Supplementary Table 3 - Part 1 - Metabolomics report of plasma from rats undergoing trauma and hemorrhage, with and without mesenteric lymph diversion

| | | | | | Plasma | | | | |

Supplementary Table 3 - Part 2 - Metabolomics report of mesenteric lymph from rats undergoing trauma and hemorrhage, with and without mesenteric lymph diversion

					Lymph															
N.	compound	CmpdID	Pathway	parent	T/SS+MLD Pre 1	T/SS+MLD Pre 2	T/SS+MLD Pre mix1	T/SS+MLD Pre mix2	T/SS+MLD Post 1	T/SS+MLD Post 2	T/SS+MLD Post mix1	T/SS+MLD Post mix2	T/HS+MLD Pre 1	T/HS+MLD Pre 2	T/HS+MLD Pre mix1	T/HS+MLD Pre mix2	T/HS+MLD Post 1	T/HS+MLD Post 2	T/HS+MLD Post mix1	T/HS+MLD Post mix2
1	alanine	C00041	Amino acids	90.05556	4.21E+07	4.26E+07	4.37E+07	4.18E+07	3.88E+07	4.16E+07	3.70E+07	4.03E+07	2.97E+07	3.08E+07	2.92E+07	3.15E+07	2.97E+07	2.95E+07	2.85E+07	2.93E+07
2	arginine	C00062	Amino acids	175.1188	1.36E+07	1.50E+07	1.23E+07	1.22E+07	1.59E+07	1.59E+07	1.41E+07	1.34E+07	1.31E+07	1.25E+07	1.20E+07	1.15E+07	1.36E+07	1.32E+07	1.22E+07	1.17E+07
3	asparagine	C00152	Amino acids	133.0606	1.60E+06	1.43E+06	1.44E+06	1.71E+06	1.54E+06	1.57E+06	1.90E+06	1.64E+06	9.95E+05	1.11E+06	8.34E+05	1.15E+06	1.46E+06	1.12E+06	1.23E+06	1.40E+06
4	aspartate	C00049	Amino acids	134.0448	1.38E+05	9.98E+04	1.21E+05	1.29E+05	8.01E+04	1.06E+05	9.80E+04	1.58E+05	8.59E+04	1.25E+05	8.09E+04	6.10E+04	9.13E+04	7.12E+04	6.04E+04	1.40E+05
5	cysteine	C00097	Amino acids	122.0272	4.71E+05	4.89E+05	6.12E+05	4.52E+05	3.35E+05	4.18E+05	5.43E+05	4.01E+05	4.01E+05	4.94E+05	4.18E+05	4.31E+05	5.10E+05	4.85E+05	6.57E+05	5.01E+05
6	glutamate	C00025	Amino acids	148.0603	2.65E+06	2.74E+06	2.26E+06	2.77E+06	2.04E+06	2.15E+06	2.58E+06	2.47E+06	2.30E+06	2.38E+06	1.92E+06	2.73E+06	2.95E+06	2.51E+06	2.67E+06	3.26E+06
7	glutamine	C00064	Amino acids	147.0761	2.93E+07	2.53E+07	2.30E+07	2.85E+07	2.71E+07	2.65E+07	3.29E+07	3.18E+07	2.00E+07	2.24E+07	2.02E+07	2.73E+07	2.94E+07	2.38E+07	2.40E+07	3.35E+07
8	glycine	C00037	Amino acids	76.04005	3.29E+06	5.08E+06	7.52E+05	5.14E+06	1.69E+06	5.15E+06	3.29E+06	5.42E+06	2.10E+06	3.82E+06	3.68E+06	3.81E+06	4.04E+06	2.58E+06	3.85E+06	4.20E+06
9	histidine	C00135	Amino acids	156.0765	4.15E+06	4.11E+06	3.86E+06	3.57E+06	4.19E+06	3.83E+06	4.29E+06	3.82E+06	3.63E+06	3.68E+06	3.55E+06	3.61E+06	4.46E+06	3.96E+06	3.95E+06	4.19E+06
10	leucine/isoleucine	C00123	Amino acids	132.1017	2.51E+08	2.42E+08	2.49E+08	2.39E+08	2.35E+08	2.53E+08	2.40E+08	2.53E+08	2.35E+08	2.55E+08	2.67E+08	2.47E+08	2.87E+08	2.90E+08	3.11E+08	2.78E+08
11	lysine	C00047	Amino acids	147.1126	2.23E+07	2.36E+07	2.01E+07	2.01E+07	2.35E+07	2.19E+07	1.94E+07	1.91E+07	1.68E+07	1.59E+07	1.46E+07	1.44E+07	1.70E+07	1.66E+07	1.54E+07	1.50E+07
12	methionine	C00073	Amino acids	150.0583	2.24E+07	2.08E+07	2.05E+07	2.02E+07	2.10E+07	2.28E+07	2.21E+07	2.31E+07	1.61E+07	1.79E+07	1.64E+07	1.70E+07	1.81E+07	1.82E+07	1.64E+07	1.71E+07
13	phenylalanine	C00079	Amino acids	166.0861	3.03E+07	2.80E+07	3.05E+07	3.00E+07	3.14E+07	3.04E+07	3.03E+07	3.21E+07	2.79E+07	2.64E+07	3.06E+07	2.87E+07	3.10E+07	2.86E+07	3.01E+07	3.14E+07
14	proline	C00148	Amino acids	116.0708	1.26E+08	1.27E+08	1.31E+08	1.25E+08	1.20E+08	1.27E+08	1.15E+08	1.21E+08	9.07E+07	9.63E+07	9.45E+07	9.31E+07	9.18E+07	9.63E+07	9.35E+07	8.49E+07
15	serine	C00065	Amino acids	106.0503	3.93E+06	3.64E+06	3.58E+06	4.01E+06	3.33E+06	3.67E+06	4.06E+06	3.83E+06	2.63E+06	2.87E+06	2.60E+06	3.01E+06	3.56E+06	3.09E+06	3.39E+06	3.70E+06
16	threonine	C00188	Amino acids	120.0657	9.91E+06	9.87E+06	9.34E+06	9.86E+06	9.57E+06	9.79E+06	1.05E+07	9.62E+06	7.34E+06	7.21E+06	6.46E+06	7.45E+06	8.13E+06	7.94E+06	7.74E+06	8.74E+06
17	tryptophan	C00078	Amino acids	205.0967	2.45E+07	1.08E+07	2.53E+07	2.47E+07	1.29E+07	9.68E+06	1.20E+07	1.15E+07	2.42E+07	1.17E+07	2.33E+07	2.32E+07	1.28E+07	1.34E+07	1.15E+07	1.33E+07
18	tyrosine	C00082	Amino acids	182.081	1.75E+07	1.63E+07	1.56E+07	1.57E+07	1.60E+07	1.67E+07	1.58E+07	1.76E+07	1.48E+07	1.63E+07	1.53E+07	1.51E+07	1.66E+07	1.67E+07	1.55E+07	1.59E+07
19	valine	C00183	Amino acids	118.0864	2.11E+08	2.06E+08	2.10E+08	1.99E+08	1.98E+08	2.09E+08	1.84E+08	2.02E+08	1.79E+08	1.90E+08	1.83E+08	1.84E+08	2.06E+08	2.11E+08	1.99E+08	2.00E+08
20	cystine	C00491	Amino acids	241.0303	3.25E+06	2.79E+06	2.53E+06	3.25E+06	2.70E+06	2.59E+06	3.25E+06	3.06E+06	3.09E+06	2.97E+06	2.70E+06	3.97E+06	3.49E+06	3.13E+06	3.30E+06	4.54E+06
21	kynurenine	C00328	Amino acids	209.0918	2.70E+05	2.35E+05	2.24E+05	2.28E+05	2.20E+05	2.73E+05	1.97E+05	1.91E+05	2.07E+05	1.09E+05	1.32E+05	1.87E+05	2.01E+05	1.86E+05	1.65E+05	1.98E+05
22	AMP	C00020	Nucleotides	348.0681	9.71E+04	9.58E+04	1.01E+05	5.46E+04	1.56E+05	9.40E+04	1.30E+05	1.58E+05	4.09E+05	3.27E+05	4.10E+05	3.27E+05	4.38E+05	4.20E+05	4.54E+05	3.86E+05
23	Hypoxanthine	C00262	Nucleotides	135.0288	2.15E+06	2.54E+06	1.93E+06	1.82E+06	2.23E+06	2.28E+06	1.68E+06	1.68E+06	2.70E+06	2.60E+06	2.26E+06	2.16E+06	2.29E+06	2.51E+06	2.19E+06	1.99E+06
24	Xanthine	C00385	Nucleotides	153.0391	1.30E+05	1.16E+05	1.31E+05	1.16E+05	1.53E+05	1.30E+05	1.78E+05	1.38E+05	9.31E+04	8.41E+04	6.71E+04	7.12E+04	9.52E+04	7.66E+04	8.41E+04	7.77E+04
25	Guanine	C00242	Nucleotides	152.0539	1.03E+06	9.75E+05	9.15E+05	9.39E+05	1.01E+06	1.05E+06	8.35E+05	1.01E+06	7.51E+05	7.03E+05	6.82E+05	8.15E+05	8.35E+05	7.24E+05	7.91E+05	8.17E+05
26	Allantoate	C00499	Nucleotides	177.0611	4.71E+05	4.73E+05	4.41E+05	4.90E+05	5.40E+05	5.64E+05	4.46E+05	5.11E+05	4.33E+05	5.06E+05	4.08E+05	4.51E+05	5.29E+05	5.10E+05	5.81E+05	5.12E+05
27	(S)(+)-Allantoin	C02350	Nucleotides	157.036	5.09E+06	5.39E+06	5.42E+06	5.69E+06	5.36E+06	5.21E+06	5.54E+06	5.59E+06	7.92E+06	7.97E+06	8.40E+06	7.65E+06	8.32E+06	7.99E+06	7.91E+06	8.90E+06
28	5-Hydroxyisourate	C11821	Nucleotides	183.0166	2.96E+04	5.66E+04	1.79E+05	1.98E+05	4.77E+04	3.61E+04	1.91E+05	2.24E+05	5.67E+04	4.68E+04	2.11E+05	1.84E+05	1.60E+05	1.59E+05	2.40E+05	2.75E+05
29	Cytidine	C00475	Nucleotides	244.0921	3.55E+04	7.21E+04	7.39E+04	1.98E+05	6.51E+04	5.77E+04	1.97E+05	4.69E+04	5.55E+04	4.31E+04	4.37E+03	4.27E+04	4.37E+04	8.79E+04	3.23E+04	5.31E+04
30	2--3--Cyclic CMP	C02354	Nucleotides	306.0488	4.04E+05	4.08E+05	4.51E+05	5.11E+05	3.95E+05	3.71E+05	5.25E+05	4.82E+05	4.35E+05	3.53E+05	4.42E+05	4.93E+05	4.38E+05	4.29E+05	4.11E+05	5.11E+05
31	5-6-Dihydrothymine	C00906	Nucleotides	129.0658	1.11E+07	1.14E+07	1.14E+07	1.12E+07	1.10E+07	1.11E+07	1.05E+07	1.09E+07	1.46E+07	1.39E+07	1.48E+07	1.29E+07	1.46E+07	1.55E+07	1.46E+07	1.32E+07
32	Thymine	C00178	Nucleotides	127.05	4.76E+05	5.69E+05	4.61E+05	4.91E+05	5.88E+05	6.26E+05	5.56E+05	4.93E+05	7.98E+05	9.09E+05	9.36E+05	6.89E+05	8.74E+05	9.63E+05	1.05E+06	9.67E+05
33	4-Pyridoxate	C00847	Nucleotides	182.0454	2.99E+04	6.14E+04	1.65E+04	3.16E+04	4.64E+04	3.16E+04	7.62E+04	5.86E+04	5.35E+04	8.32E+04	2.22E+04	1.97E+04	9.62E+04	4.41E+04	6.53E+04	3.28E+04
34	Pyridoxamine phosphate	C00647	Nucleotides	249.0605	3.97E+06	1.60E+06	4.19E+06	3.54E+06	1.91E+06	1.57E+06	1.80E+06	1.93E+06	3.89E+06	1.95E+06	3.54E+06	3.23E+06	1.82E+06	1.97E+06	1.79E+06	1.77E+06
35	Nicotinamide	C00153	Nucleotides	123.055	3.81E+06	3.65E+06	3.47E+06	3.59E+06	3.88E+06	4.09E+06	3.74E+06	4.56E+06	2.41E+06	2.05E+06	2.60E+06	2.88E+06	2.45E+06	2.79E+06	2.68E+06	2.65E+06
36	Adenine	C00147	Nucleotides	136.0635	5.20E+06	3.86E+06	4.26E+06	1.12E+07	4.03E+06	3.71E+06	6.01E+06	1.13E+07	3.72E+06	4.71E+06	4.14E+06	1.19E+07	5.43E+06	4.35E+06	4.60E+06	1.45E+07
37	Adenosine	C00212	Nucleotides	268.1031	1.03E+04	0.00E+00	0.00E+00	1.60E+04	0.00E+00	1.18E+04	1.60E+04	4.82E+03	0.00E+00	0.00E+00	3.53E+03	2.00E+04	3.14E+03	0.00E+00	4.24E+03	0.00E+00
38	Inosine	C00294	Nucleotides	267.0734	1.31E+06	1.80E+06	1.12E+06	9.07E+05	1.35E+06	1.64E+06	9.52E+05	7.42E+05	1.29E+06	1.24E+06	1.05E+06	9.98E+05	1.20E+06	1.22E+06	8.19E+05	7.42E+05
39	Purine	C15587	Nucleotides	121.0528	6.97E+05	6.96E+05	8.12E+05	7.99E+05	7.33E+05	7.13E+05	8.11E+05	7.87E+05	7.23E+05	7.56E+05	6.34E+05	7.47E+05	7.74E+05	7.26E+05	7.63E+05	7.26E+05
40	Orthophosphate	C00009	Phosphates	96.96827	1.17E+07	8.13E+06	9.08E+06	7.02E+06	9.28E+06	9.73E+06	9.19E+06	6.07E+06	6.59E+06	7.84E+06	4.63E+06	5.47E+06	1.10E+07	8.85E+06	6.60E+06	7.46E+06
41	Diphosphate	C00013	Phosphates	176.9354	2.49E+05	2.19E+05	2.34E+05	2.35E+05	2.82E+05	2.27E+05	2.26E+05	1.89E+05	1.71E+05	1.32E+05	1.14E+05	1.58E+05	1.85E+05	1.94E+05	2.00E+05	2.48E+05
42	D-Glucose	C00031	Glycolysis	179.056	2.35E+07	2.28E+07	1.95E+07	1.99E+07	2.45E+07	2.68E+07	1.77E+07	1.59E+07	2.99E+07	2.95E+07	2.92E+07	2.37E+07	3.22E+07	3.38E+07	3.27E+07	2.11E+07
43	D-Glucose 6-phosphate	C02965	Glycolysis	259.0227	1.18E+05	8.34E+04	1.05E+05	1.86E+05	1.01E+05	6.46E+04	1.55E+05	1.36E+05	5.22E+04	9.03E+04	1.61E+05	1.27E+05	1.62E+05	1.51E+05	1.78E+05	2.40E+05
44	D-Glyceraldehyde 3-phosphate	C00118	Glycolysis	168.9882	3.66E+04	3.44E+04	3.61E+04	5.49E+04	4.85E+04	9.10E+04	5.28E+04	5.23E+04	6.79E+04	1.90E+04	7.85E+04	7.19E+04	1.90E+04	1.29E+04	8.66E+04	1.05E+05
45	Pyruvate	C00022	Glycolysis	87.00725	3.70E+07	2.15E+07	1.38E+07	1.38E+07	1.78E+07	2.01E+07	1.51E+07	1.44E+07	1.70E+07	1.76E+07	1.52E+07	1.40E+07	1.56E+07	1.59E+07	1.55E+07	1.30E+07
46	Lactate	C01432	Glycolysis	89.02296	7.63E+07	9.03E+07	6.55E+07	6.76E+07	6.83E+07	8.12E+07	5.56E+07	6.11E+07	7.96E+07	8.07E+07	8.57E+07	7.90E+07	7.61E+07	7.52E+07	8.01E+07	6.52E+07
47	Mannitol	C00392	Other sugars	183.0845	1.57E+06	1.50E+06	1.49E+06	1.50E+06	1.55E+06	1.58E+06	1.54E+06	1.79E+06	1.52E+06	1.24E+06	1.58E+06	1.56E+06	1.58E+06	1.64E+06	1.42E+06	1.47E+06
48	D-Ribose	C00121	Other sugars	151.0615	1.30E+06	1.19E+06	1.25E+06	1.21E+06	1.23E+06	1.25E+06	1.18E+06	1.25E+06	9.20E+05	9.82E+05	1.01E+06	8.56E+05	9.30E+05	1.08E+06	9.06E+05	9.29E+05
49	D-Rhamnose	C01684	Other sugars	163.0617	3.58E+05	4.35E+05	3.22E+05	3.40E+05	3.78E+05	3.18E+05	4.46E+05	3.36E+05	2.66E+05	2.82E+05	3.13E+05	2.95E+05	3.78E+05	3.46E+05	3.95E+05	3.53E+05
50	D-Arabitol	C01904	Other sugars	151.0616	3.34E+05	4.30E+05	3.00E+05	3.40E+05	3.79E+05	3.18E+05	3.60E+05	2.79E+05	3.01E+05	3.32E+05	3.71E+05	2.26E+05	3.18E+05	2.96E+05	2.38E+05	3.07E+05
51	Citrate	C00158	TCA cycle	191.0212	3.25E+06	5.06E+06	1.90E+06	1.37E+06	3.69E+06	5.36E+06	1.83E+06	1.40E+06	3.14E+06	2.34E+06	1.78E+06	8.99E+05	2.68E+06	2.81E+06	1.45E+06	9.94E+05
52	2-Oxoglutarate	C00026	TCA cycle	145.0162	1.90E+06	2.26E+06	1.55E+06	1.72E+06	2.17E+06	2.16E+06	1.82E+06	1.62E+06	2.55E+06	2.24E+06	2.00E+06	1.70E+06	2.53E+06	2.50E+06	2.07E+06	1.71E+06
53	2-Oxoglutaramate	C00940	TCA cycle	144.0293	1.18E+05	1.56E+05	8.24E+04	1.12E+05	1.30E+05	1.42E+05	1.22E+05	1.03E+05	1.37E+05	1.38E+05	9.87E+04	9.09E+04	1.50E+05	1.32E+05	1.19E+05	9.15E+04
54	Succinate	C00042	TCA cycle	117.0181	1.83E+06	2.00E+06	1.81E+06	1.83E+06	1.67E+06	1.74E+06	1.35E+06	1.57E+06	1.43E+06	1.47E+06	1.45E+06	1.43E+06	3.39E+06	3.11E+06	3.48E+06	3.23E+06
55	Fumarate	C00122	TCA cycle	115.0024	3.78E+05	4.65E+05	2.49E+05	3.01E+05	3.32E+05	4.28E+05	2.88E+05	2.49E+05	4.42E+05	4.13E+05	3.81E+05	3.41E+05	5.06E+05	4.01E+05	3.38E+05	2.61E+05
56	Malate	C00149	TCA cycle	133.0139	3.58E+06	4.36E+06	3.41E+06	3.68E+06	3.62E+06	4.34E+06	3.29E+06	3.12E+06	4.27E+06	4.17E+06	3.68E+06	2.92E+06	4.78E+06	4.45E+06	3.92E+06	3.68E+06
57	Oxaloacetate	C00036	TCA cycle	131.0006	1.55E+06	1.77E+06	1.20E+06	1.10E+06	1.82E+06	1.49E+06	1.42E+06	1.51E+06	1.41E+06	1.50E+06	1.54E+06	1.34E+06	1.25E+06	1.48E+06	1.59E+06	1.35E+06
58	2-Hydroxyglutarate/Citramalate	C02630	Alternative Carboxylic acids	149.0458	1.49E+05	1.63E+05	2.65E+05	2.03E+05	1.59E+05	1.74E+05	2.42E+05	1.61E+05	2.43E+05	1.75E+05	1.67E+05	1.68E+05	1.76E+05	2.33E+05	2.01E+05	1.48E+05
59	alpha-D-Ribose 1-phosphate	C00620	Pentose Phosphate Pathway	229.0105	3.65E+04	6.51E+04	3.35E+04	4.23E+04	4.73E+04	5.18E+04	3.95E+04	2.36E+04	8.38E+04	7.48E+04	5.27E+04	4.67E+04	7.50E+04	7.76E+04	6.12E+04	5.29E+04
60	Glutathione	C00051	GSH homeostasis	308.0904	9.85E+03	1.15E+04	1.18E+04	1.24E+04	8.82E+03	4.69E+03	6.77E+03	0.00E+00	1.76E+04	2.03E+04	1.21E+04	4.36E+04	3.36E+04	4.26E+04	5.24E+04	7.86E+04
61	Glutathione disulfide	C00127	GSH homeostasis	613.1581	3.96E+03	3.03E+03	7.86E+03	1.20E+04	4.52E+03	7.89E+03	3.81E+03	2.26E+03	1.84E+04	1.01E+04	1.79E+04	1.48E+04	2.01E+04	1.95E+04	2.67E+04	2.77E+04
62	5-Oxoproline	C01879	GSH homeostasis	128.0342	1.30E+06	1.30E+06	1.11E+06	1.05E+06	1.44E+06	1.56E+06	1.48E+06	1.53E+06	1.16E+06	1.20E+06	1.18E+06	1.01E+06	1.18E+06	1.18E+06	1.18E+06	1.20E+06
63	S-Glutathionyl-L-cysteine	C05526	GSH homeostasis	425.0815	5.22E+04	5.63E+04	6.16E+04	6.30E+04	6.19E+04	3.01E+04	2.94E+04	3.96E+04	9.46E+04	6.47E+04	1.07E+05	7.57E+04	9.88E+04	1.13E+05	6.27E+04	5.79E+04
64	Ascorbate	C00072	GSH homeostasis	175.0255	2.47E+07	2.64E+07	1.72E+07	1.59E+07	2.38E+07	2.44E+07	1.53E+07	1.44E+07	2.93E+07	2.80E+07	2.27E+07	1.82E+07	3.17E+07	2.83E+07	2.31E+07	2.18E+07
65	Dehydroascorbate	C05422	GSH homeostasis	173.0106	4.09E+05	5.55E+05	6.85E+05	7.00E+05	4.92E+05	6.05E+05	6.50E+05	6.98E+05	8.24E+05	6.64E+05	9.19E+05	9.28E+05	9.22E+05	7.83E+05	7.65E+05	8.14E+05
66	gamma-L-Glutamyl-L-cysteine	C00669	Gamma-glutamyls	249.0572	1.94E+04	2.12E+04	1.95E+04	5.81E+04	2.78E+04	7.33E+04	2.14E+04	4.65E+04	5.39E+03	4.09E+03	5.52E+04	5.56E+04	7.17E+04	1.58E+05	5.37E+04	3.90E+04
67	gamma-Glutamyl-Se-methylselenocystein	C05695	Gamma-glutamyls	313.035	1.75E+05	2.12E+05	2.16E+05	1.95E+05	2.22E+05	2.32E+05	1.94E+05	2.04E+05	1.92E+05	2.15E+05	1.97E+05	2.45E+05	2.32E+05	2.70E+05	2.37E+05	2.45E+05
68	gamma-L-Glutamyl-D-alanine	C03738	Gamma-glutamyls	219.0972	2.15E+05	5.57E+04	2.45E+05	8.26E+04	7.72E+04	1.20E+05	5.98E+04	3.00E+05	2.19E+05	2.28E+05	1.82E+05	2.70E+05	2.40E+05	1.08E+05	2.05E+05	4.53E+04
69	Bis-gamma-glutamylcystine	C03646	Gamma-glutamyls	497.0929	1.53E+05	1.60E+05	1.02E+05	1.16E+05	2.39E+05	1.77E+05	2.17E+05	2.38E+05	1.89E+05	1.02E+05	1.57E+05	1.58E+05	6.16E+04	7.94E+04	5.25E+04	6.18E+04
70	(5-L-Glutamyl)-L-glutamine	C05283	Gamma-glutamyls	276.1186	5.43E+05	4.38E+05	4.47E+05	6.62E+05	2.74E+05	4.11E+05	6.06E+05	5.85E+05	5.38E+05	4.52E+05	4.04E+05	7.07E+05	5.90E+05	3.83E+05	4.69E+05	8.13E+05
71	5-L-Glutamyl-taurine	C05844	Gamma-glutamyls	255.0633	1.74E+04	2.48E+04	2.22E+04	1.92E+04	2.65E+04	1.67E+04	2.38E+04	5.53E+03	4.71E+04	3.06E+04	6.23E+04	3.13E+04	4.41E+04	4.41E+04	5.87E+04	4.25E+04
72	L-Homocysteine	C00155	Urine biosynthesis and one-carbon metabolis	136.0426	1.76E+05	1.97E+05	8.25E+04	1.24E+05	1.18E+05	1.15E+05	1.27E+05	7.68E+04	1.52E+04	6.48E+04	1.87E+05	8.63E+04	1.25E+05	4.55E+04	6.15E+04	7.50E+04
73	N-N-Dimethylglycine	C01026	Urine biosynthesis and one-carbon metabolis	104.0709	2.64E+06	2.81E+06	2.89E+06	2.65E+06	2.61E+06	2.72E+06	2.42E+06	2.74E+06	2.67E+06	2.54E+06	2.42E+06	2.90E+06	2.95E+06	2.91E+06	2.99E+06	2.94E+06
74	D-O-Phosphoserine	C02532	Urine biosynthesis and one-carbon metabolis	186.0184	6.00E+05	5.22E+05	5.17E+05	6.01E+05	6.50E+05	5.05E+05	5.97E+05	6.60E+05	4.17E+05	4.21E+05	4.44E+05	4.26E+05	4.35E+05	3.98E+05	4.10E+05	4.75E+05
75	3-Phosphonooxypyruvate	C03232	Urine biosynthesis and one-carbon metabolis	182.969	1.36E+04	1.16E+04	7.67E+03	1.40E+04	0.00E+00	0.00E+00	1.50E+04	1.16E+04	1.97E+04	2.39E+04	5.73E+04	4.06E+04	6.37E+04	7.48E+04	5.32E+04	9.12E+04
76	Folate	C00504	Folate pool (One carbon metabolism)	442.1503	3.83E+05	5.46E+05	3.37E+05	3.90E+05	5.52E+05	4.43E+05	7.15E+05	5.46E+05	5.57E+05	3.48E+05	5.88E+05	4.99E+05	3.02E+05	2.61E+05	3.87E+05	2.75E+05
77	Ornithine	C01602	Urea cycle	133.0971	1.46E+06	1.44E+06	1.32E+06	1.33E+06	1.43E+06	1.52E+06	1.39E+06	1.49E+06	1.40E+06	1.30E+06	1.36E+06	1.21E+06	1.53E+06	1.53E+06	1.52E+06	7.46E+05
78	L-Citrulline	C00327	Urea cycle	173.7855	7.14E+06	6.20E+06	5.64E+06	6.56E+06	5.08E+06	4.97E+06	6.07E+06	5.46E+06	4.13E+06	5.02E+06	4.12E+06	5.30E+06	5.37E+06	4.56E+06	4.44E+06	6.17E+06
79	Urate	C00366	Urea cycle	169.0352	4.86E+05	5.64E+05	6.70E+05	6.13E+05	7.87E+05	7.21E+05	6.27E+05	5.10E+05	8.52E+05	7.49E+05	7.43E+05	6.04E+05	8.83E+05	8.98E+05	8.97E+05	7.27E+05
80	Cadaverine	C01672	Polyamines	103.1235	3.72E+03	6.28E+03	5.95E+03	1.00E+04	1.70E+04	7.52E+03	0.00E+00	1.64E+04	4.46E+03	1.64E+04	5.74E+03	1.73E+04	1.09E+04	1.03E+04	1.20E+04	1.15E+04
81	Putrescine	C00134	Polyamines	89.10792	1.94E+05	1.98E+05	1.89E+05	1.74E+05	1.72E+05	1.88E+05	1.75E+05	1.95E+05	1.73E+05	1.90E+05	1.81E+05	1.83E+05	2.00E+05	1.91E+05	1.89E+05	1.89E+05
82	Spermidine	C00315	Polyamines	146.165	3.45E+06	3.31E+06	3.20E+06	3.23E+06	5.25E+06	5.32E+06	5.38E+06	4.53E+06	1.91E+06	1.92E+06	1.69E+06	1.53E+06	2.35E+06	2.05E+06	2.37E+06	1.67E+06
83	Spermine	C00750	Polyamines	203.2228	3.10E+05	2.50E+05	2.82E+05	2.71E+05	8.50E+05	7.87E+05	9.34E+05	7.99E+05	1.25E+05	1.48E+05	1.26E+05	1.03E+05	1.71E+05	1.31E+05	1.77E+05	1.19E+05
84	N-Acetylneuraminate	C00270	Aminosugars	308.0993	9.96E+04	2.68E+04	4.52E+04	2.11E+04	1.24E+05	1.34E+05	9.38E+04	1.27E+05	3.56E+04	1.31E+05	7.30E+04	3.82E+04	1.60E+05	9.14E+04	5.07E+04	1.12E+05
85	alpha-D-Glucosamine 1-phosphate	C06156	Aminosugars	258.0378	9.82E+03	1.64E+04	9.24E+03	1.20E+04	1.26E+04	1.57E+04	9.11E+03	8.03E+03	1.80E+04	2.45E+04	1.34E+04	1.13E+04	1.96E+04	1.52E+04	1.60E+04	1.54E+04
86	L-Arabinose	C00259	Aminosugars	149.0452	5.73E+05	5.22E+05	4.98E+05	5.16E+05	5.12E+05	5.85E+05	4.69E+05	3.79E+05	8.10E+05	8.29E+05	7.02E+05	6.84E+05	7.03E+05	8.55E+05	8.29E+05	6.43E+05
87	1-4-beta-D-Xylan	C02352	Aminosugars	131.0343	1.06E+06	1.01E+06	8.18E+05	9.14E+05	1.25E+06	1.27E+06	8.65E+05	8.02E+05	1.31E+06	1.28E+06	1.25E+06	9.57E+05	1.36E+06	1.31E+06	1.30E+06	1.17E+06
88	Homocarnosine	C00884	Arginine and proline metabolism	241.129	1.01E+05	6.84E+04

Supplementary Table 3 - Part 3 - Metabolomics report of bronchoalveolar lavage fluid from rats undergoing trauma and hemorrhage, with and without mesenteric lymph diversion

					BAL Fluid																				
N.	compound	CmpdID	Pathway	parent	Control 1	Control 2	Control mix1	Control mix2	T/SS 1	T/SS 2	T/SS mix1	T/SS mix2	T/SS+MLD 1	T/SS+MLD 2	T/SS+MLD mix1	T/SS+MLD mix2	T/HS 1	T/HS 2	T/HS mix1	T/HS mix2	T/HS+MLD 1	T/HS+MLD 2	T/HS+MLD mix1	T/HS+MLD mix2
1	alanine	C00041	Amino acids	90.05556	2.34E+06	2.57E+06	1.82E+06	1.43E+06	1.57E+06	1.66E+06	1.48E+06	1.20E+06	2.97E+06	2.83E+06	2.76E+06	2.82E+06	2.07E+06	1.99E+06	2.21E+06	2.10E+06	8.30E+06	8.80E+06	8.34E+06	8.66E+06
2	arginine	C00062	Amino acids	175.1188	2.65E+05	2.94E+05	2.77E+05	5.44E+04	2.44E+05	2.14E+05	2.41E+05	9.41E+04	7.80E+05	6.71E+05	7.63E+05	5.16E+05	5.04E+05	5.16E+05	5.52E+05	4.32E+05	1.06E+06	1.11E+06	1.31E+06	7.16E+05
3	asparagine	C00152	Amino acids	133.0606	3.49E+04	2.50E+04	6.89E+03	6.67E+03	1.74E+04	8.57E+03	0.00E+00	6.19E+03	5.04E+04	5.68E+04	3.59E+04	3.17E+04	1.53E+04	8.98E+03	1.50E+04	2.05E+04	1.35E+05	1.06E+05	1.14E+05	1.64E+05
4	aspartate	C00049	Amino acids	134.0448	7.52E+03	2.45E+04	0.00E+00	0.00E+00	0.00E+00	6.00E+03	7.20E+03	1.65E+04	8.88E+03	1.53E+05	1.47E+05	1.43E+05	8.40E+03	3.96E+04	5.13E+04	3.15E+04	1.87E+05	1.82E+05	1.88E+05	2.64E+05
5	cysteine	C00097	Amino acids	122.0272	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.80E+03	0.00E+00	8.69E+03	0.00E+00	6.24E+03	1.51E+04	1.69E+04	4.94E+03	7.82E+03	6.18E+03	1.35E+04	1.19E+04	2.54E+05	2.47E+05	2.01E+05	1.15E+05
6	glutamate	C00025	Amino acids	148.0603	1.63E+05	1.54E+05	1.08E+05	1.08E+05	1.43E+05	1.40E+05	1.62E+05	1.72E+05	8.65E+05	7.73E+05	7.70E+05	7.38E+05	3.24E+05	2.79E+05	3.16E+05	3.03E+05	1.12E+06	1.08E+06	1.09E+06	1.20E+06
7	glutamine	C00064	Amino acids	147.0761	2.53E+05	2.04E+05	1.74E+05	1.61E+05	2.04E+05	2.08E+05	2.32E+05	1.48E+05	9.70E+05	9.53E+05	8.61E+05	7.79E+05	4.63E+05	4.38E+05	4.44E+05	3.36E+05	2.07E+06	1.95E+06	1.88E+06	2.14E+06
8	glycine	C00037	Amino acids	76.04005	0.00E+00	3.05E+06	1.36E+06	1.92E+06	0.00E+00	0.00E+00	0.00E+00	3.17E+05	0.00E+00	6.08E+05	1.15E+06	1.91E+06	0.00E+00	4.25E+05	2.78E+05	0.00E+00	1.41E+06	2.05E+06	0.00E+00	2.40E+06
9	histidine	C00135	Amino acids	156.0765	9.27E+04	8.02E+04	6.68E+04	6.02E+04	3.78E+04	4.28E+04	1.71E+05	9.45E+04	1.24E+05	1.17E+05	1.03E+05	1.28E+05	7.65E+04	7.84E+04	1.12E+05	7.79E+04	3.22E+05	3.62E+05	2.87E+05	2.90E+05
10	leucine/isoleucine	C00123	Amino acids	132.1017	1.95E+06	1.80E+06	2.29E+06	2.31E+06	1.97E+06	1.63E+06	2.31E+06	2.64E+06	5.16E+06	5.09E+06	5.19E+06	4.72E+06	2.62E+06	2.80E+06	2.87E+06	3.13E+06	1.89E+07	1.84E+07	1.85E+07	1.92E+07
11	lysine	C00047	Amino acids	147.1126	2.12E+05	2.49E+05	1.81E+05	1.88E+05	2.10E+05	1.89E+05	1.99E+05	1.64E+05	6.68E+05	6.10E+05	5.28E+05	4.97E+05	4.52E+05	3.99E+05	3.94E+05	4.20E+05	1.45E+06	1.41E+06	1.51E+06	1.43E+06
12	methionine	C00073	Amino acids	150.0583	1.06E+05	8.74E+04	1.21E+05	1.52E+05	1.11E+05	9.76E+04	8.99E+04	1.46E+05	4.59E+05	4.03E+05	4.02E+05	3.85E+05	2.26E+05	2.18E+05	1.67E+05	1.78E+05	1.39E+06	1.39E+06	1.20E+06	1.22E+06
13	phenylalanine	C00079	Amino acids	166.0861	2.92E+05	3.16E+05	5.21E+05	6.07E+05	3.39E+05	2.61E+05	4.19E+05	5.83E+05	8.54E+05	7.22E+05	8.78E+05	1.10E+06	5.78E+05	5.00E+05	5.94E+05	7.51E+05	3.17E+06	2.80E+06	2.96E+06	3.38E+06
14	proline	C00148	Amino acids	116.0708	1.95E+06	1.75E+06	2.06E+06	2.25E+06	1.48E+06	1.28E+06	1.90E+06	2.21E+06	3.65E+06	3.37E+06	3.70E+06	3.95E+06	3.24E+06	2.95E+06	3.32E+06	3.35E+06	1.04E+07	1.02E+07	1.01E+07	9.95E+06
15	serine	C00065	Amino acids	106.0503	0.00E+00	7.56E+04	4.34E+04	4.91E+04	4.17E+04	3.21E+04	8.02E+04	1.08E+05	1.71E+05	1.83E+05	1.62E+05	1.50E+05	8.14E+04	8.03E+04	1.15E+05	1.06E+05	3.18E+05	3.18E+05	2.84E+05	4.03E+05
16	threonine	C00188	Amino acids	120.0657	1.34E+05	1.63E+05	1.06E+05	2.01E+05	1.41E+05	1.58E+05	1.93E+05	2.18E+05	4.09E+05	3.31E+05	3.90E+05	4.30E+05	2.39E+05	2.45E+05	2.44E+05	2.97E+05	7.07E+05	7.08E+05	7.32E+05	7.73E+05
17	tryptophan	C00078	Amino acids	205.0967	4.34E+04	1.23E+05	1.09E+07	1.11E+07	2.32E+07	9.84E+04	2.58E+07	2.57E+07	1.88E+07	3.82E+05	2.07E+07	1.89E+07	9.62E+06	1.74E+05	6.59E+06	7.39E+06	2.07E+07	8.69E+05	1.69E+07	1.94E+07
18	tyrosine	C00082	Amino acids	182.081	8.67E+04	7.65E+04	9.83E+04	9.64E+04	1.22E+05	6.10E+04	1.04E+05	1.48E+05	3.88E+05	3.92E+05	3.38E+05	3.42E+05	2.03E+05	2.53E+05	2.33E+05	2.26E+05	1.50E+06	1.41E+06	1.24E+06	1.30E+06
19	valine	C00183	Amino acids	118.0864	2.83E+06	2.95E+06	3.63E+06	3.63E+06	2.69E+06	3.30E+06	3.32E+06	4.09E+06	7.87E+06	7.57E+06	7.67E+06	9.06E+06	5.55E+06	6.65E+06	6.42E+06	8.13E+06	1.80E+07	1.93E+07	1.80E+07	2.02E+07
20	cystine	C00491	Amino acids	241.0303	2.21E+04	1.01E+04	1.42E+04	6.59E+03	1.67E+04	1.08E+04	2.74E+04	1.07E+04	7.98E+04	6.69E+04	6.96E+04	6.52E+04	2.86E+04	9.04E+03	3.05E+04	1.04E+04	1.37E+05	1.33E+05	1.51E+05	2.29E+05
21	kynurenine	C00328	Amino acids	209.0918	5.87E+03	7.06E+03	6.48E+03	1.38E+04	1.33E+04	8.89E+03	0.00E+00	8.21E+03	5.43E+03	0.00E+00	4.26E+03	6.73E+03	1.00E+04	4.51E+03	0.00E+00	9.37E+03	8.51E+03	1.00E+04	7.74E+03	0.00E+00
22	AMP	C00020	Nucleotides	348.0681	0.00E+00	0.00E+00	1.13E+04	1.40E+04	0.00E+00	0.00E+00	1.88E+04	6.59E+03	9.52E+04	0.00E+00	3.01E+04	1.86E+04	7.60E+03	0.00E+00	1.79E+04	2.25E+04	8.98E+04	1.97E+04	7.90E+04	8.22E+04
23	Hypoxanthine	C00262	Nucleotides	135.0288	9.79E+04	1.24E+05	2.12E+05	3.12E+05	2.51E+05	9.73E+04	2.73E+05	2.41E+05	2.86E+05	1.98E+05	3.06E+05	2.20E+05	3.63E+05	3.20E+05	2.47E+05	2.22E+05	9.03E+05	8.43E+05	4.78E+05	6.62E+05
24	Xanthine	C00385	Nucleotides	153.0391	8.80E+03	1.59E+04	1.09E+04	2.26E+04	1.50E+04	2.89E+04	2.01E+04	3.75E+04	4.04E+04	3.49E+04	3.70E+04	4.39E+04	2.36E+04	2.71E+04	2.75E+04	4.05E+04	4.16E+04	4.53E+04	4.26E+04	5.39E+04
25	Guanine	C00242	Nucleotides	152.0539	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.67E+03	7.50E+03	0.00E+00	7.97E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.41E+04	3.84E+04	3.85E+04	3.85E+04
26	Allantoate	C00499	Nucleotides	177.0611	4.46E+04	1.57E+04	3.48E+04	7.50E+03	2.00E+04	3.40E+04	7.78E+03	1.39E+04	4.44E+04	1.01E+04	1.56E+04	3.30E+04	5.15E+04	2.27E+04	2.44E+04	5.11E+04	1.41E+05	1.33E+05	1.42E+05	1.63E+05
27	S(+)-Allantoin	C02350	Nucleotides	157.0506	6.40E+04	6.83E+04	9.78E+04	1.04E+05	1.50E+05	1.42E+05	1.75E+05	1.73E+05	3.70E+05	3.60E+05	4.23E+05	3.81E+05	2.82E+05	2.69E+05	2.67E+05	2.72E+05	6.70E+05	7.27E+05	3.85E+05	6.46E+05
28	5-Hydroxyisourate	C11821	Nucleotides	183.0166	2.42E+04	4.44E+04	3.44E+04	2.86E+04	5.84E+04	0.00E+00	3.69E+04	3.15E+04	3.95E+04	5.36E+04	0.00E+00	1.31E+04	4.54E+04	2.40E+04	1.38E+04	0.00E+00	5.77E+04	1.78E+04	9.27E+04	1.42E+05
29	Cytidine	C00475	Nucleotides	244.0921	9.96E+03	0.00E+00	8.20E+03	0.00E+00	6.43E+03	1.32E+04	0.00E+00	6.55E+03	8.35E+03	7.28E+03	1.14E+04	3.48E+04	2.00E+04	2.01E+04	1.46E+04	1.33E+04	1.22E+05	1.02E+05	1.28E+05	9.31E+04
30	2'-3'-Cyclic CMP	C02354	Nucleotides	306.0488	9.30E+03	0.00E+00	1.62E+03	1.68E+03	0.00E+00	0.00E+00	0.00E+00	5.66E+03	1.72E+03	2.10E+04	1.41E+04	4.27E+04	2.98E+04	1.85E+04	1.75E+04	2.01E+04	5.86E+03	1.08E+05	8.11E+04	1.29E+05	2.15E+05
31	5-6-Dihydrothymine	C00906	Nucleotides	129.0658	2.55E+05	2.59E+05	2.08E+05	2.39E+05	1.82E+05	1.69E+05	2.22E+05	1.86E+05	6.08E+05	6.10E+05	5.88E+05	5.43E+05	2.48E+05	2.90E+05	2.94E+05	2.94E+05	8.30E+05	8.28E+05	7.72E+05	8.23E+05
32	Thymine	C00178	Nucleotides	127.05	1.20E+05	8.90E+04	8.96E+04	1.08E+05	7.64E+04	5.96E+04	7.47E+04	6.74E+04	6.56E+04	6.96E+04	7.35E+04	8.69E+04	9.57E+04	7.56E+04	9.30E+04	8.36E+04	1.21E+05	1.07E+05	1.01E+05	1.02E+05
33	4-Pyridoxate	C00847	Nucleotides	182.0454	6.33E+03	1.24E+04	9.16E+03	7.07E+03	7.32E+03	8.40E+03	0.00E+00	1.16E+04	5.37E+03	4.72E+03	6.41E+03	5.65E+03	0.00E+00	0.00E+00	5.73E+03	2.59E+03	3.49E+03	1.09E+04	5.14E+04	5.88E+03
34	Pyridoxamine phosphate	C00647	Nucleotides	249.0605	0.00E+00	0.00E+00	2.38E+06	2.32E+06	4.89E+06	0.00E+00	5.98E+06	5.65E+06	4.08E+06	7.66E+04	4.63E+06	4.08E+06	1.98E+06	5.92E+03	1.49E+06	1.58E+06	4.02E+06	1.71E+05	3.47E+06	3.80E+06
35	Nicotinamide	C00153	Nucleotides	123.055	6.44E+05	6.87E+05	2.78E+05	0.00E+00	4.04E+05	4.54E+05	0.00E+00	4.61E+05	7.90E+05	7.70E+05	7.93E+05	6.90E+05	2.74E+05	0.00E+00	1.24E+06	8.68E+05	1.86E+06	1.83E+06	1.63E+06	1.72E+06
36	Adenine	C00147	Nucleotides	136.0635	2.84E+06	2.42E+06	3.70E+06	8.76E+06	2.73E+06	2.58E+06	3.43E+06	7.23E+06	3.10E+06	3.30E+06	3.52E+06	6.67E+06	3.25E+06	3.21E+06	3.47E+06	6.60E+06	3.89E+06	3.39E+06	3.70E+06	8.93E+06
37	Adenosine	C00212	Nucleotides	268.1031	2.09E+04	2.71E+04	2.18E+04	3.22E+04	1.97E+04	1.07E+04	3.41E+04	2.10E+04	1.74E+05	1.63E+05	1.58E+05	1.49E+05	6.52E+04	6.09E+04	6.49E+04	4.91E+04	2.19E+04	2.98E+04	4.69E+04	4.82E+04
38	Inosine	C00294	Nucleotides	267.0734	1.36E+04	1.89E+04	1.14E+04	8.11E+03	1.99E+04	9.31E+03	7.12E+03	1.04E+04	1.63E+04	4.05E+04	1.95E+04	1.92E+04	5.76E+03	6.99E+03	4.99E+03	9.36E+03	2.67E+04	5.12E+04	4.21E+04	3.74E+04
39	Purine	C15587	Nucleotides	121.0528	6.97E+05	7.68E+05	8.23E+05	8.41E+05	7.66E+05	7.86E+05	7.85E+05	8.29E+05	7.96E+05	8.10E+05	8.25E+05	8.38E+05	7.94E+05	7.75E+05	8.44E+05	7.63E+05	8.01E+05	8.36E+05	5.99E+05	8.11E+05
40	Orthophosphate	C00009	Phosphates	96.96827	2.18E+05	1.84E+05	1.89E+05	1.23E+05	1.90E+05	2.93E+05	1.46E+05	1.63E+05	3.46E+05	3.75E+05	3.20E+05	2.82E+05	3.61E+05	3.61E+05	2.75E+05	2.78E+05	1.74E+06	2.08E+06	6.91E+05	2.21E+06
41	Diphosphate	C00013	Phosphates	176.9354	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.30E+03	8.32E+03	5.84E+03	2.33E+04
42	D-Glucose	C00031	Glycolysis	179.0564	2.10E+05	2.37E+05	2.41E+05	1.88E+05	2.93E+05	3.53E+05	2.27E+05	2.01E+05	5.23E+05	4.47E+05	5.38E+05	5.18E+05	3.03E+05	2.21E+05	2.28E+05	2.24E+05	8.94E+05	9.57E+05	3.87E+05	8.50E+05
43	D-Glucose 6-phosphate	C02965	Glycolysis	259.0227	2.53E+03	3.09E+03	1.73E+04	4.21E+04	7.95E+03	1.13E+04	2.41E+04	8.18E+04	1.43E+04	1.74E+04	2.01E+04	7.00E+04	6.36E+03	1.18E+04	1.02E+04	6.14E+04	6.69E+04	3.88E+04	4.71E+04	5.99E+04
44	D-Glyceraldehyde 3-phosphate	C00118	Glycolysis	168.9886	0.00E+00	5.46E+03	4.35E+04	9.48E+04	7.87E+04	5.93E+04	1.50E+05	1.12E+05	3.11E+04	7.24E+04	1.16E+05	9.19E+04	9.30E+04	1.20E+05	7.77E+04	8.09E+04	6.44E+04	1.13E+05	6.45E+04	1.63E+05
45	Pyruvate	C00022	Glycolysis	87.00735	1.74E+06	2.40E+06	2.42E+06	2.46E+06	2.56E+06	1.03E+06	2.33E+06	2.21E+06	2.71E+06	1.29E+06	2.65E+06	2.31E+06	2.74E+06	2.49E+06	2.23E+06	1.82E+06	2.89E+06	2.88E+06	1.59E+06	2.32E+06
46	Lactate	C01432	Glycolysis	89.02298	6.29E+06	8.32E+06	1.24E+07	6.20E+06	9.96E+06	4.08E+06	1.04E+07	1.04E+07	5.06E+06	3.28E+06	1.08E+07	9.83E+06	1.40E+07	1.24E+07	1.08E+07	1.07E+07	4.03E+07	3.55E+07	1.69E+07	3.22E+07
47	Mannitol	C00392	Other sugars	183.0845	7.07E+03	7.36E+03	1.13E+04	1.07E+04	4.77E+03	3.71E+03	5.89E+03	6.30E+03	3.33E+04	9.40E+03	1.52E+04	8.19E+03	6.08E+03	9.34E+03	1.07E+04	6.34E+03	1.25E+05	9.11E+04	1.16E+05	1.19E+05
48	D-Ribose	C00121	Other sugars	151.0615	8.46E+03	6.37E+03	3.71E+03	3.90E+03	6.87E+03	7.08E+03	6.91E+03	8.61E+03	3.20E+04	1.37E+04	2.44E+04	2.50E+04	5.88E+03	8.08E+03	6.26E+03	7.37E+03	6.29E+04	9.13E+04	5.98E+04	5.20E+04
49	D-rhamnose	C01084	Other sugars	163.0627	4.37E+05	4.61E+05	3.05E+05	2.82E+05	3.86E+05	3.62E+05	3.69E+05	3.00E+05	4.37E+05	2.89E+05	2.62E+05	2.26E+05	3.21E+05	3.31E+05	3.92E+05	2.13E+05	3.32E+05	3.11E+05	5.59E+05	3.24E+05
50	D-Arabitol	C01904	Other sugars	151.0616	3.10E+05	2.58E+05	2.68E+05	3.31E+05	3.42E+05	3.98E+05	2.53E+05	3.23E+05	3.84E+05	2.94E+05	3.20E+05	2.13E+05	2.68E+05	3.10E+05	3.22E+05	1.76E+05	3.05E+05	3.16E+05	7.05E+05	2.57E+05
51	Citrate	C00158	TCA cycle	191.0212	3.40E+05	5.63E+05	4.57E+05	3.74E+05	3.64E+05	4.11E+05	2.88E+05	3.26E+05	5.81E+05	4.36E+05	3.77E+05	3.95E+05	4.77E+05	4.40E+05	3.66E+05	4.02E+05	3.76E+05	3.91E+05	4.64E+05	3.42E+05
52	2-Oxoglutarate	C00026	TCA cycle	145.0162	1.96E+06	1.91E+06	1.84E+06	1.99E+06	2.55E+06	2.51E+06	1.89E+06	1.89E+06	2.62E+06	2.15E+06	2.27E+06	1.91E+06	2.17E+06	2.57E+06	2.28E+06	1.71E+06	1.35E+06	2.05E+06	1.64E+06	1.78E+06
53	2-Oxoglutaramate	C00940	TCA cycle	144.0293	1.82E+05	1.35E+05	1.07E+05	9.11E+04	1.42E+05	2.31E+05	1.12E+05	8.21E+04	1.04E+05	9.57E+04	5.99E+04	8.60E+04	1.11E+05	1.30E+05	1.11E+05	9.04E+04	8.18E+04	1.19E+05	4.76E+05	7.27E+04
54	Succinate	C00042	TCA cycle	117.0181	1.27E+05	2.08E+05	2.28E+05	3.14E+05	3.57E+05	3.36E+05	3.48E+05	5.36E+05	3.35E+05	2.88E+05	2.68E+05	4.90E+05	7.54E+05	7.13E+05	7.20E+05	9.03E+05	4.51E+06	4.80E+06	1.73E+06	4.13E+06
55	Fumarate	C00122	TCA cycle	115.0024	7.92E+04	5.18E+04	6.39E+04	5.60E+04	6.87E+04	4.94E+04	6.03E+04	5.78E+04	6.33E+04	1.15E+05	7.87E+04	9.34E+04	9.48E+04	1.06E+05	9.90E+04	6.23E+04	2.43E+05	2.15E+05	1.60E+05	1.79E+05
56	Malate	C00149	TCA cycle	133.0139	3.66E+05	4.23E+05	5.25E+05	4.76E+05	6.45E+05	5.80E+05	5.94E+05	4.35E+05	6.06E+05	4.67E+05	4.39E+05	3.64E+05	4.78E+05	5.26E+05	4.01E+05	4.47E+05	1.56E+06	1.68E+06	7.95E+05	1.56E+06
57	Oxaloacetate	C00036	TCA cycle	131.0006	2.00E+06	1.98E+06	1.83E+06	1.84E+06	2.59E+06	2.57E+06	1.91E+06	1.62E+06	1.80E+06	2.30E+06	2.03E+06	1.72E+06	1.84E+06	2.63E+06	2.08E+06	1.70E+06	1.63E+06	2.14E+06	1.83E+06	1.87E+06
58	2-Hydroxyglutarate/Citramalate	C02630	Alternative Carboxylic acids	149.0458	3.25E+03	2.83E+03	2.23E+03	3.64E+03	4.13E+03	1.67E+03	8.47E+03	1.98E+03	2.33E+03	1.99E+03	1.39E+04	2.01E+03	1.78E+03	2.17E+03	1.93E+03	1.77E+03	4.03E+03	5.42E+03	1.37E+03	1.61E+03
59	alpha-D-Ribose 1-phosphate	C00620	Pentose Phosphate Pathway	229.0105	3.20E+03	2.77E+03	0.00E+00	2.05E+03	1.02E+03	3.14E+03	2.71E+03	1.65E+03	5.21E+02	2.86E+03	7.07E+02	1.98E+03	1.03E+03	1.76E+03	2.03E+03	1.24E+03	1.50E+03	7.65E+02	2.67E+03	1.05E+03
60	Glutathione	C00051	GSH homeostasis	308.0904	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.74E+03	1.91E+05	2.15E+05	2.25E+05	1.49E+05	3.79E+04	6.17E+04	2.92E+04	3.99E+04	4.18E+05	3.99E+05	3.76E+05	6.00E+05
61	Glutathione disulfide	C00127	GSH homeostasis	613.1581	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.72E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.92E+03	0.00E+00	1.47E+03	0.00E+00
62	5-Oxoproline	C01879	GSH homeostasis	128.0342	7.58E+05	8.37E+05	4.88E+05	5.16E+05	6.17E+05	5.90E+05	5.11E+05	5.73E+05	6.83E+05	5.71E+05	5.18E+05	4.53E+05	5.36E+05	5.86E+05	5.28E+05	4.47E+05	5.67E+05	6.55E+05	8.21E+05	6.39E+05
63	S-Glutathionyl-L-cysteine	C05526	GSH homeostasis	425.0815	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
64	Ascorbate	C00072	GSH homeostasis	175.0255	4.36E+06	4.80E+06	3.44E+06	2.62E+06	5.34E+06	5.74E+06	3.73E+06	2.71E+06	5.19E+06	5.13E+06	3.28E+06	2.73E+06	5.21E+06	4.61E+06	3.08E+06	2.54E+06	7.66E+06	8.52E+06	3.72E+06	5.50E+06
65	Dehydroascorbate	C05422	GSH homeostasis	173.0106	2.21E+05	2.61E+05	2.02E+05	2.67E+05	2.85E+05	3.03E+05	2.17E+05	2.01E+05	3.29E+05	3.07E+05	2.68E+05	2.19E+05	2.31E+05	3.09E+05	2.46E+05	2.52E+05	2.51E+05	2.21E+05	2.24E+05	2.36E+05
66	gamma-L-Glutamyl-L-cysteine	C00669	Gamma-glutamyls	249.0572	4.04E+04	2.80E+04	2.27E+04	6.94E+03	3.38E+04	3.31E+04	1.77E+04	1.78E+04	1.76E+04	2.53E+04	1.78E+04	1.88E+04	7.83E+03	1.73E+04	2.05E+04	9.47E+03	1.93E+04	2.27E+04	1.84E+04	1.72E+04
67	gamma-Glutamyl-Se-methylselenocysteine	C05695	Gamma-glutamyls	313.035	1.97E+04	2.76E+04	1.51E+04	9.73E+03	1.17E+04	4.26E+03	1.38E+04	3.06E+04	1.07E+04	1.04E+04	8.95E+03	1.63E+04	1.11E+04	2.27E+04	1.57E+04	1.57E+04	7.29E+04	6.17E+04	6.14E+04	4.14E+04
68	gamma-L-Glutamyl-D-alanine	C03738	Gamma-glutamyls	219.0972	6.07E+04	6.50E+04	1.21E+04	1.52E+04	9.55E+04	1.02E+05	1.06E+05	1.39E+05	1.02E+05	1.73E+03	5.12E+04	2.03E+03	1.25E+04	3.99E+04	2.59E+04	5.15E+04	1.99E+03	6.50E+04	6.84E+04	1.67E+03
69	Bis-gamma-glutamylcystine	C03646	Gamma-glutamyls	497.0929	0.00E+00	0.00E+00	9.02E+04	1.14E+05	0.00E+00	0.00E+00	6.30E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.30E+03	1.90E+05	8.23E+03	1.56E+05	1.76E+05	5.27E+04	0.00E+00	4.28E+04	4.87E+04
70	(5-L-Glutamyl)-L-glutamine	C05283	Gamma-glutamyls	276.1186	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.59E+03	9.65E+03	0.00E+00	0.00E+00	0.00E+00	1.51E+03	0.00E+00	5.10E+03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.33E+03	2.32E+03	8.81E+03	0.00E+00
71	5-L-Glutamyl-taurine	C05844	Gamma-glutamyls	255.0633	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
72	L-Homocysteine	C00155	rine biosynthesis and one-carbon metabol	135.0429	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
73	N-N-Dimethylglycine	C01026	rine biosynthesis and one-carbon metabol	104.0709	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00