

Treatment of non-small cell lung cancer with the nursing application of chemotherapy and traditional Chinese medicine: A meta-analysis

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Abstract

Background

The purpose of the study was to appraise and compare the treatment of non-small cell lung cancer with the nursing application of chemotherapy and traditional Chinese medicine.

Method

Based on the inspection of the meta-analysis data, the odds ratio (OR) and mean difference (MD) with 95% confidence intervals (CIs) were derived by dichotomous random or fixed effect models. 26 papers with a total of 2290 subjects who were available between 2005 and 2021 were included in this meta-analysis.

Results

Traditional Chinese medicine had significantly higher quality of life (OR, 2.79; 95% CI, 1.87-4.16, p<0.001) and clinical efficacy (OR, 2.79; 95% CI, 2.24-3.47, p<0.001), and Karnofsky Performance Status score (OR, 3.03; 95% CI, 1.45-6.34, p=0.003), and lower leukopenia (OR, 0.21; 95% CI, 0.12-0.36, p<0.001), thrombocytopenia (OR, 0.19; 95% CI, 0.13-0.29, p<0.001), myelosuppression (OR, 0.24; 95% CI, 0.10-0.58, p=0.001), hemoglobin decrease (OR, 0.34; 95% CI, 0.12-0.93, p=0.04), nausea and vomiting (OR, 0.16; 95% CI, 0.11-0.22, p<0.001), diarrhea (OR, 0.22; 95% CI, 0.13-0.36, p<0.001), liver damage (OR, 0.17; 95% CI, 0.10-0.28, p<0.001), and kidney damage (OR, 0.30; 95% CI, 0.10-0.90, p=0.03) compared to control in subjects with non-small cell lung cancer.

Conclusions

The data that was looked at showed that using traditional Chinese medicine had significantly higher quality of life and clinical efficacy, and Karnofsky Performance Status score, and lower adverse effects, and hematological toxicity compared to control in subjects with non-small cell lung cancer. However, given that most of the studies comprised a small number as sample size, attention ought to be given to their values.

Keywords: adverse effects; quality of life; Clinical efficacy; hematological toxicity; traditional Chinese medicine; non-small cell lung cancer

Introduction

The most frequent disease and the primary cause of cancer-related deaths globally is lung cancer¹; around 85% of lung cancer cases are non-small cell lung cancer. Non-small cell lung cancer is currently treated primarily with surgery, chemotherapy, radiation therapy, and molecular-targeted therapy. Even though the tumor volume was reduced by those therapies to the best of their ability, the severe toxic side effects of chemotherapy are unavoidable and tough to handle. In addition, the majority of patients had a significant chance of experiencing a recurrence following surgery which was typically deadly due to development of multi-drug resistance.^{2, 3}

A growing body of research has demonstrated that traditional Chinese medicine is a promising adjuvant therapy for cancer. Traditional Chinese medicine has a long history of use in cancer treatment in China. Traditional Chinese medicine was generally thought to increase effectiveness while decreasing toxicity. When traditional Chinese medicine is used clinically to treat cancer, it is discovered to have many benefits, particularly in terms of suppressing and eliminating tumor cells, lowering toxic reactions to radiation and chemotherapy, enhancing patient quality of life and immunity, easing clinical symptoms, minimizing side effects from radiation and chemotherapy, and increasing patient survival times. Traditional Chinese medicine has a complex mechanism of action for treating lung cancer that includes several targets, routes, and layers. ^{4,5} Traditional Chinese medicine focuses on treating lung cancer with tailored care, body strengthening, and removal of pathogenic causes. In clinical practice, the benefits of traditional Chinese medicine for lung cancer treatment are becoming more and clearer. Regarding the safety and efficacy of traditional Chinese medicine in conjunction with chemotherapy for the treatment of non-small cell lung cancer, there is still debate. To assess the effectiveness of traditional Chinese medicine combined with chemotherapy in patients with non-small cell lung cancer, we performed a meta-analysis to compare the treatment of non-small cell lung cancer with the nursing application of chemotherapy and traditional Chinese medicine.

Method

Design of the examination

The meta-analyses were estimated and combined with the epidemiological statement using a predefined procedure. Several databases, including the Cochrane Library, PubMed, OVID, Google Scholar, and Embase, were accessed in gathering and analyzing the data. These datasets were applied to collect analyses that compared and assessed the treatment of non-small cell lung cancer with nursing application of chemotherapy and traditional Chinese medicine.⁶

Data pooling

It was discovered that traditional Chinese medicines in non-small cell lung cancer produced several clinical results. In this research, the main consequence of the inclusion parameter was analyzed. Language obstacles were not taken into account during the inclusion of research or the screening process for potential participants. There were no restrictions on the quantity of volunteers that could be found for the research. Since letters, reviews, and editorials do not present a position in the meta-analysis, we did not integrate this kind into our creation. Figure 1 illustrates the complete inspection identification process.

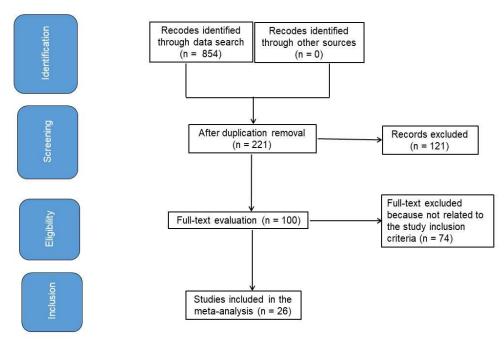


Figure 1. Schematic diagram of the examination procedure

Eligibility of included studies

The treatment of non-small cell lung cancer with nursing application of chemotherapy and traditional Chinese medicine was being studied. Only examinations that talked about how interferences influenced the incidence of different clinical results were included in the sensitivity analysis. Subclass and sensitivity analyses were implemented by associating the numerous subtypes with the interference groups.

Inclusion and exclusion criteria

Inclusion criteria and exclusion criteria:

Figure 1 is an overall study representation. When the inclusion criteria were satisfied, the literature was incorporated into the study:

- 1. The research was a randomized controlled study, observational, retrospective, and prospective.
- 2. Subjects with non-small cell lung cancer were the investigated elect subjects.
- 3. The interference incorporated traditional Chinese medicines.
- 4. The study examines the treatment of non-small cell lung cancer with the nursing application of chemotherapy and traditional Chinese medicine.

The exclusion of non-comparative study designs occurred.

Identification of studies

A protocol of search algorithms was established and specified by the PICOS principle, ⁷ which states: P (population) Subjects with non-small cell lung cancer; Traditional Chinese medicine was the "interference" or "exposure"; C (comparison): the comparison between traditional Chinese medicine and control. O (outcome): different clinical results; S (design of the examination): the planned valuation was unlimited. ⁸ By the keywords in Table 1, we led a thorough exploration of the applicable databases through May 2025. Appraisals were led on the entire articles encompassed in a reference management program, comprising Author, titles, and abstracts. Moreover, two authors assess publications to detect appropriate tests.

Table 1. Database Search Strategy for inclusion of examinations

Database	Search strategy
Google Scholar	#1 "adverse effects" OR "quality of life"
	#2 "hematological toxicity" OR "traditional Chinese medicine" OR "
	"clinical efficacy" OR "non-small cell lung cancer"
	#3 #1 AND #2
Embase	#1 'adverse effects' /exp OR 'quality of life' /exp OR 'clinical efficacy'
	#2 'hematological toxicity'/exp OR 'traditional Chinese medicine'/exp OR
	'non-small cell lung cancer'
	#3 #1 AND #2
Cochrane library	#1 (adverse effects):ti,ab,kw (quality of life):ti,ab,kw (clinical
	efficacy):ti,ab,kw (Word variations have been searched)
	#2 (hematological toxicity):ti,ab,kw OR (traditional Chinese
	medicine):ti,ab,kw OR(non-small cell lung cancer):ti,ab,kw (Word
	variations have been searched)
	#3 #1 AND #2
Pubmed	#1 "adverse effects"[MeSH] OR "quality of life"[MeSH] OR "clinical
	efficacy" [All Fields]
	#2 "hematological toxicity"[MeSH Terms] OR "traditional Chinese
	medicine"[MeSH] OR "non-small cell lung cancer "[All Fields]
	#3 #1 AND #2
OVID	#1 "adverse effects"[All Fields] OR "quality of life" [All Fields] OR "clinical
	efficacy" [All Fields]
	#2 "hematological toxicity"[All fields] OR "traditional Chinese
	medicine"[All Fields] or "non-small cell lung cancer"[All Fields]
	#3 #1 AND #2
	#0 # I AND #2

Screening of studies

The investigation is given in a regular format, along with each of its component features. First author's last name, the study's date, the nation in which it was taking place, femininity, type of population that was employed for meta-analysis, total number of subjects, clinical and treatment characteristics, demographic information, and qualitative and quantitative evaluation methods were some criteria applied to decrease the data. ⁹ Two authors looked into the opportunity of bias in the studies and the standard of approaches utilized in papers elected for supplementary analysis. The two authors conducted unbiased reviews of techniques used for each test. ¹⁰

Statistical analysis

In this meta-analysis, the odds ratio (OR) and mean difference (MD) with a 95% confidence interval (CI) were estimated utilizing dichotomous random- or fixed-effect models. ⁷ Calculated I2 index has a range of 0 to 100 and is expressed as a percentage. ⁹ Higher I2 values signify increased heterogeneity, whilst lower I2 values signify decreased heterogeneity. If I2 was 50% or above, the random effect was selected; otherwise, a fixed effect was chosen. ¹¹ The First study's consequences were classified as a component of the subcategory analysis. Bias was measured using Begg's and Egger's tests utilized for quantitative analysis, and it was considered to exist if p > 0.05. ^{12, 13} p-values were calculated by a two-tailed approach. With Review Manager 5.4, graphs and statistical analyses were created.

Results

After examining 854 pertinent publications, 26 research that were published between 2005 and 2021 content the requirements and were encompassed in this study. 14-39

Table 2 condenses the discoveries of these studies. 2290 persons were studied.

Traditional Chinese medicine had significantly higher quality of life (OR, 2.79; 95% CI, 1.87-4.16, p<0.001) with low heterogeneity (I^2 =42%) and clinical efficacy (OR, 2.79; 95% CI, 2.24-3.47, p<0.001) with no heterogeneity (I^2 =0%), and Karnofsky Performance Status score (OR, 3.03; 95% CI, 1.45-6.34, p=0.003) with moderate heterogeneity (I^2 =54%), and lower leukopenia (OR, 0.21; 95% CI, 0.12-0.36, p<0.001) with moderate heterogeneity (I^2 =64%), thrombocytopenia (OR, 0.19; 95% CI, 0.13-0.29, p<0.001) with low heterogeneity (I^2 =33%), myelosuppression (OR, 0.24; 95% CI, 0.10-0.58, p=0.001) with moderate heterogeneity (I^2 =62%), hemoglobin decrease (OR, 0.34; 95% CI, 0.12-0.93, p=0.04) with high heterogeneity (I^2 =75%), nausea and vomiting (OR, 0.16; 95% CI, 0.11-0.22, p<0.001) with low heterogeneity (I^2 =34%), diarrhea (OR, 0.22; 95% CI, 0.13-0.36, p<0.001) with no heterogeneity (I^2 =0%), liver damage (OR, 0.17; 95% CI, 0.10-0.28, p<0.001) with moderate heterogeneity (I^2 =58%), and kidney damage (OR, 0.30; 95% CI, 0.10-0.90, p=0.03) with no heterogeneity (I^2 =0%) compared to control in subjects with non-small cell lung cancer, as shown in Figures 2-12.

The quantitative Egger regression test and the visual interpretation of the effect's forest plot revealed no indication of investigation bias (p=0.89). It was exposed that the mainstream of pertinent exams had poor practical quality and were prejudiced in their selective reporting.

Table 2. Characteristics of studies

Study	Country	Total	Traditional Chinese medicine	Control
Xiaoxia, 2005 14	China	45	25	20
Chen, 2009 ¹⁵	China	61	33	28
Yan-zhi, 2009 ¹⁶	China	61	33	28
Xu, 2011 ¹⁷	China	116	63	53
Yanli, 2011 18	China	57	29	28
Hui, 2012 ¹⁹	China	68	36	32
Dengxiang, 2012 20	China	173	89	84
Yanli, 2012 ²¹	China	57	28	29
Liu, 2016 ²²	China	60	30	30
Wang, 2016 ²³	China	106	53	53
Zhi, 2016 ²⁴	China	80	40	40
Jiao, 2017 ²⁵	China	229	107	122
Qingchun, 2017 ²⁶	China	72	36	36
Xu, 2017 ²⁷	China	106	53	53
Chengjie, 2017 ²⁸	China	60	30	30
Hua, 2017 ²⁹	China	91	46	45
Wei, 2017 ³⁰	China	140	70	70
Wang, 2018 ³¹	China	53	31	22
Tao, 2018 ³²	China	80	40	40
Xianzhong, 2019 33	China	70	35	35
Zhongqing, 2019 34	China	72	36	36
Li, 2019 ³⁵	China	86	43	43
Xiaoying, 2019 36	China	76	38	38
Gu, 2019 ³⁷	China	108	54	54
Wang, 2021 ³⁸	China	91	61	30
Xiao, 2021 ³⁹	China	72	36	36
	Total	2290	1175	1115

	Traditional Chinese m	edicine	Contr	lo		Odds Ratio				Odds Rat	io	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	Year		M-F	l, Fixed, 9	5% CI	
Yanli, 2012	21	28	13	29	11.0%	3.69 [1.20, 11.38]	2012			-	•	-0.0
Hua, 2017	22	46	13	45	23.5%	2.26 [0.95, 5.37]	2017			-	•	
V/ei, 2017	53	70	42	70	35.0%	2.08 [1.01, 4.30]	2017			-	-	
Tao, 2018	27	40	21	40	23.4%	1.88 [0.76, 4.65]	2018			-	_	
Xianzhong, 2019	26	35	8	35	7.1%	9.75 [3.26, 29.12]	2019				5	
Total (95% CI)		219		219	100.0%	2.79 [1.87, 4.16]				- 8	•	
Total events	149		97									
Heterogeneity: Chi ² =	6.85, df = 4 (P = 0.14); P =	42%						0.05	0.0	-	-	20
Test for overall effect:	Z = 5.05 (P < 0.00001)							0.05	0.2	1	3	20

Figure 2. The effect's of the forest plot of the traditional Chinese medicine on quality of life compared to control in subjects with non-small cell lung cancer with non-small cell lung cancer.

	Traditional Chinese medicine Control Odds Ratio						Odds Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	/ear	M-H, Fixed, 95% CI
Xiaoxia, 2005	19	25	11	20	3.0%	2.59 [0.73, 9.25] 2	2005	
Yan-zhi, 2009	16	33	9	28	5.1%	1.99 [0.70, 5.66] 2	2009	
Yanli, 2011	21	29	13	28	3.7%	3.03 [1.01, 9.12] 2	2011	-
Yanli, 2012	21	28	13	29	3.3%	3.69 [1.20, 11.38] 2	2012	-
Dengxiang, 2012	39	89	25	84	14.8%	1.84 [0.98, 3.45] 2	2012	
Hui, 2012	17	36	7	32	4.0%	3.20 [1.10, 9.25] 2	2012	
Liu, 2016	17	30	9	30	4.0%	3.05 [1.05, 8.84] 2	2016	-
Wang, 2016	35	53	20	53	6.9%	3.21 [1.45, 7.10] 2	2016	
Zhi, 2016	24	40	13	40	5.3%	3.12 [1.25, 7.78] 2	2016	
Qingchun, 2017	28	36	13	36	3.0%	6.19 [2.19, 17.51] 2	2017	0
Wei, 2017	39	70	23	70	10.4%	2.57 [1.29, 5.11] 2	2017	
Xu, 2017	32	53	23	53	9.3%	1.99 [0.92, 4.31] 2	2017	 • • • • • • • • • • • • • • • • • • •
Chengjie, 2017	28	30	19	30	1.3%	8.11 [1.61, 40.77] 2	2017	-
Hua, 2017	6	46	2	45	1.8%	3.23 [0.61, 16.91] 2	2017	-
Tao, 2018	12	40	2 9	40	6.4%	1.48 [0.54, 4.03] 2	2018	× - -
Xianzhong, 2019	26	35	16	35	4.2%	3.43 [1.25, 9.40] 2	2019	
Xiaoying, 2019	36	38	30	38	1.6%	4.80 [0.95, 24.34] 2	2019	
Zhongqing, 2019	29	36	20	36	4.0%	3.31 [1.15, 9.52] 2	2019	
Gu, 2019	50	54	49	54	3.7%		2019	1
Li, 2019	35	43	22	43	4.2%	4.18 [1.58, 11.05] 2	2019	
Total (95% CI)		844		824	100.0%	2.79 [2.24, 3.47]		
Total events	530		346					
Heterogeneity: Chi² =	11.53, df = 19 (P = 0.90);	$ ^2 = 0\%$					+	, , , , , , , , , , , , , , , , , , ,
	Z = 9.21 (P < 0.00001)						0.0	02 0.1 1 10 50

Figure 3. The effect's the forest plot of traditional Chinese medicine on Clinical efficacy compared to control in subjects with non-small cell lung cancer with non-small cell lung cancer.

	Traditional Chinese m	Contr	lo		Odds Ratio			0				
Study or Subgroup	Events Total		Events	Total	Weight	M-H, Random, 95% CI	Year		M-H, I	Random, 95% CI		
Xiaoxia, 2005	10	25	5	20	19.3%	2.00 [0.55, 7.27]	2005		7502101	-	_	
Gu, 2019	31	54	23	54	31.3%	1.82 [0.85, 3.90]	2019			-	-	
Li, 2019	34	43	25	43	26.4%	2.72 [1.05, 7.05]	2019			-		
Xianzhong, 2019	26	35	8	35	23.1%	9.75 [3.26, 29.12]	2019				-	-
Total (95% CI)		157		152	100.0%	3.03 [1.45, 6.34]					•	
Total events	101		61									
Heterogeneity: Tau ² =	0.30; Chi2 = 6.49, df = 3 (P = 0.09);	P = 54%				13	-	-1-	-	<u> </u>	-
Test for overall effect:		11777						0.05	0.2	- 1	5	20

Figure 4. The effect's the forest plot of traditional Chinese medicine on Karnofsky Performance Status score compared to control in subjects with non-small cell lung cancer with non-small cell lung cancer.

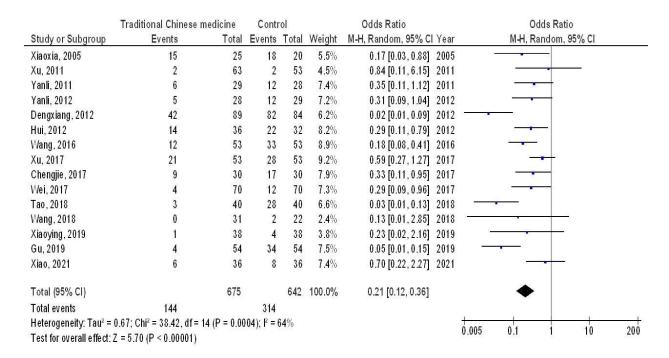


Figure 5. The effect's the forest plot of traditional Chinese medicine on leukopenia compared to control in subjects with non-small cell lung cancer with non-small cell lung cancer.

	Traditional Chinese n	Contr	ol		Odds Ratio	Odds Ratio						
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% C	Year		M-	H, Fixed, 95	% CI	
Xiaoxia, 2005	15	25	17	20	6,0%	0.26 [0.06, 1.15]	2005		_			
Yanli, 2011	7	29	14	28	8.5%	0.32 [0.10, 0.98]	2011		(-	-		
Yanli, 2012	7	28	15	29	8.7%	0.31 [0.10, 0.96]	2012		-	-		
Dengxiang, 2012	36	89	77	84	37.2%	0.06 [0.03, 0.15]	2012		-			
Hui, 2012	2	36	5	32	3.9%	0.32 [0.06, 1.77]	2012		-			
Wang, 2016	9	53	18	53	11.8%	0.40 [0.16, 0.99]	2016		-	•		
Chengjie, 2017	5	30	12	30	7.9%	0.30 [0.09, 1.00]	2017		- 6			
Gu, 2019	2	54	12	54	9.1%	0.13 [0.03, 0.63]	2019	-		-		
Xiao, 2021	T.	36	9	36	6,9%	0.09 [0.01, 0.72]	2021		100			
Total (95% CI)		380		366	100.0%	0.19 [0.13, 0.29]				3		
Total events	84		179									
Heterogeneity: Chi ² =	12.02, df = 8 (P = 0.15); I	2 = 33%						0.01	0.4	-	10	100
Test for overall effect:	Z = 8.28 (P < 0.00001)							0.01	0.1	1	10	100

Figure 6. The effect's the forest plot of traditional Chinese medicine on thrombocytopenia compared to control in subjects with non-small cell lung cancer with non-small cell lung cancer.

	Traditional Chinese m	Contr	lo		Odds Ratio			0				
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Random, 95% CI 1	Year		M-H,	Random, 9	95% CI	
Liu, 2016	10	30	18	30	22.2%	0.33 [0.12, 0.96] 2	2016		-		0000000	
V/ang. 2016	10	53	18	53	24.4%	0.45 [0.19, 1.10] 2	2016		2			
Tao, 2018	3	40	28	40	18,3%	0.03 [0.01, 0.13] 2	2018	_	-			
Li, 2019	3	43	8	43	17.8%	0.33 [0.08, 1.33] 2	2019		13			
Zhongqing, 2019	3	36	7	36	17.3%	0.38 [0.09, 1.59] 2	2019		-	•		
Total (95% CI)		202		202	100.0%	0.24 [0.10, 0.58]			•	-		
Total events	29		79									
Heterogeneity: Tau ² =	0.61; ChP = 10.59, df = 4	(P = 0.03)	F = 62%					+	1	_	- 1	
Test for overall effect:	Z = 3.18 (P = 0.001)	4x .3835						0.01	0.1	- 1	10	100

Figure 7. The effect's the forest plot of traditional Chinese medicine on myelosuppression score compared to control in subjects with non-small cell lung cancer with non-small cell lung cancer.

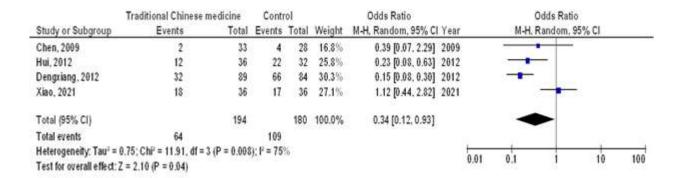


Figure 8. The effect of the forest plot of the traditional Chinese medicine on hemoglobin decrease compared to control in subjects with non-small cell lung cancer with non-small cell lung cancer.

	Traditional Chinese	Control Odds Ratio					Odds R	atio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% C	Year	M-H, Fixed.	95% CI
Dengxiang, 2012	22	89	68	84	30.8%	0.08 [0.04, 0.16]	2012	-	
Hui, 2012	4	36	14	32	7.7%	0.16 [0.05, 0.56]	2012	·	
Yanli, 2012	3	28	7	29	3.6%	0.38 [0.09, 1.64]	2012		
Liu, 2016	7	30	14	30	6.3%	0.35 [0.11, 1.05]	2016	() () () () ()	
Oingchun, 2017	15	36	25	36	8.5%	0.31 [0.12, 0.83]	2017		
V/ei, 2017	2	70	10	70	5.7%	0.18 [0.04, 0.84]	2017		
Tao, 2018	5	40	24	40	12.3%	0.10 [0.03, 0.29]	2018		
Gu. 2019	3	54	25	54	13.8%	0.07 [0.02, 0.25]	2019		
Li, 2019	15	43	30	43	11.4%	0.23 [0.09, 0.57]	2019	-	
Total (95% CI)		426		418	100.0%	0.16 [0.11, 0.22]		•	
Total events	76		217					18	
Heterogeneity: Chi ² =	12.09, df = 8 (P = 0.15);	P = 34%						t	10 50
Test for overall effect:	Z = 10.44 (P < 0.00001)							0.02 0.1 1	10 50

Figure 9. The effect's the forest plot of traditional Chinese medicine on nausea and vomiting compared to control in subjects with non-small cell lung cancer with non-small cell lung cancer.

	Traditional Chinese med	Contr	ol		Odds Ratio			tio				
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI	Year	î.	M-H,	Fixed, S	95% CI	
Dengxiang, 2012	7	89	30	84	42.0%	0.15 [0.06, 0.37]	2012	8	-			
Hui, 2012	3	36	9	32	12.9%	0.23 [0.06, 0.95]	2012			-		
V/ang, 2016	1	31	3	22	5.0%	0.21 [0.02, 2.18]	2016		- 20		7.	
Jiao, 2017	0	107	5	122	7.6%	0.10 [0.01, 1.82]	2017	_	_	-		
Li, 2019	14	43	27	43	26.9%	0.29 [0.12, 0.70]	2019		-	-		
Wang, 2021	3	61	3	30	5.6%	0.47 [0.09, 2.46]	2021		_	•	20	
Total (95% CI)		367		333	100.0%	0.22 [0.13, 0.36]			•	8		
Total events	28		77									
Heterogeneity: Chi ² =	2.05, df = 5 (P = 0.84); F = 0	%						-	- 1	_	- 1	
	Z = 5.86 (P < 0.00001)							0.005	0.1	1	10	200

Figure 10. The effect's the forest plot of traditional Chinese medicine on diarrhea score compared to control in subjects with non-small cell lung cancer with non-small cell lung cancer.

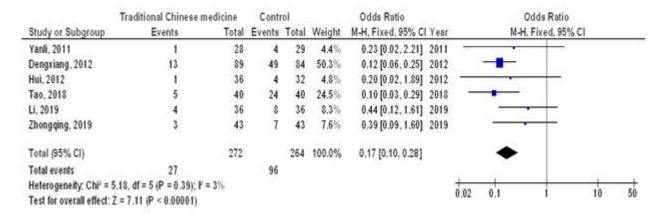


Figure 11. The effect's the forest plot of traditional Chinese medicine on liver damage compared to control in subjects with non-small cell lung cancer with non-small cell lung cancer.

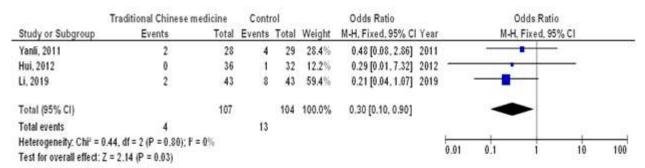


Figure 12. The effect's the forest plot of traditional Chinese medicine on kidney damage score compared to control in subjects with non-small cell lung cancer with non-small cell lung cancer.

Discussion

For the current meta-analysis, 26 research that were published between 2005 and 2021 were included; of these, 2290 people were studied. ¹⁴⁻³⁹

The data that was looked at showed that using traditional Chinese medicine had significantly higher quality of life and clinical efficacy, and Karnofsky Performance Status score, and lower leukopenia, thrombocytopenia, myelosuppression, hemoglobin decrease, nausea and vomiting, diarrhea, liver damage, and kidney damage compared to control in subjects with non-small cell lung cancer However, given that most of the studies comprised a minor sample size (18 studies utilizing sample sizes lower than 100 subjects), thoughtfulness ought to be prearranged to their values.

At 11.6% of all instances, lung cancer is currently the most prevalent disease to be diagnosed. It is also the primary cause of cancer-related deaths globally, with non-small cell lung cancer making up over 85% of cases. The incidence of non-small cell lung cancer in China has risen sharply in the past several years, posing a serious threat to public health. 40-42 Due to its gradual onset, the majority of symptoms appear later and are not immediately apparent, and the prognosis is not good. Currently, the most essential treatment modalities that have produced some results include chemotherapy, targeted therapy, and radiation. Nevertheless, the overall result is still not optimal, and novel treatment approaches must be investigated immediately to raise the effectiveness. Even though traditional medicine has developed a unique diagnostic approach and a systematic theoretical framework, there is still a great deal of uncertainty surrounding clinical treatment due to the lack of clarity surrounding the assessment of the clinical curative effect, which is primarily based on the patient's subjective symptoms and signs. However, traditional Chinese medicine treatment in conjunction with Western anti-tumor medications not only offers a foundation for using traditional Chinese medicine to treat tumors but also amplifies the anti-tumor medications' curative effects. 43 A certain theoretical foundation for the application of traditional Chinese medicine in cancer treatment is provided by the increasing number of research that center on the survival of cancer with tumors.

According to traditional Chinese medicine theory, traditional Chinese medicine is used to promote healthy quality improvement, enhance patients' bodily functions, and prevent tumor growth to increase survival rates and lengthen survival times. Current network pharmacological studies have demonstrated that traditional Chinese medicine's anti-tumor effects are based on a holistic perspective and act as multiple targets. These include enhancing the immune system, reducing the growth of cancer cells, causing cancer cells to undergo apoptosis, preventing tumor angiogenesis, modifying tumor cell signaling pathways, and reversing multi-drug resistance, among other effects. Traditional Chinese medicine added to chemotherapy could statistically significantly reduce severe toxicity as compared to chemotherapy administered alone. Strong evidence is found in the analysis to support the use of traditional Chinese medicine to lessen toxicity and improve the healing effects of Western medicine treatments alone. However, there are still many unanswered questions about traditional Chinese medicine, like what exactly makes it successful and whether or not these herbal components interact with medications. These questions currently lack definitive solutions, thus more thorough research is required.

Among the meta-analysis's limitations were the following: Assortment bias could have arisen because certain papers that were to be included in the study were excluded. Nevertheless, all the excluded work didn't meet the necessary criteria to be included in the study. Still, the data was needed to determine whether influences e.g. ethnicity, age, and gender influenced the consequence. The impartial of the study was to define the treatment of non-small cell lung cancer with the nursing application of chemotherapy and traditional Chinese medicine. Using imprecise or inadequate data from a preceding study most likely made the bias worse. The person's age, gender, ethnicity, and nutritional state were the main variables that most likely contributed to discrimination. Values may unintentionally be modified as a result of unreported investigations and inadequate data.

Conclusions

The data that was looked at showed that using traditional Chinese medicine had significantly higher quality of life and clinical efficacy, and Karnofsky Performance Status score, and lower leukopenia, thrombocytopenia, myelosuppression, hemoglobin decrease, nausea and vomiting, diarrhea, liver damage, and kidney damage compared to control in subjects with non-small cell lung cancer However, given that most of the studies comprised a minor sample size (18 studies utilizing sample sizes lower than 100 subjects), thoughtfulness ought to be prearranged to their values.

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