



香港醫院管理局中醫總部

-

中醫的現況及未來發展

謝達之博士

中醫及中西醫結合服務主管

醫管局中醫總部

2012年3月22日

醫管局訪京團



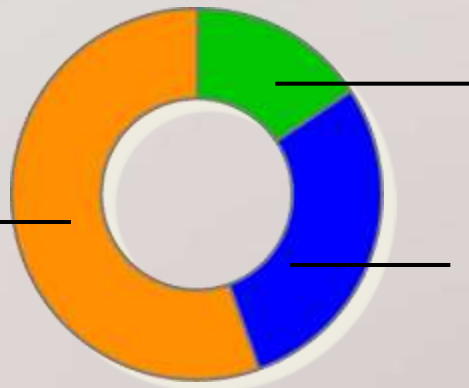
- 醫管局首次應國家衛生部邀請，由醫管局主席胡定旭率團訪京三天，行程包括：
 - 與國家衛生部部長陳竺會面



香港醫療服務的三層架構

基層醫療

私家西醫
56.6%

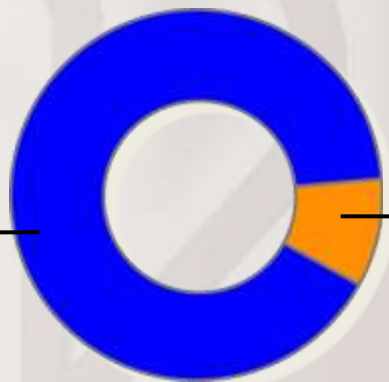


中醫
13.6%

衛生署 /
醫院管理局的西醫
28.9%

中層及第三層醫療

醫院管理局
90%



私家醫院/醫生
10%

資料來源/Source :

- (1) Thematic Household Survey Report No.30, Census and Statistics Department HKSAR, Sep 2009
- (2) Public / Private share in patient days, updated in 2009

中醫藥發展進程：法規

- 法規框架
 - 立法局通過“香港中醫藥管理條例”(1999)
- 特區政府
 - 分階段於18區設立中醫門診(2000)
 - 逐步將中醫納入公營醫療系統(2001)
- 中醫藥管理委員會
 - 中醫師表列和註冊(首批2002過渡)
 - 中藥商登記
 - 中成藥註冊2003年實施(首批批核完成於2008)

中醫藥發展進程：公營服務

醫院管理局



醫管局



- 2003-2011
 - 中西醫合作對抗SARS
 - 毒理學參巧化驗室設立
 - 已建立16所中醫診所：醫·教·研

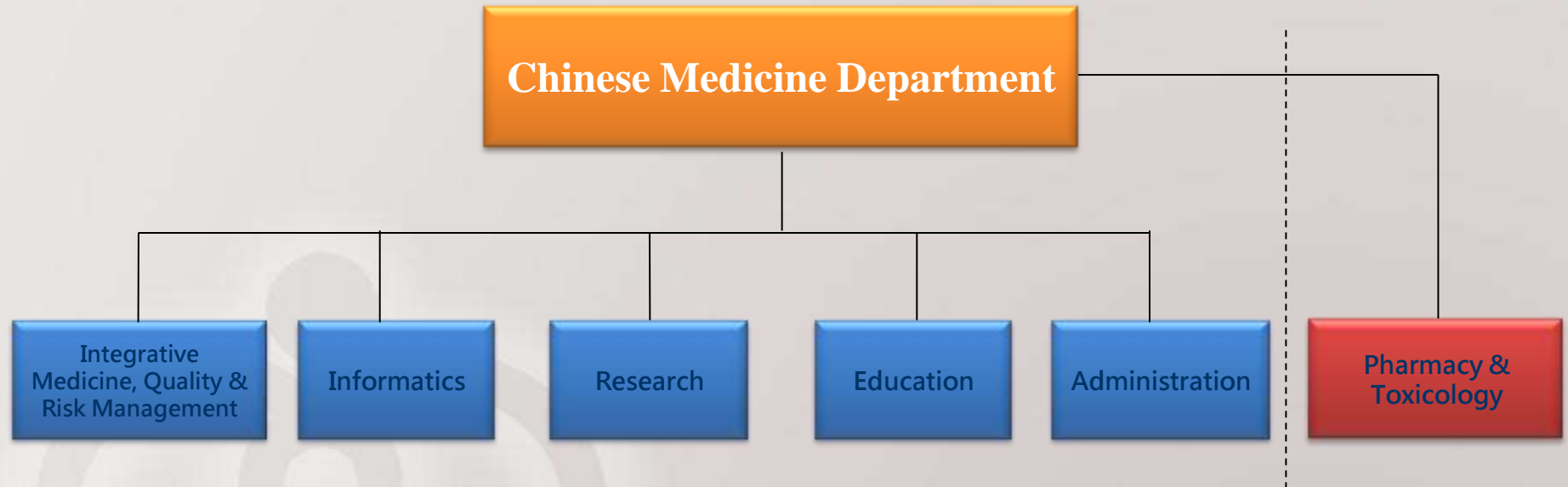
香港中西醫結合服務—納入公營體系策略

- 透過科研推動循證中醫藥的發展
- 建設系統化的中醫藥資料庫
- 提供循證中醫學相關的培訓
- 發展標準化的臨床服務
- 開拓中西醫結合服務的新模式
- 將中醫服務納入公營醫療體系

“The future direction for the development of traditional Chinese medicine services in the public sector (Discussion paper No. CB(2)1748/04-05(05)) - The Legislative Council 2005”



醫管局中醫總部架構



醫管局中醫部



提供服務

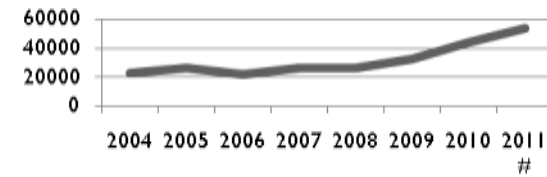


- 服務類型:
 - 內科 (HK\$120)
 - 針灸
 - 推拿 / 骨傷
- 病人種類:
 - 門診病人
 - 外展到老人中心、復康中心，等等

病人服務人次



Average Attendance per CMCTR



	2004	2005	2006	2007	2008	2009	2010	2011 (Note)
	31,993	33,435	37,736	39,391	38,183	37,584	39,792	59,619
	23,490	28,837	42,959	43,600	41,728	41,752	50,511	62,536
	11,891	16,548	21,587	29,449	38,630	37,383	42,791	56,304
	-	-	8,047	13,979	17,425	32,553	58,984	68,864
	-	-	8,597	15,001	21,162	31,274	39,275	42,865
	-	-	11,693	37,739	45,391	55,583	68,858	70,033
	-	-	1,170	23,121	26,167	34,149	46,430	56,065
	-	-	273	18,742	30,200	36,358	37,997	-
	-	-	-	-	-	-	3,077	45,073
	-	-	-	10,902	20,017	29,132	38,176	48,032
	-	-	-	-	19,440	31,823	40,482	50,779
	-	-	-	-	13,891	29,796	45,601	61,133
	-	-	-	-	47	26,576	44,274	54,199
	-	-	-	-	-	36,018	61,732	63,764
	-	-	-	-	-	20,660	40,717	53,227
	-	-	-	-	-	-	-	8,891
Total	67,374	78,820	132,062	231,924	312,281	480,641	658,697	801,384

Note: Projected figures for 2011 from figures collected Jan – Sep 2011.

結合醫學(Integrative Medicine)

Consortium of Academic Health Centers
for Integrative Medicine (US):



“結合醫學著重病人與醫者的關係，是以循證為基礎的全人治療；旨在結合所有適當的治療方案、醫療專業及學科以達致最佳的治療效果和健康保障”

18 間三方合作中醫教研中心



中醫與西醫之連繫



HA Guidelines on Interface Issues between CM & Conventional WM

- 5th revision released in Sep 08, currently available at eKG

CM Nursing Guidelines

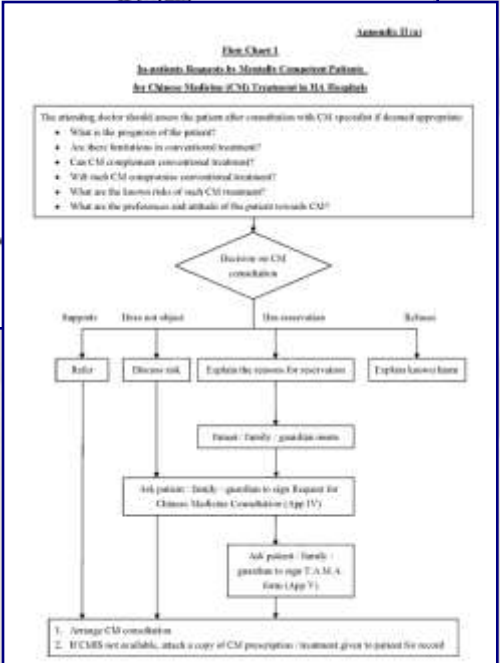
- Endorsed by CoC (N) in Nov 08, currently available at eKG

Hospital Authority Guidelines on Interface Issues between Chinese Medicine and Conventional Western Medicine

Working Group on Western/Chinese Medical Interface Issue*
Hospital Authority Head Office

專科護理服務指引

中醫護理



醫院管理局針灸操作安全指引
Hospital Authority Guideline on Safety in Acupuncture for Chinese Medicine Practitioners

Quality and Risk Sub-Committee,
Hospital Authority

Mar 2010

Acupuncture Safety Guidelines

- Released in Apr 10, currently available at eKG

目錄

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中西醫結合服務項目篩選優次

主要疾病負擔

西醫治療未
如理想

中醫治療具
有優勢



香港人口健康調查疾病負擔

主要急性疾病

- 傷風或上呼吸道感染 (35.3%)
- 腰痛 (27.3%)
- 關節痛 (21.3%)
- 頭暈 (17.9%)
- 頸痛 (16.1%)

主要慢性疾病

- 過重或肥胖 (38.8%)
- 高血壓 (12.1%)
- 血脂過高 (8.4%)
- 糖尿病 (3.8%)
- 哮喘 (1.9%)

主要導致死亡的疾病 (2010)

癌症

肺炎

心臟病

腦血管疾病

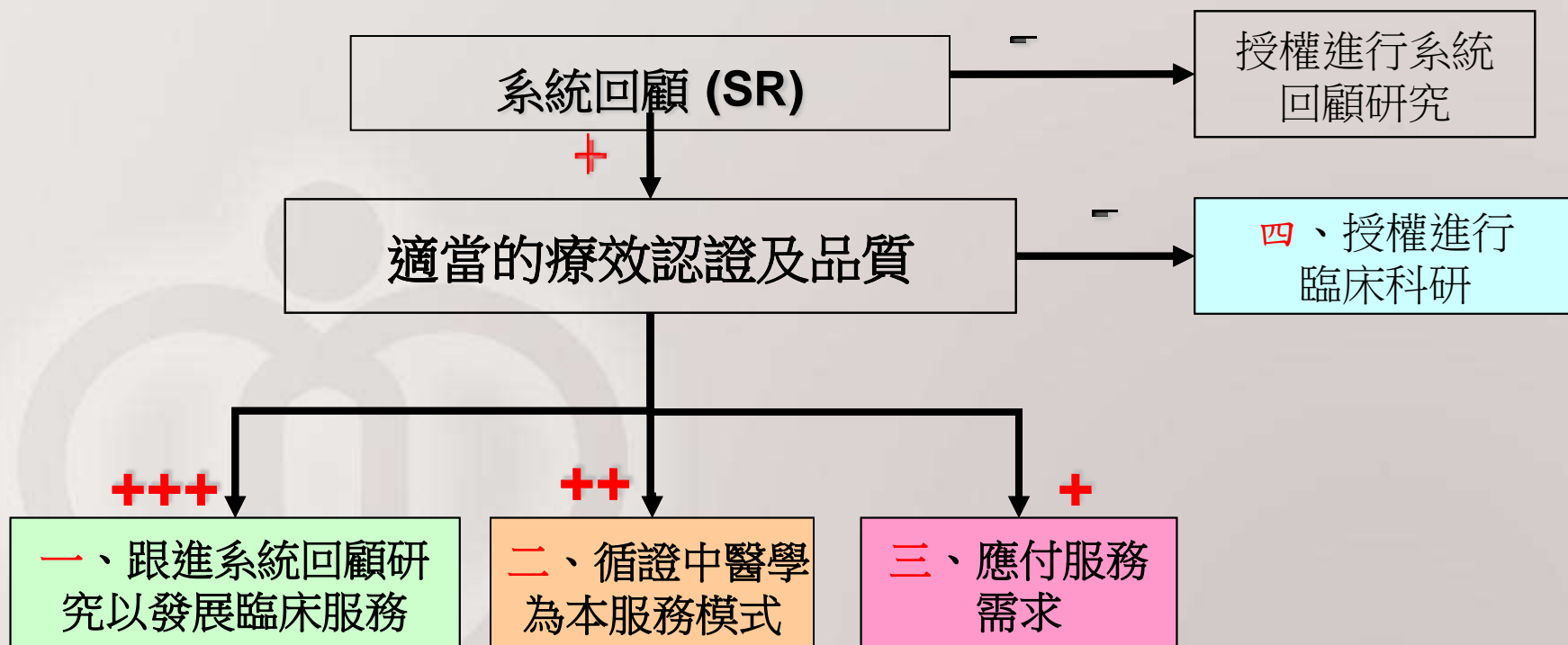
慢性下呼吸道疾病

資料來源:

衛生署及香港大學2003至2004年人口住戶健康調查
衛生署2010年5月28日編訂香港健康一覽統計數字

以循證醫學為發展平台

關注：是否安全及有效的中醫治療？



Interface Issues in IM Development

Liability

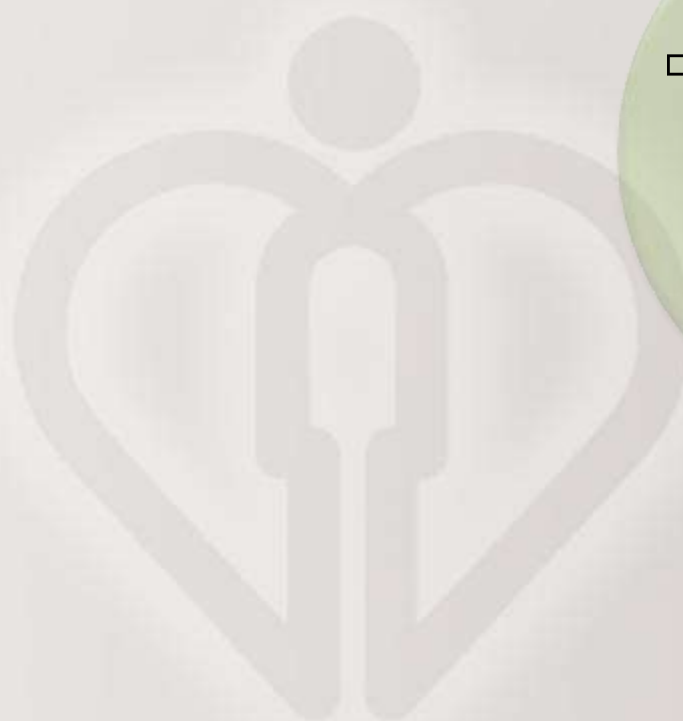
- Malpractice Insurance purchased by CMCTRs
- Professional liability on CMP

Accountability

- Three collaboration modes with communication channels
- Workflow for program development and monitoring
- Guidelines on interface, safety and operational issues

Quality and Safety

- Advanced Incidents and Reporting System (AIRS)





研究方案評審和撥款機制



醫管局中醫部中央科研委員會

- 於2011年8月10日命名為醫管局中醫部中央科研委員會
- 目的：-
促進、支持和協調以**高品質**的研究結果為目標的中醫治療研究，滿足社會的優先需求

促進中醫治療研究品質

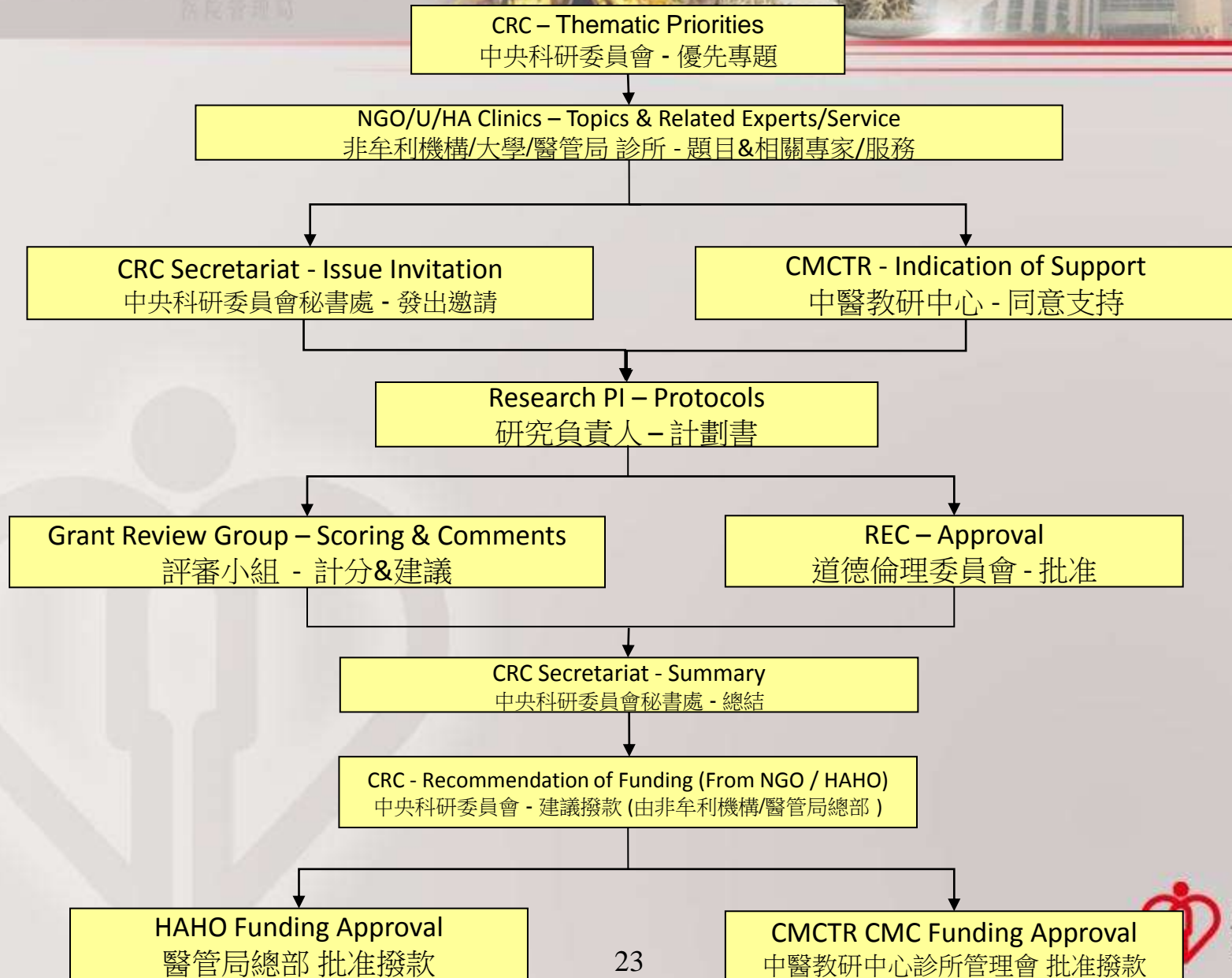
- 瞭解中醫藥實踐的特色
 - 不同的診斷系統
 - 個體化治療
 - 聯合療法
 - 對治療師的依賴
 - 期望效應
 - 不同的結果評價
 - 已被公眾採用的療法



研究方案評審和撥款機制

- 優次設定和撥款流程
- 審批及評價方法

研究方案的優次設定和撥款流程





中醫治療研究 成果

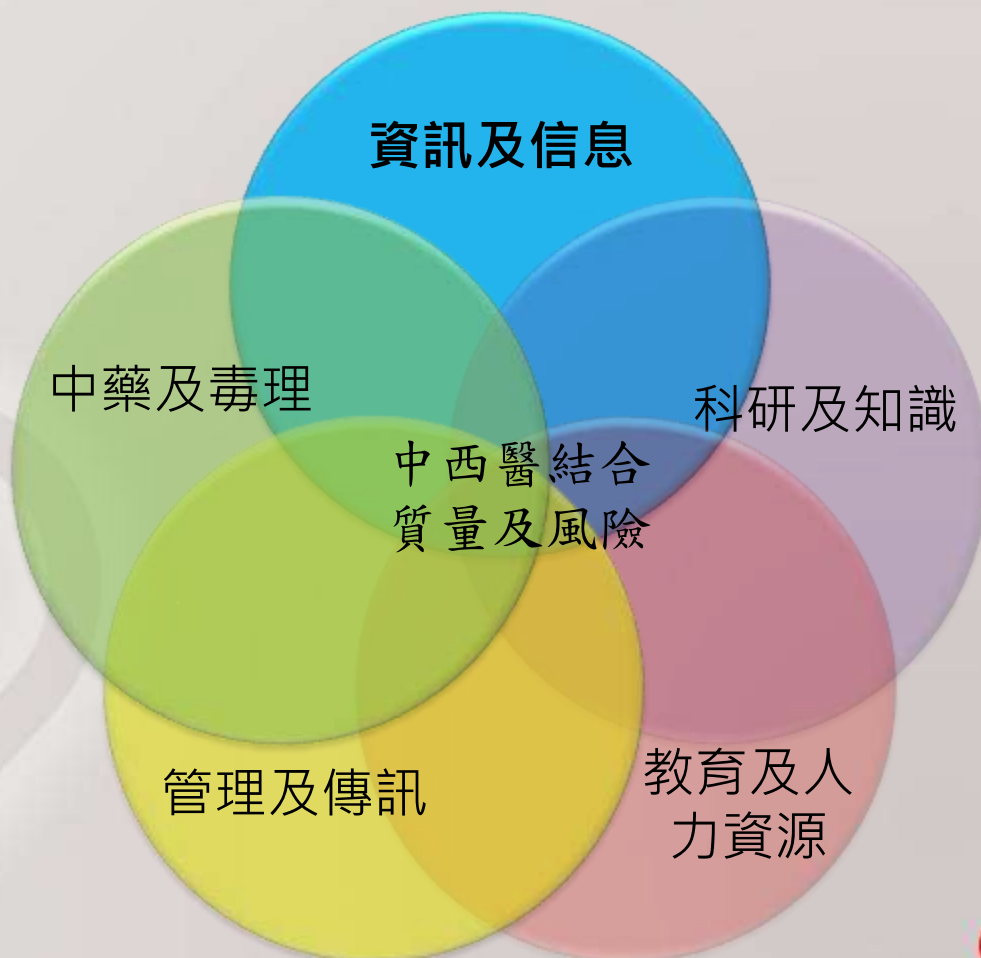


Commissioned Research Publications	Impact Factor
<p>1. Zuo Z, Chang Q, Ngai K, Chan P, Ngan TM, Wong VT, Chow MS, Herb-drug interaction involving oseltamir and Chinese medicine formulae: pharmacokinetic and dynamic studies. <i>Clinical Pharmacology & Therapeutics</i>. 2009, Vol. 85: S87 (Abstract)</p> <p>2. Moses Sing Sum Chow, Qi Chang and Joan Zuo. Herb-drug interaction involving oseltamivir and Chinese medicine formula. <i>The FASEB Journal</i>. 2008;22:1136.24 (Abstract)</p> <p>3. Chang, Q., Chow, M. S. S. and Zuo, Z., Studies on the influence of esterase inhibitor to the pharmacokinetic profiles of oseltamivir and oseltamivir carboxylate in rats using an improved LC/MS/MS method. <i>Biomedical Chromatography</i>. 2009, 23: 852–857</p>	<p>(1) 6.378 (2) 7.04 (3) 1.639</p>
<p>Chinese Herbal Medicine for Insomnia: A Systematic Review of Randomized Controlled Trials. Wing-Fai Yeung, Ka-Fai Chung, Maggie Man-Ki Poon, Fiona Yan-Yee Ho, Shi-Ping Zhang, Zhang-Jin Zhang, Eric Tat-Chi Ziea, Vivian Taam Wong. <i>Sleep Medicine Reviews</i>. (Accepted for publication in December 2011).</p>	<p>6.338</p>
<p>Wong V, Cheuk DKL, Lee S, Chu V. Acupuncture for acute management and rehabilitation of traumatic brain injury. <i>Cochrane Database of Systematic Reviews</i>. 2011, Issue 5</p>	<p>6.186</p>
<p>Zhang ZJ, Chen HY, Yip KC, Ng R, Wong V. The effectiveness and safety of acupuncture therapy in depressive disorders: systematic review and meta-analysis. <i>J Affect Disord</i>. 2010; 124(1-2): 9-21.</p>	<p>3.74</p>
<p>4. A systematic review of the effectiveness of qigong exercise in supportive cancer care. Cecilia L. W. Chan, Chong-Wen Wang, Rainbow T. H. Ho, Siu-Man Ng, Jessie S. M. Chan, Eric T. C. Ziea and Vivian C. W. Wong. <i>Support Care Cancer</i>. 2012</p> <p>5. The use of Chinese Qigong exercise in prevention and treatment of infectious diseases and improvement of immune function: A systematic review. Rainbow Ho, Chong-Wen Wang, Siu-Man Ng, Eric Tat Chi Ziea, Vivian Chi-Woon Tam Wong, Cecilia Lai Wan Chan. Submitted to the Journal of Alternative and Complementary Medicine in August 2011, under review.</p> <p>6. The use of Chinese Tai Chi exercise in prevention and treatment of infectious diseases and improvement of immune function: A systematic review. Chong-wen Wang, Siu-Man Ng, Rainbow Tin-Hung Ho, Andy Hau Yan Ho, Eric Tat Chi Ziea, Vivian Chi-Woon Tam Wong, Cecilia Lai Wan Chan. Submitted to the American Journal of Chinese Medicine, under review.</p>	<p>(4) 2.058</p>
<p>Chung VC, Wong VC, Lau CH, Hui H, Lam TH, Zhong LX, Wong SY, Griffiths SM, Using Chinese Version of MYMOP in Chinese Medicine Evaluation: Validity, Responsiveness and Minimally Important Change. <i>Health and Quality of Life Outcomes</i>. 2010, 8:111.</p>	<p>1.86</p>
<p>1. Qigong for the treatment of fibromyalgia: A systematic review of randomized controlled trials. Cecilia Lai Wan Chan, Chong-Wen Wang, Rainbow Tin-Hung Ho, Siu-Man Ng, Eric Tat Chi Ziea, Vivian Chi-Woon Tam Wong. <i>Journal of Alternative and Complementary Medicine</i> (Accepted for publication in August 2011).</p> <p>2. Tai Chi exercise for patients with heart diseases: A systematic review of controlled clinical trials. Siu-Man Ng, Chong-Wen Wang, Rainbow Tin-Hung Ho, Eric Tat Chi Ziea, Vivian Chi-Woon Wong, Cecilia Lai Wan Chan. <i>Alternative Therapies in Health and Medicine</i> (Accepted for publication in October 2011).</p> <p>3. A systematic review of the effectiveness of Qigong exercise in cardiac rehabilitation. Cecilia Chan, Chong-Wen Wang, Rainbow Tin-Hung Ho, Andy Hau Yan Ho, Eric Tat Chi Ziea, Vivian Chi-Woon Tam Wong, and Siu-Man Ng. <i>American Journal of Chinese Medicine</i> (Accepted for publication in October 2011).</p>	<p>(1) 1.685 (2) 1.77 (3) 1.383</p>
<p>Xu M, Deng PX, Qi C, Deng B, Zhao ZZ, Wong V, Ngan T, Kan V, Tian XY, Xu DY, Au D. Adjuvant phytotherapy in the treatment of cervical cancer: a systematic review and meta-analysis. <i>J Altern Complement Med</i>. 2009; 15(12): 1347-53</p>	<p>1.685</p>
<p>Xiao-Xi Zeng, Zhao-Xiang Bian, Tai-Xiang Wu, Shu-Fei Fu, Eric Ziea and Wong Taam Chi Woon. Traditional Chinese Medicine Syndrome Distribution in Chronic Hepatitis B Populations: A Systematic Review. <i>Am J Chin Med</i>. 2011; 39(6): 1061-1074</p>	<p>1.383</p>

未來研究發展的重點

1. 提升本地中醫師的科究及方法學的水準
2. 建立科究發展及資訊分享平臺以普及科究成課及推廣中醫實証
3. 透過醫管局中醫部中央科研委員會以加強科研的協作和教育

醫管局中醫部 資訊

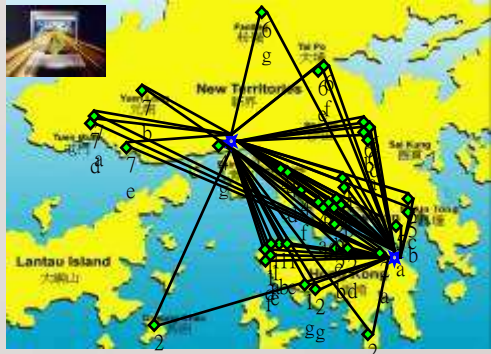


電子健康記錄(中醫藥)發展方案

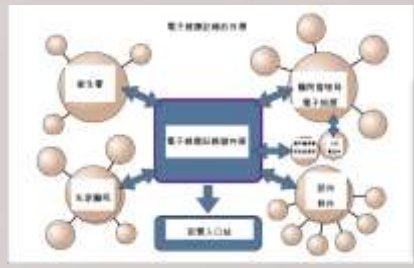


Hospital Authority
Clinical Management System
Version 2.0.0069.026

- 以病人身份證號碼登記(HKID #)
- 120醫院1/醫療機構/診所
- 23000終端機
- HA HKPMI儲存超過8百萬記錄



- 支持**16**間醫院管理局轄下中醫教研中心(CMCTR) .
- 超過**600**用家及**60,000**日常業務處理
- 儲存超過**300,000**病患記錄及
- 超過**250萬**個診療記錄
- 超過**520,000**個處方記錄



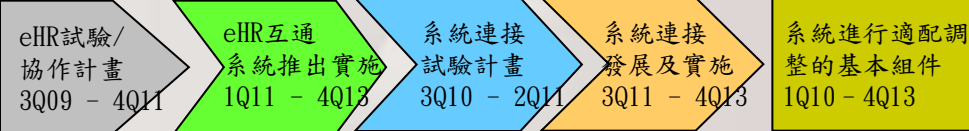
“中醫藥詞彙標準化”
2011-12

↓

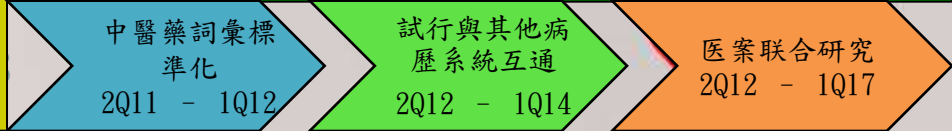
試行與其他病歷系統互通 2012-14	医案联合研究 2012 - 17
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桃園計畫
香港醫學會
2007-09

eHR第一階段發展計劃 2009-2014



eHR (CM)發展計劃 2011-2014



中醫臨床詞彙標準化

DG Members

 **National Standard Classification and Codes of Diseases and ZHENG of Traditional Chinese Medicine (GB95/97)**

 **CMIS Terminology Table**

 **Reference Guide on Issuance of Sick Leave Certificate by Registered CMP**

 **Textbook Version 5**

 **WHO International Standard Terminologies on Traditional Medicine in the Western Pacific Region**

Priority Focus: 233 Common Diseases from Reference Guide of DH

Identify Discrepancies and Issues

Define, Discuss and Refine Editorial Rules

Experts

- **Dr ZHU Liming** (General Deputy Director of National Medical Care Quality in TCM Hospitals Monitoring Center and Shanghai Evidence Based TCM Research Centre)
- **Dr SANG Zhen**(WHO ICTM)
- **Dr LI Zhaoguo** (WHO ICTM)
- **Prof BIAN Zhaoxiang** (HKBU)
- **Prof Wu Li LIU** (TWGHs)

Seek for Expertise Advise

Review and Make Recommendations

CMVT
(Chinese Medicine Vocabulary Table)



中藥詞彙標準化

DG Members



Chinese Medicine Ordinance
(CMO)



Chinese Pharmacopoeia



Zhonghua Bencao (中華本草)

Priority Focus: 605 listed in
Schedule 1 & 2 of CMO

Data Analysis of Chinese
Materia Medica and Yin Pian

Define, Discuss and Refine
Editorial Rules

Experts

- Prof ZHAO Zhongzhen
(HKBU)

Seek for Expertise
Advise

Review and Make
Recommendations

Incorporate into DB

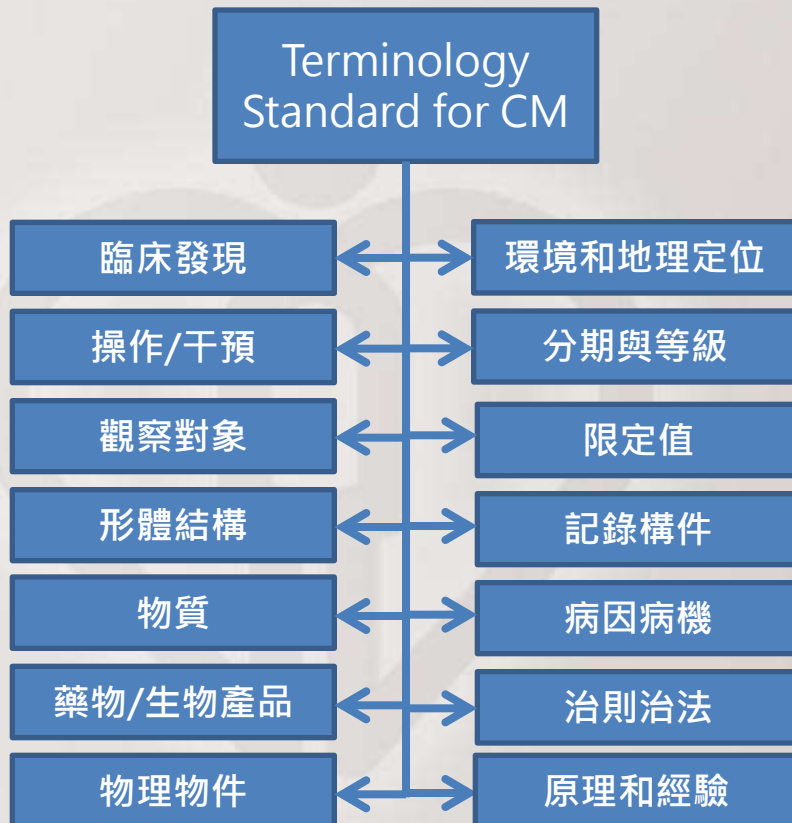
- ✓ Traditional and Simplified
Chinese Name
- ✓ Hanyu pinyin (漢語拼音)
- ✓ Latin name
- ✓ Source

MTT

(Medication
Terminology Table)

醫案聯合研究

Institute of Information on Traditional Chinese Medicine (IITCM),
China Academy of Chinese Medical Sciences (CACMS)
中國中醫科學院中醫藥資訊研究所



- Based on SNOMED CT to develop a terminology standard specialised for Chinese Medicine
- aims to provide a consistent way of indexing, storing, retrieving and aggregating clinical data from structured, computerised clinical records

- Concepts are organised into 14 hierarchies
- 11 hierarchies are similar to SNOMED CT
- Each concept represents a unit of thought or meaning

HACMK中醫動



HACMK 中醫動

天行健 君子以自強不息

關於我們
最新消息及活動
中醫服務

請選擇瀏覽網頁...

最新消息及活動

中醫老年醫學

中醫養生

2012 國際中西醫結合會議

> 資訊

公眾可透過此平台，獲得相關如中醫藥消息、自我管理、多媒體影像等資訊，從而提升公眾對中醫藥的認識。

> 知識

醫護專業人員可透過此部份得到綜合性中西醫學資訊如臨床研究、綜合數據庫、期刊數據庫、指引及手冊等，有助他們臨床應用及專業發展。

> 教育

中醫師可透過此平台參加不同進修課程及會議，與其他醫護人員進行學術討論，從而提高知識和臨床技術。
[註冊]

Information & Knowledge

- **CUHK** (CM Clinical Evidence)
- CM News
- Publication Database
- Health Preservation
- Registry, Reports and Guidelines

Education

- Scholarship Programmes
- Visiting Scholar Seminar
- Pre-service Training
- Certificate in CM for Western Trained Profs

HACMK中醫動:知識

> 知識



醫護專業人員可透過此部份得到綜合性中西醫學資訊如臨床研究、綜合數據庫、期刊數據庫、指引及手冊等，有助他們臨床應用及專業發展。

- ▶ 四庫全書中醫藥網上版
- ▶ PUBLICATION DATABASES
- ▶ SYNTHESIZED DATABASES
- ▶ 中西藥相互作用研究
- ▶ 中醫臨床證據
- ▶ REGISTRY, REPORTS AND GUIDELINES COLLECTION
- ▶ 醫院管理局資料庫
- ▶ 醫管局中醫部中央科研委員會
- ▶ 講座及會議
- ▶ 有用連結

登入 ▶

四庫全書中醫藥網上版



《文淵閣四庫全書電子版》中醫藥專業網上版 - 下載目錄

《文淵閣四庫全書電子版》中醫藥專業網上版是為配合用戶研究中醫而設，內容包含104本共2,250卷國醫學經典著作，方便研讀或查找中國醫學資料，用戶只需下載相關程式後便可以免費使用。

請確保您的電腦符合《文淵閣四庫全書電子版》中醫藥專業網上版用戶端的最低配置：

1. (1)Pentium IV 1.6GHz或同級中央處理器 (CPU)
2. (2)1GB (RAM)
3. (3)140 MB 硬盤空間 (供安裝程式及字體之用)
4. (4)1024 x 768 解像度及32768 (15位元) 色彩或以上的顯示卡 (Display Card)
5. (5)微軟視窗 XP、Vista 或 7 操作環境(繁、簡、英、日及韓語言版本) (需更新至Service Pack 最新版本)
6. (6)微軟Internet Explorer 6.0版本
7. (7)微軟視窗 Installer 3.1 版本
8. (8)微軟視窗 .NET Framework 2.0版本
9. (9)英文視窗的用戶，需安裝「East Asian Language Support」檔案

Research Projects

- Project Title:** Provision of Chinese Medicine Systematic Review on The Use of Chinese Qi-Gong in Prevention and Prevention and Rehabilitation
- Principal Investigator:** Dr. Siu Man Ng
- Project Coordinator:** Prof. Cecilia L.W. Chan
Dr. Wang Chong Wen
Ms. Venus P. Y. Wong
Ms. Jessie S.M. Chan
Mr. Andy H.Y. Ho
- Organization:** Centre on Behavioral Health, The University of Hong Kong
- Duration:** 12 months (April, 2010 - March, 2011)
- Summary:**
1. CBH will conduct a Systematic Review on the Use of Chinese Qi-Gong in Prevention and Rehabilitation within the 12 months from the signing of the proposed contract and tender. The Scope of Study,

HACMK中醫動: Chinese Medicine Clinical Evidence



- Knowledge framework for evidence based Chinese Medicine
- Repository of published systematic reviews and synopses
- Allow synopses contribution
- promote collaboration for research in Chinese Medicine

Synopses of Systematic Reviews

Home > Synopses of Systematic Reviews

Synopses of Systematic Reviews

You can find a synopsis by inputting words that should be included in the synopsis you are looking for into the search box below.

The other way to find a synopsis is to look through all synopses under the specialties it might belong to.

- Select one of the specialties
- 01. Administrative medicine (行政醫學)
 - 02. Anaesthesiology (麻醉科)
 - 03. Anatomical Pathology (解剖病理學)
 - 04. Cardiology (心臟科)
 - 05. Cardiothoracic Surgery (心臟肺外科)
 - 06. Chemical Pathology (化學病理學)
 - 07. Clinical Microbiology & Infection (臨床微生物及感染學)
 - 08. Clinical Oncology (臨床腫瘤科)
 - 09. Clinical Pharmacology & Therapeutics (臨床藥理學)
 - 10. Community Medicine (社會醫學)
 - 11. Critical Care Medicine (深切治療科)
 - 12. Dermatology & Venereology (皮膚及性病科)
 - 13. Emergency Medicine (急症科)
 - 14. Endocrinology, Diabetes & Metabolism (內分泌及糖尿病)
 - 15. Family Medicine (家庭醫學)
 - 16. Forensic Pathology (法醫病理學)
 - 17. Gastroenterology & Hepatology (腸胃肝臟科)

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Register of Published Systematic Reviews

Home > Register of Published Systematic Reviews > New synopsis

Register of Published Systematic Reviews

Synopsis Form

Specialty:

- 01. Administrative medicine (行政醫學)
- 02. Anaesthesiology (麻醉科)
- 03. Anatomical Pathology (解剖病理學)
- 04. Cardiology (心臟科)
- 05. Cardiothoracic Surgery (心臟肺外科)
- 06. Chemical Pathology (化學病理學)
- 07. Clinical Microbiology & Infection (臨床微生物及感染學)
- 08. Clinical Oncology (臨床腫瘤科)
- 09. Clinical Pharmacology & Therapeutics (臨床藥理學)
- 10. Community Medicine (社會醫學)
- 11. Critical Care Medicine (深切治療科)
- 12. Dermatology & Venereology (皮膚及性病科)

Chosen specialty:

— Please choose the above specialty / specialties —

Title:

Date of publication:

— Month — — Year —

Design:

HACMK中醫動: Chinese Medicine Clinical Evidence

Contribute New Synopsis – Web Submission Process

Register of Published Systematic Reviews

Synopsis Form

Specialty:

- 01. Administrative medicine (行政醫學)
- 02. Acupuncture (針灸)
- 03. Anatomical Pathology (解剖病理學)
- 04. Cardiology (心臟科)
- 05. Endocrinology (內分泌科)
- 06. Chemical Pathology (化學病理學)
- 07. Clinical Microbiology & Infectious Diseases (臨床微生物學及傳染病學)
- 08. Clinical Pathology (臨床病理學)
- 09. Clinical Pharmacology & Therapeutics (臨床藥理學及治療學)
- 10. Community Medicine (社區醫學)
- 11. Critical Care Medicine (重症醫學)
- 12. Dermatology & Venereology (皮膚及性病學)

Change specialty: [Please choose the above specialty / specialties]

Title:

Date of publication:

Design:

Basic Information of Study

Register of Published Systematic Reviews

Validity of Evidence, Conclusion, etc

Validity of evidence:

Importance of outcome	Very high	High	Moderate	Low	Very Low
Critical	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Important	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not important	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Legend: Very noteworthy; Noteworthy; Not noteworthy

Importance of outcome	Qualitative validity of evidence				
	Very high	High	Moderate	Low	Very Low
Critical	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Important	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Not important	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Legend: Very noteworthy; Noteworthy; Not noteworthy

Register of Published Systematic Reviews

PICOS Form

Participants:

Interventions:

Comparison:

Outcomes:

Outcome 1:

Importance: Critical Important Not important

Table of result:

Outcome	No. of studies (No. of participants)	No. of events (No. of participants)	Heterogeneity	Level of evidence	IMPROVE
Outcome 1					

PICOS, Main Findings, etc

Generated Synopsis

Qualitative validity of evidence

Outcome	Very high	High	Moderate	Low	Very low
Outcome 1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Very high
High
Moderate
Low
Very low

eKG CM 醫啟知



Chinese Medicine DB 中醫藥數據庫

- China Academic Journals - Medicine/Hygiene Series
中國期刊全文數據庫 - 醫藥衛生專輯
- Chinese Medicine Database Platform
中醫藥資料庫搜尋平台
- Chinese Medicine Specimen Database
中醫藥標本資料庫 (Internet)
- HA Herbal Toxicology Database
- Traditional Chinese Medical Database System
中國中醫藥數據庫檢索系統
- Wanfang Data China Online Journals
萬方數據中國數字化期刊 - 醫藥衛生
- Wanfang Data Conference Papers Full Text Database
萬方數據中國學術會議論文全文數據庫 - 醫學類

eKG CM Advisor 醫啟知中醫藥顧問

Dr Kevin Ka Hang OR

柯加恆醫生



eKGC M醫啟知: Drug-herb Interaction Database

Background

The HA Drug-herb Interactions Database is developed through joint collaboration by the Hospital Authority and academic institution(s) with strong background in western medicines and Chinese medicines (CM) education and research.

The HA Drug-herb Interactions Database is aimed to provide information on adverse drug-herb interactions (DHI) to healthcare professionals on specific drug groups, based on the latest published information from both English and Chinese databases at the time of data extraction and with a level of significance (LOS) rating assigned (Refer to Table 1, Level of Significance). The rating 1, 2, or 3 denotes the LOS from highest to lowest, whereas an asterisk would be indicated for which adverse drug-herb interaction was not known or studied (e.g. if toxicity of the drug-herb combination was not studied despite a beneficial effect on its efficacy might have been demonstrated).

With the information retrieved, only primary data was assessed, therefore, reviews that describe an interaction but cited the original sources were excluded; however, the original source referred to was included. Inadequate scores were assigned to randomized controlled trials (RCT) as a determinant of the quality of RCT. While a set of criteria was developed for the evaluation of the relevant drug-herb interaction information and its level of significance, critical appraisal examining the articles was not performed. As the focus of the database is primarily on Chinese medicines that are commonly used by the people in Hong Kong, information relating to health food or supplements may not be found in this database.

DHI reports

Reviewed information would be reported as a unique pair of drug(s) and herb(s) with a LOS rating assigned on the potential interaction, a brief summary, and the reference(s) used.

Each interaction is rated with a level of significance based on the level of evidence and the severity (of adverse DHI) using the criteria listed in Table 1, Level of Significance.

- provide information on adverse drug-herb interactions (DHI) on specific drug groups
- based on the latest published information from both English and Chinese databases
- rated with a **level of significance** based on the **level of evidence** and the **severity**

Drug List

A	AMSACRINE		CLADRIBINE		MITOTANE
	ANASTROZOLE	D	DACARBAZINE	P	PEGASPARAGINASE
	ARSENIC TRIOXIDE	E	EPIRUBICIN		PEMETREXED
	ASPARAGINASE		ERLOTINIB		PROCARBAZINE
	AZACITIDINE		ESTRAMUSTINE	S	SORAFENIB
B	BEVACIZUMAB	F	FLUDARABINE		SUNITINIB
	BORTEZOMIB	G	GEFITINIB	T	TEGAFUR
	BUSULPHAN		GEMTUZUMAB		TEMOZOLOMIDE
C	CAPECITABINE	I	IDARUBICIN		TENIPOSIDE
	CARMUSTINE	L	LETROZOLE		THIOGUANINE
	CETUXIMAB		LOMUSTINE		TRASTUZUMAB
	CHLORAMBUCIL	M	MELPHALAN		TRIETHYLENE

Sample of DHI report

Drug(s), as single entity or in regimen(s)

Drug(s): Interleukin (CPT-11)
 CM, Herbal Medicine(s) (Compound): *Albizia purpurascens*, *St. John's wort*

Assigned level of significance

Level of Significance: **1**

Description of interaction

Effect: The combination of *St. John's wort* with acetaminophen may decrease the drug efficacy of acetaminophen in humans with and without alcohol and cocaine priming in vivo.
 Mechanism: The combination of *St. John's wort* with acetaminophen may affect the pharmacokinetics of acetaminophen.
 Description: Pharmacokinetic interaction. *St. John's wort* may decrease the plasma concentration of acetaminophen.

Brief summary on content of the reference(s)

The combined treatment of acetaminophen and *St. John's wort* was investigated in several animal and human studies. Results showed that acetaminophen-induced acetaminophen plasma concentration and maximal metabolic clearance were attenuated by the performance of *St. John's wort* (SJW). The inhibition of pre-hepatic cytochrome and metabolic activation appears partly explained the protective effect of SJW against acetaminophen-induced toxicity (1). However, other animal studies reported that although the co-administration of SJW with acetaminophen resulted in lower toxicity induced by acetaminophen, the maximum plasma concentration (C_{max}) of acetaminophen and SJW (in acute administration of acetaminophen) had significantly decreased after a long-term exposure to SJW for consecutive 14 days (2, 3). Similar results were obtained from another long-term RCT, in which two patients had concurrent cancer, two had long cancer and one had hepatitis. But the plasma levels of SJW, 18 in patients were significantly reduced by SJW following the treatment of acetaminophen and SJW (4).

References:
 1. Ho ZP, Yang SK, Chen WY, Ho AL, Dean W, Ho YL, et al. *St. John's wort* attenuates acetaminophen-induced toxicity in dose-dependent of acetaminophen treatment and inhibition of acetaminophen metabolism. *Toxicology & Applied Pharmacology*. 2006;216(2):173-82.
 2. Ho Z, Yang R, Ho P-L, Chen L, Sun YL, Ho C, et al. *St. John's wort* modulates the toxicity and pharmacokinetics of CPT-11 (irinotecan) in vivo. *Pharmacological Research*. 2005;52(7):963-74.

Chinese / herbal medicine (s), as single entity or in formulae or compound

Table 1. Level of Significance

Level of Evidence	A	B	C	D	E
High	1	1	1	2	2
Moderate	1	1	2	2	3
Mild	2	2	2	2	3
Insignificant / Uncertain	3	3	3	3	3
Not known	*	*	*	*	*

HACMK中醫動: Comprehensive and Informative

HACMK

Pharmacognosy, Phytochemistry

ex. Herbs & Compounds

Clinical Databases

ex. Syndromes, Diseases & Formulas

EBM Database

ex. Systematic Reviews, RCTs

Pharmacovigilance

ex. Toxicology, Herb Drug Interaction

System Biology

ex. Genomics, Proteomics & Metabonomics

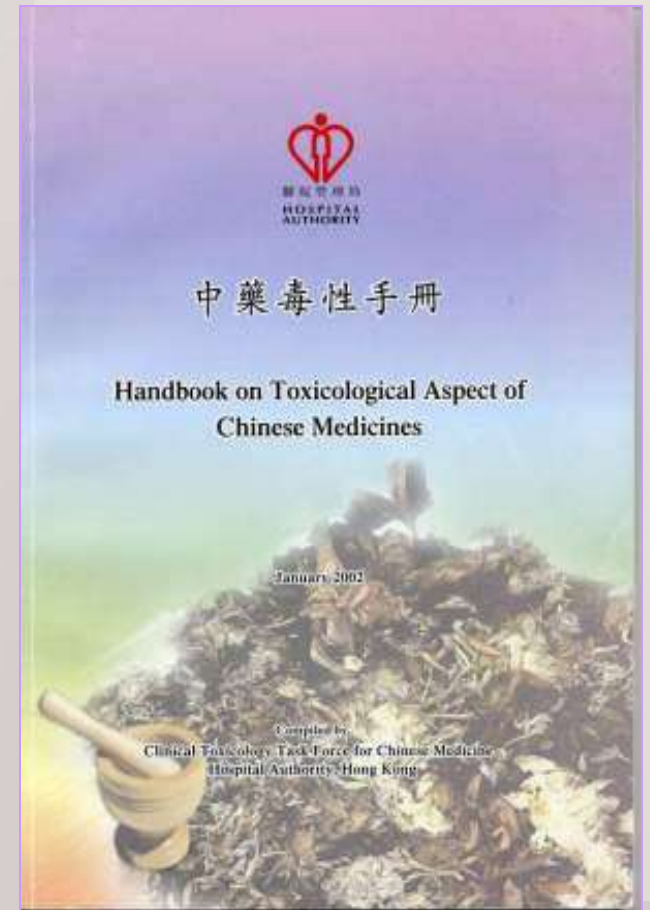
Drug Information Service on CM

CM Pharmacy Information Service

- Part of the herbal surveillance system for **early signal detection**
- **Enquires** from western and Chinese medicines professionals in HA, mainly clinicians mainly related to adverse reactions and toxicities of CM, interpretation of CM prescriptions, identification of processed herbs, and the legislations and regulations on CM.
- No. of enquires from **Aug 2004 to Apr 2010: 630**

HA Herbal Knowledge Database

- Task Force on Clinical Toxicology (HA)
- Members: clinicians, pathologists, toxicologists and pharmacists
- Published in Jan 2002





Established in Aug 2004

HA Herbal Toxicology Database

- Home
 - Monograph Search
 - Table Search
 - Management
 - Traditional Use
 - News
 - Help
- About this Database
 - Task Force
 - Links
 - Site Map
 - Feedback
 - Disclaimer

Background

Chinese Medicines have been used for thousands of years and have long been regarded by the Chinese as a relatively safe modality of therapy. With increased utilization in the community, there is an increase in awareness of reported poisoning in local hospitals. In addition, the recent development in Chinese Medicine opens up a new sphere of interest in Chinese Medicine, in particular herbal toxicology.



Quick Search

by Names: Search

by Ingredients: Search

by Products: Search

by Western Medicine: Search

by Action/Symptoms: Search

Full Text Search: Search



Western Medicines and have little Furthermore, there is a lack of dicine. The paucity of published atment and antidoting of Chinese

the Hong Kong Hospital Authority to provide our front-line clinicians nes from the Western Medicine and consolidating the information and compiled into an easily

with Quick Search or Menu Bar. Full in designing this database. Each

- 60+ highly toxic herbs**
- Pharmacology
 - Toxicology
 - Herb-drug interaction
 - Photos



Home

Monograph Search

Table Search

Management

Traditional Use

News

Help

Logout

● by Names

● by Ingredients

● by Products

● by Western Medicine

● by Action/Symptoms

● Full Text Search

半夏

Names

Medicinal Parts

Pictures

Active Ingredients

Effect of Processing

Metabolites

Pharmacological Actions

Pharmacokinetics

Usual Dosage

Lethal Dosage

Precaution

Toxic Symptoms

Interaction

Cause of Death

Management

Case Reports

Proprietary Products

References

< Go Back

Monograph

Date of Last Revision: 17 Sep, 2003

Names

[Ref \(5,12,48\)](#)

Chinese Name: 半夏

Other Names: 地文、水玉《神農本草經》，守田、示姑《名醫別錄》，羊眼半夏《唐本草》，和姑《本草綱目》，蝎子草《植物名實圖考》

Han Yu Pin Yin: Ban xia

Scientific Names: *Pinellia ternata* (Thunb.) Breit.Latin Name: *Rhizoma Pinelliae*

Common English Names: Ternate pinellia rhizome

Medicinal Parts

[Ref \(5,48,88,96\)](#)

半夏《本經》

本品為天南星科植物半夏 *Pinellia ternata* (Thunb.) Breit. 的乾燥塊莖。

生半夏《中醫藥條例》附表1中藥材。

一般市面常用為經炮製之法半夏，姜半夏和清半夏，毒性很微。

Pictures (scale is in cm)

法半夏

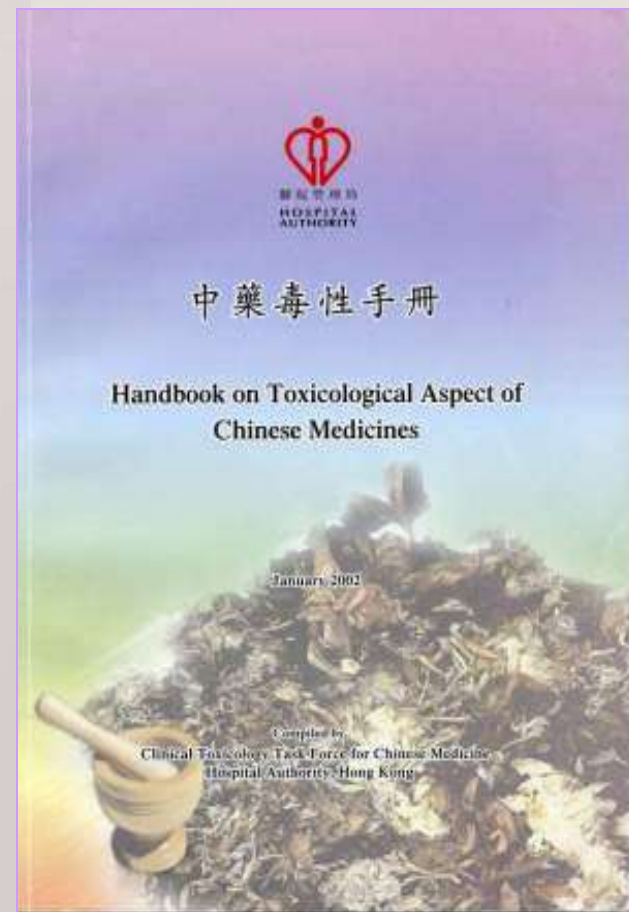


[About](#) | [Search](#) | [Search Help](#) | [eKG](#)

Search Tips		
Phrases	Examples: or	"當歸", "dang gui", "blood pressure" 當歸 (with no space in between the words)
Keywords (AND)	Examples:	經絡 (with a space in between the words) scalp acupuncture, scalp AND acupuncture, scalp +acupuncture
Keywords (OR)	Examples:	脾 OR 胃 spleen OR stomach
Keywords (NOT)	Examples:	膽 NOT 痛, 膽 - 痛 cholesterol NOT high, cholesterol - high



- Task Force on Clinical Toxicology (HA)
- Members: clinicians, pathologists, toxicologists and pharmacists
- Published in Jan 2002



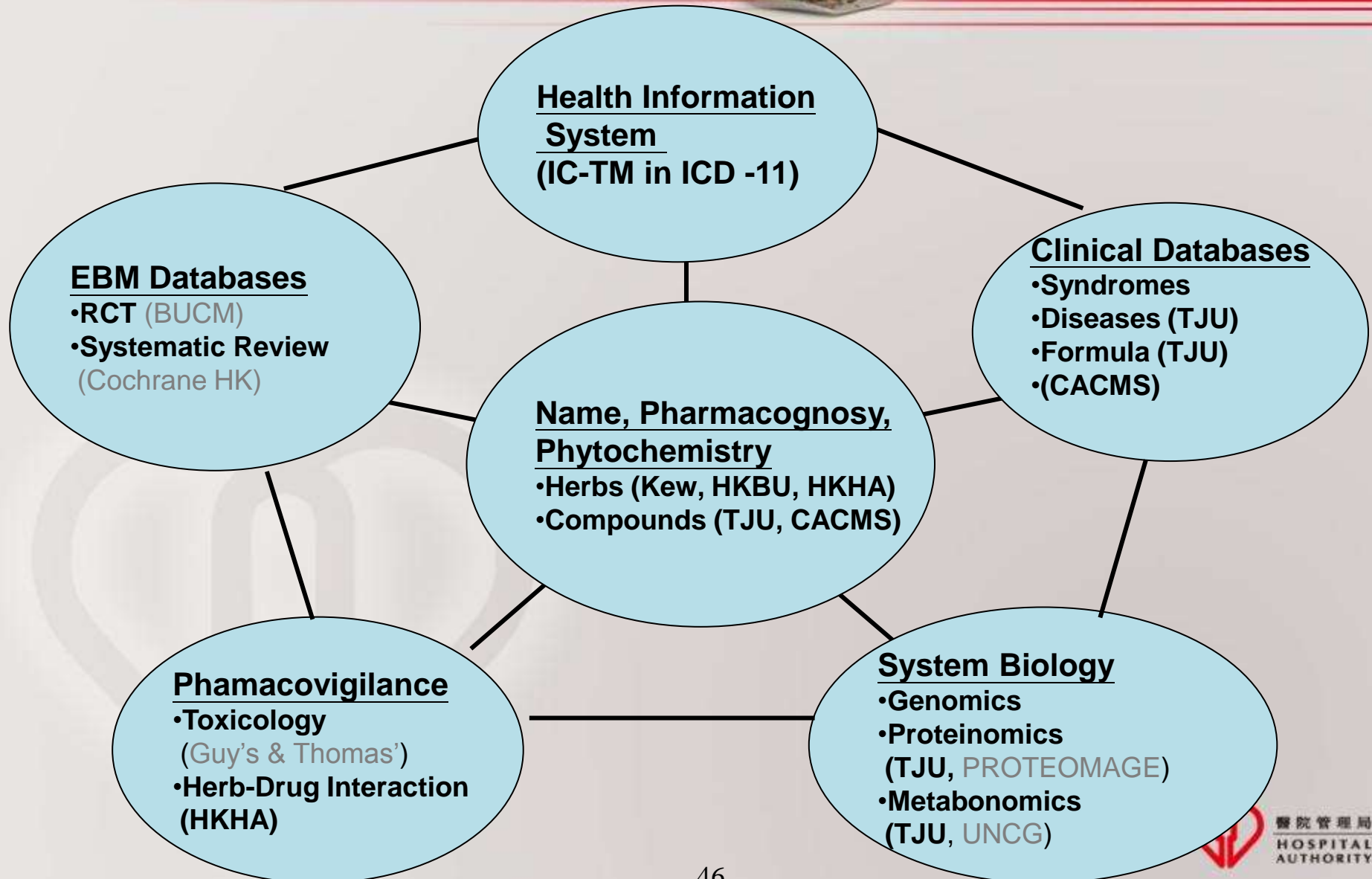


未來動向

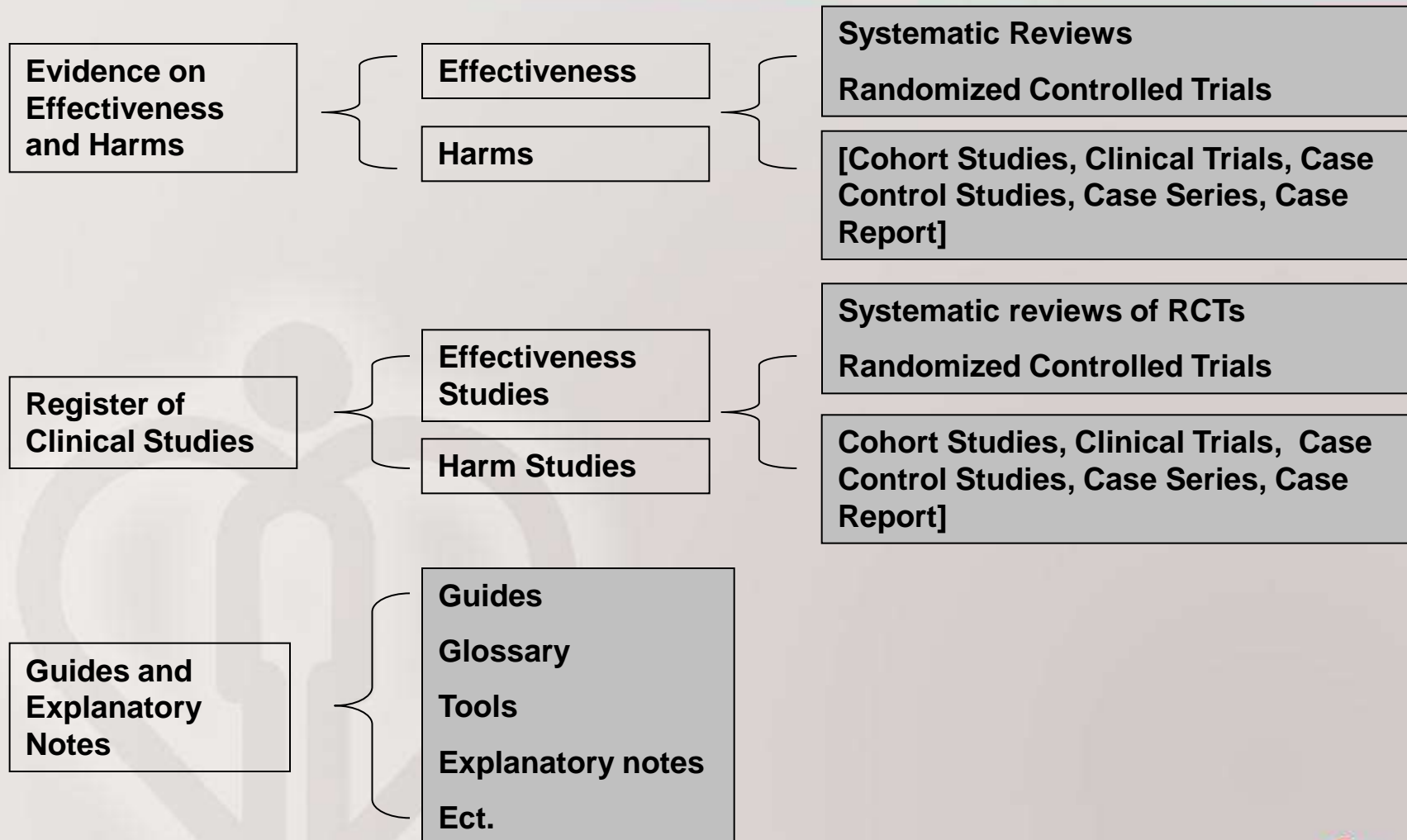
Way Forward



Bioinformatics and Database



Structure of CM Clinical Evidence (CMCE)



赛方数据库： 中医药生物信息学及在新药开发中的应用

贾韦国, PhD VP Research 上海中药创新研究中心

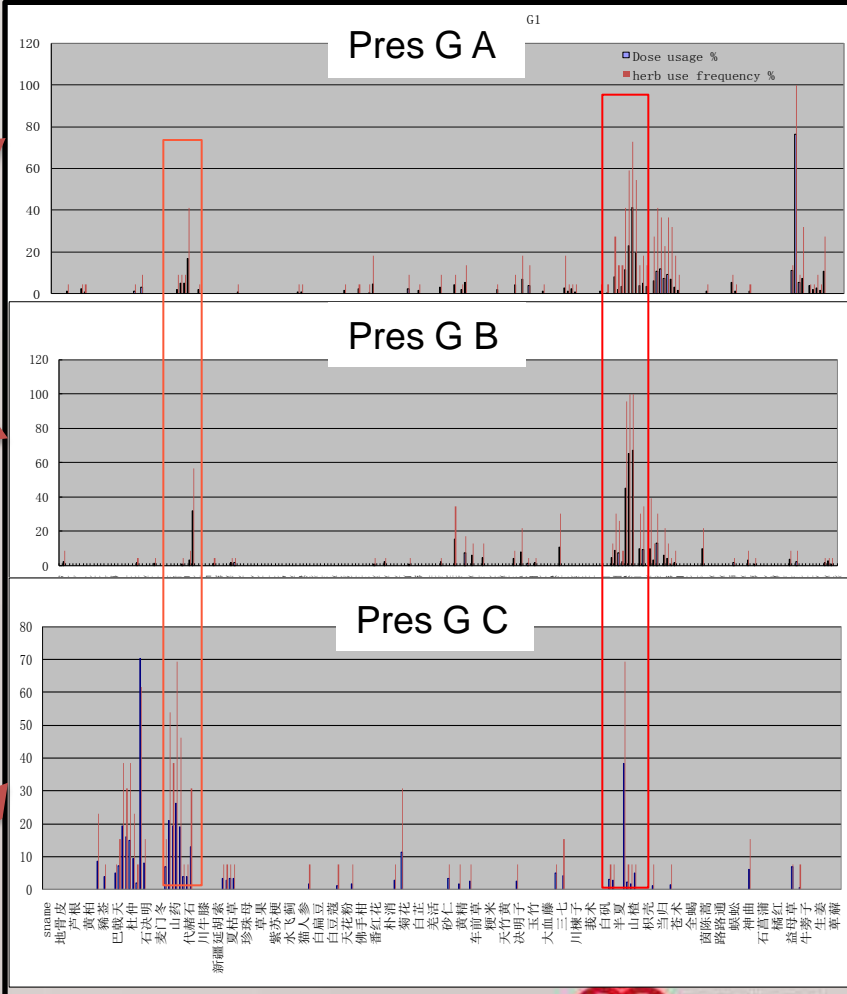
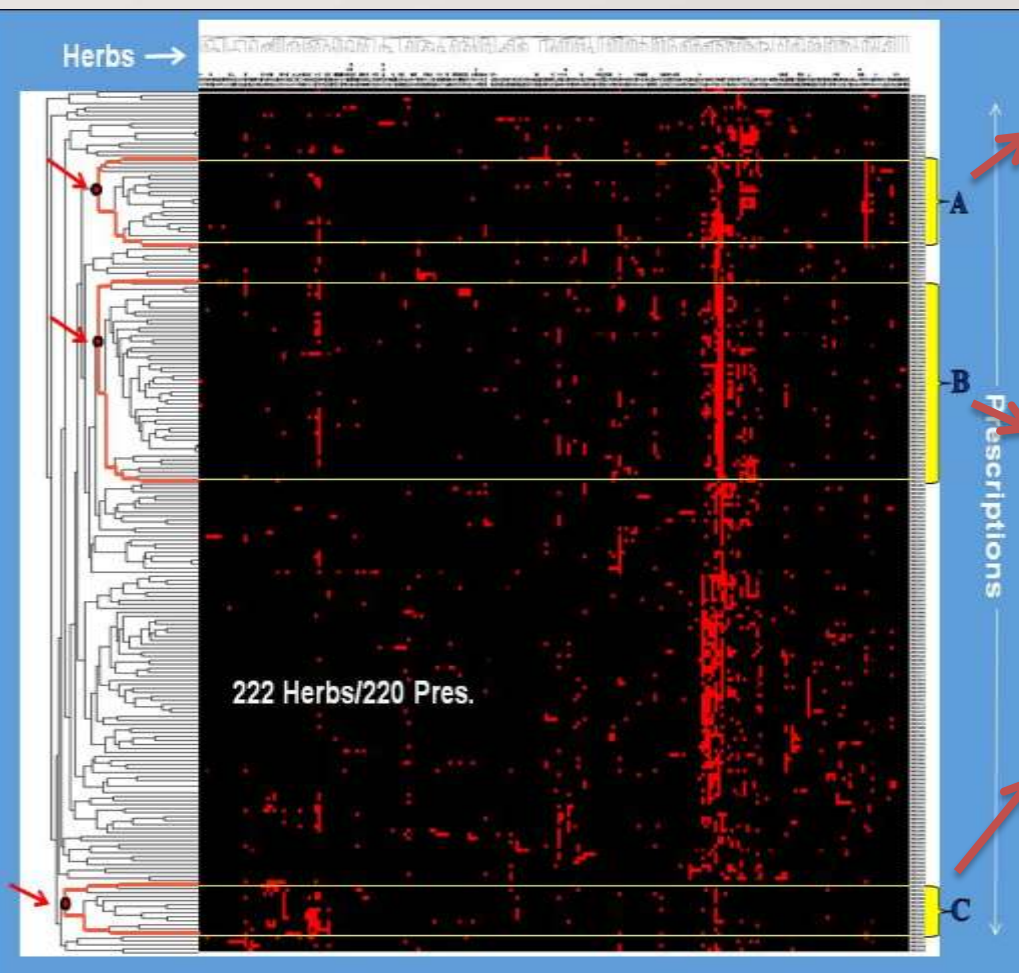
Sample data form

Prescriptions

Herb Order	HERBS	HWEIGHT	PWEIGHT	PRE 1	PRE 2	PRE 3	PRE 4	PRE 5	PRE6...
				0.3	0.7	0.7	0.5	0.6	
1	<i>Rhizoma Coptidis,</i>	1.00		9%	10%	14%	9%	9%	
2	Raw <i>Radix Astragali,</i>	1.00		10%	0%	0%	11%	11%	
3	<i>Rhizoma Panacia Majoris,</i>	1.00		21%	0%	0%	0%	14%	
4	Raw Rhizome of <i>Rehmannia glutinosa</i>	1.00		17%	16%	0%	0%	0%	
5	<i>Libosch</i>	1.00		26%	16%	0%	0%	0%	
6	<i>Cortex Moutan</i>	1.00		0%	24%	14%	11%	11%	
7	<i>Radix Puerariae</i>	1.00		0%	16%	0%	15%	0%	
8	prepared Rhizome of <i>rehmannia</i>	1.00		17%	19%	14%	9%	9%	
9	<i>Rhizoma Dioscoreae</i>	1.00		0%	0%	14%	11%	11%	
10	1.00		0%	0%	14%	11%	11%	

Weight percentage of each herb in the prescription

Signatures of Three Different Prescription Groups



Bioinformatics Services Derived from Herbal DBs— Linking Eastern Medicine to Western medicine

Dr. Zhiwei Cao 曹志伟

*College of life science and biotechnology, Tongji University;
Shanghai Center for Bioinformation Technology*

Database Resources

1. TCM_ID: Traditional Chinese Medicine Informat Database
2. HICD: Herbal Ingredient and Content Database
3. HIM: Herbal Ingredients' metabolites database
4. HIT: Herbal Ingredients' Targets database
5. ISHIP: Integrated Source of Human Interacting proteins
6. DDPA: Database of Disease and Protein Association
7.



➤ Curated & intergrated , inter-linked

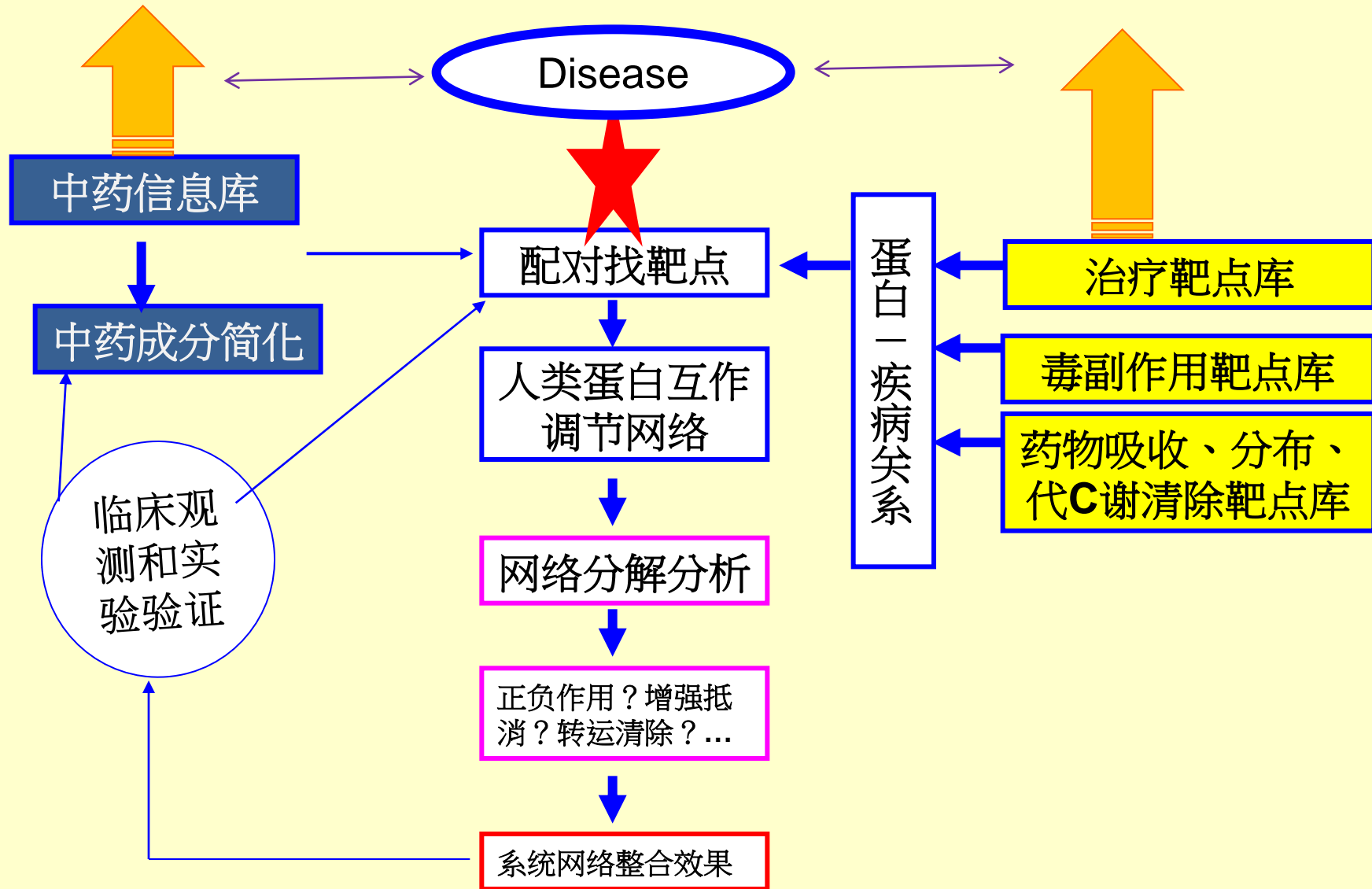
Bioinformatics Services

- What ingredients are **active compounds**?
- What are their **potential targets and targeted pathways**? How can we analyze it?
- How can we integrate the evidences from clinical and **-omics** and other sources?
- What' s the **real difference** between eastern and western medicine?
- Can we **design combinational drug** followed by **herbal mechanism....**



Case : Network-based study on molecular mechanism of active components in Chinese herbs against AD

Eastern Medicine to Western Medicine



Results



- 4 promising anti-AD Chinese herbs:

Herb	Volume of papers		Active components <i>(10 active components)</i>
	Total	Relevant to AD	
<i>Ginkgo biloba</i> (银杏)	2357	233 (9.89%; $P \ll 0.01$) 74 of the papers are review	Quercetin, Kaempferol, Ginkgolide a, Ginkgolide b
<i>Huperzia serrata</i> (蛇足石杉)	56	20 (35.71%; $P \ll 0.01$) 10 of the papers are review	Huperzine A, Huperzine B
<i>Melissa officinalis</i> (香蜂草)	612	14 (2.29%; $P \ll 0.01$) 2 of the papers are review	Quercetin, Gallic acid
<i>Salvia officinalis</i> (鼠尾草)	276	11 (3.99%; $P \ll 0.01$) 2 of the papers are review	Apigenin, beta-Sitosterol, Ursolic acid

Overlapping Target



Target	Compound	Herb	Uniprot_ID
MAPK	Quercetin; Gallic acid	<i>Ginkgo biloba</i> ; <i>Melissa officinalis</i>	P28482
ESR2	Quercetin; Kaemferol	<i>Ginkgo biloba</i>	Q92731
PPARG	Quercetin; Kaemferol	<i>Ginkgo biloba</i>	P37231
CYP1A1	Quercetin; Kaemferol	<i>Ginkgo biloba</i>	P05177
CYP1A2	Quercetin; Kaemferol	<i>Ginkgo biloba</i>	P04798
SXR	Ginkgolide a; Ginkgolide b	<i>Ginkgo biloba</i>	O75469
COL3A1	Ginkgolide a; Ginkgolide b	<i>Ginkgo biloba</i>	P02775
AChE	Huperzine A; Huperzine B	<i>Huperzia serrata</i>	P22303
BCHE	Huperzine A; Huperzine B	<i>Huperzia serrata</i>	P06276

Overlapping Targets

- **34 target proteins** of Chinese herbs
 - 3 successful anti-AD targets (60% of known successful anti-AD targets)

Target name	Uniprot_ID	Gene_ID	TTD_ID
AChE	P22303	43	TTDS00140
BChE	P06276	590	TTDS00143
NMDAR	Q05586	2902	TTDS00135
5-HT1A	P08908	3350	TTDS00098
5-HT2A	P28223	3356	TTDS00103

- 11 successful targets of other disorders
 - ◆ (proved to be AD-associated disorders)
- 11 research targets of other disorders

Development of Botanical New Drugs: Regulatory Approaches to TCM in the U.S.

The Botanical Guidance

Paul M. Coates, Ph.D., ODS/NIH
on behalf of Shaw T. Chen, M.D., Ph.D.

Guidance for Industry Botanical Drug Products

Copies of this Guidance are available from:
Division of Drug Information (HFD-140),
Office of Training and Communications,
Center for Drug Evaluation and Research (CDER),
Food and Drug Administration
5600 Fishers Lane, Rockville, MD 20857, (Tel) 301-827-4573

Internet at <http://www.fda.gov/cder/guidance/index.htm>

U.S. Department of Health and Human Services
Food and Drug Administration
Center for Drug Evaluation and Research (CDER)
June 2004

- Draft circulated on 8/10/2000
- Finalized version published on 06/09/2004
- www.fda.gov/cder/guidance/4592fnl.htm

COMMENTARY

New therapies from old medicines

Shaw T. Chen, Linhui Dou, Hober Temple, Rajiv Agarwal, Kun-Meng Wu & Susan Walker

Although new botanical drugs pose many challenges for both industry and the FDA, approval of the first botanical prescription drug shows they can be successfully met.

On October 31, 2000, the US Food and Drug Administration (FDA) approved the new drug application (NDA) for marketing of Venipin (venipinolol), a topical treatment for periodontal and peri-implantitis. Unlike most small-molecule drugs that comprise a single chemical compound, Venipin, an extract of green tea leaves, contains a mixture of known and possibly active compounds. It is the first new botanical prescription drug approved since the publication of the FDA's industry guidelines for botanical drug products¹ in late 2000. The approval shows that new therapies from natural complex mixtures can be developed to meet current FDA standards of quality control and clinical testing. In many years, interest in further development of herbal and botanical drug products derived from traditional preparations has been waning steadily. Between 1982 and 2007, more than 250 botanical investigational new drug (IND) applications and pre-IND consultation requests were submitted to the agency. Nevertheless, doubts about the feasibility of submitting such complex products for current investigation, marketing, review, and overall progress in the development of botanical new drugs has been slow. In this article, we describe the current regulatory environment in the United States for botanical new

Shaw T. Chen is associate director of botanical new drugs, Hober Temple is pharmacovigilance reviewer, Rajiv Agarwal is director of the Office of Drug Evaluation, Rajiv Agarwal is laboratory reviewer, Kun-Meng Wu is pharmacovigilance reviewer and Susan Walker is director of the Division of Dermatological and Dental Products, Center for Drug Evaluation and Research, Food and Drug Administration, 2000 New Hampshire Avenue, Building 22, Silver Spring, Maryland 20993-0002, USA. e-mail: shawco@fda.hhs.gov



Green tea leaves are the source for venipinolol, the active ingredients of Venipin—the first botanical product to be approved as a prescription drug by the FDA.

drug development, summarize our regulatory experience and outline the scientific and regulatory issues involved. We hope the introduction of the first botanical new drug in the modern era of FDA regulation will stimulate more clinical testing of potentially beneficial products and eventually lead to new therapies derived from complex natural mixtures that will satisfy unmet medical needs.

Food dietary supplements vs new drugs
In the United States, botanical products with health-related claims may be marketed as conventional foods, dietary supplements or drugs, depending on the specific claims as described in the Dietary Supplement Health and Education Act (DSHEA)² of 1994. Conventional food and dietary supplements without disease claims are regulated

by the Center for Food Safety and Applied Nutrition of the FDA. Under the Food, Drug and Cosmetic Act, a drug is defined as an article intended to diagnose, treat, cure, mitigate or prevent a disease or its related symptoms (disease claims), or as an article intended to affect the structure or function of the body (structure-function claims). Under DSHEA, a dietary supplement is considered a drug only if it bears disease claims. In this case, dietary supplements as regulated by the FDA's Center for Drug Evaluation and Research (CDER), botanical drugs are, in general, an offshoot from nonbotanical drug products in terms of the applicable FDA regulations. Specifically, to be marketed, botanical drugs must be shown to meet the legal requirements for demonstration of the safety and effectiveness of a new drug in accordance with the relevant sections

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Development Prospect of Chinese Medicine Digitization Projects

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School of 中醫藥學院 Chinese Medicine 藥用植物圖像數據庫

藥用植物作為中醫文化的主要物質基礎，其歷史源遠流長，種類繁多。為了推進藥用植物研究的普及化、國際化和信息共享，建立藥用植物數據庫顯得尤為重要。本數據庫建立在對藥用植物的長期調查研究和經驗、信息積累的基礎上，以植物圖片附加文字說明的形式，對上千種藥用植物進行系統的整理、歸類、總結。本數據庫的建立以輔助教學為主要目的，旨在通過此數據庫使學生對藥用植物形成直觀、系統的認知，並提供便捷的檢索、學習途徑。本數據庫的建立是香港浸會大學中醫藥學院和圖書館共同合作的結晶。

Medicinal plants, as an important material basis of Chinese medicine culture, have a long standing history and variety. Establishing this online database is critical for promoting its popularization, internationalization and resource sharing. Based on long-term accumulated studies, experience and information on medicinal plants, the project team systematically consolidates and summarizes thousands of medicinal plants in the form of images and annotations. With the aim of supporting teaching and learning, the database will provide students with perceptual and systematic knowledge through a user friendly searching and learning tool. The online database is a collaborative project between the School of Chinese Medicine and the Library, HKBU.



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藥用植物圖像數據庫

<http://www.hkbu.edu.hk/lib/electronic/libdbs/mpd/index.html>

3D Image Technology



- Assist the learning of complicated and complex concepts of Chinese medicine theory, such as Zang Fu organs, meridians, acupuncture points and etc.
- Employ 3-D virtual technology to illustrate morphological and microscopical structure of Chinese Materia Medica.



謝謝!

