

**Table E1.** Optic neuritis relapses (+ = relapse, – = no relapse), visual acuity (as Snellen fraction, where available), peripapillary retinal nerve fiber layer (pRNFL) thickness (in  $\mu\text{m}$ ) and abortive and prophylactic treatments in 3 patients with MOG antibody-associated recurrent bilateral optic neuritis.

Patient	Date	Optic neuritis events			Visual acuity		OCT pRNFL		Treatment of acute relapse				Severe residual deficits	Immune therapy
		OD	OS	OC	OD	OS	OD	OS	Relapse treatment		Outcome			
									OD	OS				
Pat. 1	10/2014	+	–	–	HM	20/20	n.a.	n.a.	HDMP 5d		20/200	–		none
	01/2015	–	–	+	HM/LHA	LHA	n.a.	n.a.	HDMP 5d, TCS 14d		HM	20/20	yes	none
	02/2015	–	+	–	–	20/25	n.a.	n.a.	HDMP 5d, TCS 18d, 5x PLEX		CF	20/20		none
	03/2015	–	+	–	CF	20/200	n.a.	n.a.	HDMP 5d		20/125	20/50	yes	1x NAT
	04/2015	–	+	–	–	CF	46	84	5x PLEX, HDMP 5d, TCS 14d, PRD		20/32	20/200	yes	AZA (1m)
	05/2015	–	+	–	20/80	HM	43	60	HDPRD 5d, TCS 14d		20/80	CF		1x RTX, PRD
	06/2015	–	+	–	20/40	LP	43	51	HDPRD 5d, TCS 14d		20/50	HM	yes	1x RTX, PRD
	07/2015	–	–	–	–	–	41	44	5x PLEX		20/40	–		PRD
	08/2015	–	–	–	–	–	43	38	none		–	–		PRD
	10/2015	+	–	–	20/800	LP	n.a.	n.a.	HDMP 5d, TCS 21d		20/400	–	yes	MMF, PRD
	12/2015	–	–	–	20/250	HM	n.a.	n.a.	none		–	–		MMF
	01/2016	+	–	–	CF	–	39	32	HDPRD, TCS 4d		20/400	–		MMF
	02/2016	–	–	–	–	–	n.a.	n.a.	none		–	–		1x RTX, MMF
05/2016	–	–	–	20/200	–	28	28	none		–	–		MMF	
Pat. 2	2007	+	–	–	CF	20/20	n.a.	n.a.	HDMP 3d		20/20	–		none
	05/2009	+	–	–	20/100	–	n.a.	n.a.	HDMP 4d, TCS 4d		20/25	–		none
	07/2009	–	+	–	20/20	CF	n.a.	n.a.	HDMP 4d, TCS 4d		–	20/50		none
	08/2009	–	+	–	–	20/1000	n.a.	n.a.	HDMP 4d, TCS 4d		–	n.a.		none
	11/2010	–	+	–	–	HM	n.a.	n.a.	HDMP 4d, TCS 45d		–	20/25		PRD
	03/2011	–	–	–	–	20/20	n.a.	n.a.	None		–	–		none
	08/2014	+	+	–	CF	CF	n.a.	n.a.	HDPRD 5d, re-HDPRD 5d		20/25	20/20		AZA (4m)

	10/2014	-	+	-	-	CF	n.a.	n.a.	HDMP 4d, TCS 45d	-	20/25		AZA (2m)
	01/2015	-	+	-	-	CF	n.a.	n.a.	HDPRD 3d, TCS 3d	-	20/25		PRD
	04/2015	-	+	-	20/20	20/32	48	52	HDPRD 5d, TCS 12d	-	20/25		1x RTX, PRD
	08/2015	+	-	-	LHA	-	n.a.	n.a.	HDPRD 3d, TCS 5d	20/16	20/20		none
	09/2015	-	-	-	-	-	49	51	none	-	-		none
	12/2015	-	-	-	20/20	20/16	48	48	none	-	-		1x RTX
	03/2016	-	-	-	20/16	-	47	47	none	-	-		none
Pat. 3	01/2012	+	-	-	20/40	20/16	n.a.	n.a.	HDMP 5d	20/25	-		none
	02/2012	+	-	-	20/25	-	n.a.	n.a.	HDMP 3d	-	-		NAT (3m)
	04/2012	+	-	-	20/40	-	n.a.	n.a.	HDMP 5d	20/32	-	yes	NAT (1m)
	05/2012	+	-	-	NP	-	n.a.	n.a.	HDMP 3d	20/63	-		none
	05/2012	+	-	-	CF	-	n.a.	n.a.	5x PLEX	20/40	-	yes	none
	07/2012	-	-	-	-	-	n.a.	n.a.	none	-	-		1x RTX
	08/2012	-	-	-	-	-	n.a.	n.a.	none	-	-		1x RTX
	10/2012	-	+	-	-	20/40	n.a.	n.a.	HDMP 5d, CYC	-	20/20		CYC (13m)
	04/2013	+	-	-	LP	-	n.a.	n.a.	CYC, HDMP 5d	20/100	-	yes	CYC (7m)
	09/2013	+	-	-	LP	-	n.a.	n.a.	HDMP 3d, TCS 14d	-	-	yes	CYC (2m)
	12/2013	-	-	-	-	-	n.a.	n.a.	none	-	-		TOC monthly
	07/2014	-	-	-	-	20/20	29	64	none	-	-		TOC monthly
	05/2015	-	-	-	-	20/25	30	62	none	-	-		TOC monthly

+, optic neuritis event; -, no change; AZA, azathioprine 50-100mg/d p.o.; CF, counting fingers; CYC, cyclophosphamide 600-1000mg/m<sup>2</sup> i.v.; d, days; HDMP, high-dose methylprednisolone 1g/d i.v.; HDPRD, high-dose prednisone 100mg/d p.o.; HM, perception of hand motion; LHA, left hemianopia; LP, light perception; MMF, mycophenolate mofetil 2000-3000mg/d p.o.; m, months; n.a., not available; NAT, natalizumab 300mg i.v.; NV, normal vision; NP, no light perception; OC, optic chiasm; OD, oculus dexter (right eye); OS, oculus sinister (left eye); PLEX, plasma exchange; PRD, prednisone permanent therapy 5-15mg/d p.o.; RTX, Rituximab 375mg/m<sup>2</sup> i.v.; TCS, tapering of corticosteroids p.o.; TOC, tocilizumab 8mg/kg of body weight i.v.