

R & D and Accredited Laboratories for Testing of Chinese Medicines

中藥測試認可及研發實驗室

項目負責人:

詹華強 教授 (香港科技大學)

支志明 教授 (香港大學)

葉玉如 院士 (香港科技大學)

贊助機構:

香港賽馬會慈善信託基金



香港賽馬會慈善信託基金
The Hong Kong Jockey Club Charities Trust



中藥測試認可及研發實驗室



香港賽馬會慈善信託基金
The Hong Kong Jockey Club Charities Trust



R & D and Accredited Laboratories for Testing of Chinese Medicines

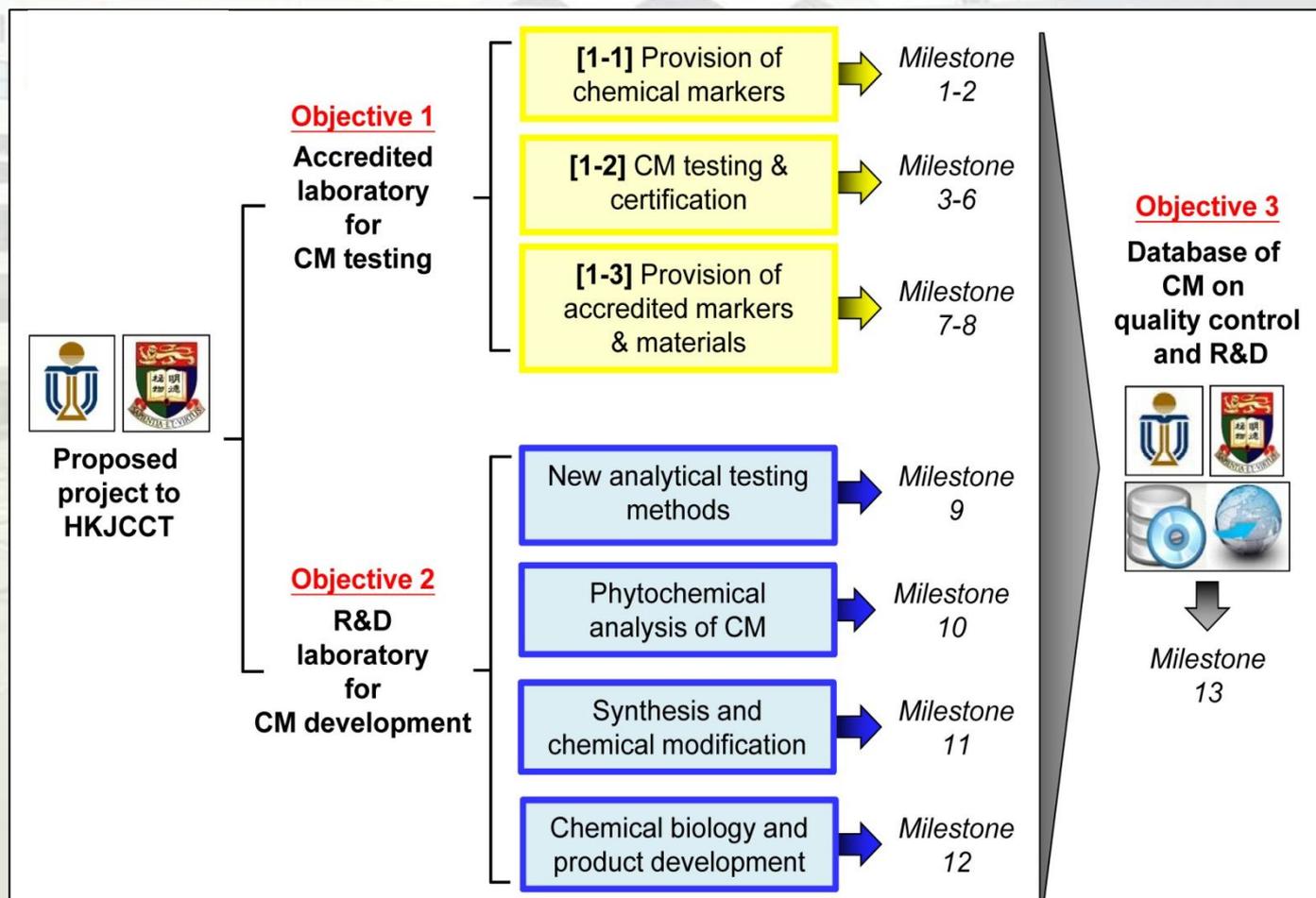
香港科技大學中藥研發中心聯同香港大學，在 2012 年獲得香港賽馬會慈善信託基金的捐助，建立**中藥測試認可及研發實驗室**，共同推行香港中藥材的檢測、質控和認證工作，建立中藥材標準化和認證的制度。

目標:

1. 為香港中藥業界提供中藥材測試及認證服務
2. 提供穩定可靠的中藥材化學對照品
3. 幫助中藥企業及產業建立新的中藥質量控制方法
4. 通過供應檢定達標的中藥材，化學標準品及測試方法，協助《香港中藥材標準》的工作
5. 為學術界和業界構建一個溝通的橋樑
6. 提升香港消費者對中醫藥的信心

R & D and Accredited Laboratories for Testing of Chinese Medicines

項目主要工作的流程:



Re-certification of the chemical markers transferred from ICM

標準品的驗證

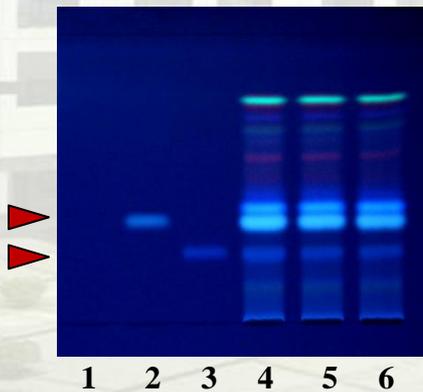
提供中藥材的化學對照品給香港中藥業界，研究機構等用作研究，檢測用途 (ISO17025).

中藥材的化學對照品主要用於：

1. 薄層色譜 (TLC)

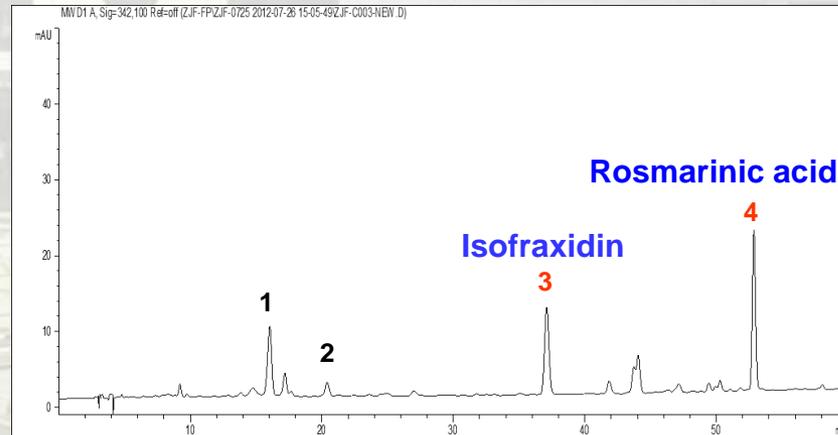
2. 色譜指紋圖譜 (Fingerprinting)

3. 含量測定 (Assay)



Lane 2: Isofraxidin

Lane 3: Rosmarinic acid



FP: Identification of 4 characteristic peaks including markers peaks

Assay: Determination of the amount of markers

市場上中藥材化學對照品存在的問題： 種類不齊全， 純度不達標， 穩定度不明確

Re-certification of the chemical markers transferred from ICM 標準品的驗證

現時已有中藥材化學對照品覆蓋了香港中藥材標準和 “Proficiency Testing Programme CMM 2012” 中所需要設定標準的中藥材。

Chemical markers for Proficiency Testing 2012

Ginsenoside Rg1 (西洋參, 人參)	Peimisine (平貝母)
Ginsenoside Re (西洋參, 人參)	Tenuifolin (遠志)
Ginsenoside Rb1 (西洋參, 人參)	Tectoridin (射干)
Ginsenoside Rc (西洋參)	Irisflorentin (射干)
Ginsenoside Rb2 (西洋參)	Z-ligustilide (當歸)
Ginsenoside Rd (西洋參)	Notoginsenoside R1 (三七)
Gastrodin (天麻)	Tanshionone IIA (丹參)
Peimine (浙貝母)	Rosmarinic acid (丹參)
Peiminine (浙貝母)	Salvianolic acid B (丹參)

純度: > 98.0% (Assay)
> 95.0% (FP)
(According to HKCMMS)

具備“產品認證報告”

資格認證 & ISO Guide 34

Re-certification of the chemical markers transferred from ICM

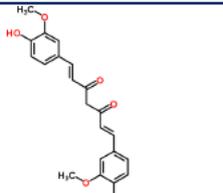
標準品的驗證

- 標準品共有**335**種。
- **78**種標準品由於純度問題不適合做重新檢定，故歸入“推遲驗證標準品”
- **46**種標準品存量較少（少於**20mg**）
- **211**種標準品存量較大（大於**100mg**）
- 標準品檢定所用方法
 - 香港中藥材標準
 - 中國藥典（**2010**版）
 - 相關研究文獻

- 目前，211種標準品中已有100種（占47.7%）經過重新驗證，并已投放香港市場。

Testing Laboratory
for Chinese Medicine **TLCM**

Certificate of Analysis

Product Name	Curcumin /薑黃素	
Catalog Number	9003	
Lot Number	90031	

Chemical Name	Curcumin
Chemical Formula	C ₂₁ H ₂₀ O ₆
Chemical Family	Phenol
Molecular Weight	368.38
CAS Number	458-37-7
Appearance (Color)	Yellow
Appearance (Form)	Powder

Analytical Test

Test	Result
Identity by LC/MS Analysis	Consistent with structure
Purity by HPLC/DAD Analysis	≥ 98.0%

Storage Conditions:

Storage:	Refer to label
Before use:	Keep container tightly closed

TLCM certifies that this standard meets the specifications stated in this certificate and warrants this product to meet the stated criteria. Warranty does not apply after opening.

Date of Certificate: 23/01/2013

Product Analysis Report

Analytical Test

Test	Results
Identity by LC/MS Analysis	Consistent with structure
Purity by HPLC/DAD Analysis	≥ 98.0%

Spectral and Physical Data

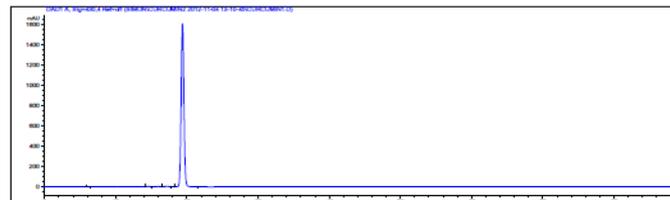
HPLC

HPLC system	: Agilent Technologies 1260 Series
Column	: Waters Symmetry, C18, 4.6 x 250 mm, 5 μm or equivalent
Injection volume	: 10 μl
Detector	: DAD
Detector wavelength	: 430nm
Flow rate	: 1.0 mL/min
Mobile phase	:

Time (min)	% trifluoroacetic acid	% ACN	Flow rate (mL/min)
0 → 30	52	48	1.0

Date File Name	: A5-C:\Chem32\1\DATA\simon\CURCUMIN2 2012-11-04 13-10-45
Operator	: DUAN Ran
Sample Lot Number	: 90031
Method File	: A5-C:\Chem32\1\METHODS\SIMON\CURCUMIN-3-TIMES.M
Acquired	: 7/11/2012

I. HPLC chromatogram



Product	RT (min)	Area (mAu*s)	Relative Area %
Curcumin	19.373	43628	99.772

標準品目錄

Testing Laboratory
for Chinese Medicine **TLCM**

Catalogue

Chemical Marker Price List

18-Mar-13

(*30% discount will be offered to Hong Kong customers)

Name	CAT No.	CAS No.	Chinese Name	Reference	Purity	Unit Price (HKD) /20 mg*
Adenosine	1002	58-61-7	腺苷		≥98%	200
Aesculetin	5001	305-01-1	秦皮乙素	Violae Herba (HKCMM VOL. 5)	≥98%	300
Albiflorin	11001	39011-90-0	芍藥內酯苷		≥98%	900
Andrographolide	11038	5508-58-7	穿心蓮內酯	Andrographidis Herba (HKCMM VOL. 3)	≥98%	250
Apigenin	6001	520-36-5	芹菜素	Scutellariae Barbatae Herba (HKCMM VOL. 4)	≥98%	300
Arctigenin	8001	7770-78-7	牛蒡子苷元	Arctii Fructus (HKCMM VOL. 4)	≥98%	900
Arctiin	8002	20632-31-6	牛蒡子苷	Arctii Fructus (HKCMM VOL. 4)	≥98%	1300
Asiatic Acid	11005	464-92-6	積雪草酸		≥98%	1000
Astragaloside IV	10002	84687-43-4	黃芪甲苷	Astragali Radix (HKCMM VOL. 1)	≥98%	500
Atractylenolide III	11007	73030-71-4	蒼朮內酯 III		≥98%	1300
Atropine	1004	51-55-8	阿托品		≥98%	700
Berberine Hydrochloride	1005	633-65-8	鹽酸小檗鹼	Phellodendri Amurensis Cortex (HKCMM VOL. 1)	≥98%	300
Bergerin	7002	477-90-7	岩白菜素		≥98%	250
Chrysin	6004	480-40-0	白楊素	Oroxyli Semen (HKCMM VOL. 5)	≥98%	300

Testing Laboratory
for Chinese Medicine **TLCM**

Catalogue

Name	CAT No.	CAS No.	Chinese Name	Reference	Purity	Unit Price (HKD) /20 mg*
Z-ligustilide	11036	81944-09-4	乙基本內酯	Angelicae Sinensis Radix (HKCMM VOL. 1) Chuanxiong Rhizoma (HKCMM VOL. 2)	≥95%	3400

Remarks:

* Listed prices are for reference only, prices are subjected to change, please contact us for quotation.

* Markers' availability depends on the stock.

FOR ORDERS & ENQUIRIES:

Mr. DUAN Ran

Tel: (852) 2358 7338 Mobile: (852) 9201 4701

Fax: (852) 2358 2551 Email: stds@ust.hk

Website: <http://www.hkctlcm.com>



www.hktlcm.com



Testing Laboratory
for Chinese Medicine **TLCM**

ABOUT US
關於我們

PRODUCTS
產品資料

R & D
研究成果

CONTACT US
聯絡我們

 香港科技大學
THE HONG KONG UNIVERSITY OF
SCIENCE AND TECHNOLOGY

 香港大學
THE UNIVERSITY OF HONG KONG

捐助機構
Funded by:



香港賽馬會慈善信託基金
The Hong Kong Jockey Club Charities Trust

Copyright reserved by TLCM

Disclaimer of Warranty

TLCM assumes no responsibility for errors or omissions in the contents of this website.

The contents of this website are provided "as is" without warranty of any kind, either express or implied, including but not limited to, the implied warranties of merchantability, fitness for a particular purpose, or non-infringement. Furthermore, TLCM does not warrant the accuracy or completeness of the information, text, graphics, links or other items contained within these materials. TLCM shall not be liable for any special, indirect, incidental, or consequential damages, including without limitation, lost revenues or lost profits, which may result from the use of these materials. The information in this website is subject to change without notice and does not represent a commitment on the part of TLCM in the future.

About Us 關於我們

The Testing Laboratory for Chinese Medicine (TLCM) has been established in 2012 by The Hong Kong University of Science and Technology (HKUST) and The University of Hong Kong (HKU). The laboratory is funded by The Hong Kong Jockey Club Charities Trust and led by Prof. Karl WK TSIM (Director), Prof. Chi-Ming CHE (Associate Director) and Prof. Nancy YY IP (Associate Director).

香港科技大學聯同香港大學，在2012年獲得香港賽馬會慈善信託基金的捐助，建立中藥檢測實驗室。該實驗室由詹華強教授（主任），支志明院士（副主任）及葉玉如院士（副主任）共同領導。

Mission 使命

At TLCM, we aim to carry out testing, quality control and certification of Chinese Materia Medica (CMM) in Hong Kong in order to establish the standardization and certification system of CMM.

我們將致力推行香港中藥材的檢測，質控和認證工作，建立中藥材標準化和認證的制度。

Goals 目標

1. Stable supply of certified chemical markers
 2. Service provision for testing and certification of CMM
 3. Development of novel testing methods of CMM quality control
1. 提供嚴格品質控制的中藥材化學對照品
 2. 提供中藥材檢測及質控服務
 3. 建立創新的中藥材質控技術

Products 產品資料

Item 項目	Description 內容	Unit Price 單價
11001	Albiflorin 20 mg	Contact us for details
8001	Arctigenin 20 mg	Contact us for details
8002	Arctiin 20 mg	Contact us for details
11005	Asiatic acid 20 mg	Contact us for details
10002	Astragaloside IV 20 mg	Contact us for details
11007	Atractylenolide III 20 mg	Contact us for details
1004	Atropine 20 mg	Contact us for details
1005	Berberine hydrochloride 20 mg	Contact us for details
7002	Bergenin 20 mg	Contact us for details

1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10



Contact Us 聯絡我們

Mr. Ran Duan

Tel: (852) 2358-7338

Fax: (852) 2358-2551

Email: stds@ust.hk

Address:

Room 6145,

The Hong Kong University of Science and Technology,
Clear Water Bay, Kowloon, Hong Kong

段然 先生

電話：(852) 2358-7338

傳真：(852) 2358-2551

電郵：stds@ust.hk

地址：香港九龍清水灣香港科技大學6145室

You may send enquiry to us via the following enquiry form:

你可以透過下面表格提交查詢內容：

Name 姓名：

Email 電郵：

Tel 聯絡電話：

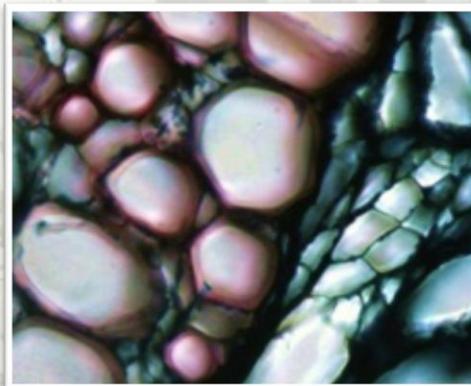
Enquiry 查詢內容：

Send 送出

To provide the reference materials for CM quality control 為中藥材質量控制提供對照藥材

建立中藥原藥材和顯微鑒定的對照藥材標準庫

為適應在香港及全世界中藥發展的需要，我們會建立中藥原藥材的標準庫及中藥材顯微鑒定的標準切片庫。

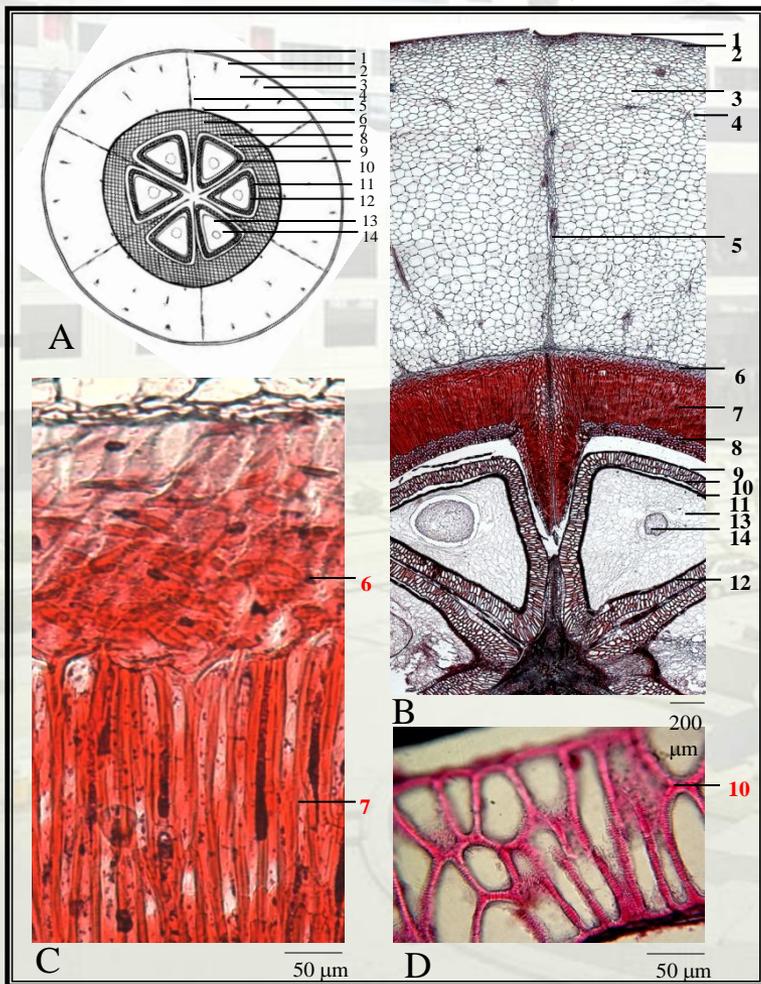


To provide the reference materials for CM quality control

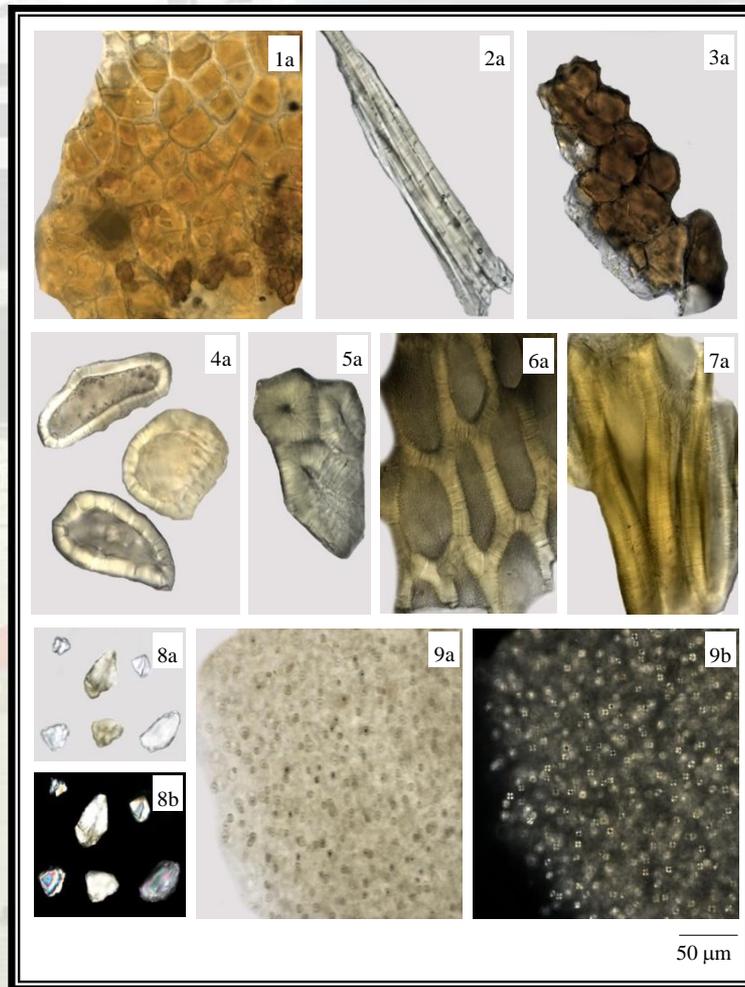
為中藥材質量控制提供對照藥材

顯微鑒別 *Microscopic identification*

a. *Transverse section* (橫斷面)



b. Power (粉末)



To provide the reference materials for CM quality control 為中藥材質量控制提供對照藥材

顯微鑒別 *Microscopic identification*

a. *Transverse section* (橫斷面)

b. *Power* (粉末)





Thank you!