

Figure S1. Random images and levels of the four metabolites in the chemo-resistant and chemo-sensitive cases. The blue arrows mark tumor sites. (A-a) Image of chemo-resistant case before chemotherapy. (A-b) Image of chemo-resistant case after chemotherapy. (B-a) Image of chemo-sensitive case before chemotherapy. (B-b) Image of chemo-sensitive case after chemotherapy. (C) Levels of the four metabolites in the chemo-sensitive case and chemo-resistant case. PC, phosphatidylcholine.

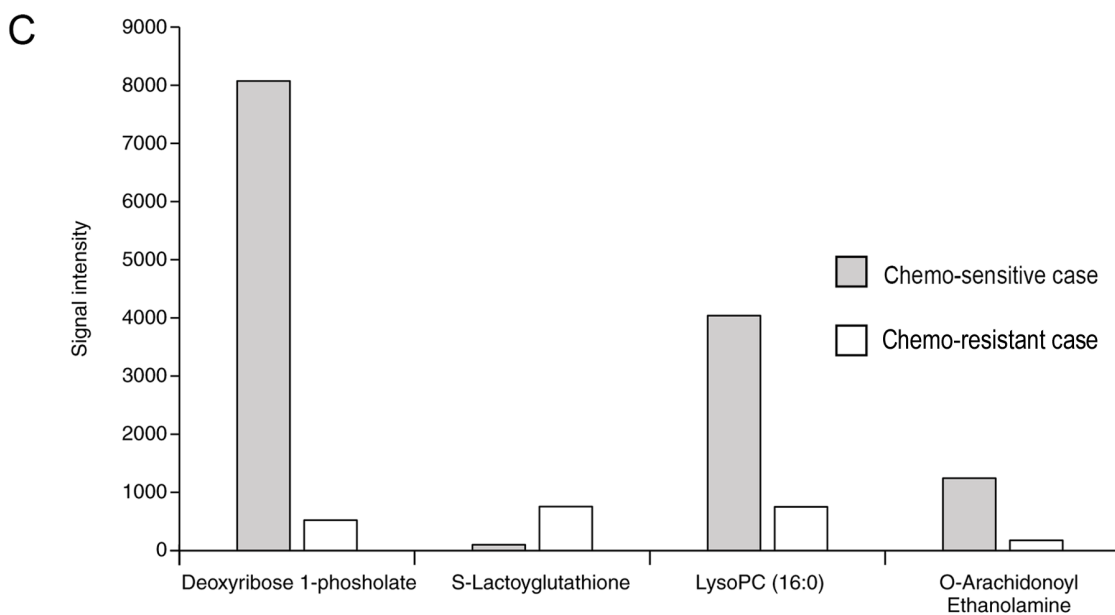
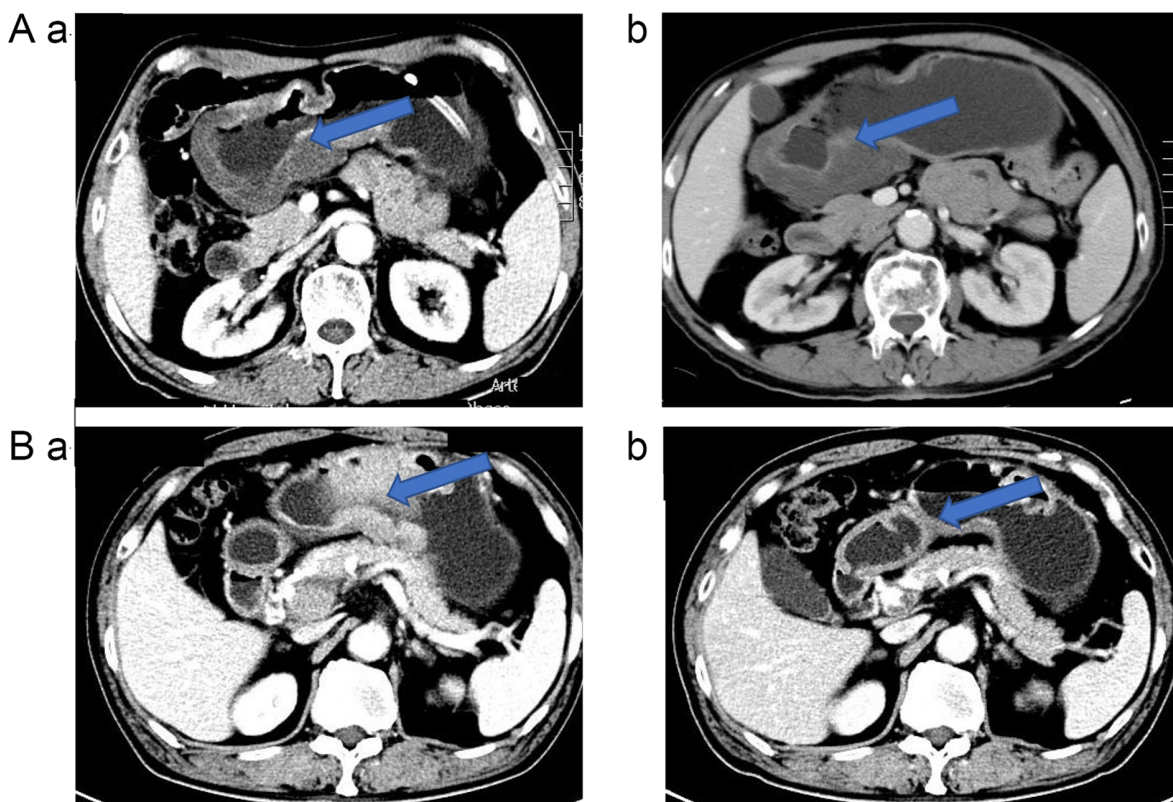


Table SI. Metabolites with significant differences between serum samples from chemo-sensitive and -resistant patients in positive ion mode.

m/z	Retention time, min	Signal intensity, mean \pm standard deviation		P-value
		Sensitive	Resistant	
99.0452	7.3	0.00 \pm 0.00	22.93 \pm 39.23	0.02631 ^a
127.0397	7.3	4.90 \pm 13.51	58.21 \pm 95.97	0.03586 ^a
183.1013	7.28	0.00 \pm 0.00	34.26 \pm 65.82	0.04602 ^a
215.0315	9.52	7598.48 \pm 955.87	2482.61 \pm 811.16	0.00141 ^b
228.2321	6.91	48.81 \pm 15.56	61.92 \pm 19.96	0.04984 ^a
230.2479	7.35	776.44 \pm 133.73	929.68 \pm 113.94	0.00187 ^b
235.1685	9.55	54.04 \pm 37.07	25.46 \pm 38.48	0.04402 ^a
243.1211	8.59	13.67 \pm 31.07	71.87 \pm 108.22	0.04802 ^a
255.1225	8.88	8.64 \pm 24.73	79.61 \pm 128.93	0.03898 ^a
256.261	7.31	59.63 \pm 33.10	80.24 \pm 18.30	0.04223 ^a
262.2374	5.53	117.85 \pm 34.48	161.44 \pm 23.44	0.00031 ^c
266.1717	6.91	7.10 \pm 8.05	1.81 \pm 4.92	0.03681 ^a
273.438	7.28	480.30 \pm 92.54	564.61 \pm 103.37	0.02327 ^a
274.274	7.28	55738.16 \pm 9069.52	63255.79 \pm 9878.32	0.03522 ^a
276.2793	7.28	1245.56 \pm 226.72	1429.11 \pm 254.23	0.04228 ^a
278.2464	8.66	0.00 \pm 0.00	33.11 \pm 50.25	0.01326 ^a
299.1452	6.84	1.45 \pm 5.78	63.60 \pm 121.25	0.04948 ^a
299.1833	8.61	16.19 \pm 37.58	147.43 \pm 251.04	0.04758 ^a
300.289	8.29	170.80 \pm 83.97	317.52 \pm 187.12	0.00801 ^b
301.3817	8.08	199.96 \pm 94.48	263.2 \pm 73.06	0.04702 ^a
306.2635	5.73	41.80 \pm 32.88	93.46 \pm 24.20	0.00238 ^b
311.1833	8.92	7.46 \pm 29.85	168.51 \pm 299.09	0.04047 ^a
315.1778	8.69	3.12 \pm 12.46	64.05 \pm 117.33	0.04772 ^a
328.739	7.07	4.35 \pm 17.3900	60.84 \pm 105.67	0.04353 ^a
337.2829	11.25	317.19 \pm 208.99	712.77 \pm 687.66	0.03612 ^a
344.3503	9.62	306.32 \pm 150.54	426.84 \pm 147.59	0.03229 ^a
345.2252	9.23	0.00 \pm 0.00	42.14 \pm 65.86	0.01587 ^a
351.1753	8.92	5.15 \pm 20.62	55.74 \pm 85.63	0.02911 ^a
354.2279	7.63	99.04 \pm 46.10	137.03 \pm 48.50	0.03320 ^a
357.2698	10.25	592.5 \pm 293.41	806.27 \pm 197.34	0.02502 ^a
357.2762	7.55	40.66 \pm 57.17	281.79 \pm 450.34	0.04215 ^a
357.3092	10.16	13.69 \pm 24.44	0.00 \pm 0.00	0.03865 ^a
358.3661	10.31	86465.19 \pm 39985.12	111731.61 \pm 24379.47	0.04394 ^a
360.2512	11.16	0.00 \pm 0.00	25.83 \pm 43.27	0.02353 ^a
360.3712	10.36	2954.95 \pm 1379.86	3805.46 \pm 831.50	0.04838 ^a
371.2024	9.76	6.38 \pm 23.08	91.93 \pm 135.71	0.01893 ^a
376.2425	10.49	22.17 \pm 41.16	0.00 \pm 0.00	0.04610 ^a
380.1122	11.3	312.26 \pm 148.42	855.95 \pm 103.00	0.00616 ^b
382.7683	6.6	0.00 \pm 0.00	24.30 \pm 47.33	0.04883 ^a
383.2033	9.99	48.74 \pm 85.74	376.40 \pm 634.11	0.04958 ^a
395.3994	9.31	290.26 \pm 291.23	622.29 \pm 483.62	0.02678 ^a
396.7837	7.85	3.95 \pm 8.55	57.64 \pm 99.57	0.03997 ^a
397.2824	7.89	0.00 \pm 0.00	18.55 \pm 33.91	0.03664 ^a
397.3754	11.68	94.82 \pm 82.96	170.21 \pm 116.48	0.04586 ^a
402.3902	10.29	21683.77 \pm 9549.55	27643.98 \pm 5856.49	0.04672 ^a
403.2285	10.43	20.14 \pm 36.53	0.00 \pm 0.00	0.04150 ^a
403.2885	7.48	2.94 \pm 11.77	40.35 \pm 70.18	0.04423 ^a
405.2572	11.35	38.71 \pm 37.19	14.40 \pm 27.12	0.04772 ^a
405.7983	7.82	0.00 \pm 0.00	32.58 \pm 60.31	0.03889 ^a
410.3143	10.92	98.70 \pm 154.52	0.00 \pm 0.00	0.01958 ^a
412.3027	8.21	0.00 \pm 0.00	105.64 \pm 182.42	0.02764 ^a
413.7948	6.6	2.10 \pm 8.41	38.15 \pm 69.57	0.04858 ^a
414.2964	6.84	14.44 \pm 33.48	251.30 \pm 446.64	0.04293 ^a
418.7969	7.74	4.87 \pm 13.35	72.19 \pm 129.9	0.04812 ^a
425.8038	8.13	1.40 \pm 5.60	112.22 \pm 193.05	0.02898 ^a
426.3365	8.25	0.00 \pm 0.00	231.80 \pm 435.41	0.04161 ^a

Table SI. Continued.

m/z	Retention time, min	Signal intensity, mean \pm standard deviation		P-value
		Sensitive	Resistant	
427.3102	7.77	22.33 \pm 48.03	179.53 \pm 293.93	0.04345 ^a
431.2915	8.29	0.00 \pm 0.00	50.94 \pm 95.32	0.04090 ^a
431.3109	9.48	694.53 \pm 94.61	316.66 \pm 39.18	0.00180 ^b
433.2511	9.93	0.00 \pm 0.00	34.72 \pm 56.26	0.01957 ^a
434.3169	8.11	10.94 \pm 30.18	187.38 \pm 325	0.03884 ^a
434.3327	7.87	0.00 \pm 0.00	324.1 \pm 632.86	0.04942 ^a
434.8173	8.13	3.28 \pm 2.28	75.10 \pm 34.81	0.04223 ^a
436.7931	8.09	0.00 \pm 0.00	42.49 \pm 74.43	0.02973 ^a
438.2935	8.95	302.03 \pm 142.41	626.39 \pm 520.36	0.02295 ^a
440.8087	7.74	0.00 \pm 0.00	58.10 \pm 104.17	0.03340 ^a
441.325	8.58	0.00 \pm 0.00	266.94 \pm 466.56	0.02941 ^a
443.2587	9.83	0.00 \pm 0.00	79.99 \pm 139.01	0.02856 ^a
445.2742	9.76	47.62 \pm 112.92	348.48 \pm 526.50	0.03336 ^a
447.8163	8.06	10.4 \pm 18.63	107.8 \pm 182.79	0.04249 ^a
448.3163	8.03	0.00 \pm 0.00	40.57 \pm 75.69	0.04032 ^a
450.3167	6.88	48.58 \pm 65.4	485.30 \pm 795.4	0.03665 ^a
451.7993	7.67	0.00 \pm 0.00	27.59 \pm 49.65	0.03401 ^a
454.2874	8.6	2729.15 \pm 1072.99	3837.61 \pm 1680.84	0.03567 ^a
454.8237	8.38	0.00 \pm 0.00	128.57 \pm 224.07	0.02898 ^a
456.3284	8.06	26.24 \pm 50.51	368.29 \pm 637.39	0.04074 ^a
456.3454	7.56	0.00 \pm 0.00	500.79 \pm 979.46	0.04976 ^a
457.2732	10.01	141.81 \pm 294.42	1471.25 \pm 2454.12	0.03978 ^a
458.8065	8.08	1.74 \pm 6.96	58.11 \pm 96.72	0.02714 ^a
462.2986	9.76	42.25 \pm 99.4	299.41 \pm 446.00	0.03221 ^a
463.3352	8.41	14.17 \pm 33.12	393.76 \pm 675.68	0.03243 ^a
464.3084	9.23	127.33 \pm 120.8	375.71 \pm 358.31	0.01382 ^a
464.3243	7.34	0.00 \pm 0.00	63.60 \pm 124.31	0.04962 ^a
465.2401	9.8	21.78 \pm 87.11	171.67 \pm 267.39	0.04204 ^a
469.8284	7.96	9.43 \pm 20.4	97.68 \pm 158.19	0.03483 ^a
470.3607	8.13	0.00 \pm 0.00	472.32 \pm 888.17	0.04182 ^a
471.1001	11.82	882.39 \pm 1562.64	31.68 \pm 80.06	0.04420 ^a
473.0967	11.84	538.67 \pm 978.53	12.01 \pm 46.53	0.04647 ^a
474.3009	9.99	123.08 \pm 247.55	1154.77 \pm 1909.71	0.04053 ^a
476.8342	8.31	6.64 \pm 14.72	142.14 \pm 238.13	0.03054 ^a
477.3361	8.27	0.00 \pm 0.00	55.45 \pm 98.33	0.03162 ^a
478.3238	8.76	752.77 \pm 201.33	1019.17 \pm 306.70	0.00745 ^b
478.3414	7.96	56.48 \pm 101.34	413.76 \pm 677.12	0.04568 ^a
480.8198	7.98	0.00 \pm 0.00	57.10 \pm 99.01	0.02824 ^a
481.0033	7.9	6.05 \pm 16.91	34.90 \pm 52.17	0.04460 ^a
482.3187	9.73	2399.39 \pm 1107.66	3422.60 \pm 1013.56	0.01208 ^a
484.3243	9.71	0.00 \pm 0.00	53.58 \pm 79.83	0.01178 ^a
484.3756	8.72	0.00 \pm 0.00	240.19 \pm 447.95	0.04026 ^a
485.3472	8.31	38.71 \pm 69.54	515.41 \pm 869.90	0.03695 ^a
487.827	8.35	0.00 \pm 0.00	75.26 \pm 126.04	0.02350 ^a
490.3306	10.32	0.00 \pm 0.00	66.33 \pm 104.42	0.01656 ^a
491.0031	7.14	0.00 \pm 0.00	26.43 \pm 47.04	0.03221 ^a
491.3094	7.09	0.00 \pm 0.00	39.22 \pm 76.31	0.04865 ^a
491.8424	7.91	9.89 \pm 21.40	88.18 \pm 143.82	0.03964 ^a
492.3395	7.87	0.00 \pm 0.00	46.62 \pm 80.37	0.02742 ^a
492.3555	8.72	7.46 \pm 20.41	334.45 \pm 627.44	0.04590 ^a
494.8101	8.68	1624.18 \pm 458.68	2231.47 \pm 774.97	0.01213 ^a
496.3331	8.78	6637.71 \pm 2345.54	1033.40 \pm 342.01	0.02887 ^a
498.8489	8.26	10.50 \pm 22.64	146.97 \pm 245.69	0.03482 ^a
499.3416	8.78	1611.18 \pm 465.13	2175.7 \pm 683.84	0.01136 ^a
499.349	8.21	0.00 \pm 0.00	69.19 \pm 116.78	0.02451 ^a
502.8316	7.87	7.81 \pm 16.89	51.14 \pm 82.00	0.04752 ^a
503.3324	7.87	0.00 \pm 0.00	25.60 \pm 42.28	0.02178 ^a

Table SI. Continued.

m/z	Retention time, min	Signal intensity, mean \pm standard deviation		P-value
		Sensitive	Resistant	
505.8571	8.58	0.00 \pm 0.00	164.35 \pm 283.57	0.02752 ^a
506.3582	8.62	0.00 \pm 0.00	68.11 \pm 125.93	0.03867 ^a
507.36	8.2	64.44 \pm 116.29	607.95 \pm 1009.81	0.04088 ^a
509.8387	8.21	8.32 \pm 18.16	87.23 \pm 144.62	0.03859 ^a
514.3668	8.62	0.00 \pm 0.00	639.70 \pm 1073.96	0.02382 ^a
514.3853	7.96	6.32 \pm 25.29	629.41 \pm 1170.62	0.04169 ^a
515.8611	7.53	3.98 \pm 15.91	71.01 \pm 129.27	0.04849 ^a
518.737	8.41	543.45 \pm 323.18	864.39 \pm 332.16	0.01075 ^a
520.3325	8.37	94077.98 \pm 37345.01	136482.56 \pm 54014.90	0.01607 ^a
520.8599	8.16	15.01 \pm 27.14	138.42 \pm 227.67	0.03965 ^a
521.3777	9.1	0.00 \pm 0.00	446.56 \pm 774.48	0.02826 ^a
522.426	8.09	0.00 \pm 0.00	23.20 \pm 41.58	0.03335 ^a
523.3396	8.37	666.57 \pm 299.46	940.63 \pm 338.46	0.02350 ^a
524.8432	7.8	5.07 \pm 14.38	51.28 \pm 82.40	0.03512 ^a
525.0271	7.74	6.65 \pm 18.32	50.50 \pm 80.22	0.04176 ^a
527.8695	8.53	3.51 \pm 14.03	174.76 \pm 303.41	0.03166 ^a
528.3993	8.49	0.00 \pm 0.00	589.86 \pm 1073.13	0.03583 ^a
529.3719	8.15	80.04 \pm 143.36	637.20 \pm 1053.33	0.04478 ^a
531.8504	8.16	5.45 \pm 14.93	82.18 \pm 135.51	0.03199 ^a
535.8657	7.75	0.00 \pm 0.00	62.05 \pm 98.01	0.01688 ^a
536.3793	8.48	59.21 \pm 109.91	733.22 \pm 1224.57	0.03634 ^a
537.3721	7.51	6.69 \pm 26.77	95.01 \pm 169.34	0.04836 ^a
539.7014	7.22	0.00 \pm 0.00	36.74 \pm 66.96	0.03615 ^a
539.8487	6.94	0.00 \pm 0.00	24.76 \pm 48.29	0.04916 ^a
542.6585	8.44	9.55 \pm 26.28	77.23 \pm 126.29	0.04473 ^a
542.8749	8.09	16.37 \pm 29.55	118.02 \pm 194.43	0.04765 ^a
543.3715	8.05	3.85 \pm 15.39	55.64 \pm 96.31	0.04227 ^a
543.3904	8.97	24.1 \pm 45.24	508.90 \pm 856.04	0.03119 ^a
544.881	7.75	8.60 \pm 34.40	162.99 \pm 281.37	0.03752 ^a
548.2656	8.23	188.65 \pm 90.9	121.67 \pm 84.34	0.04242 ^a
548.3629	9.44	1094.15 \pm 842.46	2001.38 \pm 1467.84	0.04197 ^a
548.3858	9.07	43.99 \pm 81.62	0.00 \pm 0.00	0.04595 ^a
549.8819	8.4	0.00 \pm 0.00	167.16 \pm 273.40	0.02063 ^a
550.4376	10.24	1772.24 \pm 706.03	2431.53 \pm 879.76	0.02830 ^a
551.3859	8.08	87.57 \pm 157.31	597.72 \pm 979.80	0.04879 ^a
553.8644	8.09	9.57 \pm 20.99	72.12 \pm 114.62	0.04027 ^a
556.8864	8.82	0.00 \pm 0.00	130.35 \pm 227.50	0.02919 ^a
558.4112	7.88	15.63 \pm 38.04	720.43 \pm 1360.53	0.04710 ^a
560.8712	8.38	0.00 \pm 0.00	81.84 \pm 141.93	0.02827 ^a
565.3886	8	1.94 \pm 7.74	61.72 \pm 101.59	0.02583 ^a
569.383	7.2	0.00 \pm 0.00	66.78 \pm 118.38	0.03157 ^a
571.8926	8.37	12.22 \pm 26.41	143.95 \pm 231.55	0.03133 ^a
572.4091	9.31	0.00 \pm 0.00	474.84 \pm 818.18	0.02733 ^a
572.4273	8.37	0.00 \pm 0.00	813.81 \pm 1486.27	0.03650 ^a
578.9014	8.7	0.00 \pm 0.00	148.41 \pm 259.28	0.02934 ^a
582.884	8.31	5.39 \pm 15.39	87.68 \pm 142.74	0.02919 ^a
585.2595	8.58	1269.05 \pm 813.73	661.47 \pm 744.06	0.03876 ^a
586.898	7.92	3.67 \pm 14.68	78.43 \pm 135.64	0.03645 ^a
587.4148	8.69	76.82 \pm 140.35	625.32 \pm 1053.08	0.04784 ^a
587.9167	8.72	42.39 \pm 95.91	393.76 \pm 679.34	0.04955 ^a
593.9052	8.26	17.7 \pm 38.63	128.31 \pm 206.42	0.04390 ^a
594.4078	8.24	0.00 \pm 0.00	73.28 \pm 121.58	0.02233 ^a
594.4219	9.15	34.59 \pm 64.94	563.23 \pm 949.99	0.03418 ^a
595.4113	7.93	19.78 \pm 79.14	374.47 \pm 645.68	0.03733 ^a
600.4562	9.62	7.91 \pm 31.65	167.62 \pm 302.16	0.04413 ^a
600.911	8.57	0.00 \pm 0.00	139.52 \pm 241.95	0.02825 ^a
601.4299	9.6	8.84 \pm 35.37	353.71 \pm 585.78	0.02562 ^a

Table SI. Continued.

m/z	Retention time, min	Signal intensity, mean \pm standard deviation		P-value
		Sensitive	Resistant	
602.4159	8.2	42.40 \pm 124.03	527.58 \pm 915.89	0.04446 ^a
602.4365	7.78	39.87 \pm 71.4	773.13 \pm 1430.61	0.04952 ^a
604.8958	8.29	10.99 \pm 30.29	87.48 \pm 138.78	0.03978 ^a
605.3994	8.26	0.00 \pm 0.00	43.70 \pm 76.12	0.02889 ^a
607.3328	10.9	269.51 \pm 356.60	725.91 \pm 569.03	0.01160 ^a
607.9218	9	0.00 \pm 0.00	132.28 \pm 227.74	0.02721 ^a
608.9102	7.91	0.00 \pm 0.00	61.64 \pm 96.06	0.01558 ^a
609.4267	8.63	102.25 \pm 185.89	752.20 \pm 1227.12	0.04497 ^a
610.9192	7.59	0.00 \pm 0.00	147.17 \pm 268.75	0.03647 ^a
611.9058	8.63	0.00 \pm 0.00	86.48 \pm 149.98	0.02826 ^a
612.8934	7.09	0.00 \pm 0.00	21.59 \pm 41.59	0.04659 ^a
616.4495	8.2	5.07 \pm 20.28	1016.94 \pm 1830.76	0.03491 ^a
619.9034	7.9	0.00 \pm 0.00	31.54 \pm 54.68	0.02823 ^a
622.924	8.52	0.00 \pm 0.00	130.81 \pm 207.05	0.01709 ^a
623.443	9.44	29.67 \pm 66.78	409.61 \pm 671.81	0.03200 ^a
629.9303	8.88	3.86 \pm 15.44	119.59 \pm 194.45	0.02436 ^a
630.4099	10.87	12.57 \pm 34.72	131.07 \pm 220.78	0.04255 ^a
630.4632	8.75	0.00 \pm 0.00	564.79 \pm 1032.32	0.03664 ^a
630.9242	7.85	3.04 \pm 12.15	39.68 \pm 69.09	0.04555 ^a
633.9163	8.52	0.00 \pm 0.00	88.85 \pm 135.88	0.01389 ^a
634.4174	8.52	0.00 \pm 0.00	38.02 \pm 73.53	0.04739 ^a
637.4332	7.59	25.52 \pm 47.36	0.00 \pm 0.00	0.04600 ^a
637.9288	8.08	12.67 \pm 27.28	89.46 \pm 143.27	0.04398 ^a
638.4322	8.11	2.41 \pm 9.63	52.81 \pm 92.78	0.03892 ^a
644.4827	9.39	0.00 \pm 0.00	409.51 \pm 728.18	0.03206 ^a
644.9385	8.4	0.00 \pm 0.00	111.18 \pm 172.72	0.01529 ^a
645.4513	9.29	33.28 \pm 94.08	633.45 \pm 1050.77	0.03031 ^a
646.4056	6.49	60.47 \pm 73.15	4.45 \pm 11.82	0.00659 ^b
651.3986	11.23	6.15 \pm 24.61	42.34 \pm 66.04	0.04977 ^a
651.9441	8.75	0.00 \pm 0.00	99.39 \pm 155.89	0.01620 ^a
652.4622	9.86	0.00 \pm 0.00	222.03 \pm 386.99	0.02899 ^a
654.4363	7.05	427.61 \pm 115.87	49.90 \pm 20.11	0.00475 ^b
659.9398	8.01	7.44 \pm 20.39	61.43 \pm 96.19	0.03627 ^a
659.9726	10.38	0.00 \pm 0.00	47.54 \pm 85.01	0.03294 ^a
660.4729	8.11	20.70 \pm 44.66	1004.16 \pm 1803.81	0.03730 ^a
661.9507	7.74	17.33 \pm 44.84	192.64 \pm 311.17	0.03355 ^a
667.4519	8.35	0.00 \pm 0.00	52.14 \pm 79.55	0.01369 ^a
674.4717	9.57	0.00 \pm 0.00	265.41 \pm 428.37	0.01914 ^a
674.4912	8.6	0.00 \pm 0.00	1053.69 \pm 1862.41	0.03111 ^a
674.974	9.67	6.40 \pm 25.60	158.91 \pm 275.16	0.03520 ^a
680.9665	9.03	5.09 \pm 20.38	69.31 \pm 121.53	0.04599 ^a
681.4815	10.17	0.00 \pm 0.00	95.01 \pm 164.66	0.02816 ^a
681.9533	7.95	2.87 \pm 11.48	40.26 \pm 69.95	0.04358 ^a
683.4617	7.71	6.35 \pm 25.41	92.93 \pm 165.56	0.04764 ^a
683.9625	7.69	6.71 \pm 14.63	131.34 \pm 227.04	0.03644 ^a
688.5071	9.15	0.00 \pm 0.00	639.01 \pm 1119.63	0.02978 ^a
695.9702	8.58	6.30 \pm 25.22	76.82 \pm 120.06	0.02894 ^a
701.52	7.09	0.00 \pm 0.00	32.64 \pm 62.93	0.04679 ^a
701.5476	8.89	16.98 \pm 67.91	170.2 \pm 264.19	0.03260 ^a
703.4867	10.41	0.00 \pm 0.00	94.03 \pm 146.9	0.01582 ^a
703.9956	9.98	5.89 \pm 23.57	85.80 \pm 152.46	0.04723 ^a
704.4994	8.03	43.92 \pm 78.70	966.77 \pm 1719.31	0.04028 ^a
718.5128	8.46	419.98 \pm 152.03	817.05 \pm 101.27	0.04175 ^a
732.5286	8.96	0.00 \pm 0.00	759.57 \pm 1328.89	0.02955 ^a
734.998	7.87	3.58 \pm 14.31	77.28 \pm 139.06	0.04357 ^a
746.5434	9.52	0.00 \pm 0.00	456.01 \pm 801.59	0.03027 ^a
748.5258	7.91	63.82 \pm 115.05	782.80 \pm 1372.77	0.04554 ^a

Table SI. Continued.

m/z	Retention time, min	Signal intensity, mean \pm standard deviation		P-value
		Sensitive	Resistant	
756.5079	7.8	0.00 \pm 0.00	84.99 \pm 138.68	0.02035 ^a
762.5351	8.33	32.75 \pm 59.38	1028.43 \pm 1786.84	0.03364 ^a
765.9736	8.93	182.70 \pm 117.91	99.65 \pm 92.87	0.03845 ^a
776.5512	8.8	0.00 \pm 0.00	664.59 \pm 1170.24	0.03053 ^a
781.5706	10.56	5.56 \pm 22.24	305.61 \pm 558.54	0.04008 ^a
790.5659	9.36	0.00 \pm 0.00	696.12 \pm 1217.38	0.02949 ^a
806.5619	8.21	27.05 \pm 59.67	814.50 \pm 1422.86	0.03484 ^a
820.5813	8.66	0.00 \pm 0.00	878.87 \pm 1543.27	0.03011 ^a
825.6519	9.02	2087.54 \pm 1451.45	3400.35 \pm 977.26	0.00649 ^b
834.5959	9.18	0.00 \pm 0.00	732.10 \pm 1281.34	0.02961 ^a
846.4894	8.88	0.00 \pm 0.00	108.91 \pm 166.83	0.01404 ^a
850.5888	8.13	41.19 \pm 74.13	572.74 \pm 991.30	0.04082 ^a
864.6057	8.66	4.12 \pm 16.48	720.45 \pm 1258.95	0.03025 ^a
869.6742	9.07	53.59 \pm 100.55	169.79 \pm 148.80	0.01584 ^a
894.6149	8.03	34.80 \pm 62.52	368.73 \pm 626.89	0.04251 ^a
908.5086	8.33	320.41 \pm 292.09	542.87 \pm 300.67	0.04557 ^a
908.624	8.4	0.00 \pm 0.00	523.22 \pm 914.08	0.02934 ^a
924.6253	7.62	11.75 \pm 32.29	111.79 \pm 185.84	0.04253 ^a
933.6086	8.94	13.74 \pm 54.96	304.52 \pm 390.01	0.00616 ^b
938.6393	8	25.17 \pm 45.25	231.68 \pm 378.33	0.03839 ^a
939.5717	11.62	419.64 \pm 354.89	176.88 \pm 161.37	0.02186 ^a
952.6556	8.34	13.86 \pm 30.97	339.69 \pm 575.89	0.03135 ^a
982.6635	7.88	3.55 \pm 14.19	138.40 \pm 228.21	0.02513 ^a
988.5866	8.78	154.23 \pm 180.32	421.95 \pm 454.59	0.03738 ^a
989.6534	6.6	7.60 \pm 30.41	125.81 \pm 226.30	0.04727 ^a
991.6469	8.78	72502.61 \pm 34209.43	135323.94 \pm 100784.87	0.02550 ^a
994.6572	8.78	2739.97 \pm 1326.63	4715.69 \pm 2785.68	0.01641 ^a
996.6774	8.24	0.00 \pm 0.00	228.81 \pm 385.48	0.02427 ^a

^aP<0.05, ^bP<0.01, ^cP<0.001.

Table SII. Metabolites with significant differences between serum samples from chemo-sensitive and -resistant patients in negative ion mode.

m/z	Retention time, min	Signal intensity, mean \pm standard deviation		P-value
		Sensitive	Resistant	
80.9163	10.35	6.94 \pm 20.3	33.12 \pm 40.4	0.02871a
80.9165	9.11	4.01 \pm 11.66	19.39 \pm 19.64	0.01227 ^a
131.0862	7.37	0.66 \pm 2.65	20.32 \pm 37.39	0.04454 ^a
141.0551	7.72	1.03 \pm 4.12	14.63 \pm 24.52	0.03684 ^a
144.0117	2.17	0.00 \pm 0.00	14.31 \pm 25.39	0.03169 ^a
155.1087	7.31	68.32 \pm 174.02	918.78 \pm 1580.14	0.04077 ^a
171.1395	9.25	1628.89 \pm 2757.23	159.94 \pm 116.17	0.04853 ^a
177.092	7.55	1.72 \pm 6.90	35.37 \pm 58.59	0.02997 ^a
183.1392	8.05	2.06 \pm 5.65	56.90 \pm 103.56	0.04296 ^a
197.0803	7.65	0.00 \pm 0.00	5.97 \pm 11.16	0.04063 ^a
205.1603	9.95	75.43 \pm 62.9	128.76 \pm 47.72	0.01303 ^a
211.1688	10.17	6.25 \pm 10.17	0.00 \pm 0.00	0.02427 ^a
213.114	7.65	0.00 \pm 0.00	6.01 \pm 9.91	0.02160 ^a
215.1294	7.73	3.19 \pm 8.75	73.22 \pm 136.51	0.04952 ^a
279.1994	8.71	13.30 \pm 36.66	124.82 \pm 193.81	0.03141 ^a
297.6274	2.47	14.52 \pm 25.21	0.67 \pm 2.60	0.04317 ^a
301.2201	9.7	8.10 \pm 32.38	124.66 \pm 168.29	0.01091 ^a
307.228	11.46	24.87 \pm 38.14	3.17 \pm 8.39	0.03971 ^a
317.219	9.71	16.50 \pm 40.84	79.62 \pm 102.91	0.03068 ^a
319.2316	9.7	1286.64 \pm 3197.64	6461.94 \pm 8960.08	0.03836 ^a
327.2643	10.27	32.79 \pm 61.52	0.00 \pm 0.00	0.04825 ^a
334.2397	11.46	15.51 \pm 27.95	0.00 \pm 0.00	0.04034 ^a
342.56	6.53	2.81 \pm 8.35	57.25 \pm 88.28	0.02021 ^a
369.1794	6.42	1959.43 \pm 2993.87	5229.94 \pm 4008.68	0.01504 ^a
376.2258	6.68	214.11 \pm 162.42	328.33 \pm 119.74	0.03470 ^a
383.1773	8.58	0.00 \pm 0.00	24.79 \pm 43.13	0.02874 ^a
389.2728	7.56	25.44 \pm 41.96	2.65 \pm 10.26	0.04998 ^a
391.2714	11.67	8.93 \pm 16.48	54.52 \pm 82.45	0.03851 ^a
393.1172	7.1	0.00 \pm 0.00	117.22 \pm 208.32	0.03197 ^a
398.9475	6.76	28.96 \pm 42.03	130.65 \pm 190.11	0.04567 ^a
407.2875	6.84	0.00 \pm 0.00	30.97 \pm 52.94	0.02621 ^a
411.2457	7.56	0.00 \pm 0.00	8.31 \pm 13.18	0.01726 ^a
428.1936	8.16	15.79 \pm 19.29	34.50 \pm 25.13	0.02669 ^a
437.1678	6.42	1.85 \pm 7.41	25.72 \pm 34.19	0.01071 ^a
447.2166	7.16	11.89 \pm 20.63	0.00 \pm 0.00	0.03374 ^a
449.1916	8.35	792.5 \pm 1262.94	76.88 \pm 297.77	0.04112 ^a
473.2349	8.34	37.19 \pm 51.74	6.45 \pm 24.98	0.04613 ^a
493.1314	8.33	4.29 \pm 17.17	22.87 \pm 29.87	0.04084 ^a
500.2912	8.33	4724.75 \pm 4994.74	8372.98 \pm 3946.14	0.03247 ^a
508.355	9.97	142.92 \pm 169.88	333.90 \pm 307.29	0.03917 ^a
516.3336	9.12	12.40 \pm 34.87	100.46 \pm 159.51	0.03948 ^a
526.3666	9.09	173.90 \pm 252.83	623.42 \pm 802.14	0.04147 ^a
536.3074	7.68	34.86 \pm 31.83	6.40 \pm 16.99	0.00455 ^b
536.3176	7.74	2.02 \pm 8.07	25.87 \pm 37.05	0.01772 ^a
537.2686	8.59	0.00 \pm 0.00	12.40 \pm 22.37	0.03441 ^a
537.3455	8.67	704.87 \pm 715.98	1229.92 \pm 552.89	0.03055 ^a
540.3447	8.68	13281.30 \pm 20364.88	28726.85 \pm 21107.94	0.04712 ^a
544.3341	9.27	27.07 \pm 56.19	128.54 \pm 162.66	0.02565 ^a
544.9786	8.11	129.02 \pm 352.55	479.69 \pm 537.40	0.03903 ^a
552.3467	8.51	75.32 \pm 104.96	211.21 \pm 216.06	0.03220 ^a
552.3848	9.39	215.70 \pm 255.92	586.01 \pm 498.88	0.01367 ^a
554.3639	9.3	330.12 \pm 332.65	795.02 \pm 812.75	0.04368 ^a
561.3563	8.4	561.35 \pm 284.94	764.83 \pm 267.15	0.04975 ^a
562.5871	8.4	26.69 \pm 53.20	74.20 \pm 69.37	0.04019 ^a
565.3792	9.94	251.98 \pm 208.42	470.18 \pm 276.74	0.01874 ^a
574.4153	11.2	0.00 \pm 0.00	430.40 \pm 774.18	0.03392 ^a

Table SII. Continued.

m/z	Retention time, min	Signal intensity, mean \pm standard deviation		P-value
		Sensitive	Resistant	
593.149	8.02	13.41 \pm 21.26	67.77 \pm 71.48	0.00686 ^b
600.2688	8.36	8.92 \pm 35.67	84.98 \pm 129.73	0.03163 ^a
600.285	8.98	76.04 \pm 108.28	171.28 \pm 140.29	0.04232 ^a
610.391	9.01	80.76 \pm 126.42	193.23 \pm 175.27	0.04854 ^a
826.5665	8.74	327.43 \pm 598.88	0.00 \pm 0.00	0.04312 ^a
828.5959	8.88	0.00 \pm 0.00	61.29 \pm 106.1	0.02800 ^a
947.6478	8.59	0.00 \pm 0.00	349.31 \pm 551.19	0.01678 ^a
973.6725	8.84	0.00 \pm 0.00	139.48 \pm 210.15	0.01266 ^a

^aP<0.05, ^bP<0.01, ^cP<0.001.