# Evidence Based Medicine

# 中藥和過敏性鼻炎



http://www.commonhealth.com.tw/article/article.action?nid=72775

指導醫師:鄭為仁醫師(V)

報告日期:2018/1/26

報告醫師:Intern 王毓翔、江敬益、王聖棻、張育佳、洪敏文、R1趙晏琳

## 執行實證醫學五大步驟

提問

搜尋

- 1. 提出問題:Ask-PICO
- 2. 搜尋證據:Acquire
- 3. 嚴格評讀: Appraisal-VIP
- 4. 恰當應用:Apply-3E
- 5. 評估結果:Audit

評估

### 臨床情境

- •患者為32歲女性,患者自幼嗜 食冰涼冷飲,晨起打噴嚏,鼻塞 ,鼻癢,目癢;噴嚏出清水涕偶 發;在西醫診斷為過敏性鼻炎, 長期服用西藥抗組織胺藥物
- 病患在新聞上及網路上看到中醫 藥物和針灸對於過敏性鼻炎有許 多的療效,因此來門診尋求幫助



中醫養肺防過敏慢性鼻炎對症治療

NOWnews - 2017年5月16日

西醫治療過敏性鼻炎,楊永榮醫師說,有的是使用抗組織胺藥物舒緩症狀,不過藥效 過後容易復發;也有的採鼻噴劑加以控制,但長期使用恐會出現抗藥性;此外,西醫 針對嚴重鼻過敏的患者,會建議手術治療的方式來加以改善。然而中醫觀點則認為 過敏性鼻炎的發生與身體免疫系統有關,應以改善體質為首要。



慢性病難痊癒中醫治療占優勢

中時電子報 (新聞發布) - 2017年9月15日

髮而動全身的特點,用西藥很難根除,往往只能抑制免疫功能, 停藥後容易復發。而中醫認為,過敏是因正氣不足,邪氣入侵所致,治療多以輔助正 氣,排出邪氣。婦科疾病:婦科疾病常屬於激素分泌紊亂,若僅調節某種...



|腎臟精氣充盛,肺就能獲得溫養;若腎氣不足,就會出現呼多吸少、吸氣困難 的情形,更容易發生過敏性鼻炎。5種治療方針.圖片來源/退休好幸福.何孟杰醫師 指出,過敏性鼻炎在中醫方面,於國內外有相當多的研究與臨床治療,能達到改善的 方式常見有下列5種: 1.內服中藥:中醫根據臨床的辨證論治,將過敏 ...



#### 西醫難治小兒鼻過敏中醫有解

中時電子報 (新聞發布) - 2017年3月4日

台灣的小兒過敏性鼻炎發生率居高不下,以台北市而言,每三位學齡學童 患有<mark>過敏性鼻炎</mark>,家有鼻過敏兒往往讓家長頭痛不已。西醫<mark>治療</mark>效果不甚滿意,帶來 中醫試試看,究竟小兒鼻過敏該選擇西醫還是中醫治療呢?目前西醫治療鼻過敏的內 服藥約分成五類:抗組織胺、解鼻充血劑、類固醇、白三烯素調節劑 ...



自由時報電子報

夏季三伏貼治療過敏性鼻炎這兩種人應避免

中時電子報 (新聞發布) - 2017年7月4日

61歲張姓男子長期飽受過敏性鼻炎所苦,只要天氣轉變,就會打噴嚏、流鼻水,到醫 院求診,遵照中醫師指示使用「三伏貼穴位敷貼」療法,有效減少發病率。 ... 杜旻峰 也強調,三伏貼穴位敷貼療法須經專業中醫師評估是否適合治療,不喜歡服藥的小孩 或服藥對胃不適患者都必須謹慎考慮,孕婦及1歲以下幼兒則不宜使用 ...

夏季三伏貼抗過敏性鼻炎孕婦、幼兒不能碰

深入報導 - 自由時報電子報 - 2017年7月3日

### Background

- 過敏性鼻炎發生率:約15-20%
- 過敏性鼻炎分兩大成因:「環境因素」及「遺傳因素」。「環境因素」:台灣屬海島型氣候,特有的濕熱環境使得塵蹣、蟑螂、黴菌等更易於繁殖,加上溫差大、人口密集,日益嚴重的污染,造成到處充滿了過敏原的現象。
- 「遺傳因素」:根據統計,父母其中一方罹病,其子女約有三分之一的感染機率;如父母雙方都罹病,則子女患過敏性鼻炎的機率更高達三分之二。

### Background- Symptoms

- 鼻癢和打噴嚏
- 鼻塞
- 鼻流清涕
- 嗅覺減退
- 發作期可伴暫時性耳鳴、聽力減退、頭痛

### Background- Signs

- 鼻尖周圍皮膚潮紅
- 黑眼圈 (Allergic Shiners)
- 丹尼氏線(Dennie's lines)
- 鼻樑根部橫紋、過敏性敬禮 (Allergic salute)
- 張口呼吸、打鼾
- 鼻涕倒流而引起夜間陣發性咳嗽
- 鼻黏膜明顯蒼白水腫或呈淡灰色
- 常見併發症--鼻衂、鼻息肉、鼻竇炎、咽喉炎、支氣管哮喘、滲出性中耳炎等

### Background-中醫

- 鼻鼽首先見於《素問·脈解篇》,曰:「所謂客孫脈,則頭痛、鼻鼽、腹腫者,陽明并於上,上者則其孫絡太陰也,故頭痛、鼻鼽、腹腫也。」
- 《劉河間醫學六書・素問玄機原病式》:「鼽者,鼻出清涕也」 ;「嚏,鼻中因癢而氣噴作於聲也。」

### Background-中醫

- 多因外感風寒,內為臟腑功能失調,異氣之邪侵襲鼻竅而致病。
- 「本虛標實」,『虛』在臟腑,在肺、脾、腎。;『實』為外邪 (如:風寒、灰塵、塵蹣等過敏原)所導致出現在鼻子流清涕、打 噴嚏這樣的結果。
- 病位多在肺、脾、腎

### Background

- 過敏性鼻炎西醫治療:
- 1) 類固醇鼻噴劑(Fixonase輔舒良)、口服類固醇 減少鼻黏膜的過敏細胞數量/降低發炎反應,降低過敏抗體而減輕過敏症狀。
- 2) 抗組織胺藥物(口服、鼻噴劑)
- 3) 巨大細胞穩定劑 (Cromolyn sodium)
- 4) Leukotriene拮抗劑 (Montelukast)
- 5) 血管收縮劑通鼻塞藥水 可以迅速解除鼻塞,但是只能短期使用2-3天,若長期使用可能會導致反彈性鼻炎 ,鼻塞更難處理
- 6) 抗生素 一般過敏性鼻炎的治療不需要使用到抗生素,但合併發鼻黏膜的細菌感染以及鼻 竇炎時,就必須合併使用抗生素。

reference: UPTODATE: Pharmacotherapy of allergic rhinitis

### Background

5) 減敏療法

使用少量精製過的過敏原(需先做過敏原測試),注射於患者前臂皮膚下,採逐次加量漸進式的方法,刺激病人自己的免疫系統產生保護性抗體,使其免於過敏原的刺激,是較能夠治本且改善體質的療法,但並非全部有效而且較耗時需要定期注射兩三年。

## Step 1: ASKing

· 過敏性鼻炎病人(典型症狀、升高的IgE)

• 服用中藥治療(去除外敷、針灸其他中醫治療

• 安慰劑 常規西藥治療

• 過敏性鼻炎症狀緩解與否

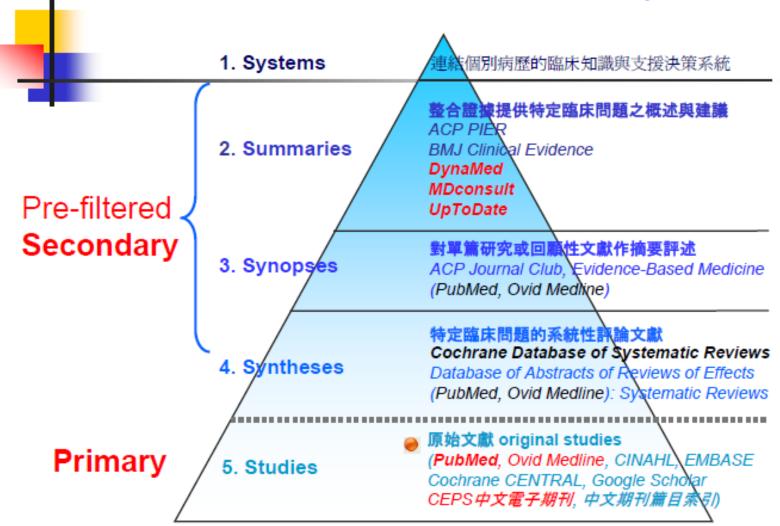
### PICO-Primary Question Types

- Therapy: how to select treatments to offer our patients that do more good than harm and that are worth the efforts and costs of using them.
- **Diagnostic tests**: how to select and interpret diagnostic tests, in order to confirm or exclude a diagnosis, based on considering their precision, accuracy, acceptability, expense, safety, etc.
- **Prognosis**: how to estimate a patient's likely clinical course over time due to factors other than interventions
- **Harm / Etiology:** how to identify causes for disease (including its iatrogenic forms).

## Acquire---文獻檢索目標

- 最符合PICO臨床問題
- 最佳的研究設計
- 文獻等級高
- 有全文可供評讀
- 發表時間最新

### 5S EBM Resources (非關證據強弱!)



### Search Strategy Design

- Key Words: Herbal Medicine, Allergic rhinitis
- 2.DynaMed, UpToDate3.PubMed
- 4.Cochrane

Model from: Haynes, R. B. (2006). Of studies, syntheses, synopses, summaries, and systems: the "5S" evolution of information services for evidence-based health care decisions. ACP Journal Club, 145(3), A8.

### DynaMed

DynaMed Plus

"Allergic rhinitis" herbal medicine

Search

- Herbal medicines
  - Butterbur (款冬屬)
  - 各種中藥和其他草藥。
- Butterbur (款冬屬)
  - Scientific name: Petasites hybridus
  - 1. reduce symptoms of seasonal allergic rhinitis (level 2 [mid-level] evidence)
  - 2. butterbur 50 mg BID not effective than placebo --- 2 weeks
  - 3. Butterbur ~fexofenadine --- 1 week
  - 4. butterbur ~cetirizine



#### DynaMed Plus

"Allergic rhinitis" herbal medicine

Q

Search

#### Search Within Text

- Epidemiology
- Etiology and Pathogenesis
- History and Physical
- Diagnosis
- Treatment

Treatment overview

- Medications
  - Intranasal corticosteroids

Systemic corticosteroids

#### Allergic rhinitis

Follow → Print ⋈ E-mail

黄耆

Treatment / Medications / Herbal medicines / Other herbal medicines

- Reference Altern Ther Health Med 2003 Sep-Oct (5):80 ☐ EBSCOhost Full Text
- herbal formulation with Astragalus membranaceus might reduce intensity of seasonal allergic rhinitis (level 2 [mid-level] evidence)
  - based on small randomized trial
  - 48 adults with moderate-to-severe seasonal allergic rhinitis randomized to herbal and mineral preparation containing A. membranaceus (marketed in Croatia as Lectranal) vs. placebo
  - herbal preparation associated with
    - decreased intensity of rhinorrhea (p < 0.05)</li>
    - greater improvement from baseline of total symptom score and quality of life (not significant)

      補中益氣湯
  - Reference Phytother Res 2010 Feb;24(2):175
- Bu-zhong-yi-qi-tang (a Chinese medicine) reported to decrease nasal symptoms
  - based on small randomized trial of 60 patients allergic to house dust mite allergen
  - Reference J Ethnopharmacol 2008 Jan 4;115(1):104

# Step 2 Acquire: UptoDate

Chinese herbal medicine for the treatment of allergic diseases

"allergic rhinitis" traditior

Find

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**Topic Outline** 

SUMMARY

INTRODUCTION

**OVERVIEW** 

#### THERAPY FOR ASTHMA

Antiasthma herbal medicine intervention (ASHMI) formula

- Indications for use
- Clinical response
- Immunologic response
- Enhanced adrenal function
- Possible mechanisms of action
- Side effects and interactions

Modified Mai Men Dong Tang (mMMDT) formula

STA-1 formula

Ding Chuan Tang (DCT) formula

THERAPY FOR ALLERGIC RHINITIS AND CONJUNCTIVITIS

Xiao-Feng-San (XFS), a 13-herb formula, was studied in a randomized trial in Taiwan [41]. Patients with severe intractable AD were treated for eight weeks with oral XFS (n = 47) or placebo (n = 24). There was a significantly greater improvement in the total lesion, erythema, surface damage, pruritus, and sleep scores in the treatment group compared with placebo. These differences, except for the erythema score, were still significant four weeks after the completion of treatment.

Preliminary observational studies suggest that the combination of Chinese herbal therapy and acupuncture may be more effective than herbal therapy alone [42,43]. Controlled clinical studies are needed.

#### SUMMARY

- Chinese herbs have been used for centuries in Asia as a part of Traditional Chinese medicine (TCM).
   However, lack of standardization and controlled clinical trials, among other issues, have hampered their use as conventional therapies in Western medicine. (See <u>'Introduction'</u> above and <u>'Overview'</u> above.)
- There is potential for developing novel therapies for atopic diseases from Chinese herbs. Several herbal
  formulas show early promise for the treatment of asthma, food allergies, and allergic rhinitis in randomized
  trials. (See <u>'Therapy for asthma'</u> above and <u>'Therapy for food allergy'</u> above and <u>'Therapy for atopic</u>
  <u>dermatitis'</u> above and <u>'Therapy for allergic rhinitis and conjunctivitis'</u> above.)
- Work remains to determine the active components of each herb, their mechanisms of action, and potential synergistic effects. In addition, issues with consistency of herb quality and standardization still need to be addressed.



### PubMed---Systematic review

# 2018 Chinese Herbal Medicine to Treat Allergic Rhinitis: Evidence From a Meta-Analysis.

2012 Meta-analysis of clinical trials on traditional Chinese herbal medicine for treatment of persistent allergic rhinitis.

2007 Herbal medicines for the treatment of allergic rhinitis: a systematic review.

2008 Complementary medicine in treatment of asthma and respiratory tract infections.

Potential effectiveness of Chinese herbal medicine Yu ping feng san for adult allergic rhinitis: a systematic review and meta-analysis of randomized controlled trials.

Acupressure for respiratory allergic diseases: a systematic review of randomised controlled trials.

Ear-acupressure for allergic rhinitis: a systematic review.

A Systematic and Narrative Review of Acupuncture Point Application Therapies in the Treatment of Allergic Rhinitis and Asthma during Dog Days.

### **PubMed**

- Acupoint herbal patching for allergic rhinitis: a systematic review and meta-
- analysis of randomised controlled trials.

Zhou F, Yan LJ, Yang GY, Liu JP.

Clin Otolaryngol. 2015 Dec;40(6):551-68. doi: 10.1111/coa.12410. Review.

PMID: 25754265 Similar articles

- Complementary and alternative therapy (CAM) in the treatment of allergic
- rhinitis.

Kern J, Bielory L.

Curr Allergy Asthma Rep. 2014 Dec;14(12):479. doi: 10.1007/s11882-014-0479-8. Review.

PMID: 25269403 Similar articles

- Catgut implantation at acupoints for allergic rhinitis: a systematic review.
- Li XR, Zhang QX, Liu M, Chen Q, Liu Y, Zhang FB, Deng J, Zhong ZD.
   Chin J Integr Med. 2014 Mar;20(3):235-40. doi: 10.1007/s11655-014-1748-z. Epub 2014 Mar 4.
   Review.

PMID: 24615216 Similar articles Search
"traditional chinese medicine" AND
"allergic rhinitis"

# Search "traditional chinese medicine" AND "allergic rhinitis"

Search Search Manag 17 RCTs

⊕ Title, Abstract, Keywords 
□ "traditional chinese medicine" AND "allergic rhinitis"

Search Limits Search Help (Word variations have been searched)

Clear

Browse

Add to Search Manager

#### All Results (17)

- Cochrane Reviews (0)
- All
- Review
- Protocol
- Other Reviews (0)
- Trials (17)
- Methods Studies (0)
- Technology Assessments (0)
- Economic Evaluations (0)
- Cochrane Groups (0)

#### Cochrane Central Register of Controlled Trials : Issue 12 of 12, December 2017

There are 17 results from 1103141 records for your search on "traditional chinese medicine" AND "allergic rhinitis" in Title, Abstract, Keywords in Trials'

Sort by Relevance: high to low ▼

Select all | Export all | Export selected

Qufeng Decoction for treating **allergic rhinitis**: a randomized controlled trial Zhu WR, Zhang SJ, Deng DH and Shen XH Zhong xi yi jie he xue bao [journal of chinese integrative medicine], 2008, 6(7), 700 Online Publication Date: 2012

#### **Original Article**

Allergy Asthma Immunol Res. 2018 January;10(1):34-42.





# Chinese Herbal Medicine to Treat Allergic Rhinitis: Evidence From a Meta-Analysis

Xu Zhang, 1,2 Feng Lan, 2 Yuan Zhang, 1,2 Luo Zhang 1,2\*

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- 最符合PICO臨床問題
- 最佳的研究設計

- 文獻等級高
- 有全文可供評讀
- 發表時間最新







В

What are the results?

 $\mathsf{C}$ 

Will the results help locally?



1. Did the review address a clearly focused question?

We systematically searched the PubMed, Medline, and Springer electronic databases up to March 2017 for RCTs comparing the efficacy of CHM versus placebo for the treatment of patients with AR. Total nasal symptoms and quality of life were assessed through pooling mean difference (MD) with its 95% confidence interval (CI).







- 1.問題明確
- 2.和我們設定的PICO相同



2. Did the authors look for the right type of papers?

We systematically searched the PubMed, Medline, and Springer electronic databases up to March 2017 for RCTs comparing the efficacy of CHM versus placebo for the treatment of patients with AR. Total nasal symptoms and quality of life were assessed through pooling mean difference (MD) with its 95% confidence interval (CI).







我們的O為尋求治療結果 => 應尋找RCT文章



3. Do you think all the important, relevant studies were included?

We systematically searched the PubMed,
Medline, and Springer electronic databases
up to March 2017 for RCTs comparing the
efficacy of CHM versus placebo for the
treatment of patients with AR. Total nasal
symptoms and quality of life were assessed
through pooling mean difference (MD) with
its 95% confidence interval (CI).

- T YES
- NO
- CAN 'T TELL
- 1.重要database皆被列入
- 2.收至March 2017



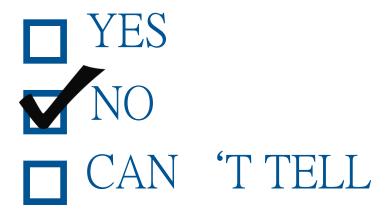


following criteria:

(1) the study was designed as a randomized controlled trial(2) patients had typical symptoms of AR, and elevated total blood IgE level or positive skin prick test reactions were observed(3) patients were treat-ed with traditional Chinese medicine as compared with place- bo or conventional Western medicine; (4) One of the following outcomes was reported — sneezing, itchy nose, total nasal symptom score (TNSS), and quality of life measured by Rhino conjunctivitis Quality of Life (RQLQ) or 36-item Short Form Health Survey (SF-36); (5) patients had provided informed writ- ten consent prior to entry to the study.

Reviews, meetings abstracts, case reports, and comments were excluded from the meta-analysis.

Reviews, meetings abstracts, case reports, and comments were excluded from the meta-



- 1.僅收錄英文RCT
- 2.排除review, abstract, case report和comment 30



4. Did the review's authors do enough to assess the quality of the included studies?

Quality of the included studies was assessed by 2 independent authors using the risk of bias tools based on the Cochrane Handbook version 5.1.0. Briefly, 6 bias items were assessed, such as selection bias, performance bias, detection bias, attrition bias, reporting bias, and others.
Each item was categorized as low, high, or unclear risk.







1.2 independent authors

2. Risk of bias tools



5. If the results of the review have been combined, was it reasonable to do so? Heterogeneity was assessed using the Cochrane Q and P

statistics. The Q test evaluates the contribution of each

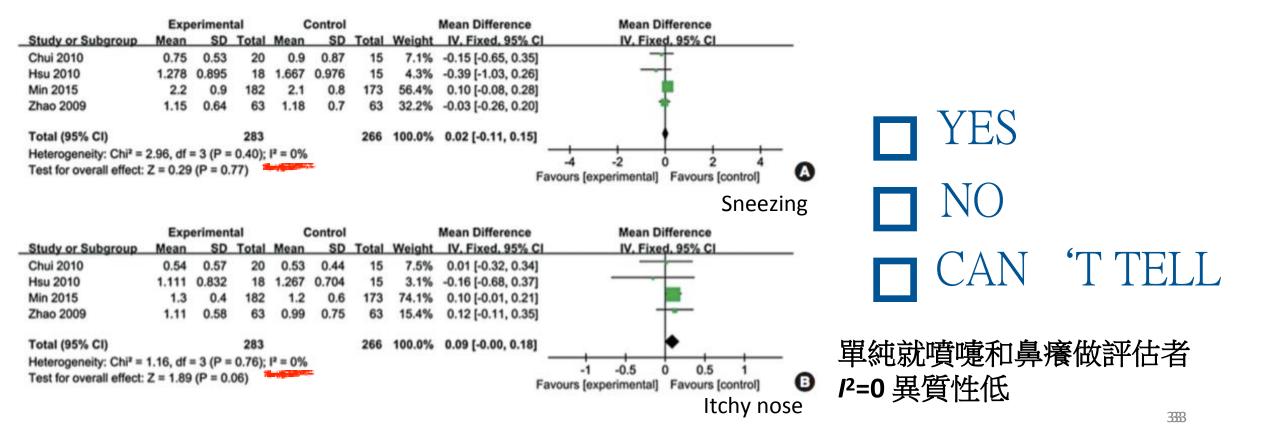
\*study by its inverse variance, which is computed by summing the squared deviations of each study's effect estimate from the overall effect estimate. The  $I^2$  index describes the percentage of total variation across studies that is due to heterogeneity rather than chance, and can be readily calculated from basic results obtained from a typical meta-analysis as  $I^2=100\%\times(Q-df)/Q$ , where Q is Cochran's heterogeneity statistic and df the degrees of freedom.

- T YES
- **N**O
- CAN 'T TELL

利用I<sup>2</sup> statistics評估異質性









Lenon 2012

Heterogeneity: Tau2 = 0.79; Chi2 = 955.01, df = 4 (P <

Test for overall effect: Z = 0.53 (P = 0.59)

Xue 2003

### Are the results of the study valid?

experimental] Favours [control]

#### 5. If the results of the review have been combined,

_Study or Subgroup	Mean		Total	Mean		Total		IV. R	Difference andom, 95% CI	Mean Difference IV. Random, 95% CI		甘草 蒼耳子
Chan 2014		0.19	1201	10.00	0.19	79	17.4%		.56 [0.50, 0.62]		辛夷散	 辛夷
Chan 2014a	2.37	0.19	80		0.19	79	17.4%		5 [-0.81, -0.69]		十大队	
Jung 2011	1.16		30	1.46		29	16.8%		30 [-0.64, 0.04]	1		細辛
Lenon 2012	2.2	1.3	47	2.2	1.4	48	15.9%		00 [-0.54, 0.54]			** * * *
Xue 2003	0.84		24	1.44		-76						防風
Yang 2010	3.19	0.35	62	5.7	Cur	e-al	lergic	-	黃耆			白芷
Total (95% CI)			324		rhin	iitis	Syrup	)	黨蔘	•		藁本
Heterogeneity: Tau <sup>2</sup> =	0.84; Ch	ni <sup>2</sup> = 10	37.88,	df = 5					白朮	4 -2 0 2 4		•
Test for overall effect:	Z = 1.53	(P = 0	).13)							s [experimental] Favours [control]		川芎
Total nasal syr	npton	n of e	eligib	le st					乾薑 桂枝	icine with control.		升麻
				-						DIM		木通
Study or Subarroup	Experin Mean			Con					大棗	Mean Difference IV, Random, 95% CI		甘草
	3.68 0.			.12 0					熟附子	IV. Kangom, 95% CI		<u> </u>
Chan 2014 Chan 2014a	2.37 0.			.12 0								
Jung 2011	1.16 0.			.46 0					細辛	-		

辛夷

艾葉

飴糖

淮小麥

TELL

使用CHM vs control/placebo後的鼻症狀評估中,/²=100異質性高

黃耆

白朮

防風 辛夷

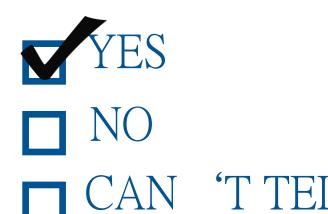
玉屏風散加減

Total nasal symptom of eligible studies comparing Chinese herbal medicine with placebo.



5. If the results of the review have been combined, was it reasonable to do so?

Assessment of overall heterogeneity indicated that there was significant heterogeneity among the individual studies ( $I^2$ =100%, P < 0.00001), and thus we used the ransomed effects model to pool data. Analysis of the data for total symptoms showed that CHM treatment did not lead to significant improvement in nasal symptoms in AR patients as compared with control medication.



使用隨機效應模式合併data

# B What are the results?

#### 6. What are the overall results of the review?

	Exp	erimen	tal	(	Control			Mean Difference	Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV. Fixed, 95% C	IV. Fixed. 95% CI		
Chui 2010	0.75	0.53	20	0.9	0.87	15	7.1%	-0.15 [-0.65, 0.35]	+		
Hsu 2010	1.278	0.895	18	1.667	0.976	15	4.3%	-0.39 [-1.03, 0.26]			
Min 2015	2.2	0.9	182	2.1	0.8	173	56.4%	0.10 [-0.08, 0.28]			
Zhao 2009	1.15	0.64	63	1.18	0.7	63	32.2%	-0.03 [-0.26, 0.20]	*		
									1	YES	
Total (95% CI)			283	nes escent		266	100.0%	0.02 [-0.11, 0.15]	· · · · · · · · · · · · · · · · · · ·		
Heterogeneity: Cnr =	2.96, ar	= J (r =	0.40);	r = U%				All the second second	4 2 0 2 4		
Test for overall effect:	Z = 0.29	(P = 0.	77)						avours [experimental] Favours [control]	KI	
									sneezing		
	22170		272	102							
	Exp	erimen			Control			Mean Difference	Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV. Fixed, 95% C	IV. Fixed, 95% CI	$\overline{}$	'm met t
Chui 2010	0.54	0.57	20	0.53	0.44	15	7.5%	0.01 [-0.32, 0.34]			'T TELL
Hsu 2010	1.111	0.832	18	1.267	0.704	15	3.1%	-0.16 [-0.68, 0.37]			
Min 2015	1.3	0.4	182	1.2	0.6	173	74.1%	0.10 [-0.01, 0.21]			
Zhao 2009	1.11	0.58	63	0.99	0.75	63	15.4%	0.12 [-0.11, 0.35]	1		
										選用risk ratio95	2. 冷福原則只相
Total (95% CI)			283			266	100.0%	0.09 [-0.00, 0.18]		迭用IISK Idiluss	70 百根四月王况
Heterogeneity; Chi <sup>2</sup> =	1.16, df	= 3 (P =	0.76);	$I^{x} = 0\%$					-1 -0.5 0 0.5 1		
Test for overall effect:	Z = 1.89	(P = 0.	06)						avours [experimental] Favours [control]	in the second se	
									arous texhennental Larous technol		

# B What are the results?

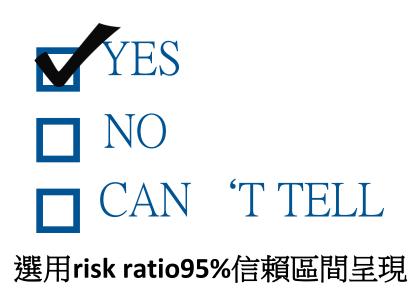
#### 6. What are the overall results of the review?

	Expe	rimen	tal	Control				Mean Difference	Mean Difference		
Study or Subgroup	Mean	SD Tota		tal Mean SI		Total	Weight	IV. Random, 95% CI	IV, Random, 95% CI		
Chan 2014	3.68	0.19	81	3.12	0.19	79	17.4%	0.56 [0.50, 0.62]			
Chan 2014a	2.37	0.19	80	3.12	0.19	79	17.4%	-0.75 [-0.81, -0.69]	*		
Jung 2011	1.16	0.55	30	1.46	0.75	29	16.8%	-0.30 [-0.64, 0.04]	*		
Lenon 2012	2.2	1.3	47	2.2	1.4	48	15.9%	0.00 [-0.54, 0.54]	+		
Xue 2003	0.84	0.67	24	1.43	0.76	25	16.6%	-0.59 [-0.99, -0.19]	*		
Yang 2010	3.19	0.35	62	5.71	1.61	38	16.0%	-2.52 [-3.04, -2.00]	-		
Total (95% CI)			324			298	100.0%	-0.59 [-1.33, 0.16]	•		

Total nasal symptom of eligible studies comparing Chinese herbal medicine with control.

	Expe	erimen	ital	C	ontrol	()		Mean Difference	Mean Difference	
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV. Random, 95% CI	_
Chan 2014	3.68	0.19	81	3.12	0.19	79	20.7%	0.56 [0.50, 0.62]		
Chan 2014a	2.37	0.19	80	3.12	0.19	79	20.7%	-0.75 [-0.81, -0.69]		
Jung 2011	1.16	0.55	30	1.46	0.75	29	20.0%	-0.30 [-0.64, 0.04]	*	
Lenon 2012	2.2	1.3	47	2.2	1.4	48	18.9%	0.00 [-0.54, 0.54]	+	
Xue 2003	0.84	0.67	24	1.43	0.76	25	19.7%	-0.59 [-0.99, -0.19]	*	
Total (95% CI)			262			260		-0.22 [-1.01, 0.58]	<b>+</b>	
Heterogeneny, rau = 0.79, CHI = 933.01, di = 4 (F < 0.00001); l* = 100% Test for overall effect: Z = 0.53 (P = 0.59)									-4 -2 0 2 4 Favours [experimental] Favours [control]	_ 

Total nasal symptom of eligible studies comparing Chinese herbal medicine with placebo.



# B What are the results?

#### 6. What are the overall results of the review?

	Exp	erimenta	al	(	Control			Mean Difference	Mean Difference			
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV. Random, 95%	CI IV. Random, 95% CI		YES	
Brinkhaus 2004	4.8	5.4	28	7.8	5.9	26	4.0%	-3.00 [-6.02, 0.03	2]		ILO	
Chan 2014	5.36	0.4	81	7.19	0.4	79	23.4%	-1.83 [-1.95, -1.7	1] "			
Chan 2014a	5.97	0.4	80	7.19	0.4	79	23.4%	-1.22 [-1.34, -1.10	0]			
Hsu 2010	6.8778	1.9019	18	6.7533	1.0986	15	15.0%	0.12 [-0.92, 1.10	6] 🕇		NIO	
Hu 2001	6.6	16.4	26	3.9	16.5	32	0.6%	2.70 [-5.81, 11.2	1]			
Jung 2011	9.38	2.45	30	10.14	3.34	29	10.8%	-0.76 [-2.26, 0.74	4] 🕂		110	
Zhao 2009	2.82	0.8	63	2.8	0.78	63	22.7%	0.02 [-0.26, 0.3	0] †			
Total (95% CI)			326				100.0%	-0.88 [-1.55, -0.21	g •		$C \wedge N$	T TELL
Heterogeneity: Tau <sup>2</sup> =				6 (P < 0	.00001);	$ ^2 = 969$	6		-10 -5 0 5 10			
Test for overall effect:	Z = 2.58	(P = 0.01	1)						Favours [experimental] Favours [control]			
									quality of life evaluation	選用ri	isk ratio95%	6信賴區間呈現

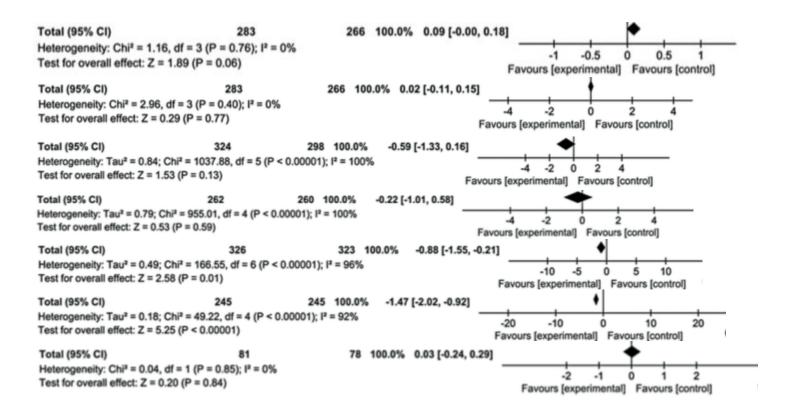
## What are the results?

#### 6. What are the overall results of the review?



# B What are the results?

#### 7. How precise are the results?





### C Will the results help locally?

#### 8. Can the results be applied to the local population?

(1) the study was designed as a randomized controlled trial(2) patients had typical symptoms of AR, and elevated total blood IgE level or positive skin prick test reactions were observed(3) patients were treated with traditional Chinese medicine as compared with placebo or conventional Western medicine; (4) One of the following outcomes was reported — sneezing, itchy nose, total nasal symptom score (TNSS), and quality of life measured by Rhino conjunctivitis Quality of Life (RQLQ) or 36-item Short Form Health Survey (SF-36); (5) patients had provided informed written consent prior to entry to the study.



## C Will the results help locally?

9. Were all important outcomes considered?

Nasal symptom evaluation(sneezing, itchy nose), Total nasal symptoms(sneezing, nasal discharge, nasal itch, nasal obstruction), Quality of life, Quality of life based on Rhino conjunctivitis Quality of Life Questionnaire, and 36-item Short Form Health Survey.

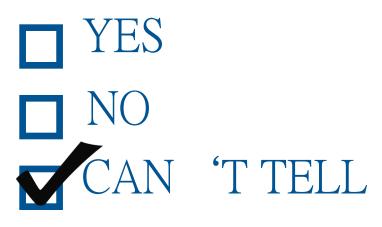


此篇研究outcome與我們設定的O

### Will the results help locally?

10. Are the benefits worth the harms and costs?

Although occurrence of adverse events was one of the outcomes to be assessed in the present meta-analysis, it was not possible to perform this analysis because the occurrence of adverse events following CHM treatment was reported as an outcome measure in only one of the enrolled studies.



僅一篇paper討論副作用

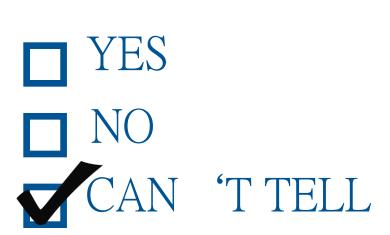


#### Will the results help locally?

#### 10. Are the benefits worth the harms and costs?

Table 4. Adverse events

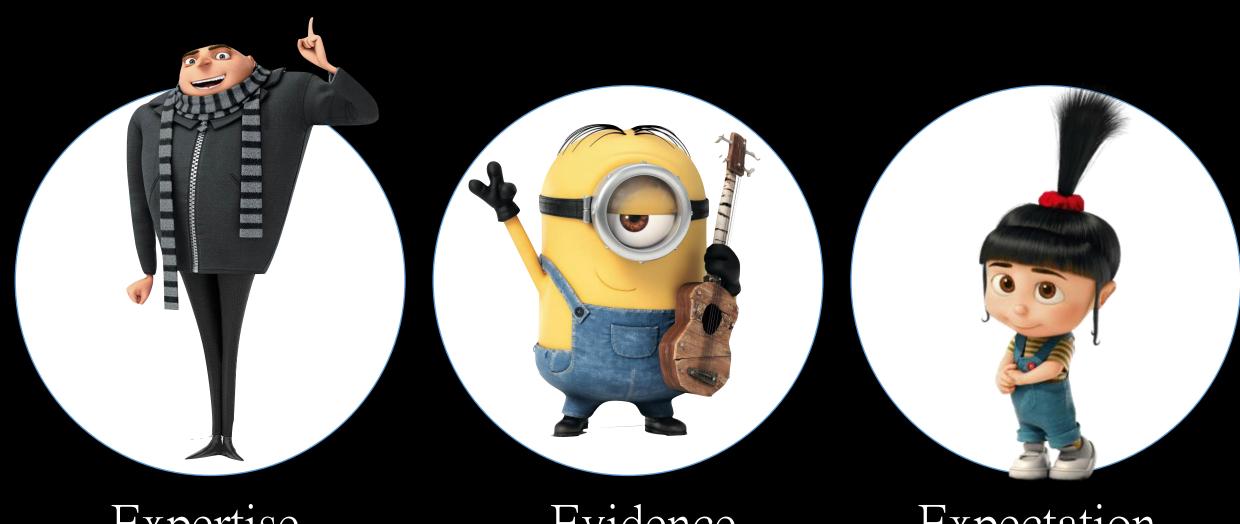
Events	RCM-102 group	Placebo group	
Nausea	0	2	
Tired	1	1	
Constipation	1	0	
Headache	1	1	
Itchy around mouth	1	0	
Dry nose at night	1	1	
Stomach upset	0	2	
Skin rash	1	0	
Reflux	0	1	
Itchy & dry skin	0	1	
Total	6 (11%)	9 (17.3%)	



#### level of evidence: level 1

Question	Stop 1	Stop 3	Stop 2	Stop 4	Stop E (Lovel E)
Question	(Level 1*)	(Level 2*)	(Level 3*)	(Level 4*)	Step 5 (Level 5)
How common is the problem?	surveys (or censuses)	Systematic review of surveys that allow matching to local circumstances**	Local non-random sample**	Case-series**	n/a
Is this diagnostic or monitoring test accurate? (Diagnosis)	of cross sectional studies with consistently applied reference		Non-consecutive studies, or studies without consistently applied reference standards**	Case-control studies, or "poor or non-independent reference standard**	Mechanism-based reasoning
What will happen if we do not add a therapy? (Prognosis)	Systematic review of inception cohort studies	Inception cohort studies	Cohort study or control arm of randomized trial*	Case-series or case- control studies, or poor quality prognostic cohort study**	n/a
Does this intervention help? (Treatment Benefits)	of randomized trials or n-of-1 trials	l .	Non-randomized controlled cohort/follow-up study**	,	Mechanism-based reasoning
What are the COMMON harms? (Treatment Harms)	trials, systematic review	or (exceptionally) observational study with dramatic effect		Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning
What are the RARE harms? (Treatment Harms)	trials or <i>n</i> -of-1 trial	Randomized trial or (exceptionally) observational study with dramatic effect			
Is this (early detection) test worthwhile? (Screening)	Systematic review of randomized trials		l '	Case-series, case-control, or historically controlled studies**	Mechanism-based reasoning





Expertise

Evidence

Expectation

#### 我們的患者是否可從該研究中獲益?

- 我們的病人和研究對象是否不同,而不能適用此結果?
- 此治療是否適合我們的醫療環境?
- 我們的患者從中獲得的好處是否多於壞處?
- 患者的價值觀與期望值

#### 我們的病人和研究對象是否不同,而不能適用此結果?

- 研究對象並不侷限於特定族群,所收錄的11篇RCT內甚至有兩 篇來自於台灣。
- 收錄對象為有過敏性鼻炎典型症狀、升高的IgE血中濃度、陽性skin prick test結果,與我們現行判斷過敏性鼻炎之情境病人相同。

#### 此治療是否適合我們的醫療環境?

• 病人或醫療體系是否可負擔此治療?

患者只要有按時繳交健保費用,前往中醫門診就醫僅需支付 部分負擔即可獲得治療,而醫療體系目前則有健保支撐此項治療 費用。

此治療是否可在國內進行?Of course。

#### 我們的患者從中獲得的好處是否多於壞處?

- 此篇研究收錄的RCT中資訊不足以討論副作用的發生率和程度 ,但就現今臨床的狀況看來,未有患者表示CHM治療過敏性 鼻炎時有影響生命危害或日常生活的副作用發生。
- 使用CHM對AR患者nasal symptom的緩解、後續quality of life皆有顯著的幫助。

#### 患者的價值觀與期望值

- 是否能達到症狀緩解?就症狀緩解來說有顯著的效益,亦可改善QOL。
- 停藥後是否能有持續的效果?長期服用後的停藥效果是否能持續維持,目前仍沒有大型研究或討論支持,服用的時間長短也是後續研究可以進行的方向。

Chui et al.2010	Hong Kong	Nasal drop	鵝薄白黃甘桔金大黃防陳不荷芍芩草梗銀棗連風皮草
Lenon et al.2012	Australia	RCM-102	黄柴甘辛薄荊防黄 耆胡草夷荷芥風芩 黄
Hu et al.2001	Australia	Biminne capsule	地黄黄白淫補五烏防白黄黄芩精果羊骨味梅風芷耆

Chan et al.2014	China	[Cure-allergic-rhinitis Syrup (CS)	黃黨白乾桂大熟細辛艾淮飴耆蔘朮薑枝棗附辛夷葉小糖子 麥
Chan etcl.2014a	China	Yu-ping-feng San	黃耆 白朮 防夷 甘草 蒼耳子
Yang et al.2010	Taiwan	Xin-Yi-san	辛細防白藁川升木甘夷辛風芷本芎麻通草
Zhao et al.2008	Hong Kong	Shi-Bi-Lin	蒼耳子 白芷 防風 辛夷 龍膽草 馬鞭草

### Thank you!!!