

#### **Public Health Symposium**

公众健康教育研讨会



癌症辅助学当前主题

## 中草药

在辅助治疗癌症的功效与潜能

#### 促进营养疗学的自我保健预防



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## 化疗药的毒性

器官系统	药毒副作用
心肌中毒	低血压,高血压,心律失常,心肌梗死,充血性心力衰竭,心肌病,心肌和心包炎
胃肠道中毒	恶心呕吐;腹泻
肝中毒	肝坏死,脂肪肝,肝纤维化, 胆汁郁积
肾损害	急性或慢性肾功能衰竭; 长期高血压发病率增高
毒害神经	周围神经病变,肌肉疼痛,颅神经病,和癫痫发作
肺毒性	干咳,肺炎,肺纤维化





### 提高生活质量

	Experim	ental	Contr	ol		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% C	M-H, Fixed, 95% CI
Li et al 2009	26	42	7	41	24.7%	3.63 [1.77, 7.41]	-
Sun 2011	5	30	4	29	14.2%	1.21 [0.36, 4.06]	-
Xu et al 2007	13	60	5	56	18.0%	2.43 [0.92, 6.37]	-
Yao et al 2011	29	43	3	43	10.4%	9.67 [3.18, 29.36]	-
Zhang et al 2012	9	63	6	56	22.1%	1.33 [0.51, 3.51]	-
Zhu et al 2011	13	32	3	31	10.6%	4.20 [1.32, 13.31]	-
Total (95% CI)		270		256	100.0%	3.25 [2.22, 4.77]	•
Total events	95		28				
Heterogeneity: Chi <sup>2</sup> = 1	10.15, df =	5 (P = 0	.07);  2 =	51%			0.004 0.4 4 40 4000
Test for overall effect: 2	Z = 6.04 (P	< 0.000	001)				0.001

Figure: Quality of life. The quality of life changes on Karnofsky performance scale (KPS) were estimated from meta-analysis of pairwise comparisons in patients with Chinese herbal medicine (CTC, treatment group) versus patients in chemotherapy (CT, control group). KPS improvement (the increase of KPS >= 10)

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### 加速肿瘤消退

	_		• •			B. I. B. C.	B. 1 B. 0
	Experim		Contr			Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events			M-H, Fixed, 95% C	M-H, Fixed, 95% CI
Chen et al 2008	24	51	16	49	7.2%	1.44 [0.88, 2.37]	-
Deng et al 2012	10	28	7	30	3.0%	1.53 [0.68, 3.47]	T-
Huang et al 2011	8	29	5	28	2.2%	1.54 [0.57, 4.15]	<u> </u>
Huang et al 2012	6	29	8	28	3.6%	0.72 [0.29, 1.82]	<del></del>
Li et al 2003	7	40	5	40	2.2%	1.40 [0.48, 4.04]	<del> -</del>
Li et al 2009	26	42	16	41	7.1%	1.59 [1.01, 2.49]	•
Lin 2008	42	58	28	57	12.4%	1.47 [1.08, 2.01]	*
Lin and Zheng 2011	7	30	5	30	2.2%	1.40 [0.50, 3.92]	<del></del>
Lu and Wei 2009	16	30	13	30	5.7%	1.23 [0.73, 2.09]	+
Sun 2011	13	30	10	29	4.5%	1.26 [0.66, 2.40]	+
Xu et al 2007	17	60	11	56	5.0%	1.44 [0.74, 2.81]	+-
Yang 2007	9	32	9	34	3.8%	1.06 [0.48, 2.34]	+
Zhang et al 2008	23	51	19	55	8.0%	1.31 [0.81, 2.10]	<del> -</del>
Zhang et al 2012	20	63	11	56	5.1%	1.62 [0.85, 3.07]	<del> -</del>
Zheng et al 2010	15	30	14	30	6.1%	1.07 [0.63, 1.81]	+
Zhou et al 2005	27	103	13	92	6.0%	1.86 [1.02, 3.38]	-
Zhou et al 2012	4	25	1	25	0.4%	4.00 [0.48, 33.33]	<del>  •</del>
Zhu and Guo 2011	41	92	35	90	15.5%	1.15 [0.81, 1.62]	†
Total (95% CI)		823		800	100.0%	1.36 [1.19, 1.56]	<b> </b>
Total events	315		226			2002	
Heterogeneity: Chi <sup>2</sup> = 7	7.39, df = 1	7 (P = 0	.98); I <sup>2</sup> =	0%			<del>                                      </del>
Test for overall effect:							0.005

Figure: Immediate tumor responses. Immediate tumor responses estimated from metaanalysis of pairwise comparisons in patients with chemotherapy combined Chinese herbal medicine (CTC, treatment group) versus patients in chemotherapy (CT, control group).



#### A. Nausea and vomiting at toxicity grade of III~IV

	Experime	ental	Contr	ol		Risk Ratio		Risk	Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% C	l .	M-H, Fixe	ed, 95% CI	
Huang et al 2011	0	29	0	28		Not estimable				
Huang et al 2012	3	28	7	29	20.9%	0.44 [0.13, 1.55]		_	-	
Lu and Wei 2009	2	30	6	30	18.2%	0.33 [0.07, 1.52]		-		
Xu et al 2007	1	60	3	56	9.4%	0.31 [0.03, 2.90]	-			
Zheng et al 2010	2	30	17	30	51.5%	0.12 [0.03, 0.47]	_			
Total (95% CI)		177		173	100.0%	0.24 [0.12, 0.50]		•		
Total events	8		33							
Heterogeneity: Chi <sup>2</sup> = 2	2.18, df = 3	(P = 0.5)	54); I <sup>2</sup> = 0	%			0.01	+	+ +	100
Test for overall effect: 2	Z = 3.81 (P	= 0.000	01)			Fa	0.01 avours	0.1 experimental	1 10 Favours cont	100 trol

#### B. Hemoglobin decline at the toxicity grade of I~IV

	Experime	ental	Contr	ol		Risk Ratio		Ri	sk Ratio		
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% C	1	M-H, F	ixed, 95	% CI	
Huang et al 2011	11	29	13	28	11.5%	0.82 [0.44, 1.51]			•		
Li and Li et al 2012	16	40	20	39	17.6%	0.78 [0.48, 1.27]			-		
Lu and Wei 2009	5	30	9	30	7.8%	0.56 [0.21, 1.46]		-	•		
Sun 2011	4	30	16	29	14.1%	0.24 [0.09, 0.64]		-	_		
Xu et al 2007	31	60	39	56	35.0%	0.74 [0.55, 1.00]			-		
Zhu and Guo 2011	8	92	16	90	14.0%	0.49 [0.22, 1.09]		_			
Total (95% CI)		281		272	100.0%	0.64 [0.51, 0.80]			<b>♦</b>		
Total events	75		113								
Heterogeneity: Chi <sup>2</sup> = 6	6.64, df = 5	(P = 0.2	25); I <sup>2</sup> = 2	5%			0.04			10	400
Test for overall effect:	Z = 3.96 (P	< 0.000	01)			Fa	0.01 avours e	0.1 experiment	al Favo	10 ours cont	100 trol

#### C. Hemoglobin decline at the toxicity grade of III~IV

	Experim	ental	Contr	ol		Risk Ratio		Risk	Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% C	L	M-H, Fix	ed, 95% CI	i
Huang et al 2011	1	29	2	28	13.3%	0.48 [0.05, 5.03]		-	_	
Li and Li et al 2012	2	40	5	39	33.2%	0.39 [0.08, 1.89]			<del> </del>	
Lu and Wei 2009	0	30	0	30		Not estimable				
Sun 2011	0	30	2	29	16.7%	0.19 [0.01, 3.87]	_			
Xu et al 2007	4	60	2	56	13.6%	1.87 [0.36, 9.80]		¥ <del></del>	•	
Zhu and Guo 2011	1	92	1	90	6.6%	0.98 [0.06, 15.40]		-		
Zhu et al 2011	0	32	2	31	16.6%	0.19 [0.01, 3.88]	_	•		
Total (95% CI)		313		303	100.0%	0.58 [0.26, 1.29]		•		
Total events	8		14							
Heterogeneity: Chi <sup>2</sup> =	3.35, df = 5	(P = 0.	65); I² = 0	%			0.004		1 10	1000
Test for overall effect:	Z = 1.33 (P	= 0.18)	)			F	0.001 avours ex	0.1 perimental	1 10 Favours o	1000 ontrol



# 减轻药对红血球的毒副作用

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#### A. WBC reduction at the toxicity grade of III~IV

	Experim	ental	Contr	ol		Risk Ratio		Risk Ra	tio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% C	I N	I-H, Fixed,	95% CI	
Huang et al 2011	2	29	3	28	3.2%	0.64 [0.12, 3.57]		-	-	
Huang et al 2012	2	28	3	29	3.1%	0.69 [0.12, 3.83]			-	
Li and Li et al 2012	6	40	12	39	12.9%	0.49 [0.20, 1.17]				
Lin 2008	7	58	20	57	21.4%	0.34 [0.16, 0.75]		-		
Lu and Wei 2009	3	30	6	30	6.4%	0.50 [0.14, 1.82]		-		
Sun 2011	0	30	1	29	1.6%	0.32 [0.01, 7.61]	_			
Xu et al 2007	12	60	23	56	25.2%	0.49 [0.27, 0.88]		-		
Zheng et al 2010	2	30	8	30	8.5%	0.25 [0.06, 1.08]				
Zhu et al 2011	0	32	16	31	17.7%	0.03 [0.00, 0.47]	-			
Total (95% CI)		337		329	100.0%	0.36 [0.26, 0.52]		•		
Total events	34		92							
Heterogeneity: Chi <sup>2</sup> =	5.97, df = 8	(P = 0.0	65); I <sup>2</sup> = 0	%			<b>—</b>	+ +		
Test for overall effect:	Z = 5.58 (F	< 0.000	001)			F	0.001 avours experi	0.1 1 mental F	10 avours co	1000 ontrol

#### B. WBC reduction at the toxicity grade of I~IV

	Experim	ental	Contr	ol		Risk Ratio	Risk Ratio
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% C	M-H, Fixed, 95% CI
Huang et al 2011	9	29	12	28	5.7%	0.72 [0.36, 1.44]	-
Huang et al 2012	5	28	12	29	5.5%	0.43 [0.17, 1.07]	<del></del>
Li and Li et al 2012	25	40	31	39	14.6%	0.79 [0.59, 1.05]	-
Lin 2008	37	58	50	57	23.4%	0.73 [0.59, 0.90]	-
Lu and Wei 2009	17	30	24	30	11.1%	0.71 [0.49, 1.02]	-
Sun 2011	5	30	13	29	6.1%	0.37 [0.15, 0.91]	
Xu et al 2007	42	60	42	56	20.2%	0.93 [0.75, 1.17]	-
Zheng et al 2010	24	30	29	30	13.5%	0.83 [0.68, 1.00]	;- <b></b> -
Total (95% CI)		305		298	100.0%	0.75 [0.67, 0.84]	•
Total events	164		213				
Heterogeneity: Chi <sup>2</sup> =	8.72, df = 7	(P = 0.	$(27); I^2 = 2$	0%			1 1 1 1 1 1
Test for overall effect:	Z = 4.84 (F	o < 0.000	001)			Fa	0.1 0.2 0.5 1 2 5 10 avours experimental Favours control

#### C. Platelet reduction at the toxicity grade of III~IV

	Experim	ental	Contr	rol		Risk Ratio		Risk	Ratio	
Study or Subgroup	Events	Total	Events	Total	Weight	M-H, Fixed, 95% CI		M-H, Fixe	d, 95% CI	
Huang et al 2011	2	29	4	28	13.9%	0.48 [0.10, 2.43]		•	_	
Huang et al 2012	2	28	4	29	13.4%	0.52 [0.10, 2.61]		-		
Li and Li et al 2012	1	40	3	39	10.4%	0.33 [0.04, 2.99]		-	_	
Lu and Wei 2009	0	30	0	30		Not estimable				
Sun 2011	0	30	1	29	5.2%	0.32 [0.01, 7.61]	-			
Zhu and Guo 2011	4	92	14	90	48.4%	0.28 [0.10, 0.82]				
Zhu et al 2011	0	32	2	31	8.7%	0.19 [0.01, 3.88]				
Total (95% CI)		281		276	100.0%	0.34 [0.17, 0.68]		•		
Total events	9		28							
Heterogeneity: Chi <sup>2</sup> =	0.71, df = 5	(P = 0.9	98); I <sup>2</sup> = 0	1%			0.004		10	4000
Test for overall effect:	Z = 3.05 (F	0.002	2)				0.001 vours expe	0.1 1 erimental	1 10 Favours c	1000 ontrol

#### D. Platelet reduction at the toxicity grade of I~IV

	Experim	ental	Contr	ol		Risk Ratio		Risk	Ratio		
Study or Subgroup	Events	Total	<b>Events</b>	Total	Weight	M-H, Fixed, 95% C	Ú.	M-H, Fix	ed, 95% C	1	
Huang et al 2011	7	29	14	28	15.9%	0.48 [0.23, 1.02]					
Huang et al 2012	7	28	15	29	16.5%	0.48 [0.23, 1.00]		-	1		
Li and Li et al 2012	8	40	12	39	13.6%	0.65 [0.30, 1.42]		-	+		
Lu and Wei 2009	6	30	13	30	14.5%	0.46 [0.20, 1.05]		•	†		
Sun 2011	2	30	6	29	6.8%	0.32 [0.07, 1.47]			+		
Zhu and Guo 2011	9	92	29	90	32.7%	0.30 [0.15, 0.60]		-			
Total (95% CI)		249		245	100.0%	0.43 [0.31, 0.60]		•			
Total events	39		89								
Heterogeneity: Chi² =	2.40, df = 5	(P = 0.7	79); I <sup>2</sup> = 0	%			0.01		1	+	400
Test for overall effect:	Z = 5.01 (F	< 0.000	001)			Fa	0.01 avours e	0.1 experimental	Favours	10 cont	100 rol



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### 提高生存率

	Experim	ental	Contr	ol		Risk Ratio	Risk Ratio
Study or Subgroup	<b>Events</b>	Total	<b>Events</b>	Total	Weight	M-H, Fixed, 95% C	I M-H, Fixed, 95% CI
Chen et al 2008	27	51	23	49	18.9%	1.13 [0.76, 1.67]	*
Chen et al 2011	26	40	14	37	11.7%	1.72 [1.07, 2.75]	-
Li et al 2003	17	40	8	40	6.5%	2.13 [1.04, 4.35]	-
Lu and Wei 2009	20	30	14	30	11.3%	1.43 [0.90, 2.26]	<del> -</del>
Yang 2007	14	32	13	34	10.2%	1.14 [0.64, 2.04]	+
Zhang et al 2008	23	51	18	55	14.0%	1.38 [0.85, 2.24]	† <del>*</del>
Zhang et al 2012	44	63	32	56	27.4%	1.22 [0.92, 1.62]	*
Total (95% CI)		307		301	100.0%	1.36 [1.15, 1.60]	<b>♦</b>
Total events	171		122				
Heterogeneity: Chi <sup>2</sup> = 4	4.24, df = 6	(P = 0.6)	64); I <sup>2</sup> = 0 <sup>4</sup>	%			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Test for overall effect:	Z = 3.61 (P	= 0.000	03)				0.02 0.1 1 10 50 Favours CT Favours CTC

Figure: Number of patients with survival > one-year. Overall survivals estimated from meta-analysis of pairwise comparisons in the patients with chemotherapy combined Chinese herbal medicine (CTC, treatment group) versus patients in chemotherapy (CT, control group).



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## 癌症辅助剂:

- 缓解药毒性
- 改善血计数
- 提高免疫功能
- 强化治疗反应



当与主流的癌症治疗方法联合使用:

可延长生存期提高生活质量

为病人当今最好的选择

