

Supplementary Table S1. Selection of candidate metabolites for CSp and CS-ESP

Group	Rank	Metabolite	m/z	Retention time (min)	Area
CSp	1	Ethylenediaminetetraacetic acid	293.10	1.80	7162012974
	2	Betaine	118.09	1.64	5767651702
	3	L(-)-pipecolinic acid	130.09	2.10	4667332460
	4	L-phenylalanine	166.09	6.05	4618739918
	5	(2E)-3-(3-Hydroxyphenyl)acrylaldehyde	166.09	6.06	4564842133
	6	Isoleucine	132.10	3.09	3986658910
	7	Propionylcarnitine	218.14	3.85	3383442696
	8	Dipropylene glycol dimethyl ether	163.13	17.90	2937239782
	9	D-(+)-proline	116.07	1.71	2466508973
	10	3-Hydroxynonanoic acid	207.16	22.75	2147125560
CS-ESP	1	L-itol	183.09	1.68	58965367896
	2	L(-)-pipecolinic acid	130.09	2.10	12022216532
	3	Ethylenediaminetetraacetic acid	293.10	1.80	8191384027
	4	Adipic acid	147.07	1.68	7660831426
	5	Citric acid	210.06	2.41	6790632331
	6	2-oxohex-4-enoic acid	129.05	1.64	6162385487
	7	Betaine	118.09	1.64	5394188839
	8	Propionylcarnitine	218.14	3.85	4422530355
	9	Valdecobix	315.08	1.76	3759231609
	10	DL-stachydrine	144.10	1.75	3440992961

Untargeted LC-MS/MS-based metabolomic analysis was performed on *Clonorchis sinensis*-derived crude proteins (CSp) and excretory/secretory proteins (CS-ESP) to identify candidate metabolites. Among the identified metabolites, candidates were initially filtered based on annotation confidence and subsequently prioritized according to their relative signal intensity (peak area) and consistent detection across samples. Based on these criteria, D-proline, L-itol, and propionylcarnitine were selected as final candidates. This table presents key LC-MS/MS parameters, including m/z, retention time, and relative peak area values for each metabolite.