Table 1: Quantitative Analysis of Ceramides Using Liquid Chromatography Tandem Mass spectrometry (LC-MS/MS)

Class	Serial No	Molecular Species	Q1 (m/z)	Q3 (m/z)
Ceramides	1	d18:1/12:0	482.9	264.4
	2	d18:1/16:0	538.9	264.4
	3	d18:1/18:0	566.3	264.4
	4	d18:1/20:0	594.8	264.4
	5	d18:1/22:0	622.5	264.4
	6	d18:1/24:0	650.9	264.4
	7	d18:1/26:0	678.9	264.4
	8	d18:1/16:1	536.9	264.4
	9	d18:1/18:1	564.3	264.4
	10	d18:1/20:1	592.8	264.4
	11	d18:1/22:1	620.5	264.4
	12	d18:1/24:1	648.9	264.4
	13	d18:1/26:1	676.9	264.4
Dihydroceramides (DHCer)	14	d18:0/16:0	540.9	266.4
	15	d18:0/18:0	568.8	266.4
	16	d18:0/20:0	596.8	266.4
	17	d18:0/22:0	624.5	266.4
	18	d18:0/24:0	652.9	266.4
	19	d18:0/26:0	680.95	266.4
Monohexosyl-ceramides (Glu or Gal Ceramides)	20	d18:1/16:1	698.4	264.4
	21	d18:1/18:1	726.09	264.4
	22	d18:1/20:1	754.15	264.4
	23	d18:1/22:1	782.2	264.4
	24	d18:1/24:1	810.25	264.4
	25	d18:1/26:1	838.31	264.4
	26	d18:1/16:0	700.04	264.4
	27	d18:1/18:0	728.09	264.4
	28	d18:1/20:0	756.15	264.4
	29	d18:1/22:0	784.2	264.4
	30	d18:1/24:0	812.25	264.4
	31	d18:1/26:0	840.31	264.4
	32	d18:1/16:0	702.05	266.4

DIhydroGlc or Galceramides (DHGlc or GalCer)				
	33	d18:1/18:0	730.09	266.4
	34	d18:1/20:0	758.15	266.4
	35	d18:1/22:0	786.2	266.4
	36	d18:1/24:0	814.25	266.4
Dihexosylceramides (Lactosylceramides)	38	d18:1/16:1	860.18	264.4
	39	d18:1/18:1	888.24	264.4
	40	d18:1/20:1	916.29	264.4
	41	d18:1/22:1	944.34	264.4
	42	d18:1/24:1	972.39	264.4
	43	d18:1/26:1	1000.45	264.4
	44	d18:1/16:0	862.18	264.4
	45	d18:1/18:0	890.24	264.4
	46	d18:1/20:0	918.29	264.4
	47	d18:1/22:0	946.34	264.4
	48	d18:1/24:0	974.39	264.4
	49	d18:1/26:0	1002.45	264.4

Table 2: Quantitative Analysis of Sphingomyelins with LC-MS/MS

Class	**Serial No**	**Molecular Species**	**Q1 (m/z)**	**Q3 (m/z)**
Sphingomyelins	1	d18:1/12:0	647.7	184.1
	2	d18:1/16:0	703.6	184.1
	3	d18:1/18:0	731.6	184.1
	4	d18:1/20:0	759.6	184.1
	5	d18:1/22:0	787.7	184.1
	6	d18:1/24:0	815.7	184.1
	7	d18:1/26:0	843.7	184.1
	8	d18:1/16:1	701.6	184.1
	9	d18:1/18:1	729.6	184.1
	10	d18:1/20:1	757.4	184.1
	11	d18:1/22:1	785.6	184.1
	12	d18:1/24:1	813.7	184.1
	13	d18:1/26:1	841.7	184.1
	14	d18:0/16:0	706.6	184.1

Dihydrosphingomyelins (DHSM)	15	d18:0/18:0	734.6	184.1
	16	d18:0/20:0	761.6	184.1
	17	d18:0/22:0	789.7	184.1
	18	d18:0/24:0	817.7	184.1
	19	d18:0/26:0	845.7	184.1

Table 3: Quantitative Analysis of Sulfatides Using LC-MS/MS Method

Class	**Serial No**	**Molecular Species**	**Q1 (m/z)**	**Q3 (m/z)**
Sulfatides	1	ST 17:0 (IS)	792.7	96.9
	2	ST 16:1	776.7	96.9
	3	ST 16:0	778.7	96.9
	4	ST 18:1	804.7	96.9
	5	ST 18:0	806.7	96.9
	6	ST 20:1	832.7	96.9
	7	ST 20:0	834.7	96.9
	8	ST 22:1	860.7	96.9
	9	ST 22:0	862.7	96.9
	10	ST 23:0	876.6	96.9
	11	ST 24:1	888.7	96.9
	12	ST 24:0	890.7	96.9
	13	ST 25:1	902.7	96.9
	14	ST 26:1	916.7	96.9
	15	ST 26:0	918.6	96.9
Hydroxy-sulfatides	16	ST 16:0-OH	794.7	96.9
	17	ST 18:1-OH	820.7	96.9
	18	ST 18:0-OH	822.7	96.9
	19	ST 20:0-OH	850.7	96.9
	20	ST 22:1-OH	876.7	96.9
	21	ST 22:0-OH	878.7	96.9
	22	ST 23:0-OH	892.7	96.9
	23	ST 24:1-OH	904.7	96.9
	24	ST 24:0-OH	906.7	96.9
	25	ST 25:1-OH	918.7	96.9

Table 4: Quantitative Analysis of Eicosanoids Using LC-MRM Method

Serial No	Common name	Abbreviation	Q1 (m/z)	Q3 (m/z)
1	(d4) Thromboxane B2	(d4) TXB2	373	173
2	(d4) Prostaglandin F2a	(d4) PGF2a	357	197
3	(d4) Prostaglandin E2	(d4) PGE2	355	275
4	(d4) Prostaglandin D2	(d4) PGD2	355	275
5	(d4) 15-deoxy-Prostalandin J2	(d4) 15d-PGJ2	319	275
6	(d4) 9,10-dihydroxy-octadecenoic acid	(d4) 9, 10 diHOME	317	203
7	(d4)12,13-dihydroxy-octadecenoic acid	(d4) 12, 13 diHOME	317	185
8	(d5) Leukotriene C4	(d5) LTC4	630	272
9	(d8) Arachidonic acid	(d8) AA	311	267
10	(d5) Eicosapentaenoic acid	(d5) EPA	306	262
11	(d5) Dohexacosaenoic acid	(d5) DHA	332	234
12	6-keto-Prostaglandin F1a	6k-PGF1a	369	163
13	Thromboxane B2	TXB2	369	169
14	Prostaglandin F2a	PGF2a	353	193
15	Prostaglandin E2	PGE2	351	271
16	Prostaglandin D2	PGD2	351	271
17	11-beta-Prostaglandin F2a	11bPGF2a	353	193
18	Thromboxane B1	TXB1	371	171
19	Prostaglandin F1a	PGF1a	355	293
20	Prostaglandin E1	PGE1	353	273
21	Prostaglandin D1	PGD1	353	273
22	Ä17-6-keto-Prostaglandin F1a	Ä17 6k-PGF1a	367	163
23	Thromboxane B3	TXB3	367	169
24	Prostaglandin F3a	PGF3a	351	193
25	Prostaglandin E3	PGE3	349	269
26	Prostaglandin D3	PGD3	349	269
27	dihomo Prostaglandin F2a	dihomo PGF2a	381	221
28	dihomo Prostaglandin E2	dihomo PGE2	379	299
29	12-hydroxy-eicosatetraenoic acid	12-HETE	265	109
30	Arachidonic acid	AA	303	259
31	Eicosapentaenoic acid	EPA	301	257
32	Docohexaenoic acid	DHA	327	229

Table 5: Quantitative Analysis of Fatty Acids Using LC-SRM/MS Method

Serial No	Molecular Species	Q1 (m/z)	Q3 (m/z)
1	C14:0	227.3	227.3
2	C16:1	253.3	253.3
3	C16:0	255.3	255.3
4	C17:0 (IS)	269.3	269.3
5	C18:3	277.3	277.3
6	C18:2	279.3	279.3
7	C18:1	281.3	281.3
8	C18:0	283.3	283.3
9	C20:5	301.3	301.3
10	C20:4	303.3	303.3
11	C20:3	305.3	305.3
12	C20:2	307.3	307.3
13	C20:1	309.3	309.3
14	C20:0	311.3	311.3
15	C22:6	327.3	327.3
16	C22:5	329.3	329.3
17	C22:4	331.3	331.3
18	C22:2	335.3	335.3
19	C22:1	337.3	337.3
20	C22:0	339.3	339.3
21	C24:1	353.3	353.3
22	C25:0	365.3	365.3
23	C26:0	367.3	367.3
24	C27:0	381.3	381.3
25	C28:0	395.3	395.3
26	C29:0	409.3	409.3