

Supplementary Table 1. Metabolomics profile of controls and patients with non-secreting adrenocortical adenomas, autonomous cortisol secretion, and Cushing's syndrome.

		Controls (n=42)	Non secreting adenomas (n=27)	Autonomous cortisol secretion (n=31)	Cushing's syndrome		P value ^a		Cushing's syndrome (n=49)
					ACTH-independent (n=22)	ACTH-dependent (n=27)			
Carnitine and acylcarnitines									
	DL-Carnitine (C0)	1.099 ± 0.323	1.226 ± 0.286	1.122 ± 0.343	1.047 ± 0.235	0.938 ± 0.249	0.014		0.987 ± 0.246
	Decanoyl-L-carnitine (C10)	1.945 ± 0.997	2.304 ± 1.52	2.035 ± 0.856	2.331 ± 1.514	2.115 ± 1.243	0.771		2.212 ± 1.361
	Decenoyl-L-carnitine (C10:1)	1.172 ± 0.61	1.25 ± 0.549	1.156 ± 0.575	1.246 ± 0.613	1.302 ± 0.787	0.878		1.277 ± 0.707
	DecadienoyL-L-carnitine (C10:2)	1.009 ± 0.218	1.196 ± 0.355	1.132 ± 0.337	1.066 ± 0.31	1.105 ± 0.319	0.148		1.087 ± 0.312
	Dodecanoyl-L-carnitine (Lauroylcarnitine) (C12)	1.588 ± 0.796	1.821 ± 0.989	1.665 ± 0.775	1.564 ± 0.747	1.62 ± 0.957	0.799		1.595 ± 0.86
	Dodecanedioyl-L-carnitine (C12-DC)	0.951 ± 0.069	0.965 ± 0.067	0.977 ± 0.09	0.937 ± 0.073	0.974 ± 0.081	0.310		0.957 ± 0.079
	Dodecenoyl-L-carnitine (C12:1)	1.948 ± 1.172	1.868 ± 0.818	1.841 ± 0.865	1.648 ± 0.784	1.833 ± 1.041	0.801		1.75 ± 0.929
	Tetradecanoyl-L-carnitine (Myristoylcarnitine) (C14)	1.914 ± 0.711	2.198 ± 1.003	2.05 ± 0.722	1.889 ± 0.599	2.116 ± 0.989	0.744		2.014 ± 0.837
	Tetradecenoyl-L-carnitine (C14:1)	2.498 ± 1.557	2.673 ± 1.517	2.526 ± 1.529	2.227 ± 1.194	2.456 ± 1.62	0.838		2.354 ± 1.435
	Hydroxytetradecenoyl-L-carnitine (C14:1-OH)	1.636 ± 0.607	1.845 ± 0.709	1.713 ± 0.569	1.596 ± 0.63	1.737 ± 0.695	0.724		1.674 ± 0.664
	Tetradecadien-L-carnitine (C14:2)	1.397 ± 0.899	1.418 ± 0.727	1.336 ± 0.928	1.247 ± 0.607	1.451 ± 1.02	0.898		1.359 ± 0.857
	Hydrohytetradecadien-L-carnitine (C14:2-OH)	1.267 ± 0.316	1.359 ± 0.401	1.242 ± 0.284	1.2 ± 0.259	1.248 ± 0.299	0.576		1.226 ± 0.28
	Hexadecanoyl-L-carnitine (Palmitoylcarnitine) (C16)	1.67 ± 0.57	1.897 ± 0.74	1.777 ± 0.6	1.816 ± 0.479	1.921 ± 0.774	0.583		1.874 ± 0.654
	Hydroxyhexadecanoyl-L-carnitine (C16-OH)	1.307 ± 0.405	1.567 ± 0.798	1.447 ± 0.457	1.424 ± 0.531	1.42 ± 0.524	0.490		1.422 ± 0.521

	Hexadecenoyl-L-carnitine (C16:1)	1.541 ± 0.46	1.641 ± 0.475	1.631 ± 0.442	1.539 ± 0.392	1.679 ± 0.563	0.685		1.616 ± 0.494
	Hydroxyhexadecenoyl-L-carnitine (C16:1-OH)	1.504 ± 0.461	1.718 ± 0.682	1.668 ± 0.566	1.482 ± 0.616	1.533 ± 0.514	0.496		1.51 ± 0.556
	Hexadecadienyl-L-carnitine (C16:2)	1.313 ± 0.416	1.471 ± 0.534	1.434 ± 0.563	1.324 ± 0.412	1.436 ± 0.578	0.723		1.386 ± 0.508
	Hydroxyhexadecadienyl-L-carnitine (C16:2-OH)	1.081 ± 0.202	1.128 ± 0.217	1.091 ± 0.18	1.06 ± 0.17	1.107 ± 0.241	0.852		1.086 ± 0.211
	Octadecanoyl-L-carnitine (Stearoylcarnitine) (C18)	1.558 ± 0.599	1.893 ± 0.742	1.983 ± 0.943	1.901 ± 0.79	1.965 ± 0.808	0.064		1.936 ± 0.792
	Octadecenoyl-L-carnitine (Oleylcarnitine) (C18:1)	1.944 ± 0.899	2.065 ± 0.787	2.021 ± 0.816	2.006 ± 0.666	2.401 ± 1.388	0.533		2.224 ± 1.13
	Hydroxyoctadecenoyl-L-carnitine (C18:1-OH)	1.269 ± 0.319	1.357 ± 0.354	1.326 ± 0.359	1.336 ± 0.386	1.292 ± 0.351	0.867		1.312 ± 0.364
	Octadecadienyl-L-carnitine (Linoleylcarnitine) (C18:2)	1.06 ± 0.556	0.998 ± 0.445	0.946 ± 0.48	1.021 ± 0.371	1.429 ± 0.87	0.146		1.246 ± 0.715
	Acetyl-L-carnitine (C2)	1.869 ± 0.76	2.101 ± 1.001	1.991 ± 1.214	1.839 ± 0.843	1.741 ± 1.152	0.633		1.785 ± 1.016
	Propionyl-L-carnitine (C3)	1.096 ± 0.362	1.301 ± 0.523	1.195 ± 0.537	1.288 ± 0.465	1.02 ± 0.394	0.091		1.141 ± 0.444
	Hydroxypropionyl-L-carnitine (C3-OH)	0.969 ± 0.179	1.041 ± 0.216	0.958 ± 0.138	1.031 ± 0.18	1.007 ± 0.129	0.266		1.018 ± 0.153
	Propenoyl-L-carnitine (C3:1)	0.965 ± 0.192	1.003 ± 0.201	0.972 ± 0.23	0.915 ± 0.15	0.995 ± 0.185	0.584		0.959 ± 0.173
	Butyryl-L-carnitine (C4)	1.431 ± 2.061	1.381 ± 0.981	1.255 ± 0.633	1.35 ± 0.714	1.211 ± 0.826	0.825		1.273 ± 0.773
	Hydroxybutyryl-L-carnitine (C4-OH [C3-DC])	0.835 ± 0.39	0.834 ± 0.335	0.87 ± 0.434	0.826 ± 0.293	0.913 ± 0.936	0.974		0.874 ± 0.717
	Butenyl-L-carnitine (C4:1)	1.071 ± 0.201	1.165 ± 0.292	1.23 ± 0.264	1.114 ± 0.339	1.109 ± 0.281	0.119		1.111 ± 0.305
	Valeryl-L-carnitine (C5)	1.136 ± 0.432	1.258 ± 0.546	1.152 ± 0.54	1.107 ± 0.39	1.069 ± 0.766	0.480		1.086 ± 0.62
	Methylglutaryl-L-carnitine (C5-M-DC)	1.005 ± 0.19	1.026 ± 0.24	1.076 ± 0.282	1.035 ± 0.236	1.02 ± 0.265	0.796		1.027 ± 0.25
	Methylmalonyl-L-carnitine (C5-OH [C3-DC-M])	0.983 ± 0.117	1.019 ± 0.161	1.104 ± 0.207	1.037 ± 0.179	1.028 ± 0.205	0.105		1.032 ± 0.192
	Tiglyl-L-carnitine (C5:1)	0.944 ± 0.156	0.992 ± 0.208	1.023 ± 0.176	0.991 ± 0.182	0.957 ± 0.188	0.425		0.973 ± 0.184

	Glutaconyl-L-carnitine (C5:1-DC)	0.98 ± 0.23	1.139 ± 0.497	1.174 ± 0.511	1.026 ± 0.19	1.023 ± 0.246	0.336		1.024 ± 0.22
	Fumaryl-L-carnitine (C6 [C4:1-DC])	1.521 ± 0.537	1.867 ± 0.681	1.778 ± 0.737	1.805 ± 0.9	1.702 ± 1.085	0.242		1.748 ± 0.998
	Glutaryl-L-carnitine (C5-DC [C6-OH])	1.182 ± 0.271	1.213 ± 0.288	1.322 ± 0.421	1.353 ± 0.39	1.246 ± 0.459	0.303		1.294 ± 0.428
	Hexenoyl-L-carnitine (C6:1)	0.978 ± 0.162	1.054 ± 0.15	1.064 ± 0.18	1.014 ± 0.156	1.015 ± 0.147	0.141		1.015 ± 0.15
	Pimelyl-L-carnitine (C7-DC)	1.428 ± 0.624	1.458 ± 0.531	1.503 ± 0.67	1.371 ± 0.565	1.334 ± 0.539	0.783		1.351 ± 0.546
	Octanoyl-L-carnitine (C8)	1.602 ± 0.808	1.919 ± 1.215	1.628 ± 0.637	2.013 ± 1.399	1.724 ± 0.957	0.541		1.854 ± 1.172
	Nonayl-L-carnitine (C9)	1.74 ± 0.66	1.813 ± 0.794	1.914 ± 0.805	1.796 ± 0.585	1.722 ± 0.718	0.875		1.755 ± 0.656
Amino acids and biogenic amines									
	Alanine	0.968 ± 0.304	0.895 ± 0.17	0.822 ± 0.259	0.989 ± 0.405	0.903 ± 0.292	0.189		0.942 ± 0.346
	Arginine	0.731 ± 0.191	0.822 ± 0.276	0.82 ± 0.303	0.754 ± 0.223	0.69 ± 0.278	0.202		0.718 ± 0.254
	Asparagine	3.033 ± 0.609	2.682 ± 0.844	2.646 ± 0.693^b	2.7 ± 0.571	2.595 ± 0.929	0.018		2.642 ± 0.783^b
	Aspartate	0.519 ± 0.261	0.607 ± 0.425	0.982 ± 1.431	0.645 ± 0.273	0.501 ± 0.193	0.055		0.565 ± 0.241
	Citrulline	1.271 ± 0.396	1.306 ± 0.551	1.584 ± 0.55	1.24 ± 0.401	1.272 ± 0.418	0.095		1.258 ± 0.407
	Glutamine	2.076 ± 0.404	1.919 ± 0.726	1.899 ± 0.546	1.901 ± 0.323	1.849 ± 0.588	0.111		1.873 ± 0.483
	Glutamate	0.373 ± 0.218	0.494 ± 0.571	0.526 ± 0.454	0.402 ± 0.262	0.455 ± 0.317	0.382		0.432 ± 0.292
	Glycine	1.066 ± 0.429	1.08 ± 0.461	1.041 ± 0.509	1.046 ± 0.294	1.017 ± 0.427	0.950		1.03 ± 0.37
	Histidine	1.196 ± 0.216	1.127 ± 0.214	1.05 ± 0.25^b	1.051 ± 0.178	1.003 ± 0.215	0.002[*]		1.025 ± 0.199^b
	Isoleucine	1.135 ± 0.272	1.161 ± 0.369	1.096 ± 0.384	1.003 ± 0.408	0.948 ± 0.22	0.053		0.973 ± 0.316
	Leucine	1.278 ± 0.276	1.285 ± 0.365	1.175 ± 0.396	1.152 ± 0.445	1.092 ± 0.265	0.076		1.119 ± 0.355
	Lysine	1.086 ± 0.193	1.051 ± 0.149	0.989 ± 0.198	1.04 ± 0.175	0.993 ± 0.136	0.129		1.014 ± 0.155

	Methionine	0.851 ± 0.21	0.811 ± 0.238	0.764 ± 0.259	0.787 ± 0.237	0.726 ± 0.244	0.285		0.754 ± 0.24
	Ornithine	1.008 ± 0.426	0.992 ± 0.292	1.111 ± 0.351	1.072 ± 0.418	1.094 ± 0.353	0.449		1.084 ± 0.38
	Phenylalanine	1.156 ± 0.202	1.123 ± 0.189	1.07 ± 0.27	1.091 ± 0.224	1.072 ± 0.228	0.315		1.081 ± 0.224
	Proline	0.922 ± 0.254	0.958 ± 0.207	0.914 ± 0.295	0.837 ± 0.265	0.767 ± 0.248	0.022		0.798 ± 0.256^b
	Serine	1.085 ± 0.304	1.098 ± 0.296	1.032 ± 0.382	0.974 ± 0.208	0.906 ± 0.314	0.062		0.936 ± 0.271
	Threonine	0.908 ± 0.232	0.821 ± 0.205	0.809 ± 0.278^b	0.823 ± 0.194	0.734 ± 0.227	0.028		0.774 ± 0.216^b
	Tryptophan	1.379 ± 0.327	1.281 ± 0.314	1.118 ± 0.377^b	1.132 ± 0.234	1.119 ± 0.299	0.004[*]		1.125 ± 0.269^b
	Tyrosine	1.147 ± 0.319	1.203 ± 0.305	1.029 ± 0.331	0.985 ± 0.291	0.874 ± 0.255	0.000[*]		0.924 ± 0.275^b
	Valine	1.301 ± 0.232	1.294 ± 0.276	1.165 ± 0.274^b	1.118 ± 0.291	1.088 ± 0.223	0.001[*]		1.101 ± 0.253^b
	Acetyloronithine	1.69 ± 1.216	1.633 ± 1.972	1.956 ± 1.041	1.697 ± 0.598	3.302 ± 5.486	0.199		2.582 ± 4.136
	Asymmetric dimethylarginine	1.352 ± 0.281	1.304 ± 0.338	1.274 ± 0.365	1.362 ± 0.298	1.263 ± 0.405	0.493		1.308 ± 0.361
	Alpha-Aminoadipic acid	0.914 ± 0.275	0.908 ± 0.315	0.899 ± 0.407	0.841 ± 0.321	0.843 ± 0.264	0.800		0.842 ± 0.288
	Creatinine	1.088 ± 0.265	1.016 ± 0.271	1.189 ± 0.597	1.232 ± 0.601	1.063 ± 0.454	0.464		1.139 ± 0.526
	Kynurenine	1.552 ± 0.434	1.492 ± 0.436	1.368 ± 0.45	1.282 ± 0.519	1.24 ± 0.54	0.009[*]		1.259 ± 0.526^b
	Methioninesulfoxide	0.615 ± 0.251	1.797 ± 4.987	1.489 ± 4.203	0.514 ± 0.197	0.715 ± 0.756	0.282		0.63 ± 0.591
	Putrescine	6.497 ± 2.564	5.29 ± 1.996	7.013 ± 4.164	6.967 ± 3.022	8.42 ± 4.435	0.050		7.768 ± 3.896
	Spermidine	1.688 ± 0.767	1.115 ± 0.342^b	1.913 ± 1.421	2.822 ± 2.413	2.58 ± 1.565	0.000[*]		2.689 ± 1.972^b
	Spermine	1.205 ± 0.141	1.089 ± 0.074^b	1.358 ± 0.627	1.716 ± 1.136	1.237 ± 0.417^c	0.000[*]		1.452 ± 0.847
	Trans-4-Hydroxyproline	0.769 ± 0.333	0.77 ± 0.267	0.847 ± 0.399	0.704 ± 0.42	0.639 ± 0.376	0.061		0.668 ± 0.393
	Taurine	0.968 ± 0.286	1.028 ± 0.258	1.423 ± 0.697^b	1.659 ± 1.07	0.958 ± 0.403^c	0.001[*]		1.273 ± 0.845^b
Phosphatidylcholines									

	Lyso PC a C14:0	1.244 ± 0.291	1.14 ± 0.217	1.072 ± 0.198	1.196 ± 0.276	1.232 ± 0.405	0.069		1.216 ± 0.35
	Lyso PC a C16:0	0.612 ± 0.189	0.558 ± 0.19	0.531 ± 0.198	0.63 ± 0.196	0.601 ± 0.185	0.152		0.614 ± 0.189
	Lyso PC a C16:1	0.995 ± 0.472	0.929 ± 0.307	0.827 ± 0.291	0.905 ± 0.315	0.978 ± 0.402	0.504		0.945 ± 0.364
	Lyso PC a C17:0	0.53 ± 0.197	0.551 ± 0.227	0.557 ± 0.208	0.616 ± 0.228	0.604 ± 0.222	0.486		0.609 ± 0.222
	Lyso PC a C18:0	0.449 ± 0.164	0.422 ± 0.139	0.388 ± 0.183	0.425 ± 0.154	0.4 ± 0.133	0.403		0.411 ± 0.142
	Lyso PC a C18:1	0.754 ± 0.291	0.804 ± 0.327	0.752 ± 0.249	0.842 ± 0.317	0.834 ± 0.393	0.738		0.838 ± 0.357
	Lyso PC a C18:2	0.878 ± 0.329	1 ± 0.526	0.893 ± 0.353	1.007 ± 0.446	1.022 ± 0.532	0.694		1.015 ± 0.49
	Lyso PC a C20:3	0.93 ± 0.324	0.999 ± 0.367	0.832 ± 0.281	1.079 ± 0.408	0.994 ± 0.489	0.138		1.032 ± 0.452
	Lyso PC a C20:4	0.564 ± 0.25	0.595 ± 0.311	0.551 ± 0.225	0.651 ± 0.223	0.578 ± 0.264	0.525		0.611 ± 0.247
	Lyso PC a C24:0	1.195 ± 0.231	1.595 ± 0.87^b	1.387 ± 0.624	1.3 ± 0.26	1.198 ± 0.291	0.004[*]		1.244 ± 0.28
	Lyso PC a C26:0	1.563 ± 0.521	2.54 ± 3.587	2.052 ± 1.768	1.863 ± 0.775	1.652 ± 0.726	0.109		1.747 ± 0.748
	Lyso PC a C26:1	1.286 ± 0.34	1.667 ± 1.09	1.65 ± 1.14	1.379 ± 0.394	1.37 ± 0.48	0.089		1.374 ± 0.439
	Lyso PC a C28:0	1.254 ± 0.288	1.982 ± 2.832	1.505 ± 1.258	1.351 ± 0.436	1.243 ± 0.454	0.133		1.291 ± 0.445
	Lyso PC a C28:1	1.527 ± 0.411	2.069 ± 1.677	1.897 ± 1.167	1.633 ± 0.42	1.645 ± 0.517	0.159		1.64 ± 0.471
	PC aa C24:0	1.271 ± 0.375	1.978 ± 1.989^b	1.757 ± 1.289^b	1.485 ± 0.55	1.324 ± 0.54	0.017		1.396 ± 0.545
	PC aa C26:0	1.29 ± 0.233	1.507 ± 0.601	1.498 ± 0.673	1.453 ± 0.347	1.469 ± 0.437	0.202		1.462 ± 0.395
	PC aa C28:1	2.137 ± 0.644	2.316 ± 0.737	2.356 ± 0.774	2.388 ± 0.537	2.394 ± 0.644	0.404		2.391 ± 0.592
	PC aa C30:0	2.872 ± 1.046	3.105 ± 1.207	2.867 ± 1.014	2.758 ± 0.971	3.053 ± 1.2	0.897		2.92 ± 1.102
	PC aa C32:0	2.056 ± 0.476	2.247 ± 0.773	2.117 ± 0.622	2.057 ± 0.48	2.016 ± 0.55	0.900		2.035 ± 0.515
	PC aa C32:1	5.334 ± 2.644	5.922 ± 2.662	4.966 ± 2.32	5.383 ± 3.104	5.528 ± 2.464	0.840		5.463 ± 2.74
	PC aa C32:2	2.914 ± 1.205	2.819 ± 1.056	2.386 ± 0.956	2.914 ± 1.294	2.998 ± 1.099	0.232		2.961 ± 1.178
	PC aa C32:3	1.193 ± 0.36	1.379 ± 0.413	1.219 ± 0.386	1.229 ± 0.326	1.284 ± 0.345	0.382		1.259 ± 0.334

	PC aa C34:1	2.591 ± 0.709	2.821 ± 1.052	2.634 ± 0.761	2.856 ± 0.708	2.757 ± 0.855	0.723		2.801 ± 0.786
	PC aa C34:2	1.747 ± 0.406	1.832 ± 0.655	1.672 ± 0.412	1.796 ± 0.298	1.823 ± 0.498	0.758		1.811 ± 0.416
	PC aa C34:3	2.145 ± 0.642	2.366 ± 0.84	2.076 ± 0.765	2.129 ± 0.699	2.326 ± 0.775	0.560		2.238 ± 0.741
	PC aa C34:4	2.385 ± 1.025	2.369 ± 0.903	2.126 ± 1.134	2.385 ± 0.993	2.31 ± 1.071	0.667		2.343 ± 1.027
	PC aa C36:0	1.624 ± 0.738	2.747 ± 2.978^b	2.467 ± 3.265	1.628 ± 0.539	1.603 ± 0.863	0.023		1.614 ± 0.729
	PC aa C36:1	2.175 ± 0.748	2.353 ± 0.723	2.181 ± 0.777	2.1 ± 0.619	2.051 ± 0.682	0.587		2.073 ± 0.648
	PC aa C36:2	1.654 ± 0.417	1.75 ± 0.559	1.567 ± 0.467	1.525 ± 0.339	1.513 ± 0.465	0.298		1.518 ± 0.409
	PC aa C36:3	1.865 ± 0.554	1.887 ± 0.576	1.672 ± 0.516	1.824 ± 0.481	1.684 ± 0.532	0.344		1.747 ± 0.509
	PC aa C36:4	1.559 ± 0.501	1.625 ± 0.581	1.488 ± 0.533	1.637 ± 0.333	1.419 ± 0.491	0.368		1.517 ± 0.437
	PC aa C36:5	2.761 ± 1.429	4.152 ± 2.841	3.328 ± 2.172	2.943 ± 1.25	4.179 ± 3.206	0.089		3.624 ± 2.576
	PC aa C36:6	2.51 ± 1.207	2.972 ± 1.416	2.588 ± 1.397	2.442 ± 1.225	3.121 ± 2.447	0.455		2.816 ± 2.004
	PC aa C38:0	1.782 ± 0.663	2.245 ± 1.271	2.033 ± 1.581	1.559 ± 0.433	1.622 ± 0.739	0.046		1.594 ± 0.615
	PC aa C38:1	1.908 ± 0.735	3.447 ± 4.248^b	2.938 ± 4.314^b	2.065 ± 0.569	1.948 ± 0.952	0.009[*]		2 ± 0.798
	PC aa C38:3	1.825 ± 0.559	1.822 ± 0.537	1.544 ± 0.589^b	1.619 ± 0.475	1.425 ± 0.496	0.005[*]		1.512 ± 0.491^b
	PC aa C38:4	1.33 ± 0.421	1.374 ± 0.445	1.226 ± 0.483	1.264 ± 0.34	1.034 ± 0.324^c	0.013		1.137 ± 0.348^b
	PC aa C38:5	1.55 ± 0.471	1.742 ± 0.662	1.528 ± 0.586	1.563 ± 0.391	1.537 ± 0.587	0.738		1.549 ± 0.503
	PC aa C38:6	2.105 ± 0.741	2.356 ± 1.338	2.152 ± 1.027	2.143 ± 0.776	2.291 ± 1.203	0.998		2.225 ± 1.026
	PC aa C40:1	1.248 ± 0.372	2.081 ± 2.431^b	1.599 ± 1.613	1.275 ± 0.252	1.309 ± 0.501	0.011[*]		1.294 ± 0.405
	PC aa C40:2	1.107 ± 0.431	2.549 ± 4.275^b	1.872 ± 3.333	1.215 ± 0.365	1.295 ± 0.879	0.008[*]		1.259 ± 0.692
	PC aa C40:3	1.228 ± 0.426	1.975 ± 2.224	1.648 ± 2.088	1.195 ± 0.277	1.293 ± 0.725	0.065		1.249 ± 0.567
	PC aa C40:4	1.201 ± 0.39	1.164 ± 0.37	1.034 ± 0.375^b	1.057 ± 0.326	0.904 ± 0.318	0.005[*]		0.972 ± 0.327^b
	PC aa C40:5	1.476 ± 0.55	1.431 ± 0.505	1.23 ± 0.461^b	1.326 ± 0.409	1.174 ± 0.426	0.042		1.242 ± 0.421^b

	PC aa C40:6	1.917 ± 0.718	2.059 ± 1.061	1.815 ± 0.834	1.646 ± 0.618	1.764 ± 0.97	0.345		1.711 ± 0.825
	PC aa C42:0	1.371 ± 0.468	1.682 ± 1.026	1.36 ± 0.795	1.238 ± 0.294	1.333 ± 0.5	0.202		1.29 ± 0.419
	PC aa C42:1	1.26 ± 0.398	1.849 ± 1.68^b	1.391 ± 1.072	1.181 ± 0.277	1.232 ± 0.463	0.040		1.209 ± 0.388
	PC aa C42:2	1.196 ± 0.384	1.931 ± 1.69^b	1.614 ± 1.809	1.263 ± 0.318	1.341 ± 0.565	0.018		1.306 ± 0.467
	PC aa C42:4	0.956 ± 0.295	1.381 ± 1.174	1.174 ± 1.251	0.934 ± 0.228	0.986 ± 0.603	0.121		0.962 ± 0.469
	PC aa C42:5	1.401 ± 0.477	1.566 ± 0.717	1.466 ± 0.755	1.195 ± 0.305	1.265 ± 0.709	0.107		1.234 ± 0.561
	PC aa C42:6	1.523 ± 0.501	1.688 ± 0.777	1.5 ± 0.616	1.325 ± 0.335	1.429 ± 0.85	0.229		1.382 ± 0.666
	PC ae C30:0	2.123 ± 0.62	2.312 ± 0.997	2.206 ± 0.747	1.95 ± 0.597	2.18 ± 0.634	0.632		2.076 ± 0.622
	PC ae C30:2	1.307 ± 0.29	1.959 ± 1.968^b	1.652 ± 1.047^b	1.438 ± 0.278	1.442 ± 0.383	0.031		1.44 ± 0.337
	PC ae C32:1	1.842 ± 0.44	1.889 ± 0.583	1.821 ± 0.532	1.686 ± 0.331	1.696 ± 0.498	0.536		1.692 ± 0.427
	PC ae C32:2	1.63 ± 0.475	1.892 ± 0.667	1.81 ± 0.603	1.626 ± 0.3	1.666 ± 0.512	0.310		1.648 ± 0.426
	PC ae C34:0	2.042 ± 0.63	2.315 ± 0.834	2.435 ± 0.822	2.214 ± 0.644	2.208 ± 0.648	0.251		2.211 ± 0.64
	PC ae C34:1	2.443 ± 0.623	2.595 ± 0.852	2.562 ± 0.759	2.472 ± 0.562	2.462 ± 0.713	0.965		2.467 ± 0.643
	PC ae C34:2	1.683 ± 0.551	1.772 ± 0.72	1.695 ± 0.461	1.746 ± 0.517	1.678 ± 0.534	0.984		1.709 ± 0.522
	PC ae C34:3	1.206 ± 0.412	1.18 ± 0.545	1.191 ± 0.372	1.164 ± 0.368	1.123 ± 0.449	0.872		1.141 ± 0.411
	PC ae C36:0	1.93 ± 0.446	2.429 ± 0.976	2.328 ± 0.938	2.061 ± 0.48	2.008 ± 0.567	0.050		2.032 ± 0.525
	PC ae C36:1	1.312 ± 0.383	1.824 ± 1.322	2.135 ± 3.215	1.532 ± 0.413	1.601 ± 0.46	0.050		1.57 ± 0.436
	PC ae C36:2	1.722 ± 0.519	2.041 ± 0.824	2.088 ± 1.218	1.887 ± 0.463	1.913 ± 0.554	0.342		1.901 ± 0.51
	PC ae C36:3	1.558 ± 0.475	1.6 ± 0.61	1.478 ± 0.401	1.503 ± 0.401	1.395 ± 0.39	0.657		1.444 ± 0.395
	PC ae C36:4	1.518 ± 0.462	1.558 ± 0.666	1.355 ± 0.403	1.394 ± 0.366	1.159 ± 0.388^c	0.011[*]		1.264 ± 0.393^b
	PC ae C36:5	1.212 ± 0.334	1.299 ± 0.567	1.232 ± 0.425	1.217 ± 0.334	1.086 ± 0.397	0.468		1.145 ± 0.372
	PC ae C38:0	1.513 ± 0.554	1.862 ± 0.769	1.682 ± 0.714	1.473 ± 0.473	1.871 ± 1.07	0.179		1.692 ± 0.871

	PC ae C38:2	0.871 ± 0.242	1.673 ± 2.398	1.644 ± 3.746	0.863 ± 0.226	1.006 ± 0.563	0.053		0.941 ± 0.447
	PC ae C38:3	0.703 ± 0.22	1.004 ± 0.817	0.902 ± 0.803	0.727 ± 0.192	0.779 ± 0.428	0.162		0.756 ± 0.341
	PC ae C38:4	1.368 ± 0.402	1.44 ± 0.47	1.376 ± 0.395	1.398 ± 0.312	1.182 ± 0.323	0.122		1.279 ± 0.333
	PC ae C38:5	1.42 ± 0.358	1.449 ± 0.557	1.296 ± 0.346	1.325 ± 0.303	1.156 ± 0.37	0.043		1.232 ± 0.349^b
	PC ae C38:6	1.544 ± 0.524	1.678 ± 0.786	1.518 ± 0.577	1.431 ± 0.398	1.426 ± 0.64	0.656		1.428 ± 0.539
	PC ae C40:1	1.451 ± 0.46	2.059 ± 1.43	1.788 ± 1.122	1.641 ± 0.429	1.557 ± 0.568	0.067		1.595 ± 0.507
	PC ae C40:2	1.271 ± 0.443	1.823 ± 1.353	1.621 ± 1.096	1.331 ± 0.259	1.382 ± 0.433	0.098		1.359 ± 0.363
	PC ae C40:3	0.331 ± 0.095	0.611 ± 0.782^b	0.476 ± 0.602	0.321 ± 0.072	0.436 ± 0.384	0.045		0.384 ± 0.293
	PC ae C40:4	0.754 ± 0.203	0.938 ± 0.524	0.812 ± 0.401	0.758 ± 0.177	0.77 ± 0.338	0.307		0.765 ± 0.275
	PC ae C40:5	0.771 ± 0.21	0.899 ± 0.315	0.823 ± 0.308	0.758 ± 0.18	0.823 ± 0.377	0.387		0.794 ± 0.303
	PC ae C40:6	1.534 ± 0.502	1.69 ± 0.735	1.593 ± 0.536	1.482 ± 0.434	1.547 ± 0.647	0.873		1.518 ± 0.557
	PC ae C42:0	1.203 ± 0.241	1.379 ± 0.612	1.251 ± 0.38	1.158 ± 0.116	1.195 ± 0.261	0.188		1.178 ± 0.207
	PC ae C42:1	1.032 ± 0.271	1.721 ± 2.013^b	1.375 ± 1.607	1.074 ± 0.259	0.983 ± 0.403	0.005[*]		1.024 ± 0.345
	PC ae C42:2	1.49 ± 0.402	2.224 ± 1.877	1.807 ± 1.245	1.576 ± 0.425	1.542 ± 0.464	0.054		1.557 ± 0.443
	PC ae C42:3	1.28 ± 0.402	1.721 ± 1.004	1.543 ± 1.112	1.308 ± 0.332	1.429 ± 0.467	0.129		1.374 ± 0.412
	PC ae C42:4	0.974 ± 0.316	1.071 ± 0.397	0.94 ± 0.391	0.952 ± 0.264	0.979 ± 0.302	0.707		0.967 ± 0.283
	PC ae C42:5	0.959 ± 0.261	0.967 ± 0.232	0.874 ± 0.227	0.879 ± 0.191	0.911 ± 0.276	0.462		0.897 ± 0.24
	PC ae C44:3	1.071 ± 0.29	1.654 ± 1.485^b	1.37 ± 1.613	1.09 ± 0.282	1.202 ± 0.508	0.035		1.152 ± 0.422
	PC ae C44:4	1.752 ± 0.558	1.778 ± 0.595	1.579 ± 0.57	1.592 ± 0.382	1.54 ± 0.382	0.344		1.564 ± 0.379
	PC ae C44:5	1.933 ± 0.629	1.715 ± 0.573	1.571 ± 0.461	1.691 ± 0.38	1.619 ± 0.575	0.072		1.651 ± 0.493
	PC ae C44:6	1.202 ± 0.412	1.185 ± 0.386	1.015 ± 0.316	1.06 ± 0.256	1.121 ± 0.423	0.287		1.094 ± 0.356

Sphingomyelins								
	SM (OH) C14:1	1.758 ± 0.59	1.925 ± 0.687	2.015 ± 0.642	1.997 ± 0.413	2.024 ± 0.683	0.202	2.012 ± 0.572
	SM (OH) C16:1	1.428 ± 0.468	1.642 ± 0.534	1.678 ± 0.503	1.69 ± 0.37	1.655 ± 0.547	0.055	1.67 ± 0.472
	SM (OH) C22:1	1.438 ± 0.393	1.475 ± 0.396	1.448 ± 0.509	1.494 ± 0.367	1.4 ± 0.367	0.924	1.443 ± 0.366
	SM (OH) C22:2	1.874 ± 0.591	1.944 ± 0.632	1.975 ± 0.639	1.883 ± 0.338	1.885 ± 0.576	0.946	1.884 ± 0.479
	SM (OH) C24:1	1.415 ± 0.358	1.429 ± 0.387	1.394 ± 0.48	1.372 ± 0.327	1.258 ± 0.356	0.428	1.309 ± 0.345
	SM C16:0	1.401 ± 0.311	1.538 ± 0.392	1.492 ± 0.381	1.505 ± 0.21	1.469 ± 0.389	0.536	1.485 ± 0.319
	SM C16:1	1.52 ± 0.403	1.653 ± 0.409	1.57 ± 0.447	1.679 ± 0.252	1.614 ± 0.501	0.194	1.643 ± 0.406
	SM C18:0	1.395 ± 0.424	1.614 ± 0.456	1.492 ± 0.4	1.613 ± 0.363	1.506 ± 0.433	0.129	1.554 ± 0.403
	SM C18:1	1.283 ± 0.429	1.497 ± 0.416	1.362 ± 0.394	1.519 ± 0.356	1.425 ± 0.503	0.087	1.467 ± 0.441
	SM C20:2	1.083 ± 0.378	1.158 ± 0.358	1.09 ± 0.37	1.072 ± 0.203	0.972 ± 0.326	0.302	1.017 ± 0.279
	SM C24:0	1.343 ± 0.317	1.39 ± 0.369	1.302 ± 0.438	1.395 ± 0.329	1.214 ± 0.277	0.308	1.296 ± 0.312
	SM C24:1	1.686 ± 0.404	1.756 ± 0.479	1.702 ± 0.447	1.678 ± 0.272	1.567 ± 0.402	0.519	1.617 ± 0.351
	SM C26:0	1.268 ± 0.463	1.203 ± 0.519	1.252 ± 0.485	1.227 ± 0.41	1.259 ± 0.414	0.972	1.244 ± 0.408
	SM C26:1	1.666 ± 0.596	1.939 ± 0.741	1.913 ± 0.615	1.665 ± 0.374	1.626 ± 0.613	0.105	1.643 ± 0.515
Hexoses								
	Sum of hexoses	1.149 ± 0.249	1.263 ± 0.464	1.239 ± 0.507	1.263 ± 0.631	1.133 ± 0.456	0.766	1.191 ± 0.54

Data are expressed as normalized concentrations (mean \pm standard deviations). Significant differences are highlighted in bold. PC: Phosphatidylcholine. aa: diacyl. ae: acyl/alkyl. SM: Sphingomyelin.

^a One-way ANOVA.

* Significant at false discovery rate $\alpha=0.1$ after applying Benjamini-Hochberg procedure.

Simple contrasts applied to ANOVA:

^b: $P<0.05$ vs. controls

^c: $P<0.05$ (ACTH-dependent) vs. ACTH-independent Cushing's syndrome.