

**Supplemental Table 4.** Comparisons of lyso-Gb<sub>3</sub> and analogue levels in plasma and urine and Gb<sub>3</sub>, in urine between never treated and treated patients, before and after treatment. Pre- and post-treatment levels were compared overall and pairwise. Lyso-Gb<sub>3</sub>(+50) data could not be analyzed due to many results below the limit of detection. Lyso-Gb<sub>3</sub> and analogue values are expressed as median (Q1-Q3). Interval values are expressed as mean (SD) and represent the time between the date of measurement and date of treatment. LOD: limit of detection; NTr: never treated; BTr: before treatment; ATr: after treatment

	NEVER TREATED	TREATED (overall)		p-value			TREATED (pairwise)		p-value
	(NTr)	before treatment (BTr)	after treatment (ATr)	NTr vs. BTr	BTr vs. ATr	NTr vs. ATr	before treatment (BTr)	after treatment (ATr)	BTr vs. ATr
Plasma (nM)									
n	20	33	35				32	32	
interval (years)		0.23 (0.33)	1.16 (0.76)				0.22 (0.33)	1.15 (0.72)	
Lyso-Gb <sub>3</sub> (-28)	0.11 (<lod-0.32)	0.58 (0.22-1.04)	0.15 (<lod-0.40)	0.001	<0.001	0.76	0.57 (0.19-1.02)	0.16 (<lod-0.41)	<0.001
Lyso-Gb <sub>3</sub> (-2)	2.50 (1.70-3.84)	4.26 (2.46-6.00)	3.06 (1.48-4.10)	0.005	0.003	0.73	4.25 (2.40-6.12)	3.07 (1.63-4.24)	<0.001
Lyso-Gb <sub>3</sub>	8.16 (6.11-11.02)	12.39 (9.44-20.06)	9.55 (6.41-14.23)	0.001	0.01	0.38	12.36 (9.15-19.83)	9.62 (6.45-14.49)	<0.001
Lyso-Gb <sub>3</sub> (+16)	0.25 (<lod-0.54)	0.92 (0.53-2.27)	0.53 (<lod-1.12)	<0.001	0.006	0.06	0.99 (0.51-2.33)	0.54 (<lod-1.17)	<0.001
Lyso-Gb <sub>3</sub> (+18)	0.10 (<lod-0.79)	0.50 (<lod-0.85)	<lod (<lod-0.32)	0.17	0.004	0.38	0.50 (<lod-0.82)	<lod (<lod-0.34)	<0.001
Lyso-Gb <sub>3</sub> (+34)	<lod (<lod- <lod)	0.36 (<lod-0.69)	<lod (<lod-0.24)	0.001	<0.001	0.28	0.36 (<lod-0.70)	<lod (<lod-0.25)	<0.001
Lyso-Gb <sub>3</sub> (+50)	<lod (<lod- <lod)	<lod (<lod- <lod)	<lod (<lod- <lod)	-	-	-	<lod (<lod- <lod)	<lod (<lod- <lod)	-
Urine (pM/mM creat.)									
n	19	14	34				13	13	
interval (years)		0.42 (0.43)	2.17 (1.64)				0.41 (0.42)	0.80 (0.56)	
Lyso-Gb <sub>3</sub> (-28)	7.08 (3.62-14.40)	22.26 (10.25-33.30)	5.48 (<lod-8.46)	0.02	<0.001	0.38	20.88 (9.67-28.00)	6.59 (2.74-10.96)	<0.001
Lyso-Gb <sub>3</sub> (-12)	47.11 (35.58-81.15)	111.90 (45.69-163.60)	37.25 (29.41-65.56)	0.02	<0.001	0.19	110.40 (45.50-175.50)	48.23 (26.98-86.77)	<0.001
Lyso-Gb <sub>3</sub> (-2)	14.11 (2.06-16.24)	26.36 (16.17-42.46)	8.42 (1.26-17.08)	0.002	<0.001	0.61	23.53 (15.57-35.80)	14.20 (7.92-20.29)	<0.001
Lyso-Gb <sub>3</sub>	14.48 (2.72-26.56)	34.58 (9.35-46.13)	11.40 (<lod-21.77)	0.08	0.008	0.35	33.27 (7.90-43.84)	24.45 (8.42-31.80)	0.20
Lyso-Gb <sub>3</sub> (+14)	13.30 (5.12-21.06)	30.40 (17.60-49.40)	11.27 (6.58-22.19)	0.002	<0.001	0.96	27.30 (16.85-51.23)	16.01 (8.83-31.50)	<0.001
Lyso-Gb <sub>3</sub> (+16)	119.60 (80.95-168.40)	237.91 (141.9-424.6)	116.3 (83.40-178.2)	0.011	<0.001	0.85	224.0 (128.7-436.9)	125.7 (89.10-314.0)	0.005
Lyso-Gb <sub>3</sub> (+34)	69.19 (44.04-112.21)	148.18 (87.28-196.58)	59.66 (41.40-81.31)	0.002	<0.001	0.55	146.33 (84.74-197.64)	70.10 (50.87-107.64)	0.005
Lyso-Gb <sub>3</sub> (+50)	42.19 (32.73-49.92)	67.99 (45.53-98.79)	42.59 (31.40-62.26)	0.004	0.02	0.75	65.28 (40.77-100.6)	47.26 (34.50-83.45)	0.13
Gb <sub>3</sub> (µg/mmol creatinine)	16.70 (10.20-49.00)	31.02 (18.75-42.87)	12.96 (6.75-18.19)	0.21	<0.001	0.06	32.19 (18.21-43.39)	15.99 (11.42-20.12)	0.006