

**Table S2.** Change in the metabolites 24 h after operation, comparison between the groups

Metabolite	Group						p-value
	Sham			RIPC			
	Mean/ median	SD/ Q1	Q3	Mean/ median	SD/ Q1	Q3	
Ala	-25.26	120.74		-11.56	123.72		0.592
Arg*	-20.00	-38.70	-4.20	-21.00	-35.80	-2.00	0.591
Cit	-8.83	8.94		-7.63	7.77		0.496
Gln	-150.49	169.93		-161.47	189.39		0.770
Glu*	-0.70	-15.50	14.60	-12.70	-24.00	14.00	0.128
Gly	-26.32	53.43		-22.38	52.73		0.723
His	-12.69	13.42		-14.72	18.57		0.550
Ile	-16.43	28.88		-24.95	32.72		0.188
Leu	-28.18	54.57		-46.08	52.25		0.112
Lys	-50.32	65.53		-56.52	63.24		0.645
Met	-1.63	7.26		-1.23	9.58		0.822
Orn	-25.24	30.58		-26.01	24.84		0.894
Phe	2.21	12.68		-1.08	14.84		0.255
Pro*	-13.00	-55.00	26.00	-17.00	-42.00	21.00	0.666
Ser*	-27.10	-37.90	-14.00	-32.00	-53.80	-10.00	0.222
Thr*	-21.60	-49.05	18.00	-20.90	-81.00	12.00	0.516
Trp	-8.81	17.38		-10.01	15.16		0.725
Tyr	-3.87	16.12		-5.33	18.89		0.692
Val	-22.24	74.64		-37.78	72.87		0.315
ADMA	-0.09	0.18		-0.08	0.18		0.833
Creatinine*	1.00	-9.00	20.00	-3.70	-15.00	22.00	0.322
Kynurenine	0.06	0.74		0.09	0.97		0.842
Serotonine	-0.06	0.13		-0.07	0.15		0.717
Spermine*	0.00	0.00	0.00	0.00	0.00	0.00	0.030
Taurine	-14.88	30.13		-10.28	31.39		0.475
Total DMA	-0.08	0.34		-0.09	0.37		0.932
lysoPCaC16:0*	-41.30	-96.00	-25.40	-43.00	-99.00	-26.80	0.643
lysoPCaC16:1*	-1.12	-2.03	-0.66	-1.20	-3.30	-0.65	0.309
lysoPCaC17:0*	-0.81	-1.84	-0.38	-0.93	-2.06	-0.46	0.376
lysoPCaC18:0*	-9.90	-13.68	-7.28	-9.96	-16.07	-6.00	0.873
lysoPCaC18:1*	-12.18	-19.25	-5.69	-11.80	-25.20	-7.93	0.717
lysoPCaC18:2*	-21.00	-34.10	-5.90	-15.00	-32.20	-6.40	0.833
lysoPCaC20:3*	-0.94	-1.94	-0.62	-0.96	-1.61	-0.53	0.885
lysoPCaC20:4*	-2.41	-4.50	-1.10	-2.82	-5.54	-1.56	0.513
lysoPCaC26:1*	-0.05	-0.14	0.08	-0.03	-0.12	0.06	0.670
PCaaC28:1*	-0.46	-0.81	-0.07	-0.36	-0.71	-0.08	0.399
PCaaC30:0*	-0.77	-1.27	-0.26	-0.69	-1.04	-0.40	0.791
PCaaC32:0	-1.17	2.81		-1.68	1.94		0.321
PCaaC32:1*	-1.90	-4.40	-0.22	-1.80	-5.53	-0.16	0.938
PCaaC32:2*	-0.46	-1.20	-0.16	-0.63	-1.13	-0.26	0.483
PCaaC32:3*	-0.06	-0.09	-0.01	-0.05	-0.08	0.00	0.840
PCaaC34:1	-26.40	58.84		-33.38	47.97		0.536
PCaaC34:2	-39.81	75.21		-45.71	50.00		0.657
PCaaC34:4*	-0.24	-0.36	-0.11	-0.23	-0.54	-0.10	0.536

PCaaC36:0	-0.47	0.54		-0.48	0.40		0.956
PCaaC36:1*	-7.20	-13.50	-4.70	-5.90	-12.10	-2.90	0.264
PCaaC36:2	-39.09	37.01		-44.61	29.63		0.433
PCaaC36:3*	-20.40	-29.00	-12.00	-16.00	-29.00	-3.30	0.240
PCaaC36:4	-15.06	42.18		-20.88	25.73		0.425
PCaaC36:5*	-4.30	-7.45	-1.85	-2.35	-11.20	-0.34	0.335
PCaaC38:0*	-0.47	-0.74	-0.26	-0.39	-0.84	-0.12	0.489
PCaaC38:3	-8.33	8.60		-9.88	7.56		0.363
PCaaC38:4	-12.55	19.84		-17.05	12.61		0.196
PCaaC38:5	-8.79	11.96		-9.94	7.83		0.585
PCaaC38:6*	-11.80	-17.70	-3.00	-7.30	-18.50	2.60	0.126
PCaaC40:4	-0.49	0.53		-0.66	0.56		0.139
PCaaC40:5	-1.47	1.66		-1.79	1.38		0.322
PCaaC40:6*	-5.30	-8.40	-2.20	-3.80	-7.00	-0.60	0.264
PCaaC42:4	-0.03	0.04		-0.02	0.04		0.315
PCaaC42:5	-0.07	0.08		-0.06	0.07		0.612
PCaaC42:6*	-0.12	-0.17	-0.03	-0.08	-0.15	0.00	0.233
PCaeC30:1*	0.03	-0.16	0.13	0.01	-0.13	0.10	0.893
PCaeC32:1	-0.39	0.48		-0.42	0.33		0.722
PCaeC32:2*	-0.09	-0.18	-0.04	-0.08	-0.14	-0.03	0.643
PCaeC34:0	-0.24	0.21		-0.23	0.22		0.741
PCaeC34:1	-1.38	1.65		-1.36	1.46		0.944
PCaeC34:2	-1.86	1.27		-1.91	1.42		0.850
PCaeC34:3	-1.22	0.89		-1.31	1.09		0.641
PCaeC36:0	-0.07	0.18		-0.11	0.17		0.360
PCaeC36:1*	-0.86	-1.40	-0.46	-0.68	-1.96	-0.26	0.904
PCaeC36:2*	-1.70	-2.89	-1.03	-1.60	-2.59	-0.79	0.646
PCaeC36:3*	-1.29	-1.96	-0.80	-1.15	-1.72	-0.57	0.559
PCaeC36:4	-2.32	1.92		-2.63	1.99		0.450
PCaeC36:5	-1.79	1.55		-1.96	1.51		0.597
PCaeC38:0*	-0.41	-0.58	-0.17	-0.35	-0.70	-0.13	0.632
PCaeC38:3	-0.54	0.66		-0.61	0.61		0.605
PCaeC38:4	-1.46	1.81		-1.79	1.17		0.297
PCaeC38:5	-2.39	2.34		-2.74	1.89		0.444
PCaeC38:6	-1.28	1.16		-1.33	0.83		0.787
PCaeC40:1	-0.27	0.24		-0.31	0.36		0.546
PCaeC40:2	-0.26	0.35		-0.33	0.27		0.308
PCaeC40:4*	-0.30	-0.44	-0.20	-0.25	-0.57	0.02	0.365
PCaeC40:5	-0.42	0.52		-0.47	0.36		0.636
PCaeC40:6	-0.69	0.84		-0.82	0.57		0.377
PCaeC42:4	-0.11	0.15		-0.15	0.15		0.252
PCaeC44:4	-0.05	0.09		-0.07	0.13		0.490
PCaeC44:5*	-0.21	-0.28	-0.10	-0.21	-0.34	-0.02	0.957
PCaeC44:6*	-0.16	-0.24	-0.07	-0.12	-0.25	-0.03	0.264
SM(OH)C14:1*	-0.57	-1.05	-0.26	-0.47	-0.84	-0.11	0.240
SM(OH)C16:1	-0.20	0.42		-0.26	0.28		0.368
SM(OH)C22:1*	-1.10	-1.92	-0.55	-0.89	-1.93	-0.30	0.481
SM(OH)C22:2	-1.00	1.27		-1.06	0.85		0.761
SM(OH)C24:1	-0.14	0.18		-0.13	0.15		0.805
SMC16:0	-11.77	13.46		-11.64	10.45		0.960

<b>SMC16:1</b>	-1.13	1.90		-1.17	1.19		0.904
<b>SMC18:0</b>	-2.81	4.99		-3.23	4.60		0.680
<b>SMC18:1</b>	-0.50	1.35		-0.70	1.12		0.453
<b>SMC20:2*</b>	-0.03	-0.05	0.00	-0.02	-0.06	0.02	0.849
<b>SMC24:0</b>	-2.11	2.25		-2.52	1.74		0.338
<b>SMC24:1</b>	-5.10	7.35		-6.08	5.64		0.475
<b>SMC26:0</b>	-0.01	0.05		-0.01	0.05		0.901
<b>SMC26:1</b>	-0.04	0.09		-0.06	0.07		0.414
<b>H1</b>	1231.64	1798.12		1157.69	1431.53		0.828
<b>(C2+C3)/C0</b>	-0.05	0.07		-0.04	0.08		0.744
<b>AAA</b>	-10.40	37.01		-16.33	38.51		0.453
<b>ADMA/Arg*</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.776
<b>BCAA*</b>	-104.00	-183.00	-29.00	-81.00	-159.00	53.00	0.238
<b>C2/C0</b>	-0.04	0.06		-0.04	0.07		0.564
<b>Cit/Arg</b>	-0.02	0.11		0.00	0.11		0.422
<b>Cit/Orn*</b>	0.04	-0.07	0.09	0.00	-0.12	0.14	0.474
<b>Essential AA</b>	-159.98	254.73		-185.36	241.36		0.625
<b>Fisher ratio</b>	-0.24	0.56		-0.32	0.56		0.456
<b>Glucogenic AA</b>	-84.81	162.93		-57.76	175.56		0.445
<b>Kynurenine/Trp*</b>	0.01	0.00	0.01	0.01	0.00	0.02	0.741
<b>Nonessential AA</b>	-339.91	362.31		-324.04	413.17		0.845
<b>Orn/Arg*</b>	-0.10	-0.24	0.08	-0.12	-0.25	0.08	0.901
<b>Putrescine/Orn*</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.413
<b>Serotonin/Trp*</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.991
<b>Total SM</b>	-27.53	34.38		-30.78	24.52		0.624
<b>Total SM-nonOH</b>	-23.88	30.22		-25.88	22.34		0.731
<b>Total SM-OH</b>	-3.09	3.69		-3.46	2.72		0.583
<b>Total SM-OH/Total SM-nonOH</b>	0.00	0.01		0.00	0.01		0.578
<b>Tyr/Phe</b>	-0.09	0.18		-0.07	0.22		0.692

All metabolites are measured in  $\mu\text{mol/L}$ , except for metabolic ratios, which do not have a unit

\* Non-normal distribution (Kolmogorov-Smirnov's test). In the case of a non-normal distribution, median and quartiles (Q1, Q3) are provided. In the case of a normal distribution, mean and standard deviation (SD) are given. SD - standard deviation, Q1 - first quartile, Q3 - third quartile, Ala - Alanine, Arg - Arginine, Cit - Citrulline, Gln - Glutamine, Glu - Glutamic acid, Gly - Glycine, His - Histidine, Ile - Isoleucine, Leu - Leucine, Lys - Lysine, Met - Methionine, Orn - Ornithine, Phe - Phenylalanine, Pro - Proline, Ser - Serine, Thr - Threonine, Trp - Tryptophan, Tyr - Tyrosine, Val - Valine, ADMA - Asymmetric dimethylarginine, DMA - dimethylarginine, lysoPCa - lysoPhosphatidylcholine acyl, PCaa - Phosphatidylcholine diacyl, PCae - Phosphatidylcholine acyl-alkyl, SM(OH) - Hydroxysphingomyeline, SM - Sphingomyeline, H1 - hexose, C2 - Acetylcarnitine, C3 - Propionylcarnitine, C0 - Carnitine, AAA - Amino adipic acid, ADMA - asymmetric dimethylarginine, BCAA - Branched chain amino acids, AA - Amino acids, OH - hydroxy, nonOH - Nonhydroxy