

The OD value of different concentrations of GJXTL against A549 cells at different time point

(1)12h:

568.00ug/ml:0.3790,0.2289,0.3042,0.3288,0.0674,0.2201
 284.00ug/ml:0.2762,0.2324,0.4608,0.2589,0.2593,0.3209
 142.00ug/ml:0.3123,0.3206,0.2267,0.2890,0.3796,0.3392
 71.00ug/ml:0.4930,0.3415,0.4555,0.5022,0.4554,0.5655
 35.50ug/ml:0.4815,0.5079, 0.9200,0.5413,0.4834,0.6310
 17.55ug/ml:0.6349,0.5677,0.5458,0.7293,0.7322,0.6952
 8.88ug/ml:0.5447,0.7959,0.9297,1.0672,0.9782,0.6132
 0.00ug/ml:0.8579,0.8445, 0.8377,0.5216,1.2558,0.7909

(1)24h:

568.00ug/ml: 0.3247,0.3783,0.3787,0.3776,0.3137,0.4090
 284.00ug/ml: 0.4623,0.4601,0.4532,0.4472,0.4727,0.4762
 142.00ug/ml: 0.4396,0.4662,0.6419,0.7133,0.7463,0.3958
 71.00ug/ml: 0.5585,0.6043,0.4870,0.4241,0.7089,1.4660
 35.50ug/ml: 0.7289,0.7879,0.6785,0.4888,0.5845,0.7272
 17.55ug/ml: 0.8376,0.8763,0.5340,0.8825,0.8783,0.9906
 8.88ug/ml:0.6554,0.9758,0.8982,0.8356,1.3987,1.0045
 0.00ug/ml: 0.9782,1.1131,0.6869,0.8288,1.2622,1.2583

(1)36h:

568.00ug/ml: 0.4119,0.4286,0.0704,0.2979,0.5447,0.3828
 284.00ug/ml: 0.4257,0.3087,0.5311,0.3245,0.4239,0.3604
 142.00ug/ml: 0.4517,0.4079,0.4678,0.4011,0.3003,0.5724
 71.00ug/ml: 0.4506,0.7691,0.5601,0.5828,0.5789,0.6714
 35.50ug/ml: 0.5745,0.8494,0.7979,0.7243,0.5531,0.5665
 17.55ug/ml: 0.7819,0.9067,0.8211,0.5360,1.2877,0.5924
 8.88ug/ml: 0.6934,0.8828,1.374,0.7188,0.8928,0.8747
 0.00ug/ml: 1.796,1.3648,1.3876,1.6806,1.4187,1.0223

Apoptotic rate of A549 cells treated with different concentrations of GJXTL for 24h

GJXTL (ug/mL)	Viable cells (%)	Early apoptotic cells (%)	Advanced apoptotic cells (%)
0.00	94.18	0.41	1.82
	95.78	0.25	1.95
	97.44	0.57	1.81
	87.80	1.31	3.65
142.00	85.59	1.50	4.49
	77.38	1.52	5.78

	90.02	1.81	5.85
284.00	78.05	2.76	8.99
	72.08	3.14	9.09
	69.31	4.01	14.39
568.00	72.86	5.48	12.06
	72.41	6.35	10.33

Effects of different concentrations GJXTL on grey level of STAT3,p-STAT3 and VEGF protein activity in JAK2/STAT3 signal pathway

GJXTL (ug/mL)	β -actin	STAT3	P-STAT3	VEGF
	9.2221	9.2668	7.5701	11.6636
0.00	8.5635	9.1232	6.3524	10.2356
	9.9845	8.5621	5.0526	9.9856
	9.8248	8.9981	6.0411	9.1561
142.00	10.2352	8.2546	6.2531	8.2456
	9.4563	9.0213	5.0213	8.5624
	10.7833	8.2099	7.1135	8.8865
284.00	10.0833	8.7565	4.8963	7.8546
	9.1203	8.6542	5.2132	7.0546
	8.7233	9.3377	4.0306	6.0324
568.00	8.6532	9.0213	4.0213	5.5632
	8.9532	8.5986	3.8546	5.4635

Effects of different concentrations GJXTL on grey level of STAT3,p-STAT3 and VEGF protein activity in JAK2/STAT3 signal pathway

GJXTL (ug/mL)	STAT3	p-STAT3	VEGF	β -actin
	9.2668	7.5701	11.6636	9.2221
0.00	9.1232	6.3524	10.2356	8.5635
	8.5621	5.0526	9.9856	9.9845

	8.9981	6.0411	9.1561	9.8248
142.00	8.2546	6.2531	8.2456	10.2352
	9.0213	5.0213	8.5624	9.4563
	8.2099	7.1135	8.8865	10.7833
284.00	8.7565	4.8963	7.8546	10.0833
	8.6542	5.2132	7.0546	9.1203
	9.3377	4.0306	6.0324	8.7233
568.00	9.0213	4.0213	5.5632	8.6532
	8.5986	3.8546	5.4635	8.9532

Effects of different concentrations GJXTL on relative grey level of STAT3,p-STAT3 and VEGF protein activity in JAK2/STAT3 signal pathway

GJXTL (ug/mL)	STAT3	P-STAT3	VEGF
	1.0048	0.8209	1.2647
0.00	1.0654	0.7418	1.1953
	0.8575	0.6109	1.0001
	0.9159	0.6149	0.8241
142.00	0.8065	0.4856	0.8056
	0.9540	0.5310	0.9055
	0.7614	0.6597	0.8247
284.00	0.8684	0.4856	0.7790
	0.7782	0.4688	0.7735
	1.0704	0.4620	0.6915
568.00	1.0425	0.4647	0.6429
	0.9604	0.4305	0.6102

The tumor volume of different concentrations of GJXTL against A549 cells at different time point (mm³)

Group	n	D1	D5	D9	D13	D17	D21
Control	7	115.2	123.72	152.21	204.86	319.23	474.51
		82.56	87.35	100.55	228.30	282.08	275.85
		89.04	135.23	189.87	497.62	609.13	760.64

		59.20	95.86	134.56	248.84	340.07	411.60
		67.2	82.56	91.50	243.68	490.92	786.16
		114.22	118.01	121.50	369.98	590.86	821.74
		96.00	120.35	151.29	175.50	301.94	368.37
	9	66.26	70.56	110.86	137.46	152.89	188.32
		99.45	130.25	180.59	192.12	254.78	297.44
		78.03	82.31	96.75	124.00	172.34	202.68
		59.39	75.42	119.48	188.75	214.93	201.11
DDP		167.27	170.25	187.55	445.18	521.46	757.73
		93.15	115.32	151.42	220.47	290.83	359.74
		129.71	145.31	185.00	323.64	390.21	419.90
		121.50	122.45	132.06	253.67	321.86	390.04
		129.65	132.38	137.5	151.23	199.25	208.5
	7	107.8	100.2	105.84	190.68	221.81	272.92
		81.56	78.52	98.88	141.66	220.17	292.67
		71.35	62.31	75.29	98.21	102.35	119.48
GJXLT-low		90.50	110.23	148.72	330.43	512.21	871.79
		54.78	78.93	118.19	131.07	180.23	178.93
		115.2	121.30	127.5	309.66	445.53	753.59
		73.41	110.25	177.5	424.34	475.56	627.20
	8	84.53	108.96	175.11	184.88	285.35	350.75
		56.59	105.63	126.67	140.56	205.46	270.36
		68.69	72.56	128.22	130.79	195.89	260.99
		10.00	15.23	21.87	51.84	96.86	101.88
GJXLT-middle		130.00	132.14	224.49	307.00	386.85	380.7
		135.87	185.2	257.55	335.92	390.65	465.79
		116.31	131.23	210	229.9	262.82	335.73
		27	31.20	80.62	97.49	115.68	193.87
						407.93	
		94.19	156.25	244.80	346.8	62.84	509.06
		21.87	28.56	40.5	49.01	227.49	76.67
		110.26	134.65	167.50	211.14	285.54	247.84
		119.48	135.65	177.5	240.66	300.08	314.47
GJXLT-high	8	110.48	132.85	172.5	268.04	280.56	312.11
		92.60	100.31	105.3	195.96	259.12	301.18
		149.76	156.23	182.07	187.27	103.02	282.96
		18.75	26.53	36.9	97.2		110.59

The stripped tumor volume of different concentrations of GJXTL against A549 cells (mm³)

Group	The stripped tumor volume
	204.12
	867.70
	176.72
Control	732.64
	278.3
	309.35
	663.26
	366.77
	173.60
	273.10
	287.18
DDP	179.40
	236.88
	352.11
	296.45
	601.04
	409.73
	172.87
GJXLT-low	106.60
	818.50
	848.38

GJXLT-middle	244.95
	126.96
	450.17
	323.54
	245.24
	365.92
	253.28
	146.45
	77.63
	158.02
GJXLT-high	272.41
	206.23
	272.82
	67.74
	406.08
	283.17
	96.66
	140.05

The positive expression rates of Ki-67 (%)

Control	DDP	GJXLT-low	GJXLT-middle	GJXLT-high
72.35	63.52	56.58	58.96	35.56
68.45	68.72	53.26	45.23	30.24
70.68	75.56	65.23	38.98	28.89
69.52	65.35	45.69	40.23	26.53
50.25	53.26	62.35	39.65	28.51

Body weight increase in A549 xenograft mice

Group	n	The body weight before the experiment(g)	The body weight after the experiment(g)	The body weight increase in A549 xenograft mice (%)
Control	7	19.5	21.5	10.25
		17.2	18.1	5.23
		18.6	21.7	16.67
		21.4	22.4	4.67
		14.0	16.4	17.14
		15.7	15.2	3.28
		15.4	17.9	16.23
DDP	9	17.6	15.4	-12.5
		18.7	15.5	-17.11
		18.1	15.3	-15.47
		14.4	13.4	-6.94
		15.2	11.5	-24.34
		13.5	12.1	-10.37
		18.6	14.2	-23.65
		14.0	10.1	-27.85
GJXLT-low	7	15.9	11.3	-28.93
		17.8	20.2	13.48
		18.5	20.6	10.19
		11.3	16.1	42.48
		16.3	19.0	14.21
		14.8	15.8	6.76
		15.6	17.4	11.54
GJXLT-middle	8	15.0	17.8	18.67
		18.8	21.5	14.36
		19.4	21.0	8.25
		15.6	20.0	28.21
		18.1	22.1	22.10

GJXLT-high	8	16.4	17.6	7.31
		14.5	17.3	8.23
		18.1	19.0	4.97
		20.8	22.0	5.77
		18.8	21.5	14.36
		19.4	21.0	8.25
		15.6	20	28.20
		18.1	22.1	22.10
		16.4	22.2	35.37
		14.5	17.6	21.38
		15.7	17.3	10.19
		20.8	19.0	