Supplementary table 1. Composition of Pien Tze Huang by online PLE-UHPLC-IT-TOF-MS method.

Component	NO	Retention	m/z	Formula	Putative identity
Notoginseng radix et rhizoma (36)	1	5.52	549.1841	$C_{22}H_{32}O_{13}$	notoginsenic acid β-sophoroside[#]
	2	5.87	861.4828	$C_{42}H_{72}O_{15}$	notoginsenoside SP1[#]
	3	6.68	592.2883	$C_{53}H_{90}O_{23}$	yesanchinoside-H
	4	6.89	1007.5416	$C_{48}H_{82}O_{19}$	notoginsenoside R3/notoginsenoside R6/20-O-glucoginsenoside Rf
	5	7.17	879.5001	$C_{42}H_{74}O_{16}$	notoginsenoside J/isomer[#]
	6	7.24	1007.5425	$C_{48}H_{82}O_{19}$	notoginsenoside R3/notoginsenoside R6/20-O-glucoginsenoside Rf
	7	7.31	879.5001	$C_{42}H_{74}O_{16}$	notoginsenoside J/isomer[#]
	8	7.48	977.5323	$C_{48}H_{82}O_{20}$	notoginsenoside ST-5
	9	7.52	931.5273	$C_{47}H_{80}O_{18}$	notoginsenoside R1[*]
	10	7.57	931.5273	C47H80O18	notoginsenoside R1 isomer
	11	7.68	991.5496	$C_{48}H_{82}O_{18}$	notoginsenoside K/isomer
	12	7.76	845.4865	$C_{42}H_{72}O_{14}$	ginsenoside Rg1[#]
	13	7.85-	845.495	$C_{42}H_{72}O_{14}$	ginsenoside Rf[*]
	14	8.50	815.4782	$C_{41}H_{70}O_{13}$	notoginsenoside R2/pseudoginsenoside RT3/isomer
	15	8.55	1239.6423	$C_{59}H_{100}O_{27}$	notoginsenoside Ra3/ginsenoside R4/notoginsenoside Fa
	16	8.71	1239.6360	$C_{59}H_{100}O_{27}$	ginsenoside Ra3/notoginsenoside R4/notoginsenoside Fa[#]
	17	8.78	1239.6407	$C_{59}H_{100}O_{27}$	ginsenoside Ra3/notoginsenoside R4/notoginsenoside Fa[#]
	18	11.47	947.5239	$C_{46}H_{78}O_{17}$	chikusetsusaponin L5
	19	13.01	1107.5913	$C_{54}H_{92}O_{23}$	ginsenoside Rb1[#]
	20	13.4	1107.5999	$C_{54}H_{92}O_{23}$	yesanchinoside-E[#]
	21	13.75	815.4796	$C_{41}H_{70}O_{13}$	notoginsenoside R2/pseudoginsenoside RT3/isomer
	22	15.06	815.4758	$C_{41}H_{70}O_{13}$	notoginsenoside R2/pseudoginsenoside RT3/isomer
	23	19.31	991.5481	$C_{48}H_{82}O_{18}$	gypeniside VIII
	24	19.89-	991.5483	$C_{48}H_{82}O_{18}$	ginsenoside Rd[*]
	25	20.03-	945.5457	$C_{48}H_{82}O_{18}$	ginsenoside Re[*]
	26	20.47	683.4354	$C_{36}H_{62}O_{9}$	ginsenoside Rh1/isomer[#]
	27	21.57	945.5458	$C_{48}H_{82}O_{18}$	notoginsenoside K/isomer
	28	22.95	683.4376	$C_{36}H_{62}O_{9}$	ginsenoside Rh1/isomer[#]
	29	26.05	915.5297	$C_{47}H_{80}O_{17}$	gypeniside IX

	30	27.16	815.4796	$C_{41}H_{70}O_{13}$	notoginsenoside R2/pseudoginsenoside RT3/isomer
	31	30.95-	829.4933	$C_{42}H_{72}O_{13}$	ginsenoside Rg2*
	32	31.67	829.4918	$C_{42}H_{72}O_{13}$	ginsenoside Rg3 isomer
	33	33.96-	829.4933	$C_{42}H_{72}O_{13}$	ginsenoside F2*
	34	36.57	665.4277	$C_{37}H_{62}O_{10}$	notoginsenoside T2/isomer
	35	39.23	829.4974	$C_{42}H_{72}O_{13}$	ginsenoside Rg3*
	36	43.57	667.4365	$C_{36}H_{62}O_8$	ginsenoside Rh2*
Snake Bile (15)	37	8.06	530.2765	$C_{26}H_{45}NO_8S$	tauro-3α, 7α, 12α, 23R-tetrahydroxy-5β-cholenoic acid/isomer
	38	8.11	530.2776	$C_{26}H_{45}NO_8S$	tauro-3α, 7α, 12α, 23R-tetrahydroxy-5β-cholenoic acid/isomer
	39	8.39	530.2762	$C_{26}H_{45}NO_8S$	tauro-3α, 7α, 12α, 23R-tetrahydroxy-5β-cholenoic acid/isomer
	40	8.48	512.2667	$C_{26}H_{43}NO_7S$	tauro-Δ8-3β, 7α, 12α-trihydroxy-5β-cholenoic acid/isomer
	41	8.6	530.2766	$C_{26}H_{45}NO_8S$	tauro-3α, 7α, 12α, 23R-tetrahydroxy-5β-cholenoic acid/isomer
	42	8.64	512.2674	$C_{26}H_{43}NO_7S$	tauro-Δ8-3β, 7α, 12α-trihydroxy-5β-cholenoic acid/isomer
	43	8.99-	423.2731	$C_{24}H_{40}O_6$	3α, 6β, 7α, 12α-tetrahydroxy bile acid/isomer
	44	9.09	530.2767	$C_{26}H_{45}NO_8S$	tauro-3α, 7α, 12α, 23R-tetrahydroxy-5β-cholenoic acid/isomer
	45	9.27	512.2666	$C_{26}H_{43}NO_7S$	tauro-3α, 7α-dihydroxy-12-oxo-5β-cholenoic acid/isomer
	46	12.52	512.2686	$C_{26}H_{43}NO_7S$	tauro-3α, 7α-dihydroxy-12-oxo-5β-cholenoic acid/isomer
	47	15.55	530.2770	$C_{26}H_{45}NO_8S$	tauro-3α, 7α, 12α, 23R-tetrahydroxy-5β-cholenoic acid/isomer
	48	16.13-	423.274	$C_{24}H_{40}O_6$	3α, 6β, 7α, 12α-tetrahydroxy bile acid/isomer
	49	17.79-	423.2737	$C_{24}H_{40}O$	3α, 6β, 7α, 12α-tetrahydroxy bile

					acid/isomer
	50	18.58-	423.2731	$C_{24}H_{40}O_6$	3α, 6β, 7α, 12α-tetrahydroxy bile acid/isomer
	51	25.82-	487.2368	$C_{24}H_{40}O_8S$	cholic acid-sulfate
Bovis Calculus (9)	52	24.42	498.2879	$C_{26}H_{45}NO_6S$	taurodeoxycholic acid[#]
	53	29.5	448.3042	$C_{26}H_{43}NO_5$	glycochenodeoxycholic acid
	54	37.39-	465.3209	$C_{27}H_{46}O_6$	tetrahydroxycholestan-26-oic acid[#]
	55	38.65-	391.2815	$C_{24}H_{40}O_4$	ursodeoxycholic acid[*]
	56	40.56-	391.2838	$C_{24}H_{40}O_4$	hyodeoxycholic acid[*]
	57	40.76-	389.2681	$C_{24}H_{38}O_4$	ketodeoxycholic acid[#]
	58	41.52-	391.2838	$C_{24}H_{40}O_4$	chenodeoxycholic acid[*]
	59	42.50-	391.2838	$C_{24}H_{40}O_4$	deoxycholic acid[#]
	60	44.24-	421.2950	$C_{25}H_{42}O_5$	methyl cholate
Common ingredients of *Bovis Calculus* and *Snake Bile* (11)	61	9.58	514.2820	$C_{26}H_{45}NO_7S$	taurocholic acid/tauro-3α, 7α, 12α-trihydroxy-5α-cholenoic acid/isomer
	62	10	514.2827	$C_{26}H_{45}NO_7S$	taurocholic acid/tauro-3α, 7α, 12α-trihydroxy-5α-cholenoic acid/isomer
	63	10.42	514.2846	$C_{26}H_{45}NO_7S$	taurocholic acid/tauro-3α, 7α, 12α-trihydroxy-5α-cholenoic acid/isomer
	64	10.84	514.2825	$C_{26}H_{45}NO_7S$	taurocholic acid/tauro-3α, 7α, 12α-trihydroxy-5α-cholenoic acid/isomer
	65	17.11	405.2623	$C_{24}H_{38}O_5$	3α, 12α-dihydroxy-7-oxo-5β-cholic acid/isomer
	66	18.98-	464.3001	$C_{26}H_{43}NO_6$	glycocholic acid[*]
	67	22.34	405.2607	$C_{24}H_{38}O_5$	3α, 12α-dihydroxy-7-oxo-5β-cholic acid/isomer
	68	23.48	498.2881	$C_{26}H_{45}NO_6S$	taurochenodeoxycholic acid[*]
	69	25.56	405.2633	$C_{24}H_{38}O_5$	3α, 12α-dihydroxy-7-oxo-5β-cholic acid/isomer
	70	26.79-	407.2785	$C_{24}H_{40}O_5$	cholic acid[*]
	71	32.56	448.3054	$C_{26}H_{43}NO_5$	glycodeoxycholic acid[#]
	72	44.62-	299.2565	$C_{18}H_{36}O_3$	unknown
	73	45.29-	795.5396	$C_{43}H_{76}N_2O$	unknown

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Supplementary table 2. Scoring system of Ishak's modified HAI.

Score	Periportal or periseptal interface hepatitis (piecemeal necrosis)	Confluent necrosis	Focal (spotty) lytic necrosis, apoptosis and focal inflammation	Portal inflammation
0	Absent	Absent	Absent	None
1	Mild (focal, few portal areas)	Focal confluent necrosis	One focus or less per 10×objective	Mild, some or all portal areas
2	Mild/moderate (focal, most portal areas)	Zone 3 necrosis in some areas	Two to four foci per 10×objective	Moderate, some or all portal areas
3	Moderate (continuous around 60% of tracts or septa)	Zone 3 necrosis in most areas	Five to ten foci per 10×objective	Moderate/marked, all portal areas
4	Severe (continuous around >50% of tracts or septa)	Zone 3 necrosis+occasional portal-central (P-C) bridging	More than ten foci per 10×objective	Marked, all portal areas
5		Zone 3 necrosis+multiple P-C bridging		
6		Panacinar or multiacinar necrosis		

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