Correction to: Oral Disease-Modifying Treatments for Relapsing Multiple Sclerosis: A Likelihood to Achieve No Evidence of Disease Activity or Harm Analysis

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Page 1069, Abstract, Results—the text that read:

The values for likelihood to achieve NEDA than experience any AE ratio ($LHH_{(AE/NEDA)}$) were 3.9, 6.8, 12.5 and 3.7, the likelihood to achieve NEDA than experience a SAE ratio ($LHH_{(SAE/NEDA)}$) values were 3.5, 15, 23.5 and 2.8, and the likelihood to achieve NEDA versus discontinue treatment ($LHH_{(AE-D/NEDA)}$) values were 20.3, 4.3, 3.9 and 3.1 for cladribine, dimethyl-fumarate, fingolimod, and teriflunomide, respectively.

Should read:

The values for likelihood to achieve NEDA than experience any AE ratio ($LHH_{(AE/NEDA)}$) were 3.5, 6.8, 12.5 and 2.6, the likelihood to achieve NEDA than experience a SAE ratio ($LHH_{(SAE/NEDA)}$) values were 13.0, 3.5, 23.5 and 2.7, and the likelihood to achieve NEDA versus discontinue treatment ($LHH_{(AE-D/NEDA)}$) values were 17.7, 6.5, 4.6 and 3.0 for cladribine, dimethyl-fumarate, fingolimod, and teriflunomide, respectively.

The original article can be found online at <https://doi.org/10.1007/s40263-018-0547-z>.

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Page 1073, column 1, lines 9 to 12—the text that read:

NEDA was evaluated as the proportion of patients free of relapses, 3-month confirmed disability progression, and free of new or newly enlarging T2 lesion and Gadolinium enhancing lesions.

Should read:

NEDA was evaluated as the proportion of patients free of relapses and 3-month confirmed disability progression, and free of new and newly enlarging T2 lesion and Gadolinium-enhancing lesions.

Page 1073, column 2, section 3.2, line 2—the text that read:

... eight (95% CI 5.3–11.5) for DMF ...

Should read:

... eight (95% CI 5.0–11.9) for DMF ...

Page 1074, column 1, section 3.3, lines 7 to 12—the text that read:

The $NNTH_{AE}$ values were 15 (95% CI 7.8 to 65.2) for cladribine, 52 (95% CI 23.6 to – 270.1) for DMF, 68 (95% CI 27.7 to – 153.1) for fingolimod, and 44 (95% CI 14.6 to – 44.2) for teriflunomide, indicating that fingolimod has the most and cladribine the least favorable safety profile with regard to the appearance of any AE (Table 4).

Should read:

The $NNTH_{AE}$ values were 14 (95% CI 7.7 to 56.2) for cladribine, 52 (95% CI 23.6 to – 270.1) for DMF, 68 (95% CI 27.7 to – 153.1) for fingolimod, and 31 (95% CI 12.8 to – 79.2) for teriflunomide, indicating that fingolimod has the most and cladribine the least favorable safety profile with regard to the appearance of any AE (Table 4).

Page 1074, column 1, section 3.3, lines 15 to 19—the text that read:

Nevertheless, with regard to the AEs that led to treatment discontinuation, the $NNTH_{AE-D}$ was most favorable for cladribine (72 [95% CI 27.9 to – 129.5]) and least favorable for fingolimod (21 [95% CI 12.6 to 54.1]) (Table 4).

Should read:

Nevertheless, with regard to the AEs that led to treatment discontinuation, the $NNTH_{AE-D}$ was most favorable for cladribine (71 [95% CI 27.9 to – 129.5]) and least favorable for fingolimod (28 [95% CI 15.0 to 191.6]) (Table 4).

Page 1074, column 2, section 3.4, lines 8 to 12—the text that read:

Nevertheless, calculating the likelihood to achieve NEDA versus discontinue treatment due to an AE cladribine has the most favourable efficacy versus risk profile ($LHH_{(AE-D/NEDA)}$ 20.3 [95% CI 7.03–37.48]).

Should read:

Nevertheless, calculating the likelihood to achieve NEDA versus discontinue treatment due to an AE cladribine has the most favourable efficacy versus risk profile ($LHH_{(AE-D/NEDA)}$ 17.7 [95% CI 7.03–37.48]).

Table 2 that read:

Table 2 Source data

Treatment arm	Cladribine		Dimethyl-fumarate		Fingolimod		Teriflunomide	
	Active	Placebo	Active	Placebo	Active	Placebo	Active	Placebo
Patients that achieved NEDA								
Proportion (<i>n</i>)	178/402	60/379	132/511 ^a	43/356 ^a	213/783	65/773	82/358	52/363
Percentage (%)	44.3	15.8	26	12	27.2	8.4	22.9	14.3
Patients in safety analysis (<i>n</i>)	433	437	769	771	783	773	360	358
Proportion of patients with any AE (<i>n</i>)	347/433	319/437	733/769	720/771	751/783	730/773	325/360	315/358
Proportion of patients with any SAE (<i>n</i>)	36/433	28/437	135/769	165/771	96/783	101/773	57/360	46/358
Proportion of patients that discontinued treatment due to an AE (<i>n</i>)	15/433	9/437	109/769	93/771	101/783	62/773	39/360	29/358
References	[11, 21]		[12, 13, 18, 19]		[14, 15, 20]		[16, 22]	

AE adverse event, *MRI* magnetic resonance imaging, *NEDA* no evidence of disease activity, *SAE* serious adverse event

^aDimethyl-fumarate and placebo patients used for the NEDA analysis (MRI cohort) were the subpopulation of patients from DEFINE and CONFIRM with MRI data

Should read:

Table 2 Source data

Treatment arm	Cladribine		Dimethyl-fumarate		Fingolimod		Teriflunomide	
	Active	Placebo	Active	Placebo	Active	Placebo	Active	Placebo
Patients that achieved NEDA								
Proportion (<i>n</i>)	178/402	60/379	90/345 ^a	41/347 ^a	213/783	65/773	82/358	52/363
Percentage (%)	44.3	15.8	26.1	11.8	27.2	8.4	22.9	14.3
Patients in safety analysis (<i>n</i>)	430	435	769	771	783	773	358	360
Proportion of patients with any AE (<i>n</i>)	347/430	319/435	733/769	720/771	751/783	730/773	325/358	315/360
Proportion of patients with any SAE (<i>n</i>)	36/430	28/435	135/769	165/771	96/783	101/773	57/358	46/360
Proportion of patients that discontinued treatment due to an AE (<i>n</i>)	15/430	9/435	109/769	93/771	98/783	69/773	39/358	29/360
References	[11, 21]		[12, 13, 18, 19]		[14, 15, 20]		[16, 22]	

AE adverse event, MRI magnetic resonance imaging, NEDA no evidence of disease activity, SAE serious adverse event

^aDimethyl-fumarate and placebo patients used for the NEDA analysis (MRI cohort) were the subpopulation of patients from DEFINE and CONFIRM with MRI data

Table 3 that read:

Table 3 Numbers needed to treat for one patient to achieve no evidence of disease activity ($NNTB_{NEDA}$)

	Cladribine (CLARITY)	Dimethyl-fumarate (pooled DEFINE + CONFIRM)	Fingolimod (pooled FREEDOMS + FREEDOMS II)	Teriflunomide (TEMSO)
Total (<i>n</i>)	812	867	1561	721
RR	2.79	2.13	3.23	1.59
95% CI	2.16–3.61	1.55–2.93	2.5–4.2	1.16–2.19
<i>p</i> value	< 0.0001	< 0.0001	< 0.0001	< 0.0035
AR	0.28	0.13	0.19	0.08
$NNTB_{NEDA}$	4	8	6	12
95% CI	2.9–4.5	5.3–11.9	4.4–6.6	7.0–34.1

AR attributable risk (proportion of patients achieving NEDA in active group minus proportion of patients achieving NEDA in placebo group), CI confidence interval, NEDA no evidence of disease activity, $NNTB_{NEDA}$ number of patients needed to treat for a patient to achieve NEDA, RR relative risk (proportion of patients achieving NEDA in active group out of the total patients in the active group over the proportion of patients achieving NEDA in placebo group out of the total patients in placebo group)

Should read:

Table 3 Numbers needed to treat for one patient to achieve no evidence of disease activity ($NNTB_{NEDA}$)

	Cladribine (CLARITY)	Dimethyl-fumarate (pooled DEFINE + CONFIRM)	Fingolimod (pooled FREEDOMS + FREEDOMS II)	Teriflunomide (TEMSO)
Total (<i>n</i>)	781	692	1556	721
RR	2.79	2.13	3.23	1.59
95% CI	2.16–3.61	1.55–2.93	2.5–4.2	1.16–2.19
<i>p</i> value	< 0.0001	< 0.0001	< 0.0001	< 0.0035
AR	0.28	0.13	0.19	0.08
$NNTB_{NEDA}$	4	8	6	12
95% CI	2.9–4.5	5.0–11.9	4.4–6.6	7.0–34.1

AR attributable risk (proportion of patients achieving NEDA in active group minus proportion of patients achieving NEDA in placebo group), CI confidence interval, NEDA no evidence of disease activity, $NNTB_{NEDA}$ number of patients needed to treat for a patient to achieve NEDA, RR relative risk (proportion of patients achieving NEDA in active group out of the total patients in the active group over the proportion of patients achieving NEDA in placebo group out of the total patients in placebo group)

Table 4 that read:

Table 4 Numbers needed to harm (NNTH) analysis of safety

	Cladribine CLARITY	DMF (pooled DEFINE and CONFIRM)	Fingolimod (pooled FREEDOMS and FREEDOMS II)	Teriflunomide TEMSO
$NNTH_{AE}$	15	52	68	44
95% CI	7.8–65.2	$NNTH$ 23.6 to ∞ to $NNTB$ 270.1 ^a	27.7 to ∞ to $NNTB$ 153.1	14.6 to ∞ to $NNTB$ 44.2
$NNTH_{SAE}$	53	27	125	34
95% CI	18.6 to ∞ to $NNTB$ 64 ^a	12.8 to ∞ to $NNTB$ 947.3 ^a	24.3 to ∞ to $NNTB$ 40 ^a	12/3 to ∞ to $NNTB$ 46.8 ^a
$NNTH_{AE-D}$	72	48	21	37
95% CI	27.9 to ∞ to $NNTB$ 129.5 ^a	18.2 to ∞ to $NNTB$ 79.4 ^a	12.6–54.1	14/3 to ∞ to $NNTB$ 64.7 ^a

AE adverse event, AE-D adverse event leading to treatment discontinuation, CI confidence interval, DMF dimethyl-fumarate, $NNTB$ number of patients needed to treat for a patient to have a good outcome (to achieve no evidence of activity), $NNTH$ number of patients needed to treat for a patient to have a harmful outcome, SAE serious adverse event. In some cases the harmful effect of the treatment leading to an AE was not significantly different from placebo at the *p* 0.05 level and resulted in the 95% CIs of the $NNTH$ to include infinity (∞)

^aNo significant difference between active treatment and placebo

Should read:

Table 4 Numbers needed to harm (NNTH) analysis of safety

	Cladribine CLARITY	DMF (pooled DEFINE and CONFIRM)	Fingolimod (pooled FREEDOMS and FREEDOMS II)	Teriflunomide TEMPO
NNTH _{AE}	14	52	68	31
95% CI	7.7–56.2	NNTH 23.6 to ∞ to NNTB 270.1 ^a	27.7 to ∞ to NNTB 153.1	12.8 to ∞ to NNTB 79.2
NNTH _{SAE}	52	27	125	32
95% CI	18.6 to ∞ to NNTB 64 ^a	12.8 to ∞ to NNTB 947.3 ^a	24.3 to ∞ to NNTB 40 ^a	12.1 to ∞ to NNTB 50.5 ^a
NNTH _{AE-D}	71	48	28	36
95% CI	27.7 to ∞ to NNTB 129.7 ^a	18.2 to ∞ to NNTB 79.4 ^a	15–191.6	14.0 to ∞ to NNTB 69.4 ^a

AE adverse event, AE-D adverse event leading to treatment discontinuation, CI confidence interval, DMF dimethyl-fumarate, NNTB number of patients needed to treat for a patient to have a good outcome (to achieve no evidence of activity), NNTH number of patients needed to treat for a patient to have a harmful outcome, SAE serious adverse event. In some cases the harmful effect of the treatment leading to an AE was not significantly different from placebo at the p 0.05 level and resulted in the 95% CIs of the NNTH to include infinity (∞)

^aNo significant difference between active treatment and placebo

Figure 1 that was:

Should read: