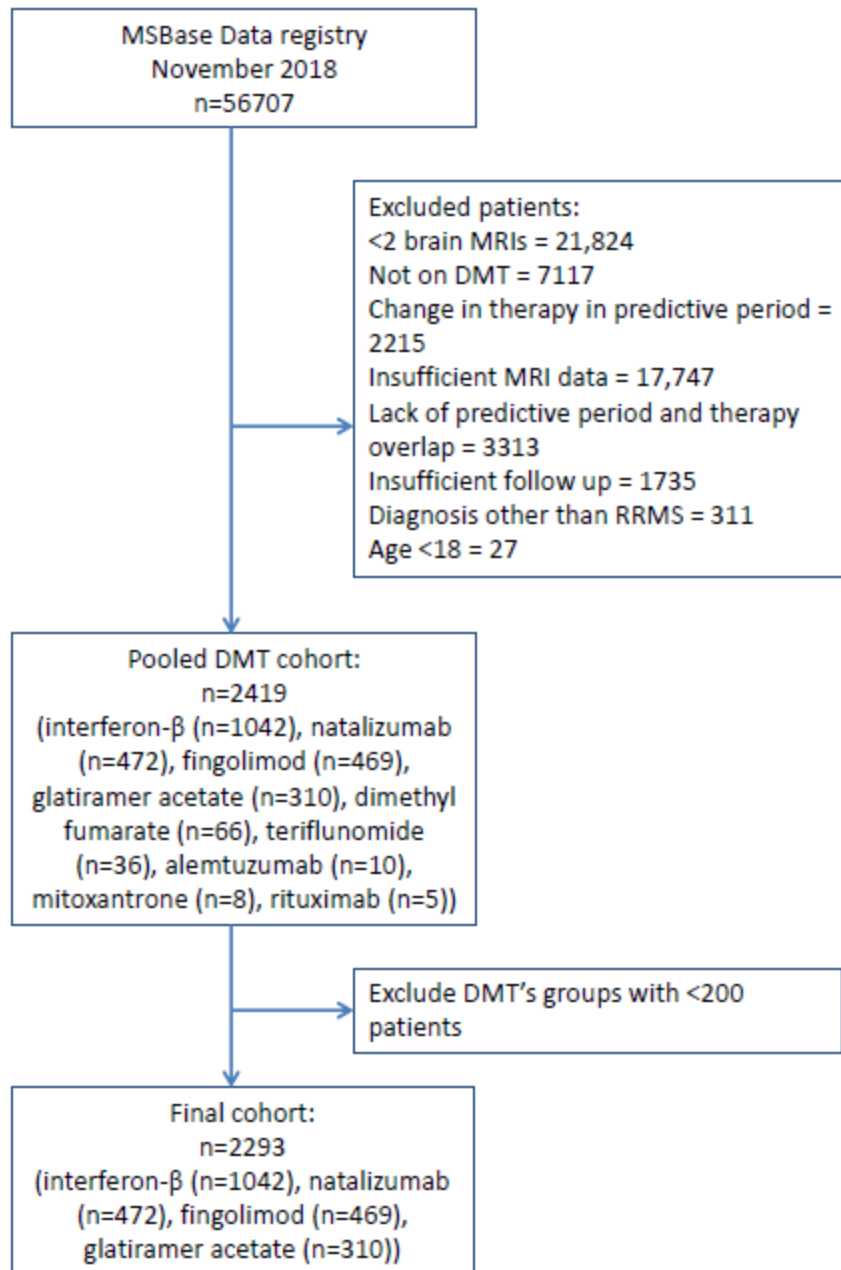
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Supplementary Figure e-1: Study design.



Abbreviations: MRI= magnetic resonance imaging, EDSS= expanded disability scoring system.

Supplementary Figure e-2: CONSORT flowchart of patient inclusion.



Abbreviations: n= number, DMT= disease modifying therapy, MRI= magnetic resonance imaging, EDSS= expanded disability scoring system, RRMS = relapsing remitting multiple sclerosis.

Supplementary Table e-1: MAGNIMS score and MAGNIMS score with contrast enhancing lesions

MAGNIMS

MAGNIMS score = 0

- Relapses = 0 AND T2 lesions <3

MAGNIMS score = 1

- Relapses = 1 OR T2 lesions ≥3

MAGNIMS = 2

- (Relapses = 1 AND T2 lesions ≥3) OR (Relapse ≥2)

MAGNIMS + gad score

MAGNIMS + gad score = 0

- Relapses = 0 AND T2 lesions <3 AND Gd = 0

MAGNIMS + gad score = 1

- Relapses = 1 OR T2 lesions ≥3 OR Gd ≥1

MAGNIMS + gad score = 2

- (Relapses = 1 & T2 lesions ≥3) OR (Relapse =1 AND Gd ≥1)

MAGNIMS + gad score = 3

- (Relapses =1 AND T2 ≥3 AND Gd ≥1) OR relapses >1

Supplementary Table e-2: Heterogeneity assessment with multivariable Cox model with interaction terms for MAGNIMS score and MS Centres.

	HR	CI	p value
Amiri x MAGNIMS 1	0.6	(0.13, 2.76)	0.516
Amiri x MAGNIMS 2	0	(0.00, inf)	NA
Box Hill x MAGNIMS 1	0.89	(0.28, 2.80)	0.843
Box Hill x MAGNIMS 2	0	(0.00, inf)	NA
Dokuz Eylul University x MAGNIMS 1	0.5	(0.13, 1.83)	0.293
Dokuz Eylul University x MAGNIMS 2	0.52	(0.06, 4.11)	0.532
John Hunter Hospital x MAGNIMS 1	0.36	(0.12, 1.09)	0.071
John Hunter Hospital x MAGNIMS 2	1.22	(0.16, 9.39)	0.846
New Civil Hospital S. Agostino-Estense x MAGNIMS 1	1.06	(0.39, 2.89)	0.908
New Civil Hospital S. Agostino-Estense x MAGNIMS 2	0.43	(0.05, 3.37)	0.42
University of Bari x MAGNIMS 1	0.89	(0.39, 2.07)	0.792
University of Bari x MAGNIMS 2	3.51	(1.43, 8.62)	0.006
University of Parma x MAGNIMS 1	0.58	(0.17, 2.03)	0.397
University of Parma x MAGNIMS 2	0.72	(0.16, 3.20)	0.664

Abbreviations: MAGNIMS= MAGNIMS = Magnetic resonance imaging in multiple sclerosis, n = number, Ref = reference, HR = hazard ratio, CI = confidence interval.

Supplementary Table e-3: Heterogeneity assessment with multivariable Cox model with interaction terms for MAGNIMS score and disease modifying therapies.

	HR	CI	p value
Glatiramer Acetate x MAGNIMS 1	1.35	(0.65, 2.82)	0.421
Glatiramer Acetate x MAGNIMS 2	0.77	(0.34, 1.76)	0.533
Fingolimod x MAGNIMS 1	1.41	(0.69, 2.89)	0.35
Fingolimod x MAGNIMS 2	0.52	(0.12, 2.26)	0.379
Natalizumab x MAGNIMS 1	1.24	(0.60, 2.59)	0.562
Natalizumab x MAGNIMS 2	0.78	(0.26, 2.29)	0.644

Abbreviations: MAGNIMS= MAGNIMS = Magnetic resonance imaging in multiple sclerosis, n = number, Ref = reference, HR = hazard ratio, CI = confidence interval.