eTable1: Comparison of demographic and diseases of patients receiving and not receiving active immunosuppressive treatment

	All*	**With active immunotherapy*,****	**Without active immunotherapy*,*****	**p**
	N=153	**(N=79)**	**(N=74)**	
Age year; median (IQR)	13 (8-16)	13 (10-16)	12 (7-15)	0,4798
Female sex N (%)	84 (55%)	42 (53%)	42 (57%)	0,7454
Baseline disease N (%)				
Multiple Sclerosis	33 (21)	22	11	
MOGAD	23 (15)	13	10	
AQP4-NMOSD	3 (2)	3	0	
Other seronegative acquired CNS demyelinating syndromes	13 (8,5)	5	8	
Infectious diseases of the CNS****	13 (8,5)	1****	12	
Myasthenia gravis	4 (2,5)	3	1	
Autoimmune polyneuropathies	4 (2,5)	2	2	
Seronegative AE	22 (14)	13	9	
NMDAR autoimmune encephalitis	10 (7)	0	10	
Opsoclonus-myoclonus syndrome	17 (11)	10	7	
Rheumatologic diseases with neurological involvement	7 (5)	6	1	
Aicardi Goutieres syndrome	3 (2)	1	2	
mGluR5 associated encephalitis	1 (1)	0	1	

Abbreviations: AQP4-NMOSD: neuromyelitis optica spectrum disorders with aquaporin 4 antibodies, CNS: central nervous system, IQR: interquartile range, mGluR5: metabotropic glutamate receptor 5, MOGAD: myelin oligodendrocyte glycoprotein associated diseases, NMDAR: N-methyl-D-aspartate receptor.

*From 154 patients initially recruited (77 for the treatment group, and for 77 control group), 2 patients from the control group initiated immunotherapy after inclusion and were re-classified in the treated group. We lost follow-up of one patient from the control group and was excluded from the study.

[**]**Description of active immunosuppressant treatment:**

- 7 patients were receiving chronic first line treatments: all with periodic steroids and IVIG;

- **72 patients were receiving chronic second line treatments and/or disease modifying treatments:** 29 patients rituximab (5 also steroids and IVIg, 4 also IVIg replacement, 1 also azathioprine, 1 also mycophenolate mofetil), 10 patients azathioprine alone, 9 patients fingolimod, 5 patients mycophenolate mofetil (3 alone, one with steroids and 1 with cyclophosphamide, steroids and IVIg), 5 patients dimethyl fumarate, 3 patients natalizumab, 2 patients anakinra, 2 patients baricitinib, 2 patients tacrolimus, 1 patient etanercep, 1 patient tocilizumab, 1 patient with abatacept and IVIg replacement, 1 patient with tocilizumab and methotrexate, and 1 patient was immunosuppressed due recent allogenic bone marrow transplantation)

[***]Patient's receiving immunomodulatory but not immunosuppressive treatment (e.g., interferon beta1a, acetate glatiramer or IVIg alone) were included in the control group (see methods)

****Non of the patients with CNS infections was on antiviral therapy during the study period, except for one patient with TLR3 immunodeficiency and previous history of herpes simplex encephalitis that was on acyclovir prophylactic therapy, but she was finally included in the immunosuppressant treated group as she was put on methotrexate and tocilizumab due diagnosis of idiopathic juvenile arthritis