





**Figure S1.** Exclusive chromatogram of components to be tested (A: chromatogram of QC sample, B: chromatogram of sample, C: chromatogram of blank plasma)

**Table S1.** Main pharmacokinetic parameters of the control groups after administration of JYP.

Compound s	C <sub>max</sub> (ng/mL)	AUC <sub>(0-t)</sub> (ng/mL·h)	AUC <sub>(0-∞)</sub> (ng/mL·h)	T <sub>max</sub> (h)	t <sub>1/2</sub> (h)	Clearances (mL / h)	MRT <sub>(0-t)</sub> (h)	MRT <sub>(0-∞)</sub> (h)	V <sub>ss</sub> (mL)	AUMC <sub>(0-t)</sub> ng/mL*(h) <sup>2</sup>	AUMC <sub>(0-∞)</sub> ng/mL*(h) <sup>2</sup>
Saikosap nin A	38.91±10.43	119.62±40.57	134.56±49.83	0.53±0.22	7.52±2.66	2262.98±1068.5			21125.87±12315.99		
						6	6.55±1.64	9.57±3.88	42581.43±30523.07	792.28±390.55	1355.37±1006.84
	47.41±11.72	148.78±49.46	177.04±46.52	0.39±0.17	10.82±9.21	3201.17±894.28	6.42±0.60	13.26±9.41	39888.83±14247.9z	935.87±261.97	2307.92±1659.75
	67.38±14.24	220.57±42.46	244.87±44.68	0.54±0.10	7.80±3.30	4464.90±760.17	6.07±1.19	9.11±3.69		1333.05±317.31	2265.45±1085.76
Saikosap nin D						2081.51±796.95					
	21.53±5.52	79.57±44.57	97.26±56.51	0.43±0.23	11.43±4.14	3109.21±1089.0	7.08±1.57	13.36±4.81	27762.67±16738.07	592.40±473.29	1331.60±1006.07
	30.14±6.87	96.80±29.29	116.99±33.20	0.54±0.10	10.86±6.69	9	6.87±0.65	13.34±6.43	41378.73±24017.48	662.12±211.50	1586.66±988.85
	41.77±17.69	115.72±12.30	156.97±34.87	0.33±0.13	13.70±5.61	4477.49±1178.0	7.10±1.12	16.61±6.52	68432.42±15413.77	830.12±197.07	2785.93±1472.47
Z- Ligustilide						4					
						9559.18±2479.1			190594.33±82167.7		
	3.37±1.11	28.73±8.22	40.81±9.33	1.67±0.52	15.40±5.99	0	8.54±1.12	20.38±8.24	0	244.45±72.75	839.61±369.47
	4.47±1.90	32.70±6.04	58.61±20.74	1.17±0.41	23.99±16.9	10223.65±3357.	8.96±0.63	32.03±20.8	280622.83±89334.7	291.74±50.18	2206.47±2197.92
Levistilide A	5.27±1.27	36.53±7.42	53.40±9.38	1.13±0.44	4	69	8.76±0.37	8	1	319.41±64.35	1163.41±438.24
					16.44±5.40	20983.77±4562.		21.57±6.20	448255.00±139953.		
						19			43		
	1.79±0.66	12.91±4.96	25.25±7.16	1.17±0.41	14.36±4.36	794.02±199.77	9.51±1.01	22.87±7.04	17878.07±6212.70	150.01±45.26	584.44±254.39
	2.86±0.52	21.47±2.97	34.23±5.08	0.92±0.13	16.45±7.30	1123.37±161.30	9.23±0.46	24.13±8.96	26341.48±7666.95	197.79±26.58	849.62±407.65
	4.60±2.01	36.70±11.31	59.83±23.13	1.67±0.52	22.15±26.8	1455.57±663.81	8.92±1.16	31.23±38.0	33463.62±24837.03	323.93±97.01	2493.49±4004.18
					8			6			

Ferulic acid	26.13±9.31	112.20±29.20	167.65±82.40	0.11±0.07	15.83±15.5	60.71±24.99	8.20±0.89	21.77±21.4	1020.61±427.20	920.92±270.38	4989.84±7833.58
	33.03±6.66	164.81±27.71	207.47±62.03	0.15±0.03	1			2			
	41.33±6.94	153.34±31.07	218.79±56.06	0.33±0.13	9.53±4.55			13.84±5.77			
					15.42±5.57			19.29±4.66			
Liquiritigenin	2.95±1.02	24.28±7.57	37.90±10.24	0.58±0.13	16.81±4.56	139.00±44.74	9.56±0.40	24.13±6.47	3476.06±2016.81	231.13±70.38	892.16±251.11
	4.39±0.47	30.41±5.25	50.33±15.38	0.63±0.21	19.40±15.3			27.60±20.6			
	5.27±2.18	33.94±6.26	48.45±10.22	0.58±0.13	0			9			
					13.44±3.91			19.47±5.47			
Liquiritin	4.21±1.22	28.27±5.08	37.25±7.36	0.49±0.19	10.95±2.30	1366.04±306.58	8.60±0.60	16.05±3.72	21368.90±3823.75	242.78±42.16	609.90±217.99
	6.35±1.64	30.83±8.16	44.11±11.65	0.38±0.14	11.12±2.84			16.55±5.41			
	7.83±3.33	40.61±13.09	56.01±12.24	0.42±0.13	13.90±3.40			19.32±5.01			
Paeoniflorin						7146.41±1816.5			84257.15±26998.98		
	20.87±5.05	77.44±19.10	92.68±25.59	0.71±0.10	10.38±5.59	1	6.69±1.11	12.13±3.83	118512.68±32910.6	515.74±155.66	1159.98±582.94
	28.02±12.40	104.91±34.22	121.52±40.73	0.67±0.13	9.96±2.44	10962.90±2498.		10.82±1.69			
	50.87±10.98	179.49±32.14	202.71±47.28	0.79±0.10	7.93±2.12	31		9.59±3.21			
						12850.86±2810.					
Albiflorin									6		
						92					
						4310.26±1096.2			67797.93±37215.77		
	29.10±12.43	113.28±34.45	145.97±34.53	0.71±0.10	12.20±8.94	2	7.49±1.37	16.35±10.0	149394.60±144699.	850.80±299.27	2439.47±1660.72
Albiflorin	31.97±7.33	136.03±51.60	179.64±67.31	0.71±0.10	13.32±8.18	7593.60±3243.2		3			
	41.76±7.73	195.87±30.38	259.43±66.27	1.08±0.47	12.74±7.86	7		17.63±8.10			
						9666.39±2118.2		16.23±7.55			
						1			0		

Oxypaeoni florin	11.00±5.55	43.15±6.64	56.34±16.77	0.63±0.21	11.63±7.54	347.97±78.14	7.43±1.20	15.41±7.45	4942.84±1353.80	317.45±50.32	960.89±804.49
	13.77±4.74	58.53±13.77	71.14±17.02	0.54±0.10	9.23±2.09	543.42±114.7	7.55±0.90	12.86±2.29	6979.24±1997.60	444.62±135.55	919.38±307.57
	21.56±4.62	87.76±11.69	116.14±5.19	0.50±0.16	13.51±5.15	639.43±29.38	7.88±0.35	17.12±5.17	10992.03±3569.08	690.02±87.45	1980.07±571.31
Poricoic acid A								1521.44±66			
	7.81±4.17	58.34±32.40	69.77±35.24	2.67±1.51	8.56±2.26	128.09±61.58	7.75±0.56	5.04	443.98±219.49	443.98±219.49	794.53±355.07
	15.42±4.34	72.48±16.40	82.77±20.26	1.04±0.51	7.61±2.67	180.08±44.30	6.61±0.81	1783.08±52	481.57±135.07	481.57±135.07	860.09±370.64
	22.57±4.45	99.97±21.03	112.84±26.44	1.17±0.65	7.95±2.00	268.18±87.45	6.79±0.52	1.01	682.54±172.01	682.54±172.01	1154.08±438.70
								2589.92±54			
Poricoic acid B								8.64			
	13.92±3.90	75.66±26.78	87.37±18.47	2.00±1.10	12.23±13.2	40.53±9.10	7.03±0.42	15.07±13.6	679.29±748.52	529.52±188.12	1182.43±817.51
	28.41±8.52	119.95±33.34	133.19±32.48	1.67±1.21	5	53.51±12.19	5.74±0.86	2	506.22±195.93	679.25±172.30	1195.18±213.22
	35.95±8.74	141.91±41.47	159.33±46.64	1.17±0.41	9.63±3.01	91.65±27.11	5.67±0.98	9.23±1.94	869.19±245.83	810.63±320.58	1551.8±565.53
Licochalco ne A					10.75±6.42			9.63±1.90			
	1.08±0.20	11.43±1.69	17.55±2.70	2.17±0.98	13.43±1.54	92.37±15.28	9.44±0.40	21.28±2.11	1954.78±297.39	108.18±18.41	375.00±71.45
	1.47±0.11	16.35±1.88	28.44±7.01	1.83±0.41	19.54±6.07	116.55±24.65	9.63±0.13	27.60±7.20	3084.37±231.29	157.42±18.66	825.38±455.76
	2.94±0.97	25.91±9.50	37.37±17.13	3.33±1.03	14.11±3.03	194.20±66.59	9.03±0.59	19.42±3.88	3631.94±1163.37	237.25±103.25	767.46±504.79

Table S2. Main pharmacokinetic parameters of ADHD model group after administration of JYP.

Compound s	C <sub>max</sub> (ng/mL)	AUC <sub>(0-t)</sub> (ng/mL·h)	AUC <sub>(0-∞)</sub> (ng/mL·h)	T <sub>max</sub> (h)	t <sub>1/2</sub> (h)	Clearances (mL / h)	MRT <sub>(0-t)</sub> (h)	MRT <sub>(0-∞)</sub> (h)	V <sub>ss</sub> (mL)	AUMC <sub>(0-t)</sub> ng/mL*(h) <sup>2</sup>	AUMC <sub>(0-∞)</sub> ng/mL*(h) <sup>2</sup>
Saikosap nin A			232.86±91.18			1291.22±525.61				1392.40±460.59	4853.64±3957.39
	40.88±22.88	163.91±57.46	324.31±131.0	0.50±0.16	13.28±7.06	2143.07±1609.0	8.75±1.60*	19.45±9.93	23782.60±13625.69	*	5558.75±2961.42
	52.96±19.17	240.37±96.61	7*	0.79±0.19*	12.24±2.82	0	8.13±1.23*	16.82±3.55	35282.72±25449.21	1937.54±771.89	*
	73.09±22.62	307.06±55.58		*	10.30±4.24	2855.71±621.15	7.95±1.20*	14.51±5.42	40360.07±12917.92	*	5783.46±3073.92
		*	387.10±78.69	0.58±0.13						2395.92±288.80	*
Saikosap nin D											
		91.33±24.62	132.27±32.26					20.27±5.60		761.68±201.22	
	22.57±2.41	145.21±32.82	187.52±55.24	0.58±0.13	14.99±5.90	1343.52±399.07	8.43±0.96	*	26784.08±8767.24	1149.72±377.93	2701.81±992.13*
	33.11±3.36	*		0.54±0.25	10.61±4.96	1952.91±715.40	7.80±1.36		26532.70±7619.14	*	3004.18±2085.30
	41.49±12.39	156.01±38.62	200.87±50.03	0.38±0.14	10.31±2.55	3506.08±856.33	8.26±0.54*	14.80±6.52	53202.65±17657.23	1294.18±361.60	3035.93±850.28
Z- Ligustilide		*						15.15±2.75		*	
						8062.61±2184.2			145289.80±58639.0		
	4.07±1.85	36.70±18.17	49.28±14.69	1.67±1.21	12.78±3.20	2	8.90±1.12	17.86±4.80	1	322.64±100.23	870.35±311.46
	5.57±2.26	44.73±18.17	62.20±24.53	1.13±.44	14.63±7.18	10040.73±4395.	8.72±0.80	19.97±7.80	207173.33±141485.	383.83±150.84	1224.58±657.13
	6.63±1.78	49.53±16.75	69.65±27.09	0.96±0.10	12.48±3.72	33	8.90±1.50	17.99±5.00	31	458.69±201.28	1348.99±756.73
						19177.75±1169			306975.33±95317.0		
						1.01			8		

Levistilide A	2.61±0.78	23.05±7.24	43.19±21.11	1.04±0.51	21.83±11.8			30.29±15.7			
	3.46±1.33	22.07±7.91	42.96±11.90	1.13±0.44	7	583.82±391.47	9.48±1.38	8	13560.55±3696.98	221.98±85.74	1547.01±1200.74
	5.48±1.21	34.83±3.46	42.60±3.94	0.88±0.14*	30.15±23.3	940.83±272.59	9.25±0.28	41.03±31.6	35525.00±20523.09	202.94±68.72	1908.62±1879.83
				*	4	1786.84±173.43	8.15±0.93	4	24223.78±5474.48	282.51±29.20	585.23±168.30
Ferulic acid		174.27±35.55			9.51±2.70			13.65±3.32			
	28.60±10.23	**	240.77±94.77	1.94±2.47	10.77±5.14	41.09±16.96	8.41±2.19	16.16±8.17	554.79±128.74*	*	4511.05±3598.15
	37.61±7.18	138.57±45.63	176.71±49.42	0.26±0.13	**	106.16±38.60	8.47±1.41	14.43±5.48	1504.68±634.79	1141.49±272.08	2579.37±1378.12
	40.17±7.44	207.00±49.04	270.69±96.33	0.57±0.71	8.30±1.95	142.94±57.33	8.41±1.18	14.73±5.85	1957.50±726.62*	1721.27±433.91	4310.54±3003.20
		*			8.91±3.85*					*	
Liquiritige nin	1.80±0.72*	17.22±5.10	29.56±8.94	0.71±0.19	17.74±5.19	178.52±55.32	9.97±1.24	25.79±7.03	3869.35±2209.32	169.83±48.23	776.47±351.07
	2.77±0.62**	19.69±2.73*	29.15±6.87	0.50±0.16	14.38±6.03	349.45±70.98**	9.08±0.96	20.75±7.90	6883.75±1548.30	178.55±30.04	642.59±413.59
	3.78±0.55	21.95±4.95**	36.98±11.35	0.58±0.13	18.87±10.8	562.94±135.21*	9.34±0.93	27.05±15.2	13934.89±4664.02*	201.96±28.84**	1121.62±1058.33
					1			4			
Liquiritin	2.51±1.07*	14.40±3.71**	29.45±16.14	0.53±0.27	22.75±18.2	1949.37±695.17		31.67±22.7	34996.20±28160.02		
	3.66±0.64**	15.36±2.24**	22.76±3.51**	0.54±0.25	7	4398.06±748.59	9.96±1.77	7	76300.87±39923.09	139.02±20.98**	417.87±153.13
	7.17±3.53	20.39±4.01**	27.75±6.02**	0.51±0.73	13.49±4.39	**	8.80±0.95	20.79±5.25	*	134.13±15.77**	478.30±156.32
					11.71±3.79	7361.22±1682.0	8.19±0.87	16.93±4.17	121685.50±27070.5	166.05±32.15**	479.91±186.34**
						0**			4*		

Paeoniflorin			226.29±191.5			3673.59±1648.8						
	39.57±5.34	144.54±57.20	4	0.63±0.31	14.25±10.9	8	7.61±1.59	18.77±14.9	53940.15±25027.14	1173.15±749.63	6541.21±11431.0	
	44.88±9.70*	173.70±75.99	234.62±126.4	0.46±0.33	1	7279.35±5603.8	6.95±1.67	9	84884.42±41057.56	1245.17±723.09	6	
	63.49±22.74*	204.42±59.92	3	0.29±0.10*	9.82±5.35	0	6.51±0.51*	13.71±8.05	109397.02±35687.3	1309.93±289.55	3775.73±3756.09	
			231.05±63.54	*	7.21±2.51	11012.36±2893.69		9.89±2.27	3		2274.30±887.26	
Albiflorin			226.29±191.5			3673.59±1648.8						
	39.57±5.34	144.54±57.20	4	0.63±0.31	14.25±10.9	8	7.61±1.59	18.77±14.9	53940.15±25027.14	1173.15±749.63	6541.21±11431.0	
	44.88±9.70*	173.70±75.99	234.62±126.4	0.46±0.33	1	7279.35±5603.8	6.95±1.67	9	84884.42±41057.56	1245.17±723.09	6	
	63.49±22.74*	204.42±59.92	3	0.29±0.10*	9.82±5.35	0	6.51±0.51*	13.71±8.05	109397.02±35687.3	1309.93±289.55	3775.73±3756.09	
			231.05±63.54	*	7.21±2.51	11012.36±2893.69		9.89±2.27	3		2274.30±887.26	
Oxypaeoniflorin					9.66±8.61			12.55±5.31				
	8.53±4.38	47.39±13.88	53.84±11.65	2.71±2.60	12.77±12.3	360.46±91.80	7.57±1.97	15.81±14.3	4725.76±2732.40	363.05±150.34	647.25±230.17	
	12.69±7.45	81.72±35.35	96.39±28.89	1.83±1.17*		414.32±120.17	7.14±1.32	2	7178.93±7592.04	559.87±206.42	1363.45±990.24	
	25.73±9.19	112.83±43.59	127.95±45.72	1.08±0.49*	1	671.36±310.16	7.10±1.14	10.91±3.15	7494.03±4533.51	786.02±296.19	1367.87±579.03	
					8.11±3.60			*				
Poricoic acid A	15.53±4.05**	89.10±35.55	99.84±41.52	0.71±0.37*	6.99±1.97	84.44±42.36	7.86±1.25	10.75±2.43	925.63±607.13	705.71±328.26	1082.34±582.13	
	26.24±6.09**	100.92±47.28	152.53±89.34	1.71±2.11	10.32±8.55	117.58±56.05	7.52±1.73	14.33±11.3	2518.64±3044.51	788.38±501.00	2959.99±4043.39	
	30.54±16.03	194.98±85.11	225.13±98.33	4.42±2.50*	6.86±3.37	178.73±160.12	8.05±1.46	0	1826.27±1334.95	1567.88±729.78	2703.46±1701.67	
		*	*					11.38±4.62				
Poricoic acid B	17.37±8.26	110.35±56.12	136.15±93.67	0.75±0.39*	8.04±4.49	34.42±18.58	8.56±1.68	12.63±6.43	394.18±220.52	948.35±595.70	2103.24±2792.61	
	28.04±7.19	141.06±44.89	153.72±47.26	2.67±2.58	5.98±2.46*	48.05±15.22	7.20±2.12	9.38±3.50	427.28±134.62	1064.19±564.04	1509.97±839.70	
	38.23±13.61	241.88±68.85	250.00±69.23	5±1.10**	4.23±1.12*	58.10±16.47*	7.04±0.43*	7.84±0.93	459.11±151.78**	1696.05±470.24	1946.42±524.46	
		*	*							*		

Licochalcone A	1.45±0.20*	14.85±3.04*	28.80±6.93**	1.08±0.47*	23.98±10.6	2	58.07±15.14**	10.25±0.51*	34.36±13.8	0	1891.10±569.09	151.85±28.97*	1038.56±608.98*
	2.50±0.53**	18.32±4.23	25.84±6.29	2.17±0.98	2*		129.92±35.81	8.41±0.75**	0*		2365.98±778.28	155.16±44.11	512.63±272.88
	3.45±0.70	23.09±5.76	30.73±5.56	2.67±1.03	13.48±7.30		211.57±33.51	8.41±0.95	19.09±7.67		3697.79±1176.34	195.07±60.32	527.62±128.84
					12.90±4.17				17.35±4.38				