Supplementary Online Content

Naegelin Y, Naegelin P, von Felten S, et al. Association of rituximab treatment with disability progression among patients with secondary progressive multiple sclerosis. *JAMA Neurol*. Published online January 7, 2019. doi:10.1001/jamaneurol.2018.4239

eTable 1. Standardized Differences

eTable 2. Treatment

eFigure 1. Density Plot of Propensity Scores

eFigure 2. Standardized Differences Between Groups

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Standardized Differences

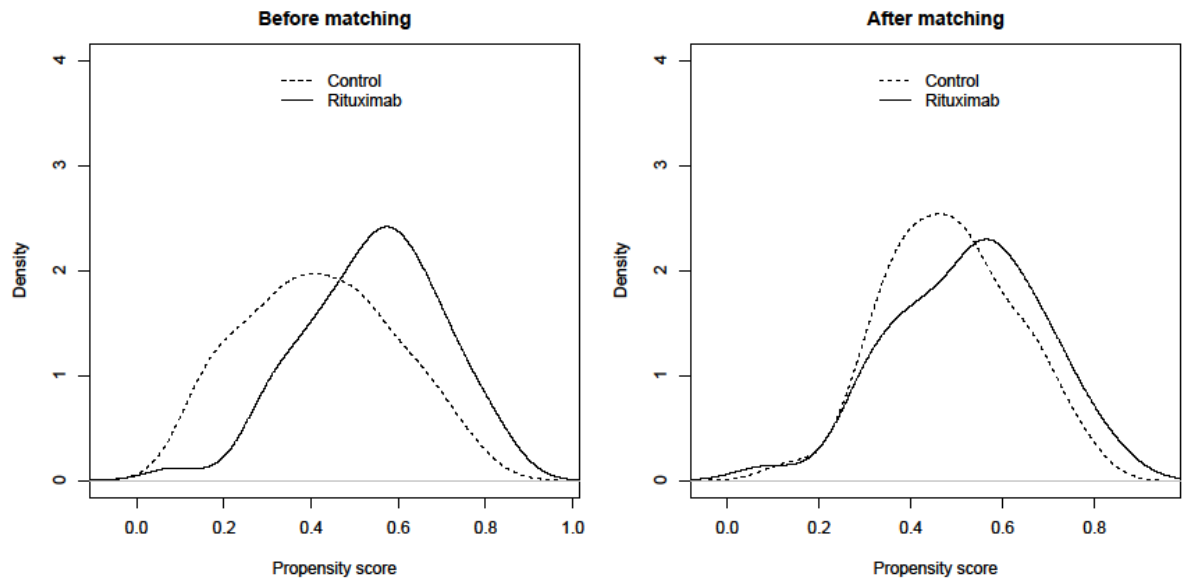| Before Matching			
Variable	**Std. Diff**	**Std. Diff. Low**	**Std. Diff. Up**
Age	0.51	0.13	0.88
EDSS	0.58	0.20	0.95
Disease Duration	0.01	-0.35	0.38
Follow-up time	0.72	0.34	1.10
Gender	0.07	-0.30	0.44
After Matching			
Variable	**Std. Diff**	**Std. Diff. Low**	**Std. Diff. Up**
Age	0.19	-0.23	0.60
EDSS	0.17	-0.25	0.59
Disease Duration	0.13	-0.29	0.55
Follow-up time	0.54	0.11	0.96
Gender	0.05	-0.37	0.46

eTable 1: Standardized differences for baseline variables (used for matching) and follow-up time (in addition) before and after matching

eTable 2. Treatment

| Cohort	Pre-BL (1 year before BL)			BL and Follow-up				
Rituximab matched	**Medication**	**n=44**	**%**	**Medication BL n=44**				
	None	18	40.9	Rituximab				
	INF-β 1a i.m.	2	4.5					
	INF-β 1b	4	9.1					
	GA	4	9.1					
	Fingolimod	2	4.5					
	Methotrexat	0	0					
	Mitoxantrone	6	13.7					
	Mycophenolat-Mophetil	1	2.3					
	Natalizumab	4	9.1					
	INF-β 1a s.c.	2	4.5					
	Rituximab	0	0					
	Teriflunomide	1	2.3					
Rituximab all	**Medication**	**n=54**	**%**	**Medication BL n=54**				
	None	21	38.9	Rituximab				
	INF-β 1a i.m.	2	3.7					
	INF-β 1b	4	7.4					
	GA	6	11.1					
	Fingolimod	4	7.4					
	Methotrexat	1	1.9					
	Mitoxantrone	6	11.1					
	Mycophenolat-Mophetil	1	1.9					
	Natalizumab	5	9.2					
	INF-β 1a s.c.	3	5.5					
	Rituximab	0	0					
	Teriflunomide	1	1.9					
Control Group matched	**Medication**	**n=44**	**%**	**Medication**	**n=44**	**%**	**Switched to**	**n=7**
	None	21	47.7	None	23	52.3		
	INF-β 1a i.m.	0	0	INF-β 1a i.m.	0	0	None	
	INF-β 1b	13	29.6	INF-β 1b	12	27.3	None	2
	GA	1	2.3	GA	2	4.5		
	Methylprednisolone monthly i.v.	0	0	MP m IV	1	2.3		
	Mitoxantrone	6	13.6	Mitoxantrone	3	6.8	None/GA	1/1
	INF-β 1a s.c.	3	6.8	INF-β 1a s.c.	3	6.8	None/Mitox	2/1
	Rituximab	0	0	Rituximab	0	0		
Control Group all	**Medication**	**n=59**	**%**	**Medication**	**n=59**	**%**	**Switched to**	**n=14**
	None	29	49.1	None	32	54.2	INF-β 1b /Mitox	1/1
	INF-β 1a i.m.	2	3.4	INF-β 1a i.m.	1	1.7	None	1
	INF-β 1b	17	28.8	INF-β 1b	16	27.1	None/Mitox	3/1
	GA	1	1.7	GA	1	1.7		
	Methylprednisolone monthly i.v.	0	0	MP m IV	1	1.7		
	Mitoxantrone	6	10.2	Mito-xantrone	4	6.8	None/GA	1/2
	INF-β 1a s.c.	4	6.8	INF-β 1a s.c.	4	6.8	None/Mitox	3/1
	Rituximab	0	0	Rituximab	0	0		

eTable 2: Treatment before BL and during follow-up for both cohorts (full and matched cohorts). "Switched to" indicates patients that switched during follow-up to another treatment. GA=Glatirameracetate

eFigure 1. Density Plot of Propensity Scores

eFigure 1: Density plot of the distribution of propensity scores in the rituximab and control group before matching (left) and after matching (right).

eFigure 2. Standardized Differences Between Groups
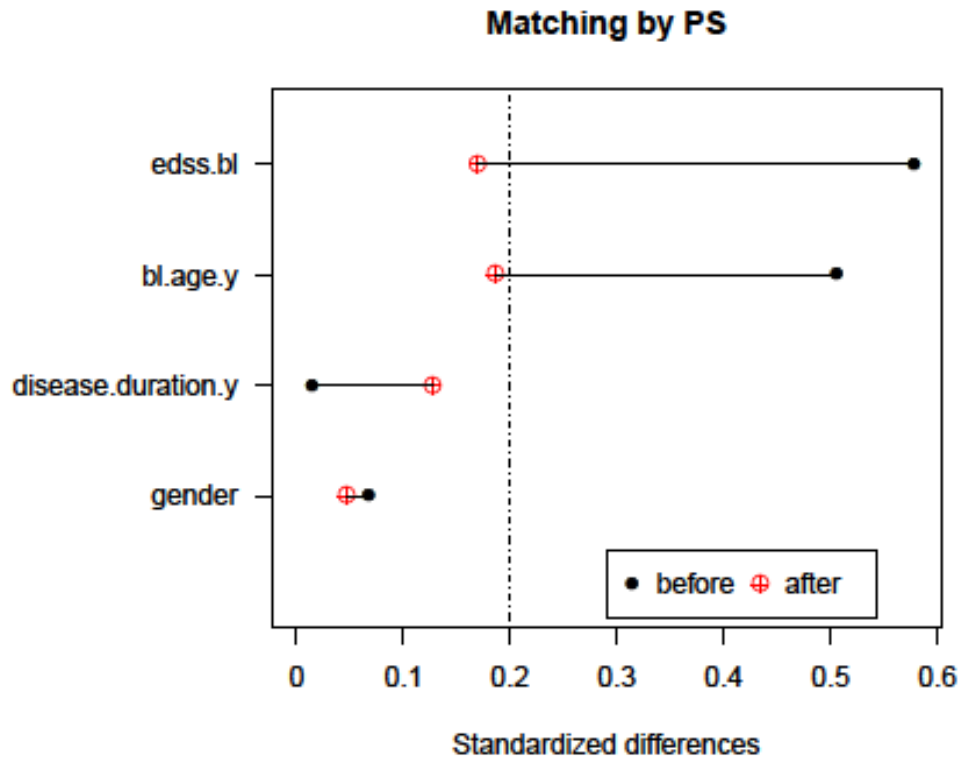
eFigure 2: Illustration of the standardized differences between groups in the total cohort and after propensity score (PS) matching (matched cohort).