

## Recent publications

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1. Miralles M, Eixarch H, Tejero M, Costa C, Hirota K, Castaño AR, Puig M, Stockinger G, Montalban X, Bosch A, Espejo C, Chillón M. Clinical and Histopathological Amelioration of Experimental Autoimmune Encephalomyelitis by AAV Vectors Expressing a Soluble Interleukin-23 Receptor. *Neurotherapeutics*. 2017 Jun 7. doi: 10.1007/s13311-017-0545-8. [Epub ahead of print] PubMed PMID: 28593439
2. Mulero P, Auger C, Parolin L, Fonseca E, Requena M, Río J, Tintoré M, Rovira A, Montalban X. Varicella-zoster meningovascularitis in a multiple sclerosis patient treated with natalizumab. *Mult Scler*. 2017 Jun 1:1352458517711569. doi: 10.1177/1352458517711569. [Epub ahead of print] PubMed PMID: 28643544
3. Amato MP, Derfuss T, Hemmer B, Liblau R, Montalban X, Soelberg Sørensen P, Miller DH; 2016ECTRIMS Focused Workshop Group. Environmental modifiable risk factors for multiple sclerosis: Report from the 2016ECTRIMS focused workshop. *Mult Scler*. 2017 Jan 6:1352458516686847. doi: 10.1177/1352458516686847. [Epub ahead of print] PubMed PMID: 28671487.
4. Preziosa P, Rocca MA, Mesaros S, Meani A, Montalban X, Drulovic J, Droby A, Zipp F, Calabrese M, Sastre-Garriga J, Dujmovic-Basuroski I, Rovira A, Filippi M. Diagnosis of multiple sclerosis: a multicentre study to compare revised McDonald-2010 and Filippi-2010 criteria. *J Neurol Neurosurg Psychiatry*. 2017 Jul 19. pii: jnnp-2017-315863. doi: 10.1136/jnnp-2017-315863. [Epub ahead of print] PubMed PMID: 28724720
5. Bove R, Chitnis T, Cree BA, Tintoré M, Naegelin Y, Uitdehaag BM, Kappos L, Khoury SJ, Montalban X, Hauser SL, Weiner HL; SUMMIT Consortium. SUMMIT (Serially Unified Multicenter Multiple Sclerosis Investigation): creating a repository of deeply phenotyped contemporary multiple sclerosis cohorts. *Mult Scler*. 2017 Aug 1:1352458517726657. doi: 10.1177/1352458517726657. [Epub ahead of print] PubMed PMID: 28847219
6. Vidal-Jordana A, Sastre-Garriga J, Pareto D, Tur C, Arrambide G, Otero Romero S, Huerga E, Mitjana R, Auger C, Tintoré M, Rovira A, Montalban X. Brain atrophy 15 years after CIS: Baseline and follow-up clinico-radiological correlations. *Mult Scler*. 2017 Apr 1:1352458517707070. doi: 10.1177/1352458517707070. [Epub ahead of print] PubMed PMID: 28445084.
7. Arrambide G, Rovira A, Sastre-Garriga J, Tur C, Castelló J, Río J, Vidal-Jordana A, Galán I, Rodríguez-Acevedo B, Midaglia L, Nos C, Mulero P, Arévalo MJ, Comabella M, Huerga E, Auger C, Montalban X, Tintore M. Spinal cord lesions: A modest contributor to diagnosis in clinically isolated syndromes but a relevant prognostic factor. *Mult Scler*. 2017 Mar 1:1352458517697830. doi: 10.1177/1352458517697830. [Epub ahead of print] PubMed PMID: 28301287.
8. Río J, Rovira À, Tintoré M, Otero-Romero S, Comabella M, Vidal-Jordana Á, Galán I, Castelló J, Arrambide G, Nos C, Tur C, Pujal B, Auger C, Sastre-Garriga J, Montalban X. Disability progression markers over 6-12 years in interferon- $\beta$ -treated multiple sclerosis patients. *Mult Scler*. 2017 Mar 1:1352458517698052. doi: 10.1177/1352458517698052. [Epub ahead of print] PubMed PMID: 28287331.
9. Eixarch H, Calvo-Barreiro L, Montalban X, Espejo C. Bone morphogenetic proteins in multiple sclerosis: Role in neuroinflammation. *Brain Behav Immun*. 2017 Feb 27. pii:

- S0889-1591(17)30061-2. doi: 10.1016/j.bbi.2017.02.019. [Epub ahead of print] Review. PubMed PMID: 28249802.
10. Rovira A, Auger C, Huerga E, Corral JF, Mitjana R, Sastre-Garriga J, Tintoré M, Montalban X. Cumulative Dose of Macrocyclic Gadolinium-Based Contrast Agent Improves Detection of Enhancing Lesions in Patients with Multiple Sclerosis. *AJNR Am J Neuroradiol*. 2017 Aug;38(8):1486-1493. doi: 10.3174/ajnr.A5253. Epub 2017 Jun 15. PubMed PMID: 28619842.
  11. Saposnik G, Maurino J, Sempere AP, Terzaghi MA, Ruff CC, Mamdani M, Tobler PN, Montalban X. Overcoming Therapeutic Inertia in Multiple Sclerosis Care: A Pilot Randomized Trial Applying the Traffic Light System in Medical Education. *Front Neurol*. 2017 Aug 21;8:430. doi: 10.3389/fneur.2017.00430. eCollection 2017. PubMed PMID: 28871238; PubMed Central PMCID: PMC5567059.
  12. Fissolo N, Pignolet B, Matute-Blanch C, Triviño JC, Miró B, Mota M, Perez-Hoyos S, Sanchez A, Vermersch P, Ruet A, de Sèze J, Labauge P, Vukusic S, Papeix C, Almoyna L, Tourbah A, Clavelou P, Moreau T, Pelletier J, Lebrun-Frenay C, Montalban X, Brassat D, Comabella M; Biomarkers and Response to Natalizumab for Multiple Sclerosis Treatment (BIONAT), Best EScalation Treatment in Multiple Sclerosis (BEST-MS), and the Société Francophone de la Sclérose En Plaques (SFSEP) Network. Matrix metalloproteinase 9 is decreased in natalizumab-treated multiple sclerosis patients at risk for progressive multifocal leukoencephalopathy. *Ann Neurol*. 2017 Aug;82(2):186-195. doi: 10.1002/ana.24987. Epub 2017 Jul 22. PubMed PMID: 28681388.
  13. Mahurkar S, Moldovan M, Suppiah V, Sorosina M, Clarelli F, Liberatore G, Malhotra S, Montalban X, Antigüedad A, Krupa M, Jokubaitis VG, McKay FC, Gatt PN, Fabis-Pedrini MJ, Martinelli V, Comi G, Lechner-Scott J, Kermodé AG, Slee M, Taylor BV, Vandebroek K, Comabella M, Boneschi FM; Australian and New Zealand Multiple Sclerosis Genetics Consortium (ANZgene), King C. Response to interferon-beta treatment in multiple sclerosis patients: a genome-wide association study. *Pharmacogenomics J*. 2017 Jul;17(4):312-318. doi: 10.1038/tpj.2016.20. Epub 2016 Mar 22. PubMed PMID: 27001119
  14. Fitzgerald KC, Munger KL, Hartung HP, Freedman MS, Montalbán X, Edan G, Wicklein EM, Radue EW, Kappos L, Pohl C, Ascherio A; BENEFIT Study Group. Sodium intake and multiple sclerosis activity and progression in BENEFIT. *Ann Neurol*. 2017 Jul;82(1):20-29. doi: 10.1002/ana.24965. PubMed PMID: 28556498; PubMed Central PMCID: PMC5555227
  15. Órpez-Zafra T, Pavía J, Hurtado-Guerrero I, Pinto-Medel MJ, Rodríguez Bada JL, Urbaneja P, Suardíaz M, Villar LM, Comabella M, Montalban X, Alvarez-Cermeño JC, Leyva L, Fernández Ó, Oliver-Martos B. Decreased soluble IFN- $\beta$  receptor (sIFNAR2) in multiple sclerosis patients: A potential serum diagnostic biomarker. *Mult Scler*. 2017 Jun;23(7):937-945. doi: 10.1177/1352458516667564. Epub 2016 Sep 9. PubMed PMID: 27613121
  16. Gutiérrez-Franco A, Eixarch H, Costa C, Gil V, Castillo M, Calvo-Barreiro L, Montalban X, Del Río JA, Espejo C. Semaphorin 7A as a Potential Therapeutic Target for Multiple Sclerosis. *Mol Neurobiol*. 2017 Aug;54(6):4820-4831. doi: 10.1007/s12035-016-0154-2. Epub 2016 Oct 6. PubMed PMID: 27714632
  17. Montalban X, Belachew S, Wolinsky JS. Ocrelizumab in Primary Progressive and Relapsing Multiple Sclerosis. *N Engl J Med*. 2017 Apr 27;376(17):1694. doi:10.1056/NEJMc1702076. PubMed PMID: 28445663.
  18. Vidal-Jordana A, Montalban X. Multiple Sclerosis: Epidemiologic, Clinical, and Therapeutic Aspects. *Neuroimaging Clin N Am*. 2017 May;27(2):195-204.

19. Carrillo-Salinas FJ, Mestre L, Mecha M, Feliú A, Del Campo R, Villarrubia N, Espejo C, Montalbán X, Álvarez-Cermeño JC, Villar LM, Guaza C. Gut dysbiosis and neuroimmune responses to brain infection with Theiler's murine encephalomyelitis virus. *Sci Rep.* 2017 Mar 14;7:44377. doi: 10.1038/srep44377. PubMed PMID: 28290524; PubMed Central PMCID: PMC5349526.
20. Sørensen PS, Comi G, Vollmer TL, Montalban X, Kappos L, Dadon Y, Gorfine T, Margalit M, Sasson N, Rubinchick S, Knappertz V. Laquinimod Safety Profile: Pooled Analyses from the ALLEGRO and BRAVO Trials. *Int J MS Care.* 2017 Jan-Feb;19(1):16-24. doi: 10.7224/1537-2073.2015-024. PubMed PMID: 28243182; PubMed Central PMCID: PMC5315319.
21. Villoslada P, Alonso C, Agirrezabal I, Kotelnikova E, Zubizarreta I, Pulido-Valdeolivas I, Saiz A, Comabella M, Montalban X, Villar L, Alvarez-Cermeño,JC, Fernández O, Alvarez-Lafuente R, Arroyo R, Castro A. Metabolomic signatures associated with disease severity in multiple sclerosis. *Neurol Neuroimmunol Neuroinflamm.* 2017 Jan 27;4(2):e321. doi: 10.1212/NXI.0000000000000321. PubMed PMID: 28180139; PubMed Central PMCID: PMC5278923.
22. Link J, Ramanujam R, Auer M, Ryner M, Hässler S, Bachelet D, Mbogning C, Warnke C, Buck D, Hyldgaard Jensen PE, Sievers C, Ingenhoven K, Fissolo N, Lindberg R, Grummel V, Donnellan N, Comabella M, Montalban X, Kieseier B, Soelberg Sørensen P, Hartung HP, Derfuss T, Lawton A, Sikkema D, Pallardy M, Hemmer B, Deisenhammer F, Broët P, Dönnies P, Davidson J, Fogdell-Hahn A; ABIRISK Consortium.. Clinical practice of analysis of anti-drug antibodies against interferon beta and natalizumab in multiple sclerosis patients in Europe: A descriptive study of test results. *PLoS One.* 2017 Feb 7;12(2):e0170395. doi: 10.1371/journal.pone.0170395. PubMed PMID: 28170401; PubMed Central PMCID: PMC5295710.
23. Trojano M, Tintore M, Montalban X, Hillert J, Kalincik T, Iaffaldano P, Spelman T, Sormani MP, Butzkueven H. Treatment decisions in multiple sclerosis - insights from real-world observational studies. *Nat Rev Neurol.* 2017 Feb;13(2):105-118. doi: 10.1038/nrneurol.2016.188. Review. PubMed PMID: 28084327.
24. Matute-Blanch C, Río J, Villar LM, Midaglia L, Malhotra S, Álvarez-Cermeño JC, Vidal-Jordana A, Montalban X, Comabella M. Chitinase 3-like 1 is associated with the response to interferon-beta treatment in multiple sclerosis. *J Neuroimmunol.* 2017 Feb 15;303:62-65. doi: 10.1016/j.jneuroim.2016.12.006. PubMed PMID: 28063616.
25. Vidal-Jordana A, Pareto D, Sastre-Garriga J, Auger C, Ciampi E, Montalban X, Rovira A. Measurement of Cortical Thickness and Volume of Subcortical Structures in Multiple Sclerosis: Agreement between 2D Spin-Echo and 3D MPRAGE T1-Weighted Images. *AJNR Am J Neuroradiol.* 2017 Feb;38(2):250-256. doi: 10.3174/ajnr.A4999. PubMed PMID: 27884876.
26. Aymerich FX, Auger C, Alcaide-Leon P, Pareto D, Huerga E, Corral JF, Mitjana R, Sastre-Garriga J, Montalban X, Rovira A. Comparison between gadolinium-enhanced 2D T1-

- weighted gradient-echo and spin-echo sequences in the detection of active multiple sclerosis lesions on 3.0T MRI. *Eur Radiol.* 2017 Apr;27(4):1361-1368. doi: 10.1007/s00330-016-4503-3. PubMed PMID: 27456965.
27. Ciampi E, Pareto D, Sastre-Garriga J, Vidal-Jordana A, Tur C, Río J, Tintoré M, Auger C, Rovira A, Montalban X. Grey matter atrophy is associated with disability increase in natalizumab-treated patients. *Mult Scler.* 2017 Apr;23(4):556-566. doi: 10.1177/1352458516656808. PubMed PMID: 27354019.
28. Montalban X, Hauser SL, Kappos L, Arnold DL, Bar-Or A, Comi G, de Seze J, Giovannoni G, Hartung HP, Hemmer B, Lublin F, Rammohan KW, Selmaj K, Traboulsee A, Sauter A, Masterman D, Fontoura P, Belachew S, Garren H, Mairon N, Chin P, Wolinsky JS; ORATORIO Clinical Investigators.. Ocrelizumab versus Placebo in Primary Progressive Multiple Sclerosis. *N Engl J Med.* 2017 Jan 19;376(3):209-220. doi: 10.1056/NEJMoa1606468. PubMed PMID: 28002688.
29. Hauser SL, Bar-Or A, Comi G, Giovannoni G, Hartung HP, Hemmer B, Lublin F, Montalban X, Rammohan KW, Selmaj K, Traboulsee A, Wolinsky JS, Arnold DL, Klingelschmitt G, Masterman D, Fontoura P, Belachew S, Chin P, Mairon N, Garren H, Kappos L; OPERA I and OPERA II Clinical Investigators.. Ocrelizumab versus Interferon Beta-1a in Relapsing Multiple Sclerosis. *N Engl J Med.* 2017 Jan 19;376(3):221-234. doi: 10.1056/NEJMoa1601277. PubMed PMID: 28002679
30. Freedman MS, Montalban X, Miller AE, Dive-Pouletty C, Hass S, Thangavelu K, Leist TP. Comparing outcomes from clinical studies of oral disease-modifying therapies (dimethyl fumarate, fingolimod, and teriflunomide) in relapsing MS: Assessing absolute differences using a number needed to treat analysis. *Mult Scler Relat Disord.* 2016 Nov;10:204-212. doi: 10.1016/j.msard.2016.10.010. PubMed PMID: 27919491.
31. Lopez de Lapuente A, Feliú A, Ugidos N, Mecha M, Mena J, Astobiza I, Riera J, Carrillo-Salinas FJ, Comabella M, Montalban X, Alloza I, Guaza C, Vandenberg K. Correction: Novel Insights into the Multiple Sclerosis Risk Gene ANKRD55. *J Immunol.* 2016 Nov 15;197(10):4177. PubMed PMID: 27815448.
32. Casacuberta-Serra S, Costa C, Eixarch H, Mansilla MJ, López-Estévez S, Martorell L, Parés M, Montalban X, Espejo C, Barquinero J. Myeloid-derived suppressor cells expressing a self-antigen ameliorate experimental autoimmune encephalomyelitis. *Exp Neurol.* 2016 Dec;286:50-60. doi:10.1016/j.expneurol.2016.09.012. PubMed PMID: 27693617
33. Tintore M, Otero-Romero S, Río J, Arrambide G, Pujal B, Tur C, Galán I, Comabella M, Nos C, Arévalo MJ, Vidal-Jordana A, Castelló J, Rodríguez-Acevedo B, Midaglia L, Mitjana R, Auger C, Sastre-Garriga J, Rovira À, Montalban X. Contribution of the symptomatic lesion in establishing MS diagnosis and prognosis. *Neurology.* 2016 Sep 27;87(13):1368-74. doi:10.1212/WNL.0000000000003144. PubMed PMID: 27566747.
34. Arrambide G, Espejo C, Eixarch H, Villar LM, Alvarez-Cermeño JC, Picón C, Kuhle J, Disanto G, Kappos L, Sastre-Garriga J, Pareto D, Simon E, Comabella M, Río J, Nos C, Tur C, Castelló J, Vidal-Jordana A, Galán I, Arévalo MJ, Auger C, Rovira A, Montalban X, Tintore M. Neurofilament light chain level is a weak risk factor for the development of MS. *Neurology.* 2016 Sep 13;87(11):1076-84. Doi 10.1212/WNL.0000000000003085. Erratum

- in: *Neurology*. 2016 Nov 8;87(19):2068. PubMed PMID: 27521440; PubMed Central PMCID: PMC5027802.
35. Otero-Romero S, Sastre-Garriga J, Comi G, Hartung HP, Soelberg Sørensen P, Thompson AJ, Vermersch P, Gold R, Montalban X. Pharmacological management of spasticity in multiple sclerosis: Systematic review and consensus paper. *Mult Scler*. 2016 Oct;22(11):1386-1396. Review. PubMed PMID: 27207462.
  36. Vidal-Jordana A, Sastre-Garriga J, Pérez-Miralles F, Pareto D, Rio J, Auger C, Tintoré M, Rovira A, Montalban X. Brain Volume Loss During the First Year of Interferon-Beta Treatment in Multiple Sclerosis: Baseline Inflammation and Regional Brain Volume Dynamics. *J Neuroimaging*. 2016 Sep;26(5):532-8. doi: 10.1111/jon.12337. PubMed PMID: 26935253.
  37. Kappos L, Edan G, Freedman MS, Montalbán X, Hartung HP, Hemmer B, Fox EJ, Barkhof F, Schippling S, Schulze A, Pleimes D, Pohl C, Sandbrink R, Suarez G, Wicklein EM; BENEFIT Study Group.. The 11-year long-term follow-up study from the randomized BENEFIT CIS trial. *Neurology*. 2016 Sep 6;87(10):978-87. Doi 10.1212/WNL.0000000000003078. PubMed PMID: 27511182; PubMed Central PMCID: PMC5027814
  38. Kappos L, Li DK, Stüve O, Hartung HP, Freedman MS, Hemmer B, Rieckmann P, Montalban X, Ziemssen T, Hunter B, Arnould S, Wallström E, Selmaj K. Safety and Efficacy of Siponimod (BAF312) in Patients With Relapsing-Remitting Multiple Sclerosis: Dose-Blinded, Randomized Extension of the Phase 2 BOLD Study. *JAMA Neurol*. 2016 Sep 1;73(9):1089-98. doi: 10.1001/jamaneurol.2016.1451. PubMed PMID: 27380540.
  39. Waters P, Reindl M, Saiz A, Schanda K, Tuller F, Kral V, Nytrova P, Sobek O, Nielsen HH, Barington T, Lillevang ST, Illes Z, Rentzsch K, Berthele A, Berki T, Granieri L, Bertolotto A, Giometto B, Zuliani L, Hamann D, van Pelt ED, Hintzen R, Höftberger R, Costa C, Comabella M, Montalban X, Tintoré M, Siva A, Altintas A, Deniz G, Woodhall M, Palace J, Paul F, Hartung HP, Aktas O, Jarius S, Wildemann B, Vedeler C, Ruiz A, Leite MI, Trillenber P, Probst M, Saschenbrecke S, Vincent A, Marignier R. Multicentre comparison of a diagnostic assay: aquaporin-4 antibodies in neuromyelitis optica. *J Neurol Neurosurg Psychiatry*. 2016 Sep;87(9):1005-15. doi: 10.1136/jnnp-2015-312601. PubMed PMID: 27113605;PubMed Central PMCID: PMC5013123.
  40. Rio J, Rovira A, Blanco Y, Sainz A, Perkal H, Robles R, Ramio-Torrenta L, Diaz RM, Arroyo R, Urbaneja P, Fernandez O, Garcia-Merino JA, Reyes MP, Oreja-Guevara C, Prieto JM, Izquierdo G, Olascoaga J, Alvarez-Cermeno JC, Simon E, Pujal B, Comabella M, Montalban X. [Response to treatment with interferon beta in patients with multiple sclerosis. Validation of the Rio Score]. *Rev Neurol*. 2016 Aug 16;63(4):145-50. Spanish. PubMed PMID: 27439483.
  41. Gold R, Radue EW, Giovannoni G, Selmaj K, Havrdova E, Stefoski D, Sprenger T, Montalban X, Cohan S, Umans K, Greenberg SJ, Ozen G, Elkins J. Safety and efficacy of daclizumab in relapsing-remitting multiple sclerosis: 3-year results from the SELECTED

- open-label extension study. *BMC Neurol.* 2016 Jul 26;16:117 doi: 10.1186/s12883-016-0635-y. PubMed PMID: 27461166; PubMed Central PMCID: PMC4962457.
42. Keshavan A, Paul F, Beyer MK, Zhu AH, Papinutto N, Shinohara RT, Stern W, Amann M, Bakshi R, Bischof A, Carriero A, Comabella M, Crane JC, D'Alfonso S, Demaerel P, Dubois B, Filippi M, Fleischer V, Fontaine B, Gaetano L, Goris A, Graetz C, Gröger A, Groppa S, Hafler DA, Harbo HF, Hemmer B, Jordan K, Kappos L, Kirkish G, Lufriu S, Magon S, Martinelli-Boneschi F, McCauley JL, Montalban X, Mühlau M, Pelletier D, Pattany PM, Pericak-Vance M, Cournu-Rebeix I, Rocca MA, Rovira A, Schlaeger R, Saiz A, Sprenger T, Stecco A, Uitdehaag BM, Villoslada P, Wattjes MP, Weiner H, Wuerfel J, Zimmer C, Zipp F; International Multiple Sclerosis Genetics Consortium. Electronic address: AIVINSON@PARTNERS.ORG., Hauser SL, Oksenberg JR, Henry RG. Power estimation for non-standardized multisite studies. *Neuroimage.* 2016 Jul 1;134:281-94. doi:10.1016/j.neuroimage.2016.03.051. PubMed PMID: 27039700.
  43. Schwab N, Schneider-Hohendorf T, Pignolet B, Spadaro M, Görlich D, Meinl I, Windhagen S, Tackenberg B, Breuer J, Cantó E, Kümpfel T, Hohlfeld R, Siffrin V, Luessi F, Posevitz-Fejfar A, Montalban X, Meuth SG, Zipp F, Gold R, Du Pasquier RA, Kleinschnitz C, Jacobi A, Comabella M, Bertolotto A, Brassat D, Wiendl H. PML risk stratification using anti-JCV antibody index and L-selectin. *Mult Scler.* 2016 Jul;22(8):1048-60. doi: 10.1177/1352458515607651. PubMed PMID: 26432858
  44. Sadovnick AD, Traboulsee AL, Bernales CQ, Ross JP, Forwell AL, Yee IM, Guillot-Noel L, Fontaine B, Cournu-Rebeix I, Alcina A, Fedetz M, Izquierdo G, Matesanz F, Hilven K, Dubois B, Goris A, Astobiza I, Alloza I, Antigüedad A, Vandebroek K, Akkad DA, Aktas O, Blaschke P, Buttmann M, Chan A, Eppelen JT, Gerdes LA, Kroner A, Kubisch C, Kümpfel T, Lohse P, Rieckmann P, Zettl UK, Zipp F, Bertram L, Lill CM, Fernandez O, Urbaneja P, Leyva L, Alvarez-Cermeño JC, Arroyo R, Garagorri AM, García-Martínez A, Villar LM, Urcelay E, Malhotra S, Montalban X, Comabella M, Berger T, Fazekas F, Reindl M, Schmied MC, Zimprich A, Vilariño-Güell C. Analysis of Plasminogen Genetic Variants in Multiple Sclerosis Patients. *G3 (Bethesda).* 2016 Jul 7;6(7):2073-9. doi: 10.1534/g3.116.030841. PubMed PMID: 27194806; PubMed Central PMCID: PMC4938660.
  45. Sepúlveda M, Armangue T, Martínez-Hernández E, Arrambide G, Sola-Valls N, Sabater L, Téllez N, Midaglia L, Ariño H, Peschl P, Reindl M, Rovira A, Montalban X, Blanco Y, Dalmau J, Graus F, Saiz A. Clinical spectrum associated with MOG autoimmunity in adults: significance of sharing rodent MOG epitopes. *J Neurol.* 2016 Jul;263(7):1349-60. doi: 10.1007/s00415-016-8147-7. PubMed PMID: 27147513.
  46. Sormani MP, Gasperini C, Romeo M, Rio J, Calabrese M, Cocco E, Enzinger C, Fazekas F, Filippi M, Gallo A, Kappos L, Marrosu MG, Martinelli V, Prosperini L, Rocca MA, Rovira A, Sprenger T, Stromillo ML, Tedeschi G, Tintorè M, Tortorella C, Trojano M, Montalban X, Pozzilli C, Comi G, De Stefano N; MAGNIMS study group. Assessing response to interferon- $\beta$  in a multicenter dataset of patients with MS. *Neurology.* 2016 Jul 12;87(2):134-40. doi: 10.1212/WNL.0000000000002830. PubMed PMID: 27306626.
  47. Fernandez O, Rodríguez-Antigüedad A, Olascoaga J, Oreja-Guevara C, Prieto JM, Mendibe-Bilbao MM, García-Merino JA, Ramio-Torrenta L, Ginestal R, Meca-Lallana JE, Romero-Pinel L, Muñoz D, Saiz A, Calles-Hernández MC, Izquierdo G, Villar LM, Oliva-

48. Nacarino P, Arnal-Garcia C, Comabella M, Brieva L, Arroyo R, Montalban X. Review of the novelties from the 31stECTRIMS Congress, 2015, presented at the 8th Post-ECTRIMS meeting. *Rev Neurol*. 2016 Jun 16;62(12):559-69. Review. English, Spanish. PubMed PMID: 27270678.
49. Comabella M, Sastre-Garriga J, X. Precision medicine in multiple sclerosis: biomarkers for diagnosis, prognosis, and treatment response. *Curr Opin Neurol*. 2016 Jun;29(3):254-262. PubMed PMID: 27075495.
50. Cohen JA, Khatri B, Barkhof F, Comi G, Hartung HP, Montalban X, Pelletier J, Stites T, Ritter S, von Rosenstiel P, Tomic D, Kappos L; TRANSFORMS (Trial Assessing injectable interferoN vS. FTY720 Oral in RRMS) Study Group. Long-term (up to 4.5 years) treatment with fingolimod in multiple sclerosis: results from the extension of the randomised TRANSFORMS study. *J Neurol Neurosurg Psychiatry*. 2016 May;87(5):468-75. doi: 10.1136/jnnp-2015-310597. Epub 2015 Jun 25. PubMed PMID: 26111826.
51. Pareto D, Sastre-Garriga J, Aymerich FX, Auger C, Tintoré M, Montalban X, Rovira A. Lesion filling effect in regional brain volume estimations: a study in multiple sclerosis patients with low lesion load. *Neuroradiology*. 2016 May;58(5):467-74. doi: 10.1007/s00234-016-1654-5. Epub 2016 Feb 4. PubMed PMID: 26847633.
52. Hegen H, Adrianto I, Lessard CJ, Millonig A, Bertolotto A, Comabella M, Giovannoni G, Guger M, Hoelzl M, Khalil M, Fazekas F, Killestein J, Lindberg RL, Malucchi S, Mehling M, Montalban X, Rudzki D, Schautzer F, Sellebjerg F, Sorensen PS, Deisenhammer F, Steinman L, Axtell RC. Cytokine profiles show heterogeneity of interferon- $\beta$  response in multiple sclerosis patients. *Neurol Neuroimmunol Neuroinflamm*. 2016 Jan 27;3(2):e202. doi: 10.1212/NXI.0000000000000202. eCollection 2016 Apr. PubMed PMID: 26894205; PubMed Central PMCID: PMC4747480.
53. An uncommon first manifestation of multiple sclerosis: Tako-Tsubo cardiomyopathy. Midaglia L, Juega Mariño JM, Sastre-Garriga J, Rovira A, Vidal-Jordana A, López-Pérez MA, Marzo-Sola ME, Librada Escribano F, Montalban X. *Mult Scler*. 2016 May;22(6):842-6. doi: 10.1177/1352458516638557. Epub 2016 Mar 18. PMID: 26993120
54. Lublin F, Miller DH, Freedman MS, Cree BA, Wolinsky JS, Weiner H, Lubetzki C, Hartung HP, Montalban X, Uitdehaag BM, Merschhemke M, Li B, Putzki N, Liu FC, Häring DA, Kappos L; INFORMS study investigators. Oral fingolimod in primary progressive multiple sclerosis (INFORMS): a phase 3, randomised, double-blind, placebo-controlled trial. *Lancet*. 2016 Mar 12;387(10023):1075-84. doi: 10.1016/S0140-6736(15)01314-8. Epub 2016 Jan 28. PubMed PMID: 26827074.
55. Filippi M, Rocca MA, Ciccarelli O, De Stefano N, Evangelou N, Kappos L, Rovira A, Sastre-Garriga J, Tintoré M, Frederiksen JL, Gasperini C, Palace J, Reich DS, Banwell B, Montalban X, Barkhof F; MAGNIMS Study Group. MRI criteria for the diagnosis of multiple sclerosis: MAGNIMS consensus guidelines. *Lancet Neurol*. 2016 Mar;15(3):292-303. doi: 10.1016/S1474-4422(15)00393-2. Epub 2016 Jan 26. Review. PubMed PMID: 26822746; PubMed Central PMCID: PMC4760851.

56. Gutiérrez-Franco A, Costa C, Eixarch H, Castillo M, Medina-Rodríguez EM, Bribián A, de Castro F, Montalban X, Espejo C. Differential expression of sema3A and sema7A in a murine model of multiple sclerosis: Implications for a therapeutic design. *Clin Immunol.* 2016 Feb;163:22-33. doi: 10.1016/j.clim.2015.12.005. Epub 2015 Dec 10. PubMed PMID: 26686462.
57. Comabella M, Cantó E, Nurtdinov R, Río J, Villar LM, Picón C, Castilló J, Fissolo N, Aymerich X, Auger C, Rovira A, Montalban X. MRI phenotypes with high neurodegeneration are associated with peripheral blood B-cell changes. *Hum Mol Genet.* 2016 Jan 15;25(2):308-16. doi: 10.1093/hmg/ddv473. Epub 2015 Nov 24. PubMed PMID: 26604134.
58. Fissolo N, Montalban X, Comabella M. DNA Vaccination Techniques. *Methods Mol Biol.* 2016;1304:39-50. doi: 10.1007/7651\_2014\_87. PubMed PMID: 24973869.
59. Borràs E, Cantó E, Choi M, Maria Villar L, Álvarez-Cermeño JC, Chiva C, Montalban X, Vitek O, Comabella M, Sabidó E. Protein-Based Classifier to Predict Conversion from Clinically Isolated Syndrome to Multiple Sclerosis. *Mol Cell Proteomics.* 2016 Jan;15(1):318-28. doi: 10.1074/mcp.M115.053256. Epub 2015 Nov 9. PubMed PMID: 26552840; PubMed Central PMCID: PMC4762525.
60. Agulló L, Malhotra S, Fissolo N, Montalban X, Comabella M. Molecular dynamics and intracellular signaling of the TNF-R1 with R92Q mutation. *J Neuroimmunol.* 2015 Dec 15;289:12-20. doi: 10.1016/j.jneuroim.2015.10.003. Epub 2015 Oct 22.
61. Lill CM, Luessi F, Alcina A, Sokolova EA, Ugidos N, de la Hera B, Guillot-Noël L, Malhotra S, Reinthaler E, Schjeide BM, Mescheriakova JY, Mashychev A, Wohlers I, Akkad DA, Aktas O, Alloza I, Antigüedad A, Arroyo R, Astobiza I, Blaschke P, Boyko AN, Buttmann M, Chan A, Dörner T, Epplen JT, Favorova OO, Fedetz M, Fernández O, García-Martínez A, Gerdes LA, Graetz C, Hartung HP, Hoffjan S, Izquierdo G, Korobko DS, Kroner A, Kubisch C, Kümpfel T, Leyva L, Lohse P, Malkova NA, Montalban X, Popova EV, Rieckmann P, Rozhdestvenskii AS, Schmied C, Smagina IV, Tsareva EY, Winkelmann A, Zettl UK, Binder H, Cournu-Rebeix I, Hintzen R, Zimprich A, Comabella M, Fontaine B, Urcelay E, Vandebroek K, Filipenko M, Matesanz F, Zipp F, Bertram L. Genome-wide significant association with seven novel multiple sclerosis risk loci. *J Med Genet.* 2015 Dec;52(12):848-55. doi: 10.1136/jmedgenet-2015-103442. Epub 2015 Oct 16.
62. Montalban X, Comi G, Antel J, O'Connor P, de Vera A, Cremer M, Sfikas N, von Rosenstiel P, Kappos L. Long-term results from a phase 2 extension study of fingolimod at high and approved dose in relapsing multiple sclerosis. *J Neurol.* 2015 Dec;262(12):2627-2634. Epub 2015 Sep 4. PubMed PMID: 26338810.
63. Negrotto L, Tur C, Tintoré M, Arrambide G, Sastre-Garriga J, Río J, Comabella M, Nos C, Galán I, Vidal-Jordana A, Simon E, Castilló J, Palavra F, Mitjana R, Auger C, Rovira À, Montalban X. Should we systematically test patients with clinically isolated syndrome for auto-antibodies? *Mult Scler.* 2015 Dec;21(14):1802-10. doi: 10.1177/1352458515575338. Epub 2015 Mar 16.
64. Rovira A, Tur C, Montalban X. Secondary progressive NMO, or concomitant NMO and a primary neurodegenerative disorder? *Mult Scler.* 2015 Dec;21(14):1876-8. doi: 10.1177/1352458515604746. Epub 2015 Sep 10. No abstract available.



65. Vidal-Jordana A, Sastre-Garriga J, Rovira A, Montalban X. Treating relapsing-remitting multiple sclerosis: therapy effects on brain atrophy. *J Neurol*. 2015 Dec;262(12):2617-26. doi: 10.1007/s00415-015-7798-0. Epub 2015 Jun 5.
66. Negrotto L, Cantó E, Río J, Tintoré M, Montalban X, Comabella M. Peripheral blood non-MAIT CD8+CD16hi cells are decreased in relapsing-remitting multiple sclerosis patients treated with interferon beta. *J Neuroimmunol*. 2015 Nov 15;288:98-101. doi: 10.1016/j.jneuroim.2015.09.007. Epub 2015 Sep 25. PMID: 26531701
67. Costa C, Martínez-Sáez E, Gutiérrez-Franco A, Eixarch H, Castro Z, Ortega-Aznar A, Ramón Y Cajal S, Montalban X, Espejo C. Expression of semaphorin 3A, semaphorin 7A and their receptors in multiple sclerosis lesions. *Mult Scler*. 2015 Nov;21(13):1632-43. doi:10.1177/1352458515599848. Epub 2015 Oct 2. PubMed PMID: 26432853
68. Munger KL, Fitzgerald KC, Freedman MS, Hartung HP, Miller DH, Montalban X, Edan G, Barkhof F, Suarez G, Radue EW, Sandbrink R, Kappos L, Pohl C, Ascherio A. No association of multiple sclerosis activity and progression with EBV or tobacco use in BENEFIT. *Neurology*. 2015 Nov 10;85(19):1694-701. doi: 10.1212/WNL.0000000000002099. Epub 2015 Oct 9. PMID:26453645
69. Cantó E, Espejo C, Costa C, Montalban X, Comabella M. Breast progression protein-39 is not required for experimental autoimmune encephalomyelitis induction. *Clin Immunol*. 2015 Oct;160(2):133-41. doi: 10.1016/j.clim.2015.06.004. Epub 2015 Jun 12.
70. Matesanz F, Potenciano V, Fedetz M, Ramos-Mozo P, Abad-Grau MD, Karky M, Barrionuevo C, Izquierdo G, Ruiz-Peña JL, García-Sánchez MI, Lucas M, Fernández Ó, Leyva L, Otaegui D, Muñoz M, Olascoaga J, Vandebroek K, Alloza I, Astobiza I, Antigüedad A, Villar LM, Álvarez-Cermeño JC, Malhotra S, Comabella M, Montalban X, Saiz A, Blanco Y, Arroyo R, Varadé J, Urcelay E, Alcina A. A functional variant that affects exon-skipping and protein expression of SP140 as genetic mechanism predisposing to multiple sclerosis. *Hum Mol Genet*. 2015 Oct 1;24(19):5619-27. doi: 10.1093/hmg/ddv256. Epub 2015 Jul 7.
71. Lopez de Lapuente A, Pinto-Medel MJ, Astobiza I, Alloza I, Comabella M, Malhotra S, Montalban X, Zettl UK, Rodríguez-Antigüedad A, Fernández O, Vandebroek K. Cell-specific effects in different immune subsets associated with SOCS 1 genotypes in multiple sclerosis. *Mult Scler*. 2015 Oct;21(12):1498-512. doi: 10.1177/1352458514566418. Epub 2015 Jan 26. PubMed PMID: 25623250.
72. Martins Da Silva A, Cavaco S, Moreira I, Bettencourt A, Santos E, Pinto C, Gonçalves A, Coutinho E, Samões R, Dias CC, Teixeira-Pinto A, Da Silva BM, Montalban X. Cognitive reserve in multiple sclerosis: Prospective effects of education. *Mult Scler*. 2015 Sep;21(10):1312-21. doi: 10.1177/1352458515581874. Epub 2015 May 6. PubMed PMID: 25948624.
73. Bustamante MF, Morcillo-Suárez C, Malhotra S, Río J, Leyva L, Fernández O, Zettl UK, Killestein J, Brassat D, García-Merino JA, Sánchez AJ, Urcelay E, Alvarez-Lafuente R, Villar LM, Alvarez-Cermeño JC, Farré X, Lechner-Scott J, Vandebroek K, Rodríguez-Antigüedad A, Drulovic JS, Martinelli Boneschi F, Chan A, Oksenberg J, Navarro A, Montalban X, Comabella M. Pharmacogenomic study in patients with multiple sclerosis: responders and nonresponders to IFN-Beta. *Neurol Neuroimmunol Neuroinflamm*. 2015

Sep 24;2(5):e154. doi: 10.1212/NXI.000000000000154. eCollection 2015 Oct. PMID: 26445728

74. Villoslada P, Rovira A, Montalban X, Arroyo R, Paul F, Meca-Lallana V, Ramo C, Fernandez O, Saiz A, Garcia-Merino A, Ramió-Torrentà L, Casanova B, Oreja-Guevara C, Muñoz D, Martinez-Rodriguez JE, Lensch E, Prieto JM, Meuth SG, Nuñez X, Campás C, Pugliese M; NeuroAdvan study. Effects of diazoxide in multiple sclerosis: A randomized, double blind phase 2 clinical trial. *Neurol Neuroimmunol Neuroinflamm*. 2015 Sep 10;2(5):e147. doi: 10.1212/NXI.000000000000147. eCollection 2015 Oct. PMID: 26405686
75. Gich J, Freixenet J, Garcia R, Vilanova JC, Genís D, Silva Y, Montalban X, Ramió-Torrentà L. A new cognitive rehabilitation programme for patients with multiple sclerosis: the 'MS-line! Project'. *Mult Scler*. 2015 Sep;21(10):1344-8. doi: 10.1177/1352458514561905. Epub 2014 Dec 5
76. Haghikia A, Faissner S, Pappas D, Pula B, Akkad DA, Arning L, Ruhrmann S, Duscha A, Gold R, Baranzini SE, Malhotra S, Montalban X, Comabella M, Chan A. Interferon-beta affects mitochondrial activity in CD4+ lymphocytes: Implications for mechanism of action in multiple sclerosis. *Mult Scler*. 2015 Sep;21(10):1262-70. doi: 10.1177/1352458514561909. Epub 2014 Dec 5.
77. Fernandez O, Alvarez-Cermeno JC, Arroyo R, Brieva L, Calles-Hernandez MC, Casanova-Estruch B, Comabella M, Garcia-Merino JA, Ginestal R, Izquierdo G, Meca-Lallana JE, Mendibe-Bilbao MM, Montalban X, Munoz-Garcia D, Olascoaga J, Oliva-Nacarino P, Oreja-Guevara C, Ramio-Torrenta L, Romero-Pinel L, Rodriguez-Antiguedad A, Saiz A, Tintore M, Grupo Post-Ectrimis GP. [Review of the novelties from the 2014 ECTRIMS-ACTRIMS Joint Congress, presented at the 7th Post-ECTRIMS meeting (I)]. *Rev Neurol*. 2015 Sep 1;61(5):215-224. Spanish.
78. Ortiz MA, Núñez C, Ordóñez D, Alvarez-Cermeño JC, Martínez-Rodriguez JE, Sánchez AJ, Arroyo R, Izquierdo G, Malhotra S, Montalban X, García-Merino A, Munteis E, Alcina A, Comabella M, Matesanz F, Villar LM, Urcelay E. Influence of the LILRA3 Deletion on Multiple Sclerosis Risk: Original Data and Meta-Analysis. *PLoS One*. 2015 Aug 14;10(8):e0134414. doi: 10.1371/journal.pone.0134414. eCollection 2015.
79. Rovira À, Wattjes MP, Tintoré M, Tur C, Yousry TA, Sormani MP, De Stefano N, Filippi M, Auger C, Rocca MA, Barkhof F, Fazekas F, Kappos L, Polman C, Miller D, Montalban X; MAGNIMS study group. Evidence-based guidelines: MAGNIMS consensus guidelines on the use of MRI in multiple sclerosis-clinical implementation in the diagnostic process. *Nat Rev Neurol*. 2015 Aug;11(8):471-82. doi: 10.1038/nrneurol.2015.106. Epub 2015 Jul 7. PMID:26149978
80. Pérez-Miralles FC, Sastre-Garriga J, Vidal-Jordana A, Río J, Auger C, Pareto D, Tintoré M, Rovira A, Montalban X. Predictive value of early brain atrophy on response in patients treated with interferon  $\beta$ . *Neurology*. 2015 Jul 7;85(1):29-39. doi: 10.1212/WNL.0000000000001706. Epub 2015 May 29. PMID: 26024899
81. Kappos L, Radue EW, Comi G, Montalban X, Butzkueven H, Wiendl H, Giovannoni G, Hartung HP, Derfuss T, Naegelin Y, Sprenger T, Mueller-Lenke N, Griffiths S, von Rosenstiel P, Gottschalk R, Zhang Y, Dahlke F, Tomic D; TOFINGO study group. Switching from natalizumab to fingolimod: A randomized, placebo-controlled study in RRMS. *Neurology*. 2015 Jul 7;85(1):29-39. doi: 10.1212/WNL.0000000000001706. Epub 2015 May 29. PMID: 26024899

82. Tintore M, Rovira À, Río J, Otero-Romero S, Arrambide G, Tur C, Comabella M, Nos C, Arévalo MJ, Negrotto L, Galán I, Vidal-Jordana A, Castelló J, Palavra F, Simon E, Mitjana R, Auger C, Sastre-Garriga J, Montalban X. Defining high, medium and low impact prognostic factors for developing multiple sclerosis. *Brain*. 2015 Jul;138(Pt 7):1863-74. doi: 10.1093/brain/awv105. Epub 2015 Apr 21. PMID: 25902415
83. Kuhle J, Disanto G, Dobson R, Adiutori R, Bianchi L, Topping J, Bestwick JP, Meier UC, Marta M, Costa GD, Runia T, Evdoshenko E, Lazareva N, Thouvenot E, Iaffaldano P, Drenzo V, Khademi M, Piehl F, Comabella M, Sombekke M, Killestein J, Hegen H, Rauch S, D'Alfonso S, Alvarez-Cermeño JC, Kleinová P, Horáková D, Roesler R, Lauda F, Llugfri S, Avsar T, Uygunoglu U, Altintas A, Saip S, Menge T, Rajda C, Bergamaschi R, Moll N, Khalil M, Marignier R, Dujmovic I, Larsson H, Malmstrom C, Scarpini E, Fenoglio C, Wergeland S, Laroni A, Annibali V, Romano S, Martínez AD, Carra A, Salvetti M, Uccelli A, Torkildsen Ø, Myhr KM, Galimberti D, Rejdak K, Lycke J, Frederiksen JL, Drulovic J, Confavreux C, Brassat D, Enzinger C, Fuchs S, Bosca I, Pelletier J, Picard C, Colombo E, Franciotta D, Derfuss T, Lindberg R, Yaldizli Ö, Vécsei L, Kieseier BC, Hartung HP, Villoslada P, Siva A, Saiz A, Tumani H, Havrdová E, Villar LM, Leone M, Barizzone N, Deisenhammer F, Teunissen C, Montalban X, Tintoré M, Olsson T, Trojano M, Lehmann S, Castelnovo G, Lapin S, Hintzen R, Kappos L, Furlan R, Martinelli V, Comi G, Ramagopalan SV, Giovannoni G. Conversion from clinically isolated syndrome to multiple sclerosis: A large multicentre study. *Mult Scler*. 2015 Jul;21(8):1013-24. doi: 10.1177/1352458514568827. Epub 2015 Feb 13. PMID:25680984
84. Fernández O, García-Merino JA, Arroyo R, Álvarez-Cermeño JC, Izquierdo G, Saiz A, Olascoaga J, Rodríguez-Antigüedad A, Prieto JM, Oreja-Guevara C, Hernández MA, Moral E, Meca J, Montalban X. Spanish consensus on the use of natalizumab (Tysabri®)-2013 *Neurologia*. 2015 Jun;30(5):302-14. doi: 10.1016/j.nrl.2013.10.004. Epub 2013 Dec 19. English, Spanish.
85. Sastre-Garriga J, Tur C, Pareto D, Vidal-Jordana A, Auger C, Río J, Huerga E, Tintoré M, Rovira A, Montalban X. Brain atrophy in natalizumab-treated patients: A 3-year follow-up. *Mult Scler*. 2015 May;21(6):749-56. doi: 10.1177/1352458514556300. Epub 2014 Nov 12
86. Vidal-Jordana A, Tintoré M, Tur C, Pérez-Miralles F, Auger C, Río J, Nos C, Arrambide G, Comabella M, Galán I, Castelló J, Sastre-Garriga J, Rovira A, Montalban X. Significant clinical worsening after natalizumab withdrawal: Predictive factors. *Mult Scler*. 2015 May;21(6):780-5. doi: 10.1177/1352458514549401. Epub 2014 Nov 12.
87. Arrambide G, Tur C, Montalban X. Comment on severe demyelination but no astrocytopathy in clinically definite neuromyelitis optica with anti-myelin-oligodendrocyte glycoprotein antibody. *Mult Scler*. 2015 Apr;21(5):660-1. doi: 10.1177/1352458514551457. Epub 2015 Feb 6. No abstract available. PMID: 25662350
88. Sergott RC, Bennett JL, Rieckmann P, Montalban X, Mikol D, Freudensprung U, Plitz T, van Beek J; ATON Trial Group. ATON: results from a Phase II randomized trial of the B-cell-targeting agent atacicept in patients with optic neuritis. *J Neurol Sci*. 2015 Apr 15;351(1-2):174-8. doi: 10.1016/j.jns.2015.02.019. Epub 2015 Feb 17. PMID: 25758472
89. Cantó E, Tintoré M, Villar LM, Costa C, Nurtdinov R, Álvarez-Cermeño JC, Arrambide G, Reverter F, Deisenhammer F, Hegen F, Khademi M, Olsson T, Tumani H, Rodríguez-Martín E, Piehl F, Bartos A, Zimova D, Kotoucova J, Kuhle J, Kappos L, García-Merino JA, Sánchez AJ, Saiz A, Blanco Y, Hintzen R, Jafari N, Brassat D, Lauda F, Roesler R,

- Rejdak K, Papuc E, de Andrés C, Rauch S, Khalil M, Enzinger C, Galimberti D, Scarpini E, Teunissen C, Sánchez A, Rovira A, Montalban X, Comabella M. Validation of cerebrospinal fluid chitinase 3-like 1 as prognostic biomarker of conversion to multiple sclerosis and disease severity in patients with clinically isolated syndrome: a multicenter longitudinal cohort study. *Brain*. 2015 Apr;138(Pt 4):918-31. doi: 10.1093/brain/awv017. Epub 2015 Feb 13.
90. Villar LM<sup>1</sup>, Costa-Frossard L, Masterman T, Fernandez O, Montalban X, Casanova B, Izquierdo G, Coret F, Tuman H, Saiz A, Arroyo R, Fink K, Leyva L, Espejo C, Simó-Castelló M, García-Sánchez MI, Lauda F, Llufríu S, Álvarez-Lafuente R, Olascoaga J, Prada A, Oterino A, de Andrés C, Tintoré M, Ramió-Torrentà L, Rodríguez-Martín E, Picón C, Comabella M, Quintana E, Agüera E, Díaz S, Fernandez-Bolaños R, García-Merino JA, Landete L, Menéndez-González M, Navarro L, Pérez D, Sánchez-López F, Serrano-Castro PJ, Tuñón A, Espiño M, Muriel A, Bar-Or A, Álvarez-Cermeño JC. Lipid-specific immunoglobulin M bands in cerebrospinal fluid are associated with a reduced risk of developing progressive multifocal leukoencephalopathy during treatment with natalizumab. *Ann Neurol*. 2015 Mar;77(3):447-57. doi: 10.1002/ana.24345. Epub 2015 Jan 30
91. Malhotra S, Rio J, Urcelay E, Nurtdinov R, Bustamante MF, Fernández O, Oliver B, Zettl UK, Brassat D, MD; Killestein J, Lechner-Scott J, Drulovic J, Chan A, Martinelli-Boneschi F, García-Merino A, Montalban X, Comabella M. NLRP3 inflammasome is associated with the response to IFN- $\beta$  in patients with multiple sclerosis. *Brain*. 2015 Mar;138(Pt 3):644-52. doi: 10.1093/brain/awu388. Epub 2015 Jan 12.
92. Malhotra S, Fissolo N, Tintoré M, Wing AC, Castilló J, Vidal-Jordana A, Montalban X, Comabella M. Role of high mobility group box protein 1 (HMGB1) in peripheral blood from patients with multiple sclerosis. *J Neuroinflammation*. 2015 Mar 11;12:48. doi: 10.1186/s12974-015-0269-9.
93. Goris A, Pauwels I, Gustavsen MW, Van Son B, Hilven K, Bos SD, Celius EG, Berg-Hansen P, Aarseth J, Myhr KM, D'Alfonso S, Barizzone N, Leone MA, Boneschi FM, Sorosina M, Liberatore G, Kockum I, Olsson T, Hillert J, Alfredsson L, Bedri SK, Hemmer B, Buck D, Berthele A, Knier B, Biberacher V, Pesch VV, Sindic C, Oturai AB, Søndergaard HB, Sellebjerg F, Jensen PEH, Comabella M, Montalban X, Pérez-Boza J, Malhotra S, Lechner-Scott J, Broadley S, Slee M, Taylor B, Kermode AG, Gourraud PA, International Multiple Sclerosis Genetics Consortium#, Sawcer SJ, Andreassen BK, Dubois B, Harbo HF. Genetic variants are major determinants of cerebrospinal fluid antibody levels in multiple sclerosis. *Brain*. 2015 Mar;138(Pt 3):632-43. doi: 10.1093/brain/awu405. Epub 2015 Jan 22
94. Gibbs E, Karim ME, Oger J; the Steering Committee of the BENEFIT study; the Steering Committee of the BENEFIT study. Antibody dissociation rates are predictive of neutralizing antibody (NAb) course: A comparison of interferon beta-1b-treated patients with transient versus sustained NAbs. *Clin Immunol*. 2015 Mar;157(1):91-101. doi: 10.1016/j.clim.2014.12.005. Epub 2014 Dec 24.
95. Kaufman M, Cree BA, De Sèze J, Fox RJ, Gold R, Hartung HP, Jeffery D, Kappos L, Montalban X, Weinstock-Guttman B, Ticho B, Duda P, Pace A, Campagnolo D. Radiologic MS disease activity during natalizumab treatment interruption: findings from RESTORE. *J Neurol*. 2015 Feb;262(2):326-36. doi: 10.1007/s00415-014-7558-6. Epub 2014 Nov 9.
96. Martí G, Río J, Rovira À, Auger C, Tintoré M, Sastre-Garriga J, Vidal A, Castilló J, Montalban X Progressive multifocal leukoencephalopathy associated to natalizumab: the

- importance of magnetic resonance imaging in its early diagnosis]. *Rev Neurol*. 2015 Feb 16;60(4):164-8. Spanish.
97. Espiño M, Abraira V, Arroyo R, Bau L, Cámara C, Campos-Ruiz L, Casanova B, Espejo C, Fernández O, García-Merino A, García-Sánchez MI, Gómez M, Gosis A, Izquierdo G, Meca J, Montalban X, Morandeira F, Olascoaga J, Prada A, Quintana E, Ramió-Torrentà L, Rodríguez-Antigüedad A, Salgado G, Santiago JL, Sarasola E, Simó-Castelló M, Alvarez-Cermeño JC, Villar LM. Assessment of the reproducibility of oligoclonal IgM band detection for its application in daily clinical practice. *Clin Chim Acta*. 2015 Jan 1;438:67-9. doi: 10.1016/j.cca.2014.08.004. Epub 2014 Aug 8.
  98. Grey Née Cotte S, Salmen Née Stroet A, von Ahsen N, Starck M, Winkelmann A, Zettl UK, Comabella M, Montalban X, Zipp F, Fleischer V, Kruse N, Gold R, Chan A. Lack of efficacy of mitoxantrone in primary progressive Multiple Sclerosis irrespective of pharmacogenetic factors: A multi-center, retrospective analysis. *J Neuroimmunol*. 2015 Jan 15;278:277-9. doi: 10.1016/j.jneuroim.2014.11.017. Epub 2014 Nov 20.
  99. Trentini A, Comabella M, Tintoré M, Koel-Simmelink MJ, Killestein J, Roos B, Rovira A, Korth C, Ottis P, Blankenstein MA, Montalban X, Bellini T, Teunissen CE. N-Acetylaspartate and neurofilaments as biomarkers of axonal damage in patients with progressive forms of multiple sclerosis. *J Neurol*. 2014 Dec;261(12):2338-43. doi: 10.1007/s00415-014-7507-4. Epub 2014 Sep 17.
  100. Rocca MA, Valsasina P, Hulst HE, Abdel-Aziz K, Enzinger C, Gallo A, Pareto D, Riccitelli G, Muhlert N, Ciccarelli O, Barkhof F, Fazekas F, Tedeschi G, Arévalo MJ, Filippi M; MAGNIMS fMRI Study Group. Functional correlates of cognitive dysfunction in multiple sclerosis: A multicenter fMRI Study. *Hum Brain Mapp*. 2014 Dec;35(12):5799-814. doi: 10.1002/hbm.22586. Epub 2014 Jul 18. PubMed PMID: 25045065
  101. de la Hera B, Urcelay E, Brassat D, Chan A, Vidal-Jordana A, Salmen A, Villar LM, Alvarez-Cermeño JC, Izquierdo G, Fernández O, Oliver B, Saiz A, Ara JR, Vigo AG, Arroyo R, Meca V, Malhotra S, Fissolo N, Horga A, Montalban X, Comabella M. Natalizumab-related anaphylactoid reactions in MS patients are associated with HLA class II alleles. *Neurol Neuroimmunol Neuroinflamm*. 2014 Dec 11;1(4):e47. Doi 10.1212/NXI.0000000000000047. eCollection 2014 Dec. PubMed PMID: 25520955; PubMed Central PMCID: PMC4268037.
  102. Ruet A, Arrambide G, Brochet B, Auger C, Simon E, Rovira A, Montalban X, Tintoré M. Early predictors of multiple sclerosis after a typical clinically isolated syndrome. *Mult Scler*. 2014 Nov;20(13):1721-6. doi: 10.1177/1352458514533397. Epub 2014 May 19. PubMed PMID: 24842960.
  103. Cantó E, Tintoré M, Villar LM, Borrás E, Alvarez-Cermeño JC, Chiva C, Sabidó E, Rovira A, Montalban X, Comabella M. Validation of semaphorin 7A and ala- $\beta$ -his-dipeptidase as biomarkers associated with the conversion from clinically isolated syndrome to multiple sclerosis. *J Neuroinflammation*. 2014 Nov 13;11:181. doi: 10.1186/s12974-014-0181-8.
  104. Edan G, Kappos L, Montalban X, Polman CH, Freedman MS, Hartung HP, Miller D, Barkhof F, Herrmann J, Lanius V, Stemper B, Pohl C, Sandbrink R, Pleimes D; BENEFIT Study Group. Long-term impact of interferon beta-1b in patients with CIS: 8-year follow-up of BENEFIT. *J Neurol Neurosurg Psychiatry*. 2014 Nov;85(11):1183-9. doi: 10.1136/jnnp-2013-306222. Epub 2013 Nov 11. PubMed PMID: 24218527.

105. Montalban X, Sastre-Garriga J. Diagnosis and trials of clinically isolated syndrome. *Lancet Neurol.* 2014 Oct;13(10):962-3. doi:10.1016/S1474-4422(14)70202-9. Epub 2014 Sep 2. PubMed PMID: 25192850.
106. Río J, Rovira A, Tintoré M, Sastre-Garriga J, Castelló J, Auger C, Nos C, Comabella M, Tur C, Vidal A, Montalban X. Evaluating the response to glatiramer acetate in relapsing-remitting multiple sclerosis (RRMS) patients. *Mult Scler.* 2014 Oct;20(12):1602-8. doi: 10.1177/1352458514527863. Epub 2014 Mar 12. PubMed PMID: 24622350.
107. Mitjana R, Tintoré M, Rocca MA, Auger C, Barkhof F, Filippi M, Polman C, Fazekas F, Huerga E, Montalban X, Rovira A. Diagnostic value of brain chronic black holes on T1-weighted MR images in clinically isolated syndromes. *Mult Scler.* 2014 Oct;20(11):1471-7. doi: 10.1177/1352458514526083. Epub 2014 Feb 27. PubMed PMID: 24576831.
108. Arrambide G, Rovira A, Tur C, Montalban X. NMO spectrum disorders: how wide is the spectrum? *Mult Scler.* 2014 Sep;20(10):1417-9. doi: 10.1177/1352458514546517. PubMed PMID: 25160127.
109. Lemcke S, Müller S, Möller S, Schillert A, Ziegler A, Cepok-Kauffeld S, Comabella M, Montalban X, Rüllicke T, Nandakumar KS, Hemmer B, Holmdahl R, Pahnke J, Ibrahim SM. Nerve conduction velocity is regulated by the inositolpolyphosphate-4-phosphatase II gene. *Am J Pathol.* 2014 Sep;184(9):2420-9. doi:10.1016/j.ajpath.2014.05.021. Epub 2014 Aug 13. PubMed PMID: 25129256.
110. Mansilla MJ, Costa C, Eixarch H, Tepavcevic V, Castillo M, Martin R, Lubetzki C, Aigrot MS, Montalban X, Espejo C. Hsp70 regulates immune response in experimental autoimmune encephalomyelitis. *PLoS One.* 2014 Aug 25;9(8):e105737. doi: 10.1371/journal.pone.0105737. eCollection 2014. PubMed PMID: 25153885; PubMed Central PMCID: PMC4143280.
111. Munger KL, Köchert K, Simon KC, Kappos L, Polman CH, Freedman MS, Hartung HP, Miller DH, Montalban X, Edan G, Barkhof F, Pleimes D, Sandbrink R, Ascherio A, Pohl C. Molecular mechanism underlying the impact of vitamin D on disease activity of MS. *Ann Clin Transl Neurol.* 2014 Aug;1(8):605-17. doi:10.1002/acn3.91. Epub 2014 Aug 22. PubMed PMID: 25285313; PubMed Central PMCID: PMC4180413.
112. Villar LM, Casanova B, Ouamara N, Comabella M, Jalili F, Leppert D, de Andrés C, Izquierdo G, Arroyo R, Avşar T, Lapin SV, Johnson T, Montalban X, Fernández O, Álvarez-Lafuente R, Masterman D, García-Sánchez MI, Coret F, Siva A, Evdoshenko E, Álvarez-Cermeño JC, Bar-Or A. Immunoglobulin M oligoclonal bands: biomarker of targetable inflammation in primary progressive multiple sclerosis. *Ann Neurol.* 2014 Aug;76(2):231-40. doi: 10.1002/ana.24190. Epub 2014 Jul 2. PubMed PMID: 24909126.
113. Filippi M, Rocca MA, Pagani E, De Stefano N, Jeffery D, Kappos L, Montalban X, Boyko AN, Comi G; ALLEGRO Study Group. Placebo-controlled trial of oral laquinimod in multiple sclerosis: MRI evidence of an effect on brain tissue damage. *J Neurol Neurosurg Psychiatry.* 2014 Aug;85(8):851-8. doi:10.1136/jnnp-2013-306132. Epub 2013 Sep 12. PubMed PMID: 24029546.
114. Moreno M, Negrotto L, Río J, Moubarak R, Martín I, Bustamante MF, Comella JX, Vidal-Jordana A, Pérez-Boza J, Montalban X, Comabella M. Activation-induced cell death in T lymphocytes from multiple sclerosis patients. *J Neuroimmunol.* 2014 Jul 15;272(1-2):51-5. doi: 10.1016/j.jneuroim.2014.04.007. Epub 2014 Apr 16. PubMed PMID: 24793898.

115. Tur C, Montalban X. Natalizumab: risk stratification of individual patients with multiple sclerosis. *CNS Drugs*. 2014 Jul;28(7):641-8. doi: 10.1007/s40263-014-0168-0. PubMed PMID: 24942634.
116. Lublin FD, Reingold SC, Cohen JA, Cutter GR, Sørensen PS, Thompson AJ, Wolinsky JS, Balcer LJ, Banwell B, Barkhof F, Bebo B Jr, Calabresi PA, Clanet M, Comi G, Fox RJ, Freedman MS, Goodman AD, Inglese M, Kappos L, Kieseier BC, Lincoln JA, Lubetzki C, Miller AE, Montalban X, O'Connor PW, Petkau J, Pozzilli C, Rudick RA, Sormani MP, Stüve O, Waubant E, Polman CH. Defining the clinical course of multiple sclerosis: the 2013 revisions. *Neurology*. 2014 Jul 15;83(3):278-86. doi: 10.1212/WNL.0000000000000560. Epub 2014 May 28. PubMed PMID: 24871874; PubMed Central PMCID: PMC4117366.
117. Fernandez O, Martin R, Rovira A, Llufríu S, Vidal-Jordana A, Fernandez-Sanchez VE, Alvarez-Cermeno JC, Izquierdo G, Arroyo-Gonzalez R, Rodriguez-Antiguedad A, Casanova-Estruch B, Montalban X. Biomarkers in multiple sclerosis: an update for 2014. *Rev Neurol*. 2014 Jun 16;58(12):553-70. English, Spanish. PubMed PMID: 24915032.
118. Guerini FR, Clerici M, Cagliani R, Malhotra S, Montalban X, Forni D, Agliardi C, Riva S, Caputo D, Galimberti D, Asselta R, Fenoglio C, Scarpini E, Comi GP, Bresolin N, Comabella M, Sironi M. No association of IFI16 (interferon-inducible protein 16) variants with susceptibility to multiple sclerosis. *J Neuroimmunol*. 2014 Jun 15;271(1-2):49-52. doi: 10.1016/j.jneuroim.2014.04.006. Epub 2014 Apr 16. PubMed PMID: 24794504
119. Fissolo N, Cantó E, Vidal-Jordana A, Castelló J, Montalban X, Comabella M. Levels of soluble TNF-RII are increased in serum of patients with primary progressive multiple sclerosis. *J Neuroimmunol*. 2014 Jun 15;271(1-2):56-9. doi: 10.1016/j.jneuroim.2014.04.001. Epub 2014 Apr 16. PubMed PMID: 24794503.
120. Núñez C, Cénit MC, Alvarez-Lafuente R, Río J, Fernández-Arquero M, Arroyo R, Montalban X, Fernández O, Oliver-Martos B, Leyva L, Comabella M, Urcelay E. HLA alleles as biomarkers of high-titre neutralising antibodies to interferon- $\beta$  therapy in multiple sclerosis. *J Med Genet*. 2014 Jun;51(6):395-400. doi:10.1136/jmedgenet-2014-102348. Epub 2014 Apr 19. PubMed PMID: 24748646.
121. Palavra F, Tur C, Tintoré M, Rovira À, Montalban X. Secondary progression is not the only explanation. *Acta Med Port*. 2014 May-Jun;27(3):393-6. Epub 2014 Jun 30. PubMed PMID: 25017353.
122. Giovannoni G, Gold R, Selmaj K, Havrdova E, Montalban X, Radue EW, Stefoski D, McNeill M, Amaravadi L, Sweetser M, Elkins J, O'Neill G; SELECTION Study Investigators. Daclizumab high-yield process in relapsing-remitting multiple sclerosis (SELECTION): a multicentre, randomised, double-blind extension trial. *Lancet Neurol*. 2014 May;13(5):472-81. doi: 10.1016/S1474-4422(14)70039-0. Epub 2014 Mar 19. PubMed PMID: 24656609.
123. Ramo-Tello C, Grau-López L, Tintoré M, Rovira A, Ramió i Torrenta L, Brieva L, Cano A, Carmona O, Saiz A, Torres F, Giner P, Nos C, Massuet A, Montalban X, Martínez-Cáceres E, Costa J. A randomized clinical trial of oral versus intravenous methylprednisolone for relapse of MS. *Mult Scler*. 2014 May;20(6):717-25. doi: 10.1177/1352458513508835. Epub 2013 Oct 21. PubMed PMID: 24144876.
124. Hegen H, Millonig A, Bertolotto A, Comabella M, Giovanonni G, Guger M, Hoelzl M, Khalil M, Killestein J, Lindberg R, Malucchi S, Mehling M, Montalban X, Polman CH, Rudzki

- D, Schautzer F, Sellebjerg F, Sørensen PS, Deisenhammer F. Early detection of neutralizing antibodies to interferon-beta in multiple sclerosis patients: binding antibodies predict neutralizing antibody development. *Mult Scler.* 2014 Apr;20(5):577-87. doi: 10.1177/1352458513503597. Epub 2013 Sep 5. PubMed PMID: 24009164.
125. Fox RJ, Cree BA, De Sèze J, Gold R, Hartung HP, Jeffery D, Kappos L, Kaufman M, Montalban X, Weinstock-Guttman B, Anderson B, Natarajan A, Ticho B, Duda P. MS disease activity in RESTORE: a randomized 24-week natalizumab treatment interruption study. *Neurology.* 2014 Apr 29;82(17):1491-8. doi:10.1212/WNL.0000000000000355. Epub 2014 Mar 28. PubMed PMID: 24682966; PubMed Central PMCID: PMC4011468.
126. Cagliani R, Forni D, Biasin M, Comabella M, Guerini FR, Riva S, Pozzoli U, Agliardi C, Caputo D, Malhotra S, Montalban X, Bresolin N, Clerici M, Sironi M. Ancient and recent selective pressures shaped genetic diversity at AIM2-like nucleic acid sensors. *Genome Biol Evol.* 2014 Apr;6(4):830-45. doi:10.1093/gbe/evu066. PubMed PMID: 24682156; PubMed Central PMCID: PMC4007548.
127. Tur C, Montalban X. Comment on 'Fingolimod to treat severe MS after natalizumab-associated progressive multifocal leukoencephalopathy: a valid option?' Maillart et al. *Mult Scler.* 2014 Apr;20(4):510-1. doi:10.1177/1352458513517281. Epub 2014 Jan 27. PubMed PMID: 24468818.
128. Miller DH, Fazekas F, Montalban X, Reingold SC, Trojano M. Pregnancy, sex and hormonal factors in multiple sclerosis. *Mult Scler.* 2014 Apr;20(5):527-36. doi: 10.1177/1352458513519840. Epub 2014 Jan 20. PubMed PMID: 24446387.
129. Mansilla MJ, Comabella M, Río J, Castelló J, Castillo M, Martin R, Montalban X, Espejo C. Up-regulation of inducible heat shock protein-70 expression in multiple sclerosis patients. *Autoimmunity.* 2014 Mar;47(2):127-33. doi:10.3109/08916934.2013.866104. Epub 2013 Dec 12. PubMed PMID: 24328534.
130. Jarius S, Kleffner I, Dörr JM, Sastre-Garriga J, Illes Z, Eggenberger E, Chalk C, Ringelstein M, Aktas O, Montalban X, Fechner K, Stöcker W, Ringelstein EB, Paul F, Wildemann B. Clinical, paraclinical and serological findings in Susac syndrome: an international multicenter study. *J Neuroinflammation.* 2014 Mar8;11:46. doi: 10.1186/1742-2094-11-46. PubMed PMID: 24606999; PubMed Central PMCID: PMC3995917.
131. Okuda DT, Siva A, Kantarci O, Inglese M, Katz I, Tutuncu M, Keegan BM, Donlon S, Hua le H, Vidal-Jordana A, Montalban X, Rovira A, Tintoré M, Amato MP, Brochet B, de Seze J, Brassat D, Vermersch P, De Stefano N, Sormani MP, Pelletier D, Lebrun C; Radiologically Isolated Syndrome Consortium (RISC); Club Francophone de la Sclérose en Plaques (CFSEP). Radiologically isolated syndrome: 5-year risk for an initial clinical event. *PLoS One.* 2014 Mar 5;9(3):e90509. doi:10.1371/journal.pone.0090509. eCollection 2014. PubMed PMID: 24598783; PubMed Central PMCID: PMC3943959.
132. Liu Y, Carlsson R, Comabella M, Wang J, Kosicki M, Carrion B, Hasan M, Wu X, Montalban X, Dziegiel MH, Sellebjerg F, Sørensen PS, Helin K, Issazadeh-Navikas S. FoxA1 directs the lineage and immunosuppressive properties of a novel regulatory T cell population in EAE and MS. *Nat Med.* 2014 Mar;20(3):272-82. doi:10.1038/nm.3485. Epub 2014 Feb 16. PubMed PMID: 24531377.
133. Ascherio A, Munger KL, White R, Köchert K, Simon KC, Polman CH, Freedman MS, Hartung HP, Miller DH, Montalban X, Edan G, Barkhof F, Pleimes D, Radü EW, Sandbrink R, Kappos L, Pohl C. Vitamin D as an early predictor of multiple sclerosis activity and



- progression. *JAMA Neurol.* 2014 Mar;71(3):306-14. doi:10.1001/jamaneurol.2013.5993. PubMed PMID: 24445558; PubMed Central PMCID: PMC4000029.
134. Montalban X, Tintoré M. Multiple sclerosis in 2013: novel triggers, treatment targets and brain atrophy measures. *Nat Rev Neurol.* 2014 Feb;10(2):72-3. doi:10.1038/nrneurol.2013.274. Epub 2014 Jan 7. Review. PubMed PMID: 24394287.
135. Marín N, Eixarch H, Mansilla MJ, Rodríguez-Martín E, Mecha M, Guaza C, Álvarez-Cermeño JC, Montalban X, Villar LM, Espejo C. Anti-myelin antibodies play an important role in the susceptibility to develop proteolipid protein-induced experimental autoimmune encephalomyelitis. *Clin Exp Immunol.* 2014 Feb;175(2):202-7. doi: 10.1111/cei.12233. PubMed PMID: 24188195; PubMed Central PMCID: PMC3892411.
136. Nagtegaal GJ, Pohl C, Wattjes MP, Hulst HE, Freedman MS, Hartung HP, Miller D, Montalban X, Kappos L, Edan G, Pleimes D, Beckman K, Stemper B, Polman CH, Sandbrink R, Barkhof F. Interferon beta-1b reduces black holes in a randomised trial of clinically isolated syndrome. *Mult Scler.* 2014 Feb;20(2):234-42. doi: 10.1177/1352458513494491. Epub 2013 Jul 10. PubMed PMID: 23842212.
137. Fernández Ó, Rodríguez-Antigüedad A, Oreja-Guevara C, Garcia-Garcia M, Montalban X; en representación de los investigadores del Registro Español de Gilenya. [Usefulness of electronic drug registers: Spanish register of patients treated with fingolimod (Gilenya®)]. *Rev Neurol.* 2014 Jan 16;58(2):77-83. Spanish. PubMed PMID: 24399624.
138. Comabella M, Montalban X. Body fluid biomarkers in multiple sclerosis. *Lancet Neurol.* 2014 Jan;13(1):113-26. doi: 10.1016/S1474-4422(13)70233-3. Review. PubMed PMID: 24331797.
139. Kearney H, Rocca MA, Valsasina P, Balk L, Sastre-Garriga J, Reinhardt J, Ruggieri S, Rovira A, Stippich C, Kappos L, Sprenger T, Tortorella P, Rovaris M, Gasperini C, Montalban X, Geurts JJ, Polman CH, Barkhof F, Filippi M, Altmann DR, Ciccarelli O, Miller DH, Chard DT. Magnetic resonance imaging correlates of physical disability in relapse onset multiple sclerosis of long disease duration. *Mult Scler.* 2014 Jan;20(1):72-80. doi: 10.1177/1352458513492245. Epub 2013 Jun 27. PubMed PMID: 23812283; PubMed Central PMCID: PMC4107776.
140. Gomez A, Espejo C, Eixarch H, Casacuberta-Serra S, Mansilla MJ, Sanchez R, Pereira S, Lopez-Estevez S, Gimeno R, Montalban X, Barquinero J. Myeloid-derived suppressor cells are generated during retroviral transduction of murine bone marrow. *Cell Transplant.* 2014 Jan;23(1):73-85. doi: 10.3727/096368912X658971. Epub 2012 Nov 27. PubMed PMID: 23192196.
141. Tur C, Tintoré M, Vidal-Jordana Á, Bichuetti D, Nieto González P, Arévalo MJ, Arrambide G, Anglada E, Galán I, Castelló J, Nos C, Río J, Martín MI, Comabella M, Sastre-Garriga J, Montalban X. Risk acceptance in multiple sclerosis patients on natalizumab treatment. *PLoS One.* 2013 Dec 10;8(12):e82796. doi:10.1371/journal.pone.0082796. eCollection 2013. PubMed PMID: 24340060; PubMed Central PMCID: PMC3858305.
142. Pérez-Miralles F, Sastre-Garriga J, Tintoré M, Arrambide G, Nos C, Perkal H, Río J, Edo MC, Horga A, Castelló J, Auger C, Huerga E, Rovira A, Montalban X. Clinical impact of early brain atrophy in clinically isolated syndromes. *Mult Scler.* 2013 Dec;19(14):1878-86. doi: 10.1177/1352458513488231. Epub 2013 May 7. PubMed PMID: 23652215.

143. Oreja-Guevara C, Montalban X, de Andrés C, Casanova-Estruch B, Muñoz-García D, García I, Fernández Ó; Grupo de Enfermedades Desmielinizantes de la Sociedad Española de Neurología. [Consensus document on spasticity in patients with multiple sclerosis. Grupo de Enfermedades Desmielinizantes de la Sociedad Española de Neurología]. *Rev Neurol*. 2013 Oct 16;57(8):359-73. Spanish. PubMed PMID: 24081891.
144. Malhotra S, Morcillo-Suárez C, Nurtdinov R, Rio J, Sarro E, Moreno M, Castelló J, Navarro A, Montalban X, Comabella M. Roles of the ubiquitin peptidase USP18 in multiple sclerosis and the response to interferon- $\beta$  treatment. *Eur J Neurol*. 2013 Oct;20(10):1390-7. doi: 10.1111/ene.12193. Epub 2013 May 22. PubMed PMID: 23700969.
145. Moreno M, Sáenz-Cuesta M, Castelló J, Cantó E, Negrotto L, Vidal-Jordana A, Montalban X, Comabella M. Circulating levels of soluble apoptosis-related molecules in patients with multiple sclerosis. *J Neuroimmunol*. 2013 Oct 15;263(1-2):152-4. doi: 10.1016/j.jneuroim.2013.07.013. Epub 2013 Jul 26. PubMed PMID: 23932896.
146. Popescu V, Agosta F, Hulst HE, Sluimer IC, Knol DL, Sormani MP, Enzinger C, Ropele S, Alonso J, Sastre-Garriga J, Rovira A, Montalban X, Bodini B, Ciccarelli O, Khaleeli Z, Chard DT, Matthews L, Palace J, Giorgio A, De Stefano N, Eisele P, Gass A, Polman CH, Uitdehaag BM, Messina MJ, Comi G, Filippi M, Barkhof F, Vrenken H; MAGNIMS Study Group. Brain atrophy and lesion load predict long term disability in multiple sclerosis. *J Neurol Neurosurg Psychiatry*. 2013 Oct;84(10):1082-91. doi: 10.1136/jnnp-2012-304094. Epub 2013 Mar 23. PubMed PMID: 23524331.
147. Fernández V, Valls-Sole J, Relova JL, Raguer N, Miralles F, Dinca L, Taramundi S, Costa-Frossard L, Ferrandiz M, Ramió-Torrentà L, Villoslada P, Saiz A, Calles C, Antigüedad A, Alvarez-Cermeño JC, Prieto JM, Izquierdo G, Montalban X, Fernández O. [Recommendations for the clinical use of motor evoked potentials in multiple sclerosis]. *Neurologia*. 2013 Sep;28(7):408-16. doi: 10.1016/j.nrl.2012.07.007. Epub 2012 Sep 18. Review. Spanish. PubMed PMID: 22995526.
148. Cohen JA, Barkhof F, Comi G, Izquierdo G, Khatir B, Montalban X, Pelletier J, Eckert B, Häring DA, Francis G. Fingolimod versus intramuscular interferon in patient subgroups from TRANSFORMS. *J Neurol*. 2013 Aug;260(8):2023-32. doi: 10.1007/s00415-013-6932-0. Epub 2013 Apr 30. PubMed PMID: 23632946; PubMed Central PMCID: PMC3737385.
149. Vidal-Jordana A, Sastre-Garriga J, Pérez-Miralles F, Tur C, Tintoré M, Horga A, Auger C, Río J, Nos C, Edo MC, Arévalo MJ, Castelló J, Rovira A, Montalban X. Early brain pseudoatrophy while on natalizumab therapy is due to white matter volume changes. *Mult Scler*. 2013 Aug;19(9):1175-81. doi:10.1177/1352458512473190. Epub 2013 Jan 14. PubMed PMID: 23319072.
150. Wallner-Blazek M, Rovira A, Filipp M, Rocca MA, Miller DH, Schmierer K, Frederiksen J, Gass A, Gama H, Tilbery CP, Rocha AJ, Flores J, Barkhof F, Seewann A, Palace J, Yousry T, Montalban X, Enzinger C, Fazekas F. Atypical idiopathic inflammatory demyelinating lesions: prognostic implications and relation to multiple sclerosis. *J Neurol*. 2013 Aug;260(8):2016-22. doi: 10.1007/s00415-013-6918-y. Epub 2013 Apr 26. PubMed PMID: 23620065.
151. Selmaj K, Li DK, Hartung HP, Hemmer B, Kappos L, Freedman MS, Stüve O, Rieckmann P, Montalban X, Ziemssen T, Auberson LZ, Pohlmann H, Mercier F, Dahlke F, Wallström E. Siponimod for patients with relapsing-remitting multiple sclerosis (BOLD): an adaptive, dose-ranging, randomised, phase 2 study. *Lancet Neurol*. 2013 Aug;12(8):756-

67. doi: 10.1016/S1474-4422(13)70102-9. Epub 2013 Jun 11. Erratum in: *Lancet Neurol.* 2013 Sep;12(9):846. PubMed PMID: 23764350.
152. Malhotra S, Castelló J, Negrotto L, Merino-Zamorano C, Montaner J, Vidal-Jordana A, Montalban X, Comabella M. TRPM4 mRNA expression levels in peripheral blood mononuclear cells from multiple sclerosis patients. *J Neuroimmunol.* 2013 Aug 15;261(1-2):146-8. doi: 10.1016/j.jneuroim.2013.05.013. Epub 2013 Jun 22. PubMed PMID: 23796873.
153. García-Merino A, Fernández O, Montalban X, de Andrés C, Oreja-Guevara C, Rodríguez-Antigüedad A, Arbizu T; Grupo de Consenso de la Sociedad Española de Neurología. Consensus Statement on medication use in multiple sclerosis by the Spanish Society of Neurology's study group for demyelinating diseases. *Neurologia.* 2013 Jul-Aug;28(6):375-8. doi: 10.1016/j.nrl.2013.01.009. Epub 2013 May 3. Review. English, Spanish. PubMed PMID: 23643683.
154. Comi G, Martinelli V, Rodegher M, Moiola L, Leocani L, Bajenaru O, Carra A, Elovaara I, Fazekas F, Hartung HP, Hillert J, King J, Komoly S, Lubetzki C, Montalban X, Myhr KM, Preziosa P, Ravnborg M, Rieckmann P, Rocca MA, Wynn D, Young C, Filippi M. Effects of early treatment with glatiramer acetate in patients with clinically isolated syndrome. *Mult Scler.* 2013 Jul;19(8):1074-83. doi: 10.1177/1352458512469695. Epub 2012 Dec 12. PubMed PMID: 23234810.
155. Tur C, Montalban X. Possible new modifications for the McDonald 2010 criteria for the diagnosis of primary progressive multiple sclerosis. *Mult Scler.* 2013 Jul;19(8):993-4. doi: 10.1177/1352458513493036. PubMed PMID: 23818017.
156. Amato MP, Langdon D, Montalban X, Benedict RH, DeLuca J, Krupp LB, Thompson AJ, Comi G. Treatment of cognitive impairment in multiple sclerosis: position paper. *J Neurol.* 2013 Jun;260(6):1452-68. doi: 10.1007/s00415-012-6678-0. Epub 2012 Nov 23. Review. PubMed PMID: 23180174.
157. Gold R, Giovannoni G, Selmaj K, Havrdova E, Montalban X, Radue EW, Stefoski D, Robinson R, Riester K, Rana J, Elkins J, O'Neill G; SELECT study investigators. Daclizumab high-yield process in relapsing-remitting multiple sclerosis (SELECT): a randomised, double-blind, placebo-controlled trial. *Lancet.* 2013 Jun 22;381(9884):2167-75. doi: 10.1016/S0140-6736(12)62190-4. Epub 2013 Apr 4. PubMed PMID: 23562009.
158. Costa C, Comabella M, Montalban X. [Reply]. *Med Clin (Barc).* 2013 Jun 18;140(12):571. doi: 10.1016/j.medcli.2013.02.007. Epub 2013 Apr 4. Spanish. PubMed PMID: 23562309.
159. International Multiple Sclerosis Genetics Consortium, Lill CM, Schjeide BM, Graetz C, Ban M, Alcina A, Ortiz MA, Pérez J, Damotte V, Booth D, Lopez de Lapuente A, Broer L, Schilling M, Akkad DA, Aktas O, Alloza I, Antigüedad A, Arroyo R, Blaschke P, Buttman M, Chan A, Compston A, Cournu-Rebeix I, Dörner T, Epplen JT, Fernández Ó, Gerdes LA, Guillot-Noël L, Hartung HP, Hoffjan S, Izquierdo G, Kemppinen A, Kroner A, Kubisch C, Kümpfel T, Li SC, Lindenberger U, Lohse P, Lubetzki C, Luessi F, Malhotra S, Mescheriakova J, Montalban X, Papeix C, Paredes LF, Rieckmann P, Steinhagen-Thiessen E, Winkelmann A, Zettl UK, Hintzen R, Vandebroek K, Stewart G, Fontaine B, Comabella M, Urcelay E, Matesanz F, Sawcer S, Bertram L, Zipp F. MANBA, CXCR5, SOX8, RPS6KB1 and ZBTB46 are genetic risk loci for multiple sclerosis. *Brain.* 2013 Jun;136(Pt

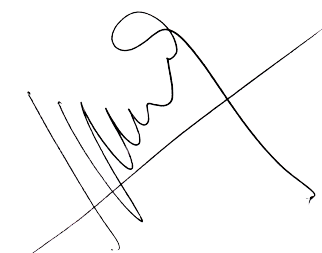
- 6):1778-82. doi: 10.1093/brain/awt101. PubMed PMID: 23739915; PubMed Central PMCID: PMC3673463.
160. Tur C, Montalban X. CSF oligoclonal bands are important in the diagnosis of multiple sclerosis, unreasonably downplayed by the McDonald criteria 2010: No. *Mult Scler.* 2013 May;19(6):717-8. doi: 10.1177/1352458513477713. PubMed PMID: 23658236.
161. Comabella M, Caminero AB, Malhotra S, Agulló L, Fernández O, Reverter F, Vandebroek K, Rodríguez-Antigüedad A, Matesanz F, Izquierdo G, Urcelay E, López-Larios A, Sánchez A, Otero S, Tintoré M, Montalban X. TNFRSF1A polymorphisms rs1800693 and rs4149584 in patients with multiple sclerosis. *Neurology.* 2013 May 28;80(22):2010-6. doi: 10.1212/WNL.0b013e318294b2d6. Epub 2013 Apr 26. PubMed PMID: 23624563.
162. Sepúlveda M, Blanco Y, Rovira A, Río J, Mendibe M, Llufríu S, Gabilondo I, Villoslada P, Castelló J, Corral J, Ayuso T, Iñiguez C, Santos S, Guijarro C, Ramió-Torrentà L, Sempere AP, Olascoaga J, Graus F, Montalban X, Saiz A. Analysis of prognostic factors associated with longitudinally extensive transverse myelitis. *Mult Scler.* 2013 May;19(6):742-8. doi: 10.1177/1352458512461968. Epub 2012 Oct 4. PubMed PMID: 23037550.
163. Sormani MP, Río J, Tintoré M, Signori A, Li D, Cornelisse P, Stubinski B, Stromillo MI, Montalban X, De Stefano N. Scoring treatment response in patients with relapsing multiple sclerosis. *Mult Scler.* 2013 Apr;19(5):605-12. doi: 10.1177/1352458512460605. Epub 2012 Sep 25. PubMed PMID: 23012253.
164. Malhotra S, Castelló J, Bustamante M, Vidal-Jordana A, Castro Z, Montalban X, Comabella M. SIGLEC1 and SIGLEC7 expression in circulating monocytes of patients with multiple sclerosis. *Mult Scler.* 2013 Apr;19(5):524-31. doi: 10.1177/1352458512458718. Epub 2012 Aug 29. PubMed PMID: 22933622.
165. Bustamante MF, Nurdinov RN, Río J, Montalban X, Comabella M. Baseline gene expression signatures in monocytes from multiple sclerosis patients treated with interferon-beta. *PLoS One.* 2013 Apr 18;8(4):e60994. doi: 10.1371/journal.pone.0060994. Print 2013. PubMed PMID: 23637780; PubMed Central PMCID: PMC3630153.
166. Arrambide G, Espejo C, Yarden J, Fire E, Spector L, Dotan N, Dukler A, Rovira A, Montalban X, Tintore M. Serum biomarker gMS-Classifer2: predicting conversion to clinically definite multiple sclerosis. *PLoS One.* 2013;8(3):e59953. doi:10.1371/journal.pone.0059953. Epub 2013 Mar 28. PubMed PMID: 23555846; PubMed Central PMCID: PMC3610690.
167. Fernández Ó, Arroyo-González R, Rodríguez-Antigüedad A, García-Merino JA, Comabella M, Villar LM, Izquierdo G, Tintoré M, Oreja-Guevara C, Álvarez-Cermeño JC, Meca-Lallana JE, Prieto JM, Ramió-Torrentà L, Martínez-Yélamos S, Montalban X. [Biomarkers in multiple sclerosis]. *Rev Neurol.* 2013 Apr 1;56(7):375-90. Review. Spanish. PubMed PMID: 23520007.
168. Eixarch H, Mansilla MJ, Costa C, Kunkel SL, Montalban X, Godessart N, Espejo C. Inhibition of delta-like ligand 4 decreases Th1/Th17 response in a mouse model of multiple sclerosis. *Neurosci Lett.* 2013 Apr 29;541:161-6. doi: 10.1016/j.neulet.2013.02.038. Epub 2013 Mar 1. PubMed PMID: 23466692.
169. Eixarch H, Gutiérrez-Franco A, Montalban X, Espejo C. Semaphorins 3A and 7A: potential immune and neuroregenerative targets in multiple sclerosis. *Trends Mol Med.*

- 2013 Mar;19(3):157-64. doi: 10.1016/j.molmed.2013.01.003. Epub 2013 Feb 16. PubMed PMID: 23419749.
170. Bustamante MF, Rio J, Castro Z, Sánchez A, Montalban X, Comabella M. Cellular immune responses in multiple sclerosis patients treated with interferon-beta. *Clin Exp Immunol.* 2013 Mar;171(3):243-6. doi: 10.1111/cei.12016. PubMed PMID: 23379429; PubMed Central PMCID: PMC3569530.
  171. Lill CM, Schjeide BM, Graetz C, Liu T, Damotte V, Akkad DA, Blaschke P, Gerdes LA, Kroner A, Luessi F, Courneu-Rebeix I, Hoffjan S, Winkelmann A, Touze E, Pico F, Corcia P, Otaegui D, Antigüedad A, Alcina A, Comabella M, Montalban X, Olascoaga J, Matesanz F, Dörner T, Li SC, Steinhagen-Thiessen E, Lindenberger U, Chan A, Rieckmann P, Hartung HP, Aktas O, Lohse P, Buttmann M, Kümpfel T, Kubisch C, Zettl UK, Epplen JT, Fontaine B, Zipp F, Vandenbroeck K, Bertram L. Genome-wide significant association of ANKRD55 rs6859219 and multiple sclerosis risk. *J Med Genet.* 2013 Mar;50(3):140-3. doi: 10.1136/jmedgenet-2012-101411. Epub 2013 Jan 12. PubMed PMID: 23315543.
  172. Comabella M, Rentzsch K, Río J, Bustamante MF, Borowski K, Stoecker W, Montalban X. Treatment with interferon- $\beta$  does not induce anti-nuclear and anti-neuronal serum autoantibodies in multiple sclerosis patients. *J Neuroimmunol.* 2013 Feb 15;255(1-2):102-4. doi: 10.1016/j.jneuroim.2012.10.016. Epub 2012 Nov 22. PubMed PMID: 23182615.
  173. Otero-Romero S, Roura P, Solà J, Altimiras J, Sastre-Garriga J, Nos C, Vaqué J, Montalban X, Bufill E. Increase in the prevalence of multiple sclerosis over a 17-year period in Osona, Catalonia, Spain. *Mult Scler.* 2013 Feb;19(2):245-8. doi:10.1177/1352458512444751. Epub 2012 Apr 30. PubMed PMID: 22546846.
  174. López-Méndez P, Río J, Pérez-Ricart A, Tintoré M, Sastre-Garriga J, Cardona-Pascual I, Gómez-Domingo MR, Montalban X. [Therapy adherence to immunomodulator treatment in patients with multiple sclerosis]. *Rev Neurol.* 2013 Jan 1;56(1):8-12. Spanish. PubMed PMID: 23250676.
  175. Alcina A, Fedetz M, Fernández O, Saiz A, Izquierdo G, Lucas M, Leyva L, García-León JA, Abad-Grau Mdel M, Alloza I, Antigüedad A, Garcia-Barcina MJ, Vandenbroeck K, Varadé J, de la Hera B, Arroyo R, Comabella M, Montalban X, Petit-Marty N, Navarro A, Otaegui D, Olascoaga J, Blanco Y, Urcelay E, Matesanz F. Identification of a functional variant in the KIF5A-CYP27B1-METTL1-FAM119B locus associated with multiple sclerosis. *J Med Genet.* 2013 Jan;50(1):25-33. doi:10.1136/jmedgenet-2012-101085. Epub 2012 Nov 17. PubMed PMID: 23160276; PubMed Central PMCID: PMC3538279.
  176. Tur C, Montalban X. Subcutaneous alemtuzumab for multiple sclerosis. *Expert Rev Clin Immunol.* 2012 Jul;8(5):423-6. doi: 10.1586/eci.12.30. PubMed PMID: 22882217.
  177. Fissolo N, Costa C, Nurtdinov RN, Bustamante MF, Llombart V, Mansilla MJ, Espejo C, Montalban X, Comabella M. Treatment with MOG-DNA vaccines induces CD4+CD25+FoxP3+ regulatory T cells and up-regulates genes with neuroprotective functions in experimental autoimmune encephalomyelitis. *J Neuroinflammation.* 2012 Jun 22;9:139. doi: 10.1186/1742-2094-9-139. PubMed PMID: 22727044; PubMed Central PMCID: PMC3464883.

178. Fernandez O, Alvarez-Cermeno JC, Arroyo-Gonzalez R, Brieva L, Calles-Hernandez MC, Casanova-Estruch B, Comabella M, de las Heras V, Garcia-Merino JA, Hernandez-Perez MA, Izquierdo G, Meca-Lallana JE, Munoz-Garcia D, Olascoaga J, Oreja-Guevara C, Prieto JM, Ramio-Torrenta L, Rodriguez-Antiguedad A, Romero-Pinel L, Sanchez F, Tellez N, Tintore M, Montalban X; Post-ECTRIMS group. Review of the novelties presented at the 27th Congress of the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS) (II). *Rev Neurol*. 2012 Jun 16;54(12):734-49. English, Spanish. PubMed PMID: 22673950.
179. Mansilla MJ, Montalban X, Espejo C. Heat shock protein 70: roles in multiple sclerosis. *Mol Med*. 2012 Sep 7;18:1018-28. doi: 10.2119/molmed.2012.00119. Review. PubMed PMID: 22669475; PubMed Central PMCID: PMC3459486.
180. Fernández Ó, Álvarez-Cermeño JC, Arroyo-González R, Brieva L, Calles-Hernández MC, Casanova-Estruch B, Comabella M, de las Heras V, García-Merino JA, Hernández-Pérez MA, Izquierdo G, Meca-Lallana JE, Muñoz-García D, Olascoaga J, Oreja-Guevara C, Prieto JM, Ramió-Torrentà L, Rodríguez-Antigüedad A, Romero-Pinel L, Sanchez F, Téllez N, Tintoré M, Montalban X; Post-ECTRIMS group. Review of the novelties presented at the 27th Congress of the European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS) (I). *Rev Neurol*. 2012 Jun 1;54(11):677-91. Review. English, Spanish. PubMed PMID: 22627749.
181. Costa C, Arrambide G, Tintore M, Castelló J, Sastre-Garriga J, Tur C, Río J, Saiz A, Vidal-Jordana A, Auger C, Nos C, Rovira A, Comabella M, Horga A, Montalban X. Value of NMO-IgG determination at the time of presentation as CIS. *Neurology*. 2012 May 15;78(20):1608-11. doi: 10.1212/WNL.0b013e3182563b32. Epub 2012 May 2. PubMed PMID: 22551725.
182. Vidal-Jordana Á, Sastre-Garriga J, Montalban X. [Optical coherence tomography in multiple sclerosis]. *Rev Neurol*. 2012 May 1;54(9):556-63. Review. Spanish. PubMed PMID: 22532220.
183. Penner IK, Stemper B, Calabrese P, Freedman MS, Polman CH, Edan G, Hartung HP, Miller DH, Montalban X, Barkhof F, Pleimes D, Lanius V, Pohl C, Kappos L, Sandbrink R. Effects of interferon beta-1b on cognitive performance in patients with a first event suggestive of multiple sclerosis. *Mult Scler*. 2012 Oct;18(10):1466-71. Epub 2012 Apr 4. PubMed PMID: 22492127; PubMed Central PMCID: PMC3573673.
184. Comi G, Jeffery D, Kappos L, Montalban X, Boyko A, Rocca MA, Filippi M; ALLEGRO Study Group. Placebo-controlled trial of oral laquinimod for multiple sclerosis. *N Engl J Med*. 2012 Mar 15;366(11):1000-9. doi: 10.1056/NEJMoa1104318. PubMed PMID: 22417253.
185. Lopez de Lapuente A, Alloza I, Goertsches R, Zettl UK, Urcelay E, Arroyo R, Comabella M, Montalban X, Antigüedad A, Vandebroek K. Analysis of the IL28RA locus as genetic risk factor for multiple sclerosis. *J Neuroimmunol*. 2012 Apr;245(1-2):98-101. doi: 10.1016/j.jneuroim.2012.02.005. Epub 2012 Mar 2. PubMed PMID: 22386267.
186. Tur C, Tintoré M, Vidal-Jordana A, Castelló J, Galán I, Río J, Arrambide G, Comabella M, Arévalo MJ, Horno R, Vicente MJ, Caminero A, Nos C, Sastre-Garriga J, Montalban X. Natalizumab discontinuation after PML risk stratification: outcome from a shared and informed decision. *Mult Scler*. 2012 Aug;18(8):1193-6. doi: 10.1177/1352458512439238. Epub 2012 Mar 1. PubMed PMID: 22383232.

187. Costa C, Comabella M, Montalban X. [Stem cell-based treatment of neurologic diseases]. *Med Clin (Barc)*. 2012 Jul 21;139(5):208-14. doi:10.1016/j.medcli.2011.12.009. Epub 2012 Feb 22. Review. Spanish. PubMed PMID: 22361347.
188. Sørensen PS, Bertolotto A, Edan G, Giovannoni G, Gold R, Havrdova E, Kappos L, Kieseier BC, Montalban X, Olsson T. Risk stratification for progressive multifocal leukoencephalopathy in patients treated with natalizumab. *Mult Scler*. 2012 Feb;18(2):143-52. doi: 10.1177/1352458511435105. Review. PubMed PMID: 22312009.
189. Fernández O, Oreja-Guevara C, Arroyo R, Izquierdo G, Pérez JL, Montalban X. Natalizumab treatment of multiple sclerosis in Spain: results of an extensive observational study. *J Neurol*. 2012 Sep;259(9):1814-23. PubMed PMID: 22289966; PubMed Central PMCID: PMC3432776.
190. Río J, Tintoré M, Sastre-Garriga J, Nos C, Castelló J, Tur C, Comabella M, Montalban X. Change in the clinical activity of multiple sclerosis after treatment switch for suboptimal response. *Eur J Neurol*. 2012 Jun;19(6):899-904. doi: 10.1111/j.1468-1331.2011.03648.x. Epub 2012 Jan 31. PubMed PMID: 22289050.
191. Moreno B, Espejo C, Mestre L, Suardiaz M, Clemente D, de Castro F, Fernández-Fernández Ó, Montalban X, Villoslada P, Guaza C; Spanish Network for MS. [Guidelines on the appropriate use of animal models for developing therapies in multiple sclerosis]. *Rev Neurol*. 2012 Jan 16;54(2):114-24. Spanish. PubMed PMID: 22234570.
192. Miller DH, Weber T, Grove R, Wardell C, Horrigan J, Graff O, Atkinson G, Dua P, Yousry T, Macmanus D, Montalban X. Fingertegrast for relapsing remitting multiple sclerosis: a phase 2, randomised, double-blind, placebo-controlled trial. *Lancet Neurol*. 2012 Feb;11(2):131-9. doi: 10.1016/S1474-4422(11)70299-X. Epub 2012 Jan 5. PubMed PMID: 22226929.
193. Montalban X. Review of methodological issues of clinical trials in multiple sclerosis. *J Neurol Sci*. 2011 Dec;311 Suppl 1:S35-42. PubMed PMID: 22206765.
194. Varadé J, Comabella M, Ortiz MA, Arroyo R, Fernández O, Pinto-Medel MJ, Fedetz M, Izquierdo G, Lucas M, Gómez CL, Rabasa AC, Alcina A, Matesanz F, Alloza I, Antigüedad A, García-Barcina M, Otaegui D, Olascoaga J, Saiz A, Blanco Y, Montalban X, Vandebroek K, Urcelay E. Replication study of 10 genes showing evidence for association with multiple sclerosis: validation of TMEM39A, IL12B and CBLB [correction of CLBL] genes. *Mult Scler*. 2012 Jul;18(7):959-65. doi: 10.1177/1352458511432741. Epub 2011 Dec 22. PubMed PMID: 22194214.
195. Freedman MS, Metzger C, Kappos L, Polman CH, Edan G, Hartung HP, Miller DH, Montalban X, Yarden J, Spector L, Fire E, Dotan N, Schwenke S, Lanius V, Sandbrink R, Pohl C. Predictive nature of IgM anti- $\alpha$ -glucose serum biomarker for relapse activity and
196. EDSS progression in CIS patients: a BENEFIT study analysis. *Mult Scler*. 2012 Jul;18(7):966-73. doi: 10.1177/1352458511432327. Epub 2011 Dec 19. PubMed PMID: 22183938; PubMed Central PMCID: PMC3546632.
197. Cantó E, Reverter F, Morcillo-Suárez C, Matesanz F, Fernández O, Izquierdo G, Vandebroek K, Rodríguez-Antigüedad A, Urcelay E, Arroyo R, Otaegui D, Olascoaga J, Saiz A, Navarro A, Sanchez A, Domínguez C, Caminero A, Horga A, Tintoré M, Montalban X, Comabella M. Chitinase 3-like 1 plasma levels are increased in patients with progressive

- forms of multiple sclerosis. *Mult Scler.* 2012 Jul;18(7):983-90. doi: 10.1177/1352458511433063. Epub 2011 Dec 19. PubMed PMID: 22183936.
198. Alloza I, Otaegui D, de Lapuente AL, Antigüedad A, Varadé J, Núñez C, Arroyo R, Urcelay E, Fernandez O, Leyva L, Fedetz M, Izquierdo G, Lucas M, Oliver-Martos B, Alcina A, Saiz A, Blanco Y, Comabella M, Montalban X, Olascoaga J, Matesanz F, Vandebroek K. ANKRD55 and DHCR7 are novel multiple sclerosis risk loci. *Genes Immun.* 2012 Apr;13(3):253-7. doi: 10.1038/gene.2011.81. Epub 2011 Dec 1. PubMed PMID: 22130326.
199. Fernández O, García-Merino JA, Arroyo R, Álvarez-Cermeño JC, Arbizu T, Izquierdo G, Saiz A, Olascoaga J, Rodríguez-Antigüedad A, Prieto JM, Oreja-Guevara C, Hernández MA, Montalban X. Spanish consensus on the use of natalizumab (Tysabri®)--2011. *Neurologia.* 2012 Sep;27(7):432-41. Epub 2011 Nov 9. English, Spanish. PubMed PMID: 22078648.
200. Silva AM, Santos E, Moreira I, Bettencourt A, Coutinho E, Gonçalves A, Pinto C, Montalban X, Cavaco S. Olfactory dysfunction in multiple sclerosis: association with secondary progression. *Mult Scler.* 2012 May;18(5):616-21. doi: 10.1177/1352458511427156. Epub 2011 Oct 21. PubMed PMID: 22020420.
201. Comabella M, Kakalacheva K, Río J, Münz C, Montalban X, Lünemann JD. EBV-specific immune responses in patients with multiple sclerosis responding to IFN $\beta$  therapy. *Mult Scler.* 2012 May;18(5):605-9. doi: 10.1177/1352458511426816. Epub 2011 Oct 21. PubMed PMID: 22020417.
202. Espejo C, Montalban X. Dalfampridine in multiple sclerosis: from symptomatic treatment to immunomodulation. *Clin Immunol.* 2012 Jan;142(1):84-92. doi: 10.1016/j.clim.2011.06.004. Epub 2011 Jun 25. Review. PubMed PMID: 21742559.
203. Vandebroek K, Alvarez J, Swaminathan B, Alloza I, Matesanz F, Urcelay E, Comabella M, Alcina A, Fedetz M, Ortiz MA, Izquierdo G, Fernandez O, Rodriguez-Ezpeleta N, Matute C, Caillier S, Arroyo R, Montalban X, Oksenberg JR, Antigüedad A, Aransay A. A cytokine gene screen uncovers SOCS1 as genetic risk factor for multiple sclerosis. *Genes Immun.* 2012 Jan;13(1):21-8. doi: 10.1038/gene.2011.44. Epub 2011 Jun 30. PubMed PMID: 21716315.



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