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	All	No-washout- group	washout- group
	N=213	N=148	N=65
	n (%)	n (%)	n (%)
Pregnancies with SRDCS at 3rd trimester	9 (4.23)	7 (4.73)	2 (3.08)
Pregnancies with SRDCS at one year pp	11 (5.16)	8 (5.41)	3 (4.62)
Pregnancies newly with SRDCS at one year pp	3 (1.41)	2 (1.35)	1 (1.54)
EDSS 3rd trimester, median [Range]	2.00 [0.00;7.50]	2.00 [0.00;7.50]	1.75 [0.00;6.50]
EDSS at one year pp, median [Range]	2.00 [0.00;7.50]	2.00 [0.00;7.50]	1.50 [0.00;6.50]
Delta EDSS between baseline and 3rd	0.00 [-	0.00 [-	0.00 [-
trimester, median [Range]	2.50;4.50]	2.50;4.50]	1.50;3.00]
Delta EDSS between baseline and one year pp, median [Range]	0.00 [- 4.50;3.50]	0.00 [- 4.50;3.50]	0.00 [- 2.50;3.00]
missing	39 (18.31)	26 (17.57)	13 (20.00)
Pregnancies with significant clinical worsening at 3 rd trimester	10/174 (5.75)	8/122 (6.56)	2/52 (3.85)
Pregnancies with significant clinical worsening at one year pp	10/174 (5.75)	6/122 (4.92)	4/52 (7.69)
missing	39 (18.31)	26 (17.57)	13 (20.00)
Pregnancies with EDSS >= 2 at 3 rd trimester	103/174 (59.20)	77/122 (63.11)	26/52 (50.00)
Pregnancies with EDSS >= 2 at one year pp	96/174 (55.17)	72/122 (59.02)	24/52 (46.15)
Pregnancies with EDSS >= 3 at 3 rd trimester	57/174 (32.76)	43/122 (35.25)	14/52 (26.92)
Pregnancies with EDSS >= 3 at one year pp	48/174 (27.59)	37/122 (30.33)	11/52 (21.15)
	Pregnancies with SRDCS at one year pp Pregnancies newly with SRDCS at one year pp EDSS 3 rd trimester, median [Range] EDSS at one year pp, median [Range] Delta EDSS between baseline and 3 rd trimester, median [Range] Delta EDSS between baseline and one year pp, median [Range] Delta EDSS between baseline and one year pp, median [Range] missing Pregnancies with significant clinical worsening at 3 rd trimester Pregnancies with significant clinical worsening at one year pp missing Pregnancies with EDSS >= 2 at 3 rd trimester Pregnancies with EDSS >= 2 at one year pp Pregnancies with EDSS >= 3 at 3 rd trimester Pregnancies with EDSS >= 3 at one year pp	N=213n (%)Pregnancies with SRDCS at 3rd trimester9 (4.23)Pregnancies with SRDCS at one year pp11 (5.16)Pregnancies newly with SRDCS at one year pp3 (1.41)EDSS 3rd trimester, median [Range]2.00 [0.00;7.50]DEISS at one year pp, median [Range]2.00 [0.00;7.50]Delta EDSS between baseline and 3rd0.00 [-trimester, median [Range]2.50;4.50]Delta EDSS between baseline and one0.00 [-year pp, median [Range]39 (18.31)Pregnancies with significant clinical10/174 (5.75)Pregnancies with significant clinical10/174 (5.75)Pregnancies with significant clinical10/174 (5.75)missing39 (18.31)Pregnancies with EDSS >= 2 at 3rd103/174 (59.20)Pregnancies with EDSS >= 2 at one year96/174 (55.17)Pregnancies with EDSS >= 3 at 3rd57/174 (32.76)Pregnancies with EDSS >= 3 at one year48/174 (27.59)	No-washout- group N=213 N=148 n (%) n (%) Pregnancies with SRDCS at 3 rd trimester 9 (4.23) 7 (4.73) Pregnancies with SRDCS at one year pp 11 (5.16) 8 (5.41) Pregnancies newly with SRDCS at one year pp 3 (1.41) 2 (1.35) EDSS 3 rd trimester, median [Range] 2.00 [0.00;7.50] 2.00 [0.00;7.50] EDSS at one year pp, median [Range] 2.00 [0.00;7.50] 2.00 [0.00;7.50] Delta EDSS between baseline and 3 rd 0.00 [- 0.00 [- trimester, median [Range] 2.50;4.50] 2.50;4.50] Delta EDSS between baseline and one year pp, median [Range] 0.00 [- 0.00 [- missing 39 (18.31) 26 (17.57) Pregnancies with significant clinical worsening at 3 rd trimester 10/174 (5.75) 8/122 (6.56) Pregnancies with significant clinical worsening at one year pp 10/174 (5.75) 6/122 (4.92) missing 39 (18.31) 26 (17.57) Pregnancies with EDSS >= 2 at 3 rd Pregnancies with EDSS >= 2 at 3 rd 103/174 (59.20) 77/122 (63.11) Pregnancies with EDSS >= 2 at one year pp 96/174

		All	No-washout- group	washout-group	
		N=213	N=148	N=65	
		n (%)	n (%)	n (%)	
	Pregnancies with EDSS >= 4 at 3 rd trimester	26/174 (14.94)	22/122 (18.03)	4/52 (7.69)	
	Pregnancies with EDSS >= 4 at one year pp	24/174 (13.79)	20/122 (16.39)	4/52 (7.69)	
	Pregnancies with EDSS >= 6 at 3 rd trimester	4/174 (2.30)	3/122 (2.46)	1/52 (1.92)	
	Pregnancies with EDSS >= 6 at one year pp	6/174 (3.45)	5/122 (4.10)	1/52 (1.92)	
Categorical EDSS change (N=174 ^b) at 3 rd trimester and one year pp, n (%)	missing	39 (18.31)	26 (17.57)	13 (20.00)	
	Pregnancies with delta EDSS >= 2 points between baseline and 3 rd trimester	10/174 (5.75)	8/122 (6.56)	2/52 (3.85)	
	Pregnancies with delta EDSS >= 2 points between baseline and one year pp	10/174 (5.75)	6/122 (4.92)	4/52 (7.69)	
	Pregnancies with delta EDSS >= 3 points between baseline and 3 rd trimester	5/174 (2.87)	4/122 (3.28)	1/52 (1.92)	
	Pregnancies with delta EDSS >= 3 points between baseline and one year pp	3/174 (1.72)	2/122 (1.64)	1/52 (1.92)	
	Pregnancies with delta EDSS >= 4 points between baseline and 3 rd trimester	1/174 (0.57)	1/122 (0.82)	0/52 (0.00)	
	Pregnancies with delta EDSS >= 4 points between baseline one year pp	0/174 (0.00)	0/122 (0.00)	0/52 (0.00)	
Disability progression (N=174 ^b) at 3 rd trimester and one year pp, n (%)	missing	39 (18.31)	26 (17.57)	13 (20.00)	
	Pregnancies with disability progression at 3 rd trimester	17/174 (9.77)	12/122 (9.84)	5/52 (9.62)	
	Pregnancies with disability progression at one year pp	19/174 (10.92)	13/122 (10.66)	6/52 (11.54)	
Newly reaching EDSS (N=174 ^b) Milestones at 3 rd trimester and one year pp, n (%)	missing	39 (18.31)	26 (17.57)	13 (20.00)	

	All	No-washout- group	washout-group	
	N=213	N=148		
	n (%)	n (%)	n (%)	
Pregnancies with newly EDSS >= 3 at 3rd trimester	13/174 (7.47)	8/122 (6.56)	5/52 (9.62)	
Pregnancies with newly EDSS >= 3 at one year pp	4/174 (2.30)	3/122 (2.46)	1/52 (1.92)	
Pregnancies with new walking limitation (EDSS $>= 4$) at 3 rd trimester	8/174 (4.60)	7/122 (5.74)	1/52 (1.92)	
Pregnancies with new walking limitation (EDSS >= 4) at one year pp	2/174 (1.15)	1/122 (0.82)	1/52 (1.92)	
Pregnancies newly requiring walking aid (EDSS >= 6 during) at 3 rd trimester	0/174 (0.00)	0/122 (0.00)	0/52 (0.00)	
Pregnancies newly requiring walking aid (EDSS >= 6) at one year pp	2/174 (1.15)	2/122 (1.64)	0/52 (0.00)	
Pregnancies newly bedbound (EDSS >= 8) at 3 rd trimester	0/174 (0.00)	0/122 (0.00)	0/52 (0.00)	
Pregnancies newly bedbound (EDSS >= 8) at one year pp	0/174 (0.00)	0/122 (0.00)	0/52 (0.00)	

eTable 1: Relapse risk and expanded disability status scale change during pregnancy and past-partum

No-washout-group, pregnancies with last FTY intake less than 60 days pre LMP or after LMP; washout-group, pregnancies with last FTY intake between 60 days and 1 year pre LMP; N, denominator; n, number in group; SRDCS, Severe Relapse Disability Composite Score; pp, post-partum; EDSS, Expanded Disability Status Scale; baseline, 3 months prior to conception; Trim, trimester

^a 34 pregnancies with relapses in pregnancy or one-year postpartum and missing EDSS value were categorized as "non-severe". 25 relapses in pregnancy and 25 relapses postpartum could not be rated for severity.

^b For all disability related analysis pregnancies with less than 3 EDSS values are counted as missing. Denominator for this subgroup analysis is the number of pregnancies with 3 available EDSS values (N=174).

BASELINE DURIN				DURING PREGNANCY				POSTPARTUM							
Joine d in 1st trimes ter	Disea se durati on, years	FTY exposu re duratio n, days	Baseli ne EDSS	No rel in preg	Time to first rel after last FTY, month s	Worst EDSS and relapse treatment	EDSS 3 rd trimes ter	Delta EDSS betwee n baselin e and 3 rd trimest er	BF	DMT resum ption	Time to pp DMT start, mont hs	No rel up to 12 month s pp	Time to first rel pp after last FTY, days	EDSS at one year pp	Delta EDSS between baseline and one year pp
no	14.32	156; Therapy break between gestatio nal day 102 and 133	1	2	1.80ª	EDSS 6 11,500 mg CS i.v.	5.5	4.5	yes	yes	1.37	0		4	3
yes	11.40	41	1	1	1.20	EDSS 4 2,500 mg CS i.v. 7 x PLEX	4	3	yes	yes	1.07	2	253	2	1
yes	11.38	-46	0	1	2.67	EDSS 4 5,000 mg CS i.v.	4	4	no	yes	0.40	1	284	3.5	3.5
yes	3.25	-62	1	1	8.14	EDSS 4 2,500 mg CS i.v. 5 X IA	4	3	yes	yes	0.47	0		3	2
no	3.20	33	0	2	2.34 ^b	EDSS 5,0 11,000 mg CS i.v.	3	3	no	yes	0.07	0		2	2
yes	3.87	-347	2.5	0			3	0.5	yes	no		1	694	5.5	3

eTable 2: Clinical characteristics of women with EDSS increase ≥3 between baseline and 12 months postpartum

No, Number; FTY, fingolimod; baseline, up to 3 months prior to conception; EDSS, expanded disability status scale; rel, relapse; preg, pregnancy; BF, breastfeeding; DMT, disease modifying therapy; pp, postpartum; unk, unkown; mg, milligrams; CS, corticosteroids; i.v., intravenous; IVIG, intravenous immunoglobulins; PLEX, plasma exchange; g, grams; i.th., intrathecal; IA, immunoadsorption.

^a calculated as difference to first FTY stop at gestational day 102; another pregnancy relapse 1.04 month before FTY stop was reported.

^b another pregnancy relapse 4.10 month after FTY stop was reported

	All N= 213	No-washout- group N=148	washout- group N=65
Age at LMP (years), mean (SD)	32.47 (4.64)	32.48 (4.95)	32.45 (3.87)
Disease Duration (years), median [range]	6.82 [0.53;20.36]	7.40 [0.53;20.36]	6.29 [1.76;17.74]
Any relapse in year prior to pregnancy, n (%)	82 (38.50)	54 (36.49)	28 (43.08)
Total duration FTY treatment pre-pregnancy (years), median [range]	2.68 [0.06;12.5]	2.37 [0.06;9.58]	3.60 [0.15;12.5]
Any relapse under FTY treatment, n (%) ^a	29/194(14.95)	4/130(3.08)	25/64 (39.06)
Any prior attempt to stop FTY, n (%)	31 (14.55)	26 (17.57)	5 (7.69)
Any relapses with prior stopping attempts, n (%)	17/31 (54.84)	14/26 (53.85)	3/5 (60.00)
Gestational week at enrollment (weeks), median [range]	9.00 [1.14;39.14]	9.00 [1.14;39.14]	9.00 [3.57;35.29]
MS related Disability at baseline (N=174 ^b)			
Information missing, n (%)	39 (18.31)	26 (17.57)	13 (20.00)
no disability (EDSS 0-2.0), n (%)	81/174 (46.55)	52/122 (42.62)	29/52 (55.77)
some disability, (EDSS 2.5-3.5), n (%)	73/174 (41.95)	53/122 (43.44)	20/52 (38.46)
some ambulatory impairment, no assist device (EDSS 4.0-5.5), n (%)	15/174 (8.62)	13/122 (10.66)	2/52 (3.85)
cane required (EDSS 6.0-6.5), n (%)	3/174 (1.72)	2/122 (1.64)	1/52 (1.92)
wheelchair required (EDSS >=7.0), n (%)	2/174 (1.15)	2/122 (1.64)	0/52 (0.00)

eTable 3: Demographic and clinical characteristics of Women in the no-washout- and washout-group

no-washout-group, pregnancies with last FTY intake less than 60 days pre LMP or after LMP; washout-group, pregnancies with last FTY intake between 60 days and 1 year pre LMP; LMP, last menstrual period; SD, standard deviation; n, number in group; MS, multiple sclerosis; baseline, within three months prior to conception; EDSS, expanded disability status scale; FTY, fingolimod; N, denominator.

^a In 19 cases data was missing

^b For all disability related analysis pregnancies with less than 3 EDSS values are counted as missing. Denominator for this subgroup analysis is the number of pregnancies with 3 available EDSS values (N=174).

	All	No-washout-group	washout-group N=65	
	N= 213	N=148		
Pregnancy				
Any relapse in pregnancy, n (%)	67 (31.46)	40 (27.03)	27 (41.54)	
More than one pregnancy relapse, n (%)	23 (10.80)	14 (9.46)	9 (13.85)	
Any relapse in 1st trimester, n (%)	33 (15.49)	20 (13.51)	13 (20.00)	
Any relapse in 2nd trimester, n (%)	38 (17.84)	21 (14.19)	17 (26.15)	
Any relapse in 3rd trimester, n (%)	17 (7.98)	10 (6.76)	7 (10.77)	
Any severe relapse in pregnancy ^a , n (%)	9 (4.23)	7 (4.73)	2 (3.08)	
DMT reintroduction in pregnancy, n (%)			,	
Glatiramer acetate, n (%)	3 (1.41)	2 (1.35)	1 (1.54)	
Immunoglobulins, n (%)	1 (0.47)	0 (0.00)	1 (1.54)	
None, n (%)	209 (98.12)	146 (98.65)	63 (96.92)	
Disability during pregnancy (N=174 ^b)			· ,	
Information missing, n (%)	39 (18.31)	26 (17.57)	13 (20.00)	
Disability progression in pregnancy, n (%)	17/174 (9.77)	12/122 (9.84)	5/52 (9.62)	
Severe Relapse Disability Composite Score (SRDCS) in pregnancy, n (%)	9/174 (5.17)	7/122 (5.74)	2/52 (3.85)	
Postpartum period				
Any relapse postpartum, n (%)	95 (44.60)	69 (46.62)	26 (40.00)	
Any severe relapse postpartum ^a	3 (1.41)	2 (1.35)	1 (1.54)	
Lost to follow up postpartum ^c				
Up to 1 st trimester, n (%)	9 (4.23)	5 (3.38)	4 (6.15)	
Up to 2 nd trimester, n (%)	14 (6.57)	8 (5.41)	6 (9.23)	
Up to 3 rd trimester, n (%)	26 (12.21)	16 (10.81)	10 (15.38)	
Up to 4 th trimester, n (%)	37 (17.37)	25 (16.89)	12 (18.46)	
Timing of any relapse postpartum ^c				
1st trimester postpartum, n (%)	55/204 (26.96)	36/143 (25.17)	19/61 (31.15)	
2nd trimester postpartum, n (%)	31/199 (15.58)	20/140 (14.29)	11/59 (18.64)	
3rd trimester postpartum, n (%)	29/187 (15.51)	24/132 (18.18)	5/55 (9.09)	
4th trimester postpartum, n (%)	11/176 (6.25)	9/123 (7.32)	2/53 (3.77)	
Disability postpartum (N=174 ^b)				
Information missing, n (%)	39 (18.31)	26 (17.57)	13 (20.00)	
Disability progression postpartum, n (%)	19/174 (10.92)	13/122 (10.66)	6(52 (11.54)	

	All N= 213	No-washout-group N=148	washout-group N=65
Severe Relapse Disability Composite Score (SRDCS) postpartum, n (%)	11/174 (6.32)	8/122 (6.56)	3/52 (5.77)
Breastfeeding (N=213 ^d)			
Pregnancies with information on breastfeeding behaviour available, n (%)	213 (100.00)	148 (100.00)	65 (100.00)
Exclusively	80 (37.56)	49 (33.11)	31 (47.69)
No breastfeeding	68 (31.92)	53 (35.81)	15 (23.08)
Some, but not exclusively	65 (30.52)	46 (31.08)	19 (29.23)
FTY restart postpartum (N=138)	. , <i>,</i> , ,	· · · · · ·	
Missing due to LFU before FTY restart, n (%)	75 (35.21)	47 (31.76)	28 (43.08)
no FTY restart in one year pp, n (%)	28/138 (20.29)	16/101 (15.84)	12/37 (32.43)
Resumed FTY post-partum, n (%)	110/138 (79.71)	85/101 (84.16)	25/37 (67.57)
> 4 weeks/later, n (%)	78/110 (70.91)	59/85 (69.41)	19/25 (76.00)
0-4 weeks/early, n (%)	32/110 (29.09)	26/85 (30.59)	6/25 (24.00)

eTable 4: Disease activity during pregnancy and the postpartum period in the no-washout- and washout-group

no-washout-group, pregnancies with last FTY intake less than 60 days pre LMP or after LMP; washout-group, pregnancies with last FTY intake between 60 days and 1 year pre LMP; LMP, last menstrual period; SD, standard deviation; n, number in group; MS, multiple sclerosis, baseline, within three months prior to conception; EDSS, expanded disability status scale; FTY, fingolimod; n, number; N, denominator; LFU, lost to follow up

^a 34 pregnancies with relapses in pregnancy or one-year postpartum and missing EDSS value were categorized as "non-severe". 25 relapses in pregnancy and 25 relapses postpartum could not be rated for severity.

^b For all disability related analysis pregnancies with less than 3 EDSS values are counted as missing. Denominator for this subgroup analysis is the number of pregnancies with 3 available EDSS values (n=174)

[°] 37 pregnancies have no complete 1 year postpartum follow up, 9 have not completed the first trimester, 5 have not completed the second trimester, 12 have not completed the third trimester and 11 have not completed the fourth trimester. Denominators for this subgroup analysis is the number of pregnancies with completed follow up per postpartum trimester (first trimester N=204, second trimester N=199, third trimester N=187, fourth trimester N=176)

^dBreastfeeding: Exclusively, pregnancies followed for at least 8 weeks without introduction of supplemental feedings; No breastfeeding, pregnancies without any breastfeed meal after delivery; Breastfeeding: Some, but not exclusively, pregnancies with follow up < 8 weeks or with supplemental feeding during the first 2 months. Denominator for this subgroup analysis is the number of pregnancies with available breastfeeding data (n=213)