

Table S1, continued. Changes of steroids, steroid molar ratios that may reflect activities of steroidogenic enzymes and balances between them, and of indices of MS severity after treatment with anti-MS drugs shown as re-transformed means with their 95% confidence intervals

Variable	n	Follicular phase		Luteal phase				
		Before treatment	n	After treatment	n	Before treatment	n	After treatment
Δ ⁴ Pregnanes								
Progesterone (P) [nM]	44	0.192 (0.152, 0.244)	43	0.213 (0.166, 0.273)	14	7.77 (2.98, 26.6)	17	5.25 (2.36, 13.9)
Stage: F=0.1, p=0.808, η _p ² =0.00108; PMC: F=48.2, p<0.001, η _p ² =0.467; Stage × PMC: F=0.4, p=0.527, η _p ² =0.00732; Subj: F=1.1, p=0.371, η _p ² =0.54, F0<L0								
17-Hydroxyprogesterone (17-OH-P) [nM]	44	1.11 (0.946, 1.3)	43	0.829 (0.701, 0.978)	14	2.76 (1.95, 3.91)	17	3.22 (2.36, 4.39)
Stage: F=0.2, p=0.635, η _p ² =0.00413; PMC: F=20.9, p<0.001, η _p ² =0.275; Stage × PMC: F=2, p=0.167, η _p ² =0.0345; Subj: F=2.1, p=0.003, η _p ² =0.695, F0<L0								
17,20α-Dihydroxy-4-pregnene-3-one (17-OH-20α-DHP) [nM]	41	0.683 (0.614, 0.758)	41	0.604 (0.54, 0.673)	13	1.28 (1.03, 1.58)	15	1.22 (0.995, 1.48)
Stage: F=0.9, p=0.355, η _p ² =0.0168; PMC: F=17.1, p<0.001, η _p ² =0.251; Stage × PMC: F=0.1, p=0.753, η _p ² =0.00196; Subj: F=3.3, p<0.001, η _p ² =0.78, F0<L0								
16α-Hydroxyprogesterone (16α-OH-P) [nM]	44	0.323 (0.267, 0.39)	43	0.259 (0.212, 0.316)	14	0.903 (0.597, 1.37)	17	0.901 (0.623, 1.3)
Stage: F=0.4, p=0.513, η _p ² =0.00782; PMC: F=14.6, p<0.001, η _p ² =0.21; Stage × PMC: F=0.3, p=0.571, η _p ² =0.00586; Subj: F=2.5, p<0.001, η _p ² =0.728, F0<L0								
20α-Dihydroprogesterone (20α-DHP) [nM]	44	0.311 (0.263, 0.367)	43	0.305 (0.258, 0.363)	14	3.59 (2.05, 6.87)	17	2.78 (1.73, 4.75)
Stage: F=0.4, p=0.542, η _p ² =0.00681; PMC: F=52.9, p<0.001, η _p ² =0.49; Stage × PMC: F=0.2, p=0.658, η _p ² =0.00359; Subj: F=1.8, p=0.013, η _p ² =0.661, F0<L0								
Conjugated 20α-dihydroprogesterone (20α-DHPC) [nM]	44	1.11 (0.917, 1.34)	42	0.658 (0.536, 0.805)	13	1.25 (0.809, 1.92)	17	1.5 (1.02, 2.19)
Stage: F=0.9, p=0.337, η _p ² =0.0174; PMC: F=2.4, p=0.126, η _p ² =0.0436; Stage × PMC: F=3.2, p=0.081, η _p ² =0.0565; Subj: F=1.6, p=0.038, η _p ² =0.644, F0>F1								
Δ ⁴ Androstanes								
Androstenedione (A) [nM]	44	2.87 (2.56, 3.2)	43	2.56 (2.26, 2.88)	14	2.66 (2.02, 3.4)	17	4 (3.27, 4.84)
Stage: F=2.6, p=0.116, η _p ² =0.0443; PMC: F=1.2, p=0.275, η _p ² =0.0216; Stage × PMC: F=5.8, p=0.019, η _p ² =0.0955; Subj: F=2.5, p<0.001, η _p ² =0.728								
Testosterone (T) [nM]	43	0.544 (0.479, 0.615)	43	0.613 (0.54, 0.692)	14	0.44 (0.326, 0.582)	16	0.766 (0.601, 0.967)
Stage: F=9.8, p=0.003, η _p ² =0.154; PMC: F=0, p=0.945, η _p ² =0.0000883; Stage × PMC: F=3.3, p=0.077, η _p ² =0.0568; Subj: F=3, p<0.001, η _p ² =0.765, L0<L1, F1<L1								
Estrogens								
Estrone sulfate (E1C) [nM]	43	1.67 (1.37, 2.02)	42	1.25 (1.01, 1.53)	14	3.3 (2.2, 4.87)	17	2.15 (1.47, 3.08)
Stage: F=4.7, p=0.035, η _p ² =0.0798; PMC: F=4.2, p=0.045, η _p ² =0.0726; Stage × PMC: F=0.2, p=0.663, η _p ² =0.00355; Subj: F=2.1, p=0.004, η _p ² =0.688, F0<L0								
Estradiol (E2) [pM]	32	145 (118, 177)	33	133 (108, 162)	8	293 (179, 474)	8	267 (162, 431)
Stage: F=0.2, p=0.662, η _p ² =0.00522; PMC: F=4.2, p=0.049, η _p ² =0.101; Stage × PMC: F=0, p=0.974, η _p ² =0.00003; Subj: F=3.5, p<0.001, η _p ² =0.791, F0<L0								
20-oxo-5α/β-Pregnanes								
5α-Dihydroprogesterone [nM]	39	0.14 (0.113, 0.174)	43	0.18 (0.146, 0.223)	14	1.16 (0.679, 2.09)	17	1.16 (0.714, 1.96)
Stage: F=0.5, p=0.495, η _p ² =0.00937; PMC: F=32.5, p<0.001, η _p ² =0.394; Stage × PMC: F=0.4, p=0.543, η _p ² =0.00744; Subj: F=1.3, p=0.157, η _p ² =0.609, F0<L0								
Allopregnanolone [nM]	42	0.179 (0.15, 0.215)	42	0.205 (0.171, 0.247)	14	1.41 (0.903, 2.27)	17	1.32 (0.888, 2.01)
Stage: F=0.1, p=0.802, η _p ² =0.00119; PMC: F=44.1, p<0.001, η _p ² =0.454; Stage × PMC: F=0.3, p=0.59, η _p ² =0.00552; Subj: F=2.1, p=0.004, η _p ² =0.693, F0<L0								
Allopregnanolone sulfate [nM]	44	4.3 (3.76, 4.93)	42	3.45 (3.01, 3.97)	13	11.9 (8.18, 18)	17	10.4 (7.56, 14.7)
Stage: F=1.8, p=0.19, η _p ² =0.0322; PMC: F=20.3, p<0.001, η _p ² =0.277; Stage × PMC: F=0.2, p=0.683, η _p ² =0.00317; Subj: F=2.4, p<0.001, η _p ² =0.731, F0<L0								
Isopregnanolone [nM]	41	0.219 (0.182, 0.264)	41	0.372 (0.31, 0.446)	14	0.568 (0.39, 0.823)	16	0.715 (0.506, 1.01)
Stage: F=6.1, p=0.017, η _p ² =0.105; PMC: F=8.2, p=0.006, η _p ² =0.137; Stage × PMC: F=0.7, p=0.413, η _p ² =0.0129; Subj: F=1.8, p=0.015, η _p ² =0.662, F0<F1, F0<L0								
Isopregnanolone sulfate [nM]	44	11.2 (9.97, 12.7)	42	12.9 (11.3, 14.6)	13	14.7 (11.1, 19.6)	17	17.6 (13.7, 22.9)
Stage: F=2, p=0.167, η _p ² =0.0358; PMC: F=2.2, p=0.145, η _p ² =0.0396; Stage × PMC: F=0, p=0.887, η _p ² =0.000387; Subj: F=2.5, p<0.001, η _p ² =0.737								
Pregnanolone [nM]	42	0.0726 (0.0566, 0.0932)	43	0.0973 (0.0756, 0.126)	14	0.63 (0.335, 1.26)	17	0.586 (0.334, 1.08)
Stage: F=0.3, p=0.591, η _p ² =0.00548; PMC: F=22.5, p<0.001, η _p ² =0.298; Stage × PMC: F=0.5, p=0.475, η _p ² =0.00968; Subj: F=1.1, p=0.32, η _p ² =0.558, F0<L0								
Conjugated pregnanolone [nM]	42	9.3 (7.88, 11)	43	11.3 (9.55, 13.3)	14	37.1 (25, 56.6)	17	35.4 (24.9, 51.6)
Stage: F=0.3, p=0.591, η _p ² =0.00548; PMC: F=22.5, p<0.001, η _p ² =0.298; Stage × PMC: F=0.5, p=0.475, η _p ² =0.00968; Subj: F=1.1, p=0.32, η _p ² =0.558, F0<L0								
Conjugated epipregnanolone [nM]	41	2.62 (2.38, 2.9)	39	2.31 (2.09, 2.57)	13	3.78 (3.02, 4.77)	17	3.66 (3.01, 4.48)
Stage: F=0.8, p=0.375, η _p ² =0.0157; PMC: F=7.1, p=0.011, η _p ² =0.124; Stage × PMC: F=0.2, p=0.638, η _p ² =0.00445; Subj: F=4.7, p<0.001, η _p ² =0.84, F0<L0								

Table S1, continued. Changes of steroids, steroid molar ratios that may reflect activities of steroidogenic enzymes and balances between them, and of indices of MS severity after treatment with anti-MS drugs shown as re-transformed means with their 95% confidence intervals

Variable	n	Follicular phase		Luteal phase	
		Before treatment	n After treatment	Before treatment	n After treatment
20 α -Hydroxy-5 α / β -pregnanes					
5 α ,20 α -Tetrahydroprogesterone [nM]	43	0.183 (0.155, 0.217)	42 0.219 (0.184, 0.261)	14 1.2 (0.765, 1.98)	17 1.14 (0.763, 1.77)
Stage: F=0.2, p=0.64, η_p^2 =0.00408; PMC: F=36.7, p<0.001, η_p^2 =0.405; Stage $\times$ PMC: F=0.4, p=0.509, η_p^2 =0.0081; Subj: F=2, p=0.005, η_p^2 =0.684, F0<L0					
Conjugated 5 α ,20 α -tetrahydroprogesterone [nM]	44	0.165 (0.134, 0.204)	42 0.12 (0.0966, 0.149)	13 0.815 (0.466, 1.5)	17 0.815 (0.498, 1.38)
Stage: F=0.7, p=0.405, η_p^2 =0.0131; PMC: F=23.7, p<0.001, η_p^2 =0.309; Stage $\times$ PMC: F=0.6, p=0.463, η_p^2 =0.0102; Subj: F=1.8, p=0.019, η_p^2 =0.662, F0<L0					
5 α -Pregnane-3 α ,20 α -diol [nM]	43	0.63 (0.552, 0.72)	42 0.81 (0.705, 0.932)	14 1.84 (1.35, 2.56)	17 3.34 (2.45, 4.63)
Stage: F=10.8, p=0.002, η_p^2 =0.166; PMC: F=31.2, p<0.001, η_p^2 =0.366; Stage $\times$ PMC: F=1, p=0.32, η_p^2 =0.0183; Subj: F=2.8, p<0.001, η_p^2 =0.75, F0<L0					
Conjugated 5 α -pregnane-3 α ,20 α -diol [nM]	44	27.9 (24.7, 31.5)	41 27.5 (24.2, 31.3)	12 117 (78.6, 183)	17 95.4 (69.7, 135)
Stage: F=0.5, p=0.483, η_p^2 =0.00952; PMC: F=33.6, p<0.001, η_p^2 =0.392; Stage $\times$ PMC: F=0.3, p=0.612, η_p^2 =0.00499; Subj: F=3.4, p<0.001, η_p^2 =0.789, F0<L0					
5 α -Pregnane-3 β ,20 α -diol [nM]	38	0.305 (0.208, 0.449)	42 0.182 (0.127, 0.261)	14 0.491 (0.225, 1.13)	17 0.358 (0.179, 0.74)
Stage: F=1.8, p=0.189, η_p^2 =0.0356; PMC: F=1.1, p=0.302, η_p^2 =0.0222; Stage $\times$ PMC: F=0.1, p=0.769, η_p^2 =0.00181; Subj: F=1, p=0.441, η_p^2 =0.562					
Conjugated 5 α -pregnane-3 β ,20 α -diol [nM]	44	122 (98.4, 153)	42 70.4 (56.3, 88.1)	13 155 (93.8, 261)	17 146 (94.6, 231)
Stage: F=2.4, p=0.131, η_p^2 =0.0425; PMC: F=2, p=0.168, η_p^2 =0.0356; Stage $\times$ PMC: F=1.3, p=0.267, η_p^2 =0.0232; Subj: F=1.7, p=0.024, η_p^2 =0.656, F0>F1					
Conjugated 5 β ,20 α -tetrahydroprogesterone [nM]	44	0.297 (0.25, 0.352)	42 0.288 (0.241, 0.345)	13 1.06 (0.707, 1.62)	17 0.801 (0.565, 1.15)
Stage: F=0.9, p=0.347, η_p^2 =0.0167; PMC: F=17.4, p<0.001, η_p^2 =0.248; Stage $\times$ PMC: F=0.5, p=0.503, η_p^2 =0.00853; Subj: F=2.1, p=0.003, η_p^2 =0.703, F0<L0					
5 β -Pregnane-3 α ,20 α -diol [nM]	44	0.258 (0.207, 0.32)	43 0.349 (0.279, 0.435)	14 1.06 (0.662, 1.69)	17 1.39 (0.913, 2.12)
Stage: F=2.3, p=0.134, η_p^2 =0.0404; PMC: F=17.2, p<0.001, η_p^2 =0.239; Stage $\times$ PMC: F=0, p=0.956, η_p^2 =0.0000565; Subj: F=1.7, p=0.02, η_p^2 =0.65, F0<L0					
Conjugated 5 β -pregnane-3 α ,20 α -diol [nM]	44	28.1 (24.5, 32.4)	42 35.2 (30.3, 41.1)	13 71.3 (49.3, 107)	17 78.1 (56, 113)
Stage: F=1.3, p=0.253, η_p^2 =0.0246; PMC: F=12.5, p<0.001, η_p^2 =0.19; Stage $\times$ PMC: F=0.3, p=0.614, η_p^2 =0.00483; Subj: F=3.2, p<0.001, η_p^2 =0.782, F0<L0					
5 β -Pregnane-3 β ,20 α -diol [nM]	44	0.232 (0.196, 0.275)	43 0.215 (0.182, 0.256)	14 0.235 (0.164, 0.348)	17 0.356 (0.251, 0.524)
Stage: F=1.2, p=0.286, η_p^2 =0.0207; PMC: F=0.9, p=0.352, η_p^2 =0.0158; Stage $\times$ PMC: F=2, p=0.167, η_p^2 =0.0344; Subj: F=2.2, p=0.002, η_p^2 =0.702					
Conjugated 5 β -pregnane-3 β ,20 α -diol [nM]	43	15.8 (13.8, 18.1)	41 13.9 (12, 16)	13 27.9 (20.3, 39.2)	17 24.6 (18.7, 32.9)
Stage: F=1, p=0.313, η_p^2 =0.0196; PMC: F=6.9, p=0.011, η_p^2 =0.118; Stage $\times$ PMC: F=0, p=0.958, η_p^2 =0.0000541; Subj: F=3.7, p<0.001, η_p^2 =0.807, F0<L0					
17-Hydroxy-20-oxo- a 20 α -hydroxy-5 α / β -pregnanes					
17-Hydroxyallopregnanolone sulfate [nM]	44	1.42 (1.23, 1.63)	43 1.02 (0.878, 1.19)	14 2.24 (1.66, 3)	17 1.75 (1.33, 2.29)
Stage: F=5.2, p=0.026, η_p^2 =0.087; PMC: F=5, p=0.029, η_p^2 =0.0836; Stage $\times$ PMC: F=0.1, p=0.831, η_p^2 =0.000837; Subj: F=3.5, p<0.001, η_p^2 =0.791, F0>F1, F0<L0					
17-Hydroxypregnanolone [nM]	38	0.0527 (0.0398, 0.0694)	41 0.0411 (0.031, 0.0541)	14 0.2 (0.118, 0.336)	17 0.188 (0.117, 0.3)
Stage: F=0.5, p=0.496, η_p^2 =0.00972; PMC: F=13.7, p<0.001, η_p^2 =0.222; Stage $\times$ PMC: F=0.1, p=0.732, η_p^2 =0.00246; Subj: F=1.7, p=0.027, η_p^2 =0.676, F0<L0					
Conjugated 17-hydroxypregnanolone [nM]	44	8.3 (7.25, 9.47)	43 5.86 (5.07, 6.76)	14 11.9 (8.92, 15.8)	17 8.65 (6.62, 11.2)
Stage: F=8, p=0.007, η_p^2 =0.127; PMC: F=3.2, p=0.082, η_p^2 =0.0541; Stage $\times$ PMC: F=0, p=0.961, η_p^2 =0.0000441; Subj: F=2.4, p<0.001, η_p^2 =0.721, F0>F1					
5 α -Pregnane-3 α ,17,20 α -triol [pM]	42	105 (89.6, 122)	42 129 (111, 150)	13 180 (130, 246)	15 128 (93.4, 173)
Stage: F=0.3, p=0.608, η_p^2 =0.00511; PMC: F=1.3, p=0.264, η_p^2 =0.0239; Stage $\times$ PMC: F=3.4, p=0.073, η_p^2 =0.0607; Subj: F=4.2, p<0.001, η_p^2 =0.819, F0<L0					
Conjugated 5 α -pregnane-3 α ,17,20 α -triol [nM]	44	29.5 (22.4, 38.9)	43 10.2 (7.68, 13.4)	14 16.9 (9.33, 31)	17 11.7 (6.82, 19.9)
Stage: F=9.1, p=0.004, η_p^2 =0.142; PMC: F=0.2, p=0.634, η_p^2 =0.00415; Stage $\times$ PMC: F=1.6, p=0.205, η_p^2 =0.029; Subj: F=1.9, p=0.011, η_p^2 =0.666, F0>F1					
5 β -Pregnane-3 α ,17,20 α -triol [nM]	42	1.82 (1.65, 2.01)	42 1.98 (1.79, 2.18)	14 2.42 (1.97, 2.94)	16 2.38 (1.97, 2.85)
Stage: F=0.2, p=0.703, η_p^2 =0.00277; PMC: F=2.4, p=0.128, η_p^2 =0.0433; Stage $\times$ PMC: F=0.3, p=0.608, η_p^2 =0.00501; Subj: F=5.3, p<0.001, η_p^2 =0.851					
Conjugated 5 β -pregnane-3 α ,17,20 α -triol [nM]	44	126 (107, 148)	42 55.1 (44.9, 67.1)	13 87.3 (57, 130)	17 67.1 (45.9, 95.8)
Stage: F=11.7, p=0.001, η_p^2 =0.178; PMC: F=0.1, p=0.742, η_p^2 =0.00202; Stage $\times$ PMC: F=2.6, p=0.114, η_p^2 =0.0455; Subj: F=3.4, p<0.001, η_p^2 =0.787, F0>F1					

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17-oxo-5 α / β -Androstanes									
5 α -Androstane-3,17-dione [nM]	42	0.25 (0.213, 0.292)	42	0.245 (0.208, 0.287)	14	0.25 (0.176, 0.35)	16	0.305 (0.222, 0.415)	
Stage: F=0.5, p=0.505, η_p^2 =0.00845; PMC: F=0.2, p=0.659, η_p^2 =0.00371; Stage $\times$ PMC: F=0.5, p=0.477, η_p^2 =0.00958; Subj: F=1.7, p=0.029, η_p^2 =0.644									
Androsterone [nM]	42	0.566 (0.516, 0.619)	42	0.522 (0.475, 0.574)	14	0.434 (0.35, 0.532)	16	0.575 (0.477, 0.688)	
Stage: F=1.5, p=0.22, η_p^2 =0.0282; PMC: F=0.3, p=0.574, η_p^2 =0.00601; Stage $\times$ PMC: F=4, p=0.052, η_p^2 =0.0696; Subj: F=4.4, p<0.001, η_p^2 =0.825									
Androsterone sulfate [μ M]	41	1.05 (0.913, 1.2)	40	1.18 (1.03, 1.35)	13	0.509 (0.357, 0.709)	15	0.651 (0.478, 0.872)	
Stage: F=2, p=0.162, η_p^2 =0.0388; PMC: F=8.6, p=0.005, η_p^2 =0.147; Stage $\times$ PMC: F=0.1, p=0.717, η_p^2 =0.00265; Subj: F=4.3, p<0.001, η_p^2 =0.826, FO>LO									
Epiandrosterone [nM]	41	0.344 (0.31, 0.381)	41	0.37 (0.333, 0.41)	13	0.304 (0.238, 0.383)	15	0.397 (0.321, 0.486)	
Stage: F=3.3, p=0.073, η_p^2 =0.0615; PMC: F=0, p=0.881, η_p^2 =0.000442; Stage $\times$ PMC: F=0.8, p=0.363, η_p^2 =0.0162; Subj: F=6.2, p<0.001, η_p^2 =0.87									
Epiandrosterone sulfate [nM]	40	303 (274, 335)	39	340 (308, 376)	13	197 (154, 248)	15	263 (213, 322)	
Stage: F=4.9, p=0.031, η_p^2 =0.0916; PMC: F=4.7, p=0.035, η_p^2 =0.0873; Stage $\times$ PMC: F=0.6, p=0.431, η_p^2 =0.0127; Subj: F=6.1, p<0.001, η_p^2 =0.871, FO>LO									
Etiocholanolone [nM]	41	0.246 (0.224, 0.27)	41	0.25 (0.227, 0.274)	14	0.209 (0.168, 0.256)	16	0.245 (0.203, 0.294)	
Stage: F=1.1, p=0.29, η_p^2 =0.0215; PMC: F=0.4, p=0.553, η_p^2 =0.00683; Stage $\times$ PMC: F=0.6, p=0.435, η_p^2 =0.0118; Subj: F=4.7, p<0.001, η_p^2 =0.835									
Etiocholanolone sulfate [nM]	42	78.5 (70.1, 87.7)	40	78.5 (69.7, 88.2)	13	52.3 (39, 68.5)	16	53 (40.9, 67.3)	
Stage: F=0, p=0.955, η_p^2 =0.0000634; PMC: F=4.7, p=0.035, η_p^2 =0.0843; Stage $\times$ PMC: F=0, p=0.962, η_p^2 =0.000046; Subj: F=3.9, p<0.001, η_p^2 =0.81, FO>LO									
Epietiicholanolone sulfate [nM]	42	23.9 (20.1, 28.4)	41	21.3 (17.9, 25.5)	13	9.44 (6.22, 14)	15	10.7 (7.35, 15.4)	
Stage: F=0, p=0.977, η_p^2 =0.0000162; PMC: F=8.4, p=0.006, η_p^2 =0.141; Stage $\times$ PMC: F=0.4, p=0.508, η_p^2 =0.00864; Subj: F=3.5, p<0.001, η_p^2 =0.793, FO>LO									
17 β -Hydroxy-5 α / β -androstanes									
5 α -Dihydrotestosterone [pM]	43	159 (134, 189)	43	210 (176, 251)	14	104 (71.5, 152)	16	135 (95.6, 192)	
Stage: F=3.3, p=0.077, η_p^2 =0.0567; PMC: F=2.4, p=0.125, η_p^2 =0.043; Stage $\times$ PMC: F=0, p=0.968, η_p^2 =0.0000307; Subj: F=2.4, p<0.001, η_p^2 =0.722									
Conjugated 5 α -dihydrotestosterone [nM]	42	1.04 (0.836, 1.29)	42	0.887 (0.715, 1.1)	13	0.975 (0.612, 1.57)	16	0.5 (0.32, 0.774)	
Stage: F=4.8, p=0.033, η_p^2 =0.0863; PMC: F=0.9, p=0.361, η_p^2 =0.0164; Stage $\times$ PMC: F=1.5, p=0.226, η_p^2 =0.0286; Subj: F=1.4, p=0.1, η_p^2 =0.618									
5 α -Androstane-3 α ,17 β -diol [pM]	42	91.6 (81.7, 103)	42	99.9 (89, 112)	14	84.8 (66.2, 109)	16	116 (92.1, 146)	
Stage: F=4.1, p=0.049, η_p^2 =0.0715; PMC: F=0, p=0.846, η_p^2 =0.000715; Stage $\times$ PMC: F=1, p=0.316, η_p^2 =0.019; Subj: F=4.9, p<0.001, η_p^2 =0.84									
Conjugated 5 α -androstane-3 α ,17 β -diol [nM]	42	30.9 (27.1, 35.2)	41	26 (22.6, 29.7)	13	13 (9.4, 17.8)	16	14.7 (11, 19.4)	
Stage: F=0.1, p=0.783, η_p^2 =0.0015; PMC: F=11.1, p=0.002, η_p^2 =0.178; Stage $\times$ PMC: F=1.1, p=0.292, η_p^2 =0.0218; Subj: F=3.2, p<0.001, η_p^2 =0.784, FO>LO									
Conjugated 5 α -androstane-3 β ,17 β -diol [nM]	44	53.2 (45.2, 62.5)	42	52.3 (44, 61.9)	13	25.8 (17.1, 38.1)	17	27.4 (19.2, 38.5)	
Stage: F=0, p=0.9, η_p^2 =0.000303; PMC: F=6.6, p=0.013, η_p^2 =0.111; Stage $\times$ PMC: F=0.1, p=0.826, η_p^2 =0.000917; Subj: F=2.6, p<0.001, η_p^2 =0.742, FO>LO									
Conjugated 5 β -androstane-3 α ,17 β -diol [nM]	42	5.56 (4.84, 6.37)	41	4.41 (3.8, 5.1)	13	5.01 (3.65, 6.79)	16	4.05 (3.01, 5.39)	
Stage: F=3.1, p=0.083, η_p^2 =0.0579; PMC: F=0.2, p=0.677, η_p^2 =0.00342; Stage $\times$ PMC: F=0, p=0.936, η_p^2 =0.000129; Subj: F=3.1, p<0.001, η_p^2 =0.774									
Conjugated 5 β -androstane-3 β ,17 β -diol [nM]	41	0.374 (0.306, 0.453)	41	0.258 (0.208, 0.319)	13	0.22 (0.133, 0.348)	15	0.231 (0.144, 0.355)	
Stage: F=0.8, p=0.372, η_p^2 =0.016; PMC: F=0.9, p=0.344, η_p^2 =0.0179; Stage $\times$ PMC: F=1.1, p=0.309, η_p^2 =0.0207; Subj: F=2.8, p<0.001, η_p^2 =0.76									

5α-DHA/5α,20α-THP	43	1.34 (1.15, 1.55)	42	0.995 (0.844, 1.17)	14	0.255 (0.146, 0.405)	17	0.382 (0.252, 0.553)
	Stage: F=0, p=0.975, $\eta_p^2=0.0000182$; PMC: F=22.3, p<0.001, $\eta_p^2=0.292$; Stage $\times$ PMC: F=3.8, p=0.058, $\eta_p^2=0.0652$; Subj: F=1.4, p=0.119, $\eta_p^2=0.596$, F0>L0							
3α,5α-THA/3α,5α-THP	43	2.93 (2.5, 3.44)	43	2.35 (2, 2.76)	14	0.361 (0.224, 0.546)	17	0.554 (0.385, 0.775)
	Stage: F=0.3, p=0.616, $\eta_p^2=0.00469$; PMC: F=47.3, p<0.001, $\eta_p^2=0.467$; Stage $\times$ PMC: F=3.4, p=0.069, $\eta_p^2=0.0598$; Subj: F=1.7, p=0.028, $\eta_p^2=0.647$, F0>L0							
3α,5α-THA/3α,5α-THP, C	43	222 (182, 270)	41	276 (225, 339)	13	27.5 (13.3, 48.7)	17	55.7 (34.6, 85.8)
	Stage: F=4.8, p=0.034, $\eta_p^2=0.0837$; PMC: F=30.5, p<0.001, $\eta_p^2=0.37$; Stage $\times$ PMC: F=0.7, p=0.415, $\eta_p^2=0.0128$; Subj: F=2.1, p=0.004, $\eta_p^2=0.7$, F0>L0							
3α,5α-THA/3α,5α,20α-PD	44	0.801 (0.703, 0.914)	43	0.597 (0.524, 0.683)	14	0.255 (0.189, 0.34)	17	0.204 (0.155, 0.265)
	Stage: F=5, p=0.03, $\eta_p^2=0.0831$; PMC: F=29.6, p<0.001, $\eta_p^2=0.35$; Stage $\times$ PMC: F=0.1, p=0.773, $\eta_p^2=0.00153$; Subj: F=2.7, p<0.001, $\eta_p^2=0.741$, F0>F1, F0>L0							
3α,5α-THA/3α,5α,20α-PD, C	42	38.9 (33.5, 45.1)	41	36.6 (31.3, 42.7)	13	3.9 (2.01, 6.55)	16	5.6 (3.4, 8.58)
	Stage: F=0.4, p=0.543, $\eta_p^2=0.00731$; PMC: F=52.8, p<0.001, $\eta_p^2=0.509$; Stage $\times$ PMC: F=0.9, p=0.348, $\eta_p^2=0.0173$; Subj: F=2.9, p<0.001, $\eta_p^2=0.765$, F0>L0							
3β,5α-THA/3β,5α-THP	44	1.71 (1.47, 2.01)	43	0.945 (0.806, 1.11)	14	0.511 (0.353, 0.727)	17	0.608 (0.441, 0.829)
	Stage: F=2.5, p=0.122, $\eta_p^2=0.0429$; PMC: F=11.2, p=0.002, $\eta_p^2=0.169$; Stage $\times$ PMC: F=6.1, p=0.016, $\eta_p^2=0.1$; Subj: F=1.5, p=0.084, $\eta_p^2=0.608$, F0>F1, F0>L0							
3β,5α-THA/3β,5α-THP, C	43	27.2 (23.8, 31.2)	42	24 (20.9, 27.6)	13	10.8 (7.8, 14.8)	16	11.2 (8.41, 14.8)
	Stage: F=0.1, p=0.712, $\eta_p^2=0.00259$; PMC: F=15.4, p<0.001, $\eta_p^2=0.225$; Stage $\times$ PMC: F=0.3, p=0.565, $\eta_p^2=0.00628$; Subj: F=3.1, p<0.001, $\eta_p^2=0.767$, F0>L0							
3β,5α-THA/3β,5α,20α-PD	38	1.22 (0.858, 1.72)	42	2.37 (1.71, 3.27)	14	0.815 (0.376, 1.65)	17	1.32 (0.691, 2.45)
	Stage: F=4.2, p=0.047, $\eta_p^2=0.0799$; PMC: F=1, p=0.325, $\eta_p^2=0.0202$; Stage $\times$ PMC: F=0.1, p=0.758, $\eta_p^2=0.002$; Subj: F=1.6, p=0.057, $\eta_p^2=0.657$							
3β,5α-THA/3β,5α,20α-PD, C	43	2.69 (2.16, 3.33)	42	4.74 (3.81, 5.9)	13	1.19 (0.686, 1.99)	16	1.57 (0.984, 2.44)
	Stage: F=4.5, p=0.039, $\eta_p^2=0.078$; PMC: F=7.7, p=0.008, $\eta_p^2=0.127$; Stage $\times$ PMC: F=0.5, p=0.483, $\eta_p^2=0.00933$; Subj: F=2.5, p<0.001, $\eta_p^2=0.729$, F0<F1, F0>L0							
3α,5β-THA/3α,5β-THP	42	2.86 (2.34, 3.51)	43	2.5 (2.04, 3.06)	14	0.359 (0.213, 0.568)	17	0.478 (0.313, 0.71)
	Stage: F=0.1, p=0.706, $\eta_p^2=0.00271$; PMC: F=36.7, p<0.001, $\eta_p^2=0.409$; Stage $\times$ PMC: F=1.1, p=0.311, $\eta_p^2=0.0194$; Subj: F=1.4, p=0.1, $\eta_p^2=0.612$, F0>L0							
3α,5β-THA/3α,5β-THP, C	42	5.59 (4.99, 6.27)	41	5.52 (4.9, 6.22)	13	1.87 (1.38, 2.48)	16	2.53 (1.97, 3.21)
	Stage: F=1.6, p=0.209, $\eta_p^2=0.0302$; PMC: F=25.7, p<0.001, $\eta_p^2=0.331$; Stage $\times$ PMC: F=1.5, p=0.226, $\eta_p^2=0.0281$; Subj: F=2.9, p<0.001, $\eta_p^2=0.758$, F0>L0							
3α,5β-THA/3α,5β,20α-PD	44	0.833 (0.687, 1.02)	43	0.723 (0.594, 0.884)	14	0.228 (0.15, 0.341)	17	0.222 (0.153, 0.319)
	Stage: F=0.2, p=0.624, $\eta_p^2=0.0044$; PMC: F=18, p<0.001, $\eta_p^2=0.246$; Stage $\times$ PMC: F=0.1, p=0.764, $\eta_p^2=0.00165$; Subj: F=1.2, p=0.212, $\eta_p^2=0.571$, F0>L0							
3α,5β-THA/3α,5β,20α-PD, C	39	3.06 (2.78, 3.36)	39	2.04 (1.83, 2.27)	13	0.469 (0.308, 0.669)	15	0.389 (0.254, 0.554)
	Stage: F=8.4, p=0.006, $\eta_p^2=0.146$; PMC: F=76.8, p<0.001, $\eta_p^2=0.61$; Stage $\times$ PMC: F=2.3, p=0.132, $\eta_p^2=0.0456$; Subj: F=3.8, p<0.001, $\eta_p^2=0.805$, F0>F1, F0>L0							
3β,5β-THA/3β,5β-THP, C	42	8.7 (7.44, 10.2)	41	8.65 (7.36, 10.2)	13	2.58 (1.71, 3.79)	16	3.33 (2.36, 4.62)
	Stage: F=0.6							

3α,5β-THA/3α,5β,17-PD	39	4.38 (3.55, 5.46)	42	5.37 (4.33, 6.72)	14	1.24 (0.823, 1.85)	17	1.71 (1.19, 2.46)
Stage: F=2.4, p=0.125, $\eta_p^2=0.0473$; PMC: F=16.5, p<0.001, $\eta_p^2=0.252$; Stage × PMC: F=0.2, p=0.697, $\eta_p^2=0.00311$; Subj: F=1.8, p=0.02, $\eta_p^2=0.682$, F0>L0								
3α,5β-THA/3α,5β,17-PD, C	39	8.4 (7.6, 9.27)	38	13.5 (12.2, 15)	12	6.24 (4.93, 7.84)	15	7.77 (6.35, 9.49)
Stage: F=15.4, p<0.001, $\eta_p^2=0.243$; PMC: F=6.9, p=0.011, $\eta_p^2=0.126$; Stage × PMC: F=1.7, p=0.198, $\eta_p^2=0.0343$; Subj: F=5.5, p<0.001, $\eta_p^2=0.857$, F0<F1								
3α,5α-THA/3α,5α,17α,20α-PT	42	5.43 (4.7, 6.26)	42	4.01 (3.46, 4.64)	14	2.79 (2.01, 3.84)	16	4.13 (3.08, 5.51)
Stage: F=0.1, p=0.745, $\eta_p^2=0.00202$; PMC: F=1.9, p=0.175, $\eta_p^2=0.0345$; Stage × PMC: F=6, p=0.018, $\eta_p^2=0.102$; Subj: F=2.3, p=0.002, $\eta_p^2=0.708$, F0>F1, F0>L0								
3α,5α-THA/3α,5α,17α,20α-PT, C	42	32.2 (24, 42.9)	40	126 (92.1, 172)	13	37.9 (19.7, 72.1)	16	62.3 (35.2, 111)
Stage: F=12.6, p<0.001, $\eta_p^2=0.195$; PMC: F=0.3, p=0.562, $\eta_p^2=0.00652$; Stage × PMC: F=2.1, p=0.156, $\eta_p^2=0.0383$; Subj: F=2.7, p<0.001, $\eta_p^2=0.743$, F0<F1								
103-3α,5β-THA/3α,5β,17α,20α-PT	43	137 (124, 151)	42	129 (116, 143)	14	91 (73.9, 112)	17	112 (92.7, 136)
Stage: F=0.8, p=0.373, $\eta_p^2=0.0147$; PMC: F=3.2, p=0.08, $\eta_p^2=0.0556$; Stage × PMC: F=1.9, p=0.174, $\eta_p^2=0.034$; Subj: F=2.7, p<0.001, $\eta_p^2=0.745$, F0>L0								
3α,5β-THA/3α,5β,17α,20α-PT, C	42	0.569 (0.482, 0.674)	40	1.62 (1.31, 2.04)	13	0.509 (0.354, 0.744)	16	0.62 (0.446, 0.877)
Stage: F=14.1, p<0.001, $\eta_p^2=0.214$; PMC: F=3.4, p=0.07, $\eta_p^2=0.0616$; Stage × PMC: F=4.7, p=0.035, $\eta_p^2=0.0825$; Subj: F=2.8, p<0.001, $\eta_p^2=0.748$, F0<F1								
103-11β-OH-A/F	44	130 (118, 144)	43	134 (121, 148)	13	116 (91, 147)	16	125 (101, 153)
Stage: F=0.3, p=0.592, $\eta_p^2=0.00537$; PMC: F=0.3, p=0.574, $\eta_p^2=0.00589$; Stage × PMC: F=0, p=0.847, $\eta_p^2=0.000695$; Subj: F=1.1, p=0.417, $\eta_p^2=0.532$								
103-11β-OH-A/F (RIA)	44	92.5 (82.9, 103)	42	89.4 (79.5, 99.9)	12	61.1 (43.2, 82.5)	14	92.5 (72.1, 116)
Stage: F=2.7, p=0.105, $\eta_p^2=0.0506$; PMC: F=0.9, p=0.354, $\eta_p^2=0.0169$; Stage × PMC: F=3.2, p=0.082, $\eta_p^2=0.0583$; Subj: F=1.3, p=0.163, $\eta_p^2=0.595$, F0>L0								
3β-Hydroxysteroid dehydrogenases (HSD3Bs)								
103-P/Preg	44	86 (69.6, 106)	43	79.1 (63.7, 98.6)	14	4120 (1480, 18200)	17	1760 (836, 4580)
Stage: F=1.5, p=0.222, $\eta_p^2=0.027$; PMC: F=56.8, p<0.001, $\eta_p^2=0.508$; Stage × PMC: F=0.5, p=0.487, $\eta_p^2=0.00884$; Subj: F=1.1, p=0.427, $\eta_p^2=0.53$, F0<L0								
103-P/PregC	44	1.42 (1.11, 1.82)	42	1.61 (1.24, 2.1)	13	101 (30.4, 579)	17	47.8 (19.4, 155)
Stage: F=0.2, p=0.655, $\eta_p^2=0.0038$; PMC: F=48.8, p<0.001, $\eta_p^2=0.479$; Stage × PMC: F=0.8, p=0.377, $\eta_p^2=0.0147$; Subj: F=1, p=0.446, $\eta_p^2=0.536$, F0<L0								
103-20α-DHP/20α-DHPreg	44	91.2 (79.3, 105)	43	93.6 (80.9, 109)	14	1010 (576, 2020)	17	640 (411, 1070)
Stage: F=0.8, p=0.373, $\eta_p^2=0.0145$; PMC: F=54.6, p<0.001, $\eta_p^2=0.498$; Stage × PMC: F=1, p=0.332, $\eta_p^2=0.0171$; Subj: F=1.8, p=0.015, $\eta_p^2=0.658$, F0<L0								
103-20α-DHP/20α-DHPreg, C	43	1.25 (1, 1.55)	42	0.945 (0.746, 1.19)	13	2.58 (1.6, 4.15)	16	3.69 (2.4, 5.68)
Stage: F=0.1, p=0.812, $\eta_p^2=0.0011$; PMC: F=9.1, p=0.004, $\eta_p^2=0.149$; Stage × PMC: F=2.1, p=0.153, $\eta_p^2=0.0389$; Subj: F=1.3, p=0.174, $\eta_p^2=0.59$, F0<L0								
17-OH-P/17-OH-Preg	44	0.175 (0.152, 0.201)	43	0.144 (0.125, 0.165)	14	0.662 (0.438, 1.08)	17	0.507 (0.36, 0.748)
Stage: F=2.6, p=0.116, $\eta_p^2=0.0443$; PMC: F=26.9, p<0.001, $\eta_p^2=0.328$; Stage × PMC: F=0, p=0.984, $\eta_p^2=0.00000765$; Subj: F=2.2, p=0.002, $\eta_p^2=0.698$, F0<L0								
17-OH-P/17-OH-PregC	42	0.0887 (0.0764, 0.103)	41	0.094 (0.0805, 0.11)	13	0.621 (0.403, 0.997)	16	0.554 (0.376, 0.843)
Stage: F=0, p=0.922, $\eta_p^2=0.000188$; PMC: F=47.4, p<0.001, $\eta_p^2=0.481$; Stage × PMC: F=0.2, p=0.64, $\eta_p^2=0.00433$; Subj: F=2.6, p<0.001, $\eta_p^2=0.745$, F0<L0								
16α-OH-P/16α-OH-Preg	44	0.698 (0.611, 0.801)	43	0.577 (0.504, 0.662)	14	2.59 (1.72, 4.21)	17	1.99 (1.42, 2.92)
Stage: F=2.6, p=0.116, $\eta_p^2=0.0443$; PMC: F=26.9, p<0.001, $\eta_p^2=0.328$; Stage × PMC: F=0, p=0.984, $\eta_p^2=0.00000765$; Subj: F=2.2, p=0.002, $\eta_p^2=0.698$, F0<L0								
A/DHEA	42	0.331 (0.302, 0.363)	41	0.256 (0.235, 0.28)	13	0.341 (0.279, 0.423)	16	0.394 (0.326, 0.48)
Stage: F=0.6, p=0.448, $\eta_p^2=0.0111$; PMC: F=2.6, p=0.11, $\eta_p^2=0.0483$; Stage × PMC: F=4.6, p=0.037, $\eta_p^2=0.0814$; Subj: F=2.6, p<0.001, $\eta_p^2=0.739$, F0>F1								
103-A/DHEAC	44	1.05 (0.907, 1.22)	42	0.951 (0.811, 1.11)	13	1.78 (1.26, 2.52)	17	1.97 (1.46, 2.67)
Stage: F=0, p=0.992, $\eta_p^2=0.00000199$; PMC: F=6.9, p=0.011, $\eta_p^2=0.115$; Stage × PMC: F=0.4, p=0.517, $\eta_p^2=0.00796$; Subj: F=1.9, p=0.009, $\eta_p^2=0.679$, F0<L0								
T/Adiol	44	0.296 (0.263, 0.331)	43	0.342 (0.304, 0.383)	14	0.286 (0.218, 0.368)	17	0.412 (0.332, 0.505)
Stage: F=6.6, p=0.013, $\eta_p^2=0.108$; PMC: F=0.2, p=0.648, $\eta_p^2=0.00382$; Stage × PMC: F=1, p=0.321, $\eta_p^2=0.0179$; Subj: F=2.3, p<0.001, $\eta_p^2=0.714$								
103-T/AdiolC	44	0.61 (0.51, 0.728)	42	0.805 (0.668, 0.969)	13	1.36 (0.909, 2.05)	17	1.69 (1.18, 2.43)
Stage: F=2.3, p=0.138, $\eta_p^2=0.0411$; PMC: F=7.5, p=0.008, $\eta_p^2=0.124$; Stage × PMC: F=0, p=0.859, $\eta_p^2=0.000602$; Subj: F=2.3, p=0.001, $\eta_p^2=0.719$, F0<L0								

Table S1, continued. Changes of steroids, steroid molar ratios that may reflect activities of steroidogenic enzymes and balances between them, and of indices of MS severity after treatment with anti-MS drugs shown as re-transformed means with their 95% confidence intervals

Variable	n	Follicular phase			Luteal phase			
		Before treatment	n	After treatment	n	Before treatment	n	After treatment
Conjugated/unconjugated steroids (sulfotransferase 2A1/steroid sulfatase, SULT2A1/STS)								
Preg C/U	44	58.9 (50.2, 69.5)	42	46.3 (39.3, 54.8)	13	31.9 (22.8, 45.2)	17	25.7 (19.2, 34.5)
		Stage: F=2.6, p=0.11, $\eta_p^2=0.0475$; PMC: F=6.1, p=0.017, $\eta_p^2=0.104$; Stage $\times$ PMC: F=0, p=0.987, $\eta_p^2=0.0000048$; Subj: F=1.7, p=0.024, $\eta_p^2=0.656$, F0>L0						
20 α -DHPreg C/U	44	231 (202, 264)	42	196 (171, 225)	13	148 (112, 197)	17	118 (92.7, 152)
		Stage: F=2.8, p=0.1, $\eta_p^2=0.0502$; PMC: F=5.6, p=0.022, $\eta_p^2=0.0951$; Stage $\times$ PMC: F=0.1, p=0.789, $\eta_p^2=0.00136$; Subj: F=1.6, p=0.054, $\eta_p^2=0.633$, F0>L0						
17-OH-Preg C/U	42	1.59 (1.41, 1.82)	42	1.32 (1.18, 1.48)	13	1.28 (1.02, 1.66)	15	1.19 (0.963, 1.51)
		Stage: F=1.7, p=0.201, $\eta_p^2=0.0319$; PMC: F=0.8, p=0.391, $\eta_p^2=0.0145$; Stage $\times$ PMC: F=0.2, p=0.636, $\eta_p^2=0.00442$; Subj: F=2.5, p<0.001, $\eta_p^2=0.734$						
DHEA C/U	44	302 (259, 353)	42	242 (208, 282)	13	207 (152, 289)	17	180 (137, 238)
		Stage: F=1.9, p=0.173, $\eta_p^2=0.0347$; PMC: F=2.2, p=0.148, $\eta_p^2=0.0391$; Stage $\times$ PMC: F=0.1, p=0.831, $\eta_p^2=0.000869$; Subj: F=1.5, p=0.058, $\eta_p^2=0.63$						
Adiol C/U	44	485 (418, 561)	42	421 (359, 492)	13	226 (154, 324)	17	241 (173, 330)
		Stage: F=0.1, p=0.771, $\eta_p^2=0.00162$; PMC: F=7.3, p=0.009, $\eta_p^2=0.121$; Stage $\times$ PMC: F=0.4, p=0.515, $\eta_p^2=0.00805$; Subj: F=1.9, p=0.008, $\eta_p^2=0.682$, F0>L0						
3 β ,16 α ,17 β -AT C/U	44	415 (339, 504)	42	350 (281, 432)	13	212 (124, 344)	17	209 (131, 320)
		Stage: F=0.3, p=0.615, $\eta_p^2=0.0048$; PMC: F=3.2, p=0.081, $\eta_p^2=0.0563$; Stage $\times$ PMC: F=0.1, p=0.709, $\eta_p^2=0.00264$; Subj: F=1.2, p=0.263, $\eta_p^2=0.569$						
20 α -DHP C/U	43	3.6 (2.92, 4.46)	42	2.12 (1.71, 2.64)	13	0.262 (0.139, 0.45)	16	0.336 (0.198, 0.54)
		Stage: F=0.7, p=0.411, $\eta_p^2=0.0131$; PMC: F=40.5, p<0.001, $\eta_p^2=0.438$; Stage $\times$ PMC: F=3, p=0.09, $\eta_p^2=0.0542$; Subj: F=2, p=0.006, $\eta_p^2=0.692$, F0>F1, F0>L0						
5 α -DHT C/U	43	6.28 (4.74, 8.39)	42	3.97 (2.98, 5.31)	13	9.58 (5.06, 19)	17	3.5 (2, 6.12)
		Stage: F=8.4, p=0.006, $\eta_p^2=0.139$; PMC: F=0.1, p=0.757, $\eta_p^2=0.00186$; Stage $\times$ PMC: F=0.9, p=0.347, $\eta_p^2=0.017$; Subj: F=1.4, p=0.137, $\eta_p^2=0.605$						
3 α ,5 α -THP C/U	42	20.7 (17.2, 25.2)	41	14.1 (11.8, 16.9)	12	13.3 (9.06, 20.4)	16	12.4 (8.9, 17.8)
		Stage: F=2, p=0.169, $\eta_p^2=0.0376$; PMC: F=0.9, p=0.348, $\eta_p^2=0.0176$; Stage $\times$ PMC: F=0.7, p=0.404, $\eta_p^2=0.014$; Subj: F=1.6, p=0.041, $\eta_p^2=0.649$, F0>F1						
3 β ,5 α -THP C/U	42	49.8 (41.9, 60)	41	32.7 (28.2, 38.4)	12	23.1 (17.3, 31.8)	15	31.1 (23.3, 43.2)
		Stage: F=0.1, p=0.827, $\eta_p^2=0.000969$; PMC: F=2.8, p=0.098, $\eta_p^2=0.0537$; Stage $\times$ PMC: F=5, p=0.031, $\eta_p^2=0.0902$; Subj: F=1.8, p=0.022, $\eta_p^2=0.664$, F0>F1, F0>L0						
3 α ,5 β -THP C/U	42	49.8 (41.9, 60)	41	32.7 (28.2, 38.4)	12	23.1 (17.3, 31.8)	15	31.1 (23.3, 43.2)
		Stage: F=0.1, p=0.827, $\eta_p^2=0.000969$; PMC: F=2.8, p=0.098, $\eta_p^2=0.0537$; Stage $\times$ PMC: F=5, p=0.031, $\eta_p^2=0.0902$; Subj: F=1.8, p=0.022, $\eta_p^2=0.664$, F0>F1, F0>L0						
3 α ,5 β ,17-PD C/U	38	157 (121, 206)	41	134 (105, 174)	14	59.5 (38.6, 94.6)	17	48.4 (33.1, 72.3)
		Stage: F=0.9, p=0.349, $\eta_p^2=0.0183$; PMC: F=8.5, p=0.005, $\eta_p^2=0.151$; Stage $\times$ PMC: F=0, p=0.853, $\eta_p^2=0.000718$; Subj: F=1.7, p=0.025, $\eta_p^2=0.677$, F0>L0						
5 α ,20 α -THP C/U	44	0.818 (0.64, 1.06)	42	0.483 (0.383, 0.616)	13	0.539 (0.327, 0.942)	17	0.534 (0.344, 0.866)
		Stage: F=1.5, p=0.223, $\eta_p^2=0.0279$; PMC: F=0.2, p=0.687, $\eta_p^2=0.00309$; Stage $\times$ PMC: F=1.1, p=0.3, $\eta_p^2=0.0202$; Subj: F=1.6, p=0.05, $\eta_p^2=0.635$, F0>F1						
3 α ,5 α ,20 α -PD C/U	44	45.3 (38, 53.9)	42	33.2 (27.7, 39.8)	13	51.4 (34.6, 77.2)	17	32.6 (23.2, 46)
		Stage: F=5.9, p=0.019, $\eta_p^2=0.0995$; PMC: F=0, p=0.847, $\eta_p^2=0.00071$; Stage $\times$ PMC: F=0.2, p=0.689, $\eta_p^2=0.00304$; Subj: F=2.8, p<0.001, $\eta_p^2=0.757$						
3 β ,5 α ,20 α -PD C/U	38	302 (223, 417)	41	404 (295, 565)	13	299 (161, 599)	17	322 (185, 598)
		Stage: F=0.5, p=0.504, $\eta_p^2=0.00975$; PMC: F=0.1, p=0.802, $\eta_p^2=0.00139$; Stage $\times$ PMC: F=0.1, p=0.733, $\eta_p^2=0.00255$; Subj: F=0.8, p=0.825, $\eta_p^2=0.498$						
3 α ,5 β ,20 α -PD C/U	44	116 (95.3, 141)	42	105 (85.3, 129)	13	82.4 (53.7, 128)	17	85.2 (58.5, 126)
		Stage: F=0, p=0.849, $\eta_p^2=0.000693$; PMC: F=0.8, p=0.377, $\eta_p^2=0.0148$; Stage $\times$ PMC: F=0.1, p=0.736, $\eta_p^2=0.00216$; Subj: F=2.1, p=0.004, $\eta_p^2=0.696$						
3 β ,5 β ,20 α -PD C/U	44	68.2 (53.8, 86.1)	42	66.4 (51.7, 84.8)	13	154 (92, 254)	17	83.3 (52.1, 131)
		Stage: F=2.4, p=0.129, $\eta_p^2=0.043$; PMC: F=2.1, p=0.158, $\eta_p^2=0.0373$; Stage $\times$ PMC: F=1.6, p=0.218, $\eta_p^2=0.0285$; Subj: F=2.6, p<0.001, $\eta_p^2=0.742$, F0<L0						
3 α ,5 α ,17,20 α -PT C/U	44	317 (229, 444)	43	73.2 (53.7, 100)	14	95.7 (49.1, 190)	17	70.9 (39.1, 130)
		Stage: F=10.3, p=0.002, $\eta_p^2=0.158$; PMC: F=1.5, p=0.224, $\eta_p^2=0.0267$; Stage $\times$ PMC: F=3.4, p=0.07, $\eta_p^2=0.0584$; Subj: F=1.5, p=0.08, $\eta_p^2=0.61$, F0>F1, F0>L0						
3 α ,5 β ,17,20 α -PT C/U	44	75.8 (62.8, 91)	43	25.9 (20.1, 32.9)	14	43.2 (26.4, 67.2)	17	31.1 (19.4, 47.7)
		Stage: F=14.2, p<0.001, $\eta_p^2=0.205$; PMC: F=0.4, p=0.516, $\eta_p^2=0.0077$; Stage $\times$ PMC: F=3.4, p=0.072, $\eta_p^2=0.0577$; Subj: F=1.2, p=0.294, $\eta_p^2=0.554$, F0>F1						

Table S1, continued. Changes of steroids, steroid molar ratios that may reflect activities of steroidogenic enzymes and balances between them, and of indices of MS severity after treatment with anti-MS drugs shown as re-transformed means with their 95% confidence intervals

Variable	n	Follicular phase		n	After treatment	n	Luteal phase	
		Before treatment					Before treatment	After treatment
5 α -Reductases (SRD5As)								
(5 α -DHP+3 α / β ,5 α -THP)/P	38	2.64 (2.17, 3.19)	42	4.53 (3.82, 5.33)	14	0.409 (0.163, 0.766)	17	0.48 (0.234, 0.823)
Stage: F=4.4, p=0.041, η_p^2 =0.0822; PMC: F=36.8, p<0.001, η_p^2 =0.429; Stage $\times$ PMC: F=1.8, p=0.191, η_p^2 =0.0347; Subj: F=1.2, p=0.249, η_p^2 =0.589, F0<F1, F0>L0								
(3 α / β ,5 α -THP, C)/P	44	84.7 (66.8, 107)	42	80.7 (62.8, 103)	13	4.84 (0.928, 11.7)	17	7.21 (2.74, 14.5)
Stage: F=0.2, p=0.692, η_p^2 =0.00298; PMC: F=32.4, p<0.001, η_p^2 =0.38; Stage $\times$ PMC: F=0.3, p=0.584, η_p^2 =0.00571; Subj: F=1.1, p=0.354, η_p^2 =0.552, F0>L0								
(5 α ,20 α -THP+3 α / β ,5 α ,20 α -PD)/20 α -DHP	38	4.74 (4.08, 5.51)	42	4.72 (4.09, 5.46)	14	1.12 (0.799, 1.54)	17	1.4 (1.05, 1.85)
Stage: F=0.7, p=0.399, η_p^2 =0.0149; PMC: F=38.3, p<0.001, η_p^2 =0.444; Stage $\times$ PMC: F=0.6, p=0.445, η_p^2 =0.0122; Subj: F=2, p=0.007, η_p^2 =0.711, F0>L0								
(5 α ,20 α -THP+3 α / β ,5 α ,20 α -PD)/20 α -DHP, C	44	158 (129, 193)	42	156 (127, 194)	13	229 (144, 380)	17	182 (122, 277)
Stage: F=0.4, p=0.527, η_p^2 =0.00761; PMC: F=0.7, p=0.422, η_p^2 =0.0122; Stage $\times$ PMC: F=0.3, p=0.609, η_p^2 =0.00498; Subj: F=1.4, p=0.132, η_p^2 =0.601								
3 α ,5 α ,17-PD, C/17-OH-P	44	1.23 (1.04, 1.46)	43	1.19 (1, 1.42)	14	0.826 (0.562, 1.2)	17	0.575 (0.403, 0.811)
Stage: F=1.7, p=0.204, η_p^2 =0.0292; PMC: F=4.4, p=0.042, η_p^2 =0.0734; Stage $\times$ PMC: F=0.9, p=0.346, η_p^2 =0.0162; Subj: F=2.3, p<0.001, η_p^2 =0.715								
103:3 α ,5 α ,17,20 α -PT/17-OH-20 α -DHP	42	145 (129, 162)	42	217 (193, 245)	14	141 (111, 181)	16	105 (83.6, 131)
Stage: F=0.2, p=0.631, η_p^2 =0.00438; PMC: F=4.4, p=0.042, η_p^2 =0.076; Stage $\times$ PMC: F=10.2, p=0.002, η_p^2 =0.161; Subj: F=3.4, p<0.001, η_p^2 =0.785, F0<F1								
3 α ,5 α ,17,20 α -PT/17-OH-20 α -DHP, C	42	52.8 (41.3, 67.8)	40	14.1 (11.1, 18)	13	9.45 (5.62, 15.9)	17	7.4 (4.72, 11.5)
Stage: F=14.3, p<0.001, η_p^2 =0.215; PMC: F=10, p=0.003, η_p^2 =0.161; Stage $\times$ PMC: F=5.2, p=0.026, η_p^2 =0.0913; Subj: F=2.9, p<0.001, η_p^2 =0.758, F0>F1, F0>L0								
(5 α -DHA+3 α / β ,5 α -THA)/A	44	0.41 (0.367, 0.458)	43	0.503 (0.448, 0.566)	14	0.458 (0.359, 0.589)	17	0.455 (0.365, 0.569)
Stage: F=1, p=0.32, η_p^2 =0.018; PMC: F=0, p=0.976, η_p^2 =0.0000164; Stage $\times$ PMC: F=0.9, p=0.345, η_p^2 =0.0163; Subj: F=1.5, p=0.071, η_p^2 =0.614								
3 α / β ,5 α -THA, C/A	41	503 (432, 586)	40	691 (589, 811)	13	245 (173, 345)	15	225 (162, 308)
Stage: F=0.7, p=0.404, η_p^2 =0.0137; PMC: F=14.3, p<0.001, η_p^2 =0.218; Stage $\times$ PMC: F=1.7, p=0.202, η_p^2 =0.0317; Subj: F=2.5, p<0.001, η_p^2 =0.728, F0<F1, F0>L0								
(5 α -DHT+3 α ,5 α ,17 β -AD)/T	43	0.5 (0.446, 0.564)	43	0.552 (0.49, 0.626)	14	0.463 (0.362, 0.603)	16	0.364 (0.293, 0.456)
Stage: F=0.6, p=0.446, η_p^2 =0.0108; PMC: F=1.8, p=0.186, η_p^2 =0.0322; Stage $\times$ PMC: F=2.3, p=0.132, η_p^2 =0.0415; Subj: F=2.2, p=0.002, η_p^2 =0.702								
(5 α -DHTC+3 α / β ,5 α ,17 β -ADC)/T	42	145 (122, 172)	41	118 (98.3, 140)	12	135 (90.2, 199)	16	85.5 (59, 122)
Stage: F=4.7, p=0.035, η_p^2 =0.086; PMC: F=0.5, p=0.502, η_p^2 =0.00906; Stage $\times$ PMC: F=0.5, p=0.482, η_p^2 =0.00993; Subj: F=2.8, p<0.001, η_p^2 =0.762								
103:(11 β -OH-3 α / β ,5 α -THA)/11 β -OH-A	43	42.4 (36.5, 48.9)	43	46.3 (39.9, 53.3)	14	54.3 (39.7, 72.2)	16	36.4 (26, 49.1)
Stage: F=1.5, p=0.22, η_p^2 =0.0277; PMC: F=0, p=0.964, η_p^2 =0.0000382; Stage $\times$ PMC: F=3, p=0.091, η_p^2 =0.0519; Subj: F=4.5, p<0.001, η_p^2 =0.828								
(11 β -OH-3 α / β ,5 α -THAC)/11 β -OH-A	44	0.614 (0.505, 0.738)	43	0.823 (0.684, 0.981)	14	0.724 (0.473, 1.06)	17	0.503 (0.328, 0.734)
Stage: F=0, p=0.867, η_p^2 =0.000515; PMC: F=0.3, p=0.586, η_p^2 =0.00543; Stage $\times$ PMC: F=3.1, p=0.083, η_p^2 =0.0538; Subj: F=2.1, p=0.003, η_p^2 =0.695								

Table S1, continued. Changes of steroids, steroid molar ratios that may reflect activities of steroidogenic enzymes and balances between them, and of indices of MS severity after treatment with anti-MS drugs shown as re-transformed means with their 95% confidence intervals

Variable	Follicular phase				Luteal phase			
	n	Before treatment	n	After treatment	n	Before treatment	n	After treatment
Subfamily 1C aldoketoreductase type 2 (AKR1C2) vs. vs. 17β-hydroxysteroid dehydrogenase type 2 and 6 (HSD17B2 and HSD17B6)								
3α,5α-THP/3β,5α-THP	43	0.973 (0.846, 1.11)	43	0.587 (0.497, 0.687)	14	2.26 (1.75, 2.89)	17	1.62 (1.26, 2.04)
Stage: F=12.9, p<0.001, η ² =0.193; PMC: F=20.3, p<0.001, η ² =0.273; Stage × PMC: F=0.1, p=0.763, η ² =0.0017; Subj: F=1.2, p=0.209, η ² =0.576, F0>F1, F0<L0								
3α,5α-THP/3β,5α-THP, C	44	5.07 (4.73, 5.44)	42	5.25 (4.88, 5.67)	12	6.54 (5.49, 7.92)	16	4.73 (4.11, 5.46)
Stage: F=4.3, p=0.043, η ² =0.0762; PMC: F=0.4, p=0.541, η ² =0.00725; Stage × PMC: F=5.3, p=0.026, η ² =0.0922; Subj: F=2.5, p<0.001, η ² =0.732, L0>L1, F0<L0, F1>L1								
3α,5β-THP/3β,5β-THP, C	44	5.07 (4.73, 5.44)	42	5.25 (4.88, 5.67)	12	6.54 (5.49, 7.92)	16	4.73 (4.11, 5.46)
Stage: F=4.3, p=0.043, η ² =0.0762; PMC: F=0.4, p=0.541, η ² =0.00725; Stage × PMC: F=5.3, p=0.026, η ² =0.0922; Subj: F=2.5, p<0.001, η ² =0.732, L0>L1, F0<L0, F1>L1								
3α,5α,20α-PD/3β,5α,20α-PD	37	3.53 (2.35, 5.14)	41	5.33 (3.73, 7.46)	14	5.74 (2.69, 11.2)	17	10.3 (5.64, 18)
Stage: F=3.1, p=0.084, η ² =0.0621; PMC: F=1.3, p=0.257, η ² =0.0273; Stage × PMC: F=0.1, p=0.731, η ² =0.00253; Subj: F=1.3, p=0.211, η ² =0.608								
3α,5α,20α-PD/3β,5α,20α-PD, C	44	0.303 (0.252, 0.36)	42	0.423 (0.357, 0.495)	13	0.884 (0.67, 1.14)	17	0.903 (0.711, 1.13)
Stage: F=1.5, p=0.234, η ² =0.0266; PMC: F=17.6, p<0.001, η ² =0.25; Stage × PMC: F=0.8, p=0.383, η ² =0.0144; Subj: F=2.5, p<0.001, η ² =0.737, F0<L0								
3α,5β,20α-PD/3β,5β,20α-PD, C	44	1.81 (1.56, 2.1)	42	2.42 (2.06, 2.87)	13	2.66 (1.87, 3.91)	17	3.46 (2.48, 5)
Stage: F=3.6, p=0.062, η ² =0.0642; PMC: F=2.2, p=0.148, η ² =0.0391; Stage × PMC: F=0, p=0.871, η ² =0.000501; Subj: F=1.5, p=0.085, η ² =0.618								
3α,5α-THA/3β,5α-THA	44	1.61 (1.46, 1.79)	43	1.31 (1.2, 1.45)	13	1.34 (1.09, 1.68)	16	1.44 (1.19, 1.77)
Stage: F=0.6, p=0.462, η ² =0.01; PMC: F=0.1, p=0.776, η ² =0.00151; Stage × PMC: F=2, p=0.167, η ² =0.035; Subj: F=1.9, p=0.009, η ² =0.673, F0>F1								
3α,5α-THA/3β,5α-THA, C	40	2.98 (2.82, 3.15)	41	3.26 (3.08, 3.44)	12	3.36 (2.95, 3.85)	12	3.33 (2.92, 3.82)
Stage: F=0.6, p=0.449, η ² =0.0118; PMC: F=0.6, p=0.455, η ² =0.0114; Stage × PMC: F=0.7, p=0.404, η ² =0.0143; Subj: F=3.2, p<0.001, η ² =0.77								
3α,5β-THA/3β,5β-THA, C	42	3.22 (2.84, 3.63)	41	3.33 (2.93, 3.78)	13	4.64 (3.51, 6.16)	15	4.12 (3.19, 5.33)
Stage: F=0.1, p=0.708, η ² =0.00273; PMC: F=2.1, p=0.151, η ² =0.0393; Stage × PMC: F=0.4, p=0.546, η ² =0.00705; Subj: F=2.8, p<0.001, η ² =0.749								
3α,5α,17β-AD/3β,5α,17β-AD, C	42	0.553 (0.521, 0.587)	41	0.498 (0.468, 0.529)	13	0.53 (0.465, 0.606)	16	0.579 (0.513, 0.654)
Stage: F=0, p=0.867, η ² =0.000533; PMC: F=0.3, p=0.564, η ² =0.00656; Stage × PMC: F=2.6, p=0.114, η ² =0.0483; Subj: F=5.4, p<0.001, η ² =0.857								
3α,5β,17β-AD/3β,5β,17β-AD, C	43	16.3 (13.8, 19.5)	42	17.8 (14.9, 21.6)	13	20.2 (13.7, 32.2)	16	14.5 (10.5, 20.8)
Stage: F=0.6, p=0.441, η ² =0.0115; PMC: F=0, p=0.996, η ² =0.00000534; Stage × PMC: F=1.4, p=0.244, η ² =0.026; Subj: F=1, p=0.539, η ² =0.521								
11β-OH-3α,5α-THA/11β-OH-3β,5α-THA	42	20.2 (17.7, 23.2)	42	19.4 (17, 22.3)	14	13.7 (10.6, 18)	16	14.2 (11.2, 18.2)
Stage: F=0, p=0.982, η ² =0.00000937; PMC: F=3, p=0.089, η ² =0.0535; Stage × PMC: F=0.1, p=0.781, η ² =0.00147; Subj: F=1.9, p=0.011, η ² =0.668								
11β-OH-3α,5α-THA/11β-OH-3β,5α-THA, C	44	36.6 (31.9, 41.9)	43	33.1 (28.7, 38.1)	14	19.2 (13.5, 26.6)	17	14.6 (10.5, 20)
Stage: F=1.9, p=0.169, η ² =0.0341; PMC: F=10, p=0.003, η ² =0.153; Stage × PMC: F=0.3, p=0.615, η ² =0.00463; Subj: F=2.7, p<0.001, η ² =0.745, F0>L0								
3α,5α-THP/5α-DHP	38	1.5 (1.26, 1.77)	42	1.23 (1.03, 1.45)	14	1.31 (0.897, 1.83)	17	1.22 (0.86, 1.66)
Stage: F=0.9, p=0.338, η ² =0.0187; PMC: F=0.1, p=0.767, η ² =0.00181; Stage × PMC: F=0.2, p=0.688, η ² =0.00333; Subj: F=1.2, p=0.225, η ² =0.594								
3α,5α-THPC/5α-DHP	39	29.2 (22.8, 37.6)	42	19.1 (15.2, 24.2)	13	10.8 (6.75, 17.6)	17	9.76 (6.44, 14.9)
Stage: F=1.7, p=0.204, η ² =0.0334; PMC: F=5.9, p=0.019, η ² =0.11; Stage × PMC: F=0.4, p=0.518, η ² =0.00876; Subj: F=1.3, p=0.147, η ² =0.623, F0>L0								
3α,5α,20α-PD/5α,20α-THP, C	44	162 (132, 201)	42	224 (178, 283)	13	127 (80.4, 206)	17	122 (81.3, 185)
Stage: F=0.5, p=0.491, η ² =0.00899; PMC: F=1.6, p=0.208, η ² =0.0298; Stage × PMC: F=0.7, p=0.414, η ² =0.0126; Subj: F=1.4, p=0.13, η ² =0.602								
3α,5β,20α-PD/5β,20α-THP, C	43	118 (98.1, 141)	42	138 (114, 165)	13	94.5 (60.9, 142)	16	122 (83.8, 175)
Stage: F=1.6, p=0.211, η ² =0.0299; PMC: F=0.3, p=0.565, η ² =0.00641; Stage × PMC: F=0.1, p=0.791, η ² =0.00136; Subj: F=2.1, p=0.003, η ² =0.703								
3α,5α-THA/5α-DHA	44	2.29 (2.07, 2.53)	43	2.13 (1.92, 2.36)	14	1.79 (1.42, 2.24)	17	1.9 (1.55, 2.32)
Stage: F=0, p=0.949, η ² =0.0000744; PMC: F=1.3, p=0.266, η ² =0.0224; Stage × PMC: F=0.4, p=0.519, η ² =0.00761; Subj: F=1.6, p=0.034, η ² =0.637								
3α,5α-THAC/5α-DHA	41	4.72 (3.89, 5.69)	40	5.15 (4.23, 6.23)	13	1.55 (0.856, 2.56)	15	1.66 (0.977, 2.62)
Stage: F=0.2, p=0.681, η ² =0.00334; PMC: F=11.3, p=0.002, η ² =0.181; Stage × PMC: F=0, p=0.928, η ² =0.00016; Subj: F=2, p=0.007, η ² =0.68, F0>L0								

