## "COVID-19 AND TRADITIONAL CHINESE MEDICINE"

HSU, SHENG-FENG

CHINA MEDICAL UNIVERSITY, TAICHUNG, TAIWAN

DATE: SATURDAY, 11TH SEPT. 2021

TIME: 2:15 - 3 PM (INDIAN TIMING- 30 MINUTES PRESENTATION AND 15

**MINUTES Q&A)** 

### PART I INTRODUCTION

### 3 INTRODUCTION

- Dr. A is a TCM doctor who work in Canada, and got COVID-19 infection in 2019.
- The sign and symptom are short of breath (SOB), non-productive cough, chest pain, tired, muscle soreness, cannot sleep well and cannot walk a long distance (less than 1km), and need rest all the time.
- 2020 In Canada one person can average got 3 vaccines, but also can easy to be infected by COVID-19.
- He is one of the mild case (not a severe case) and cannot stay in hospital, so just can stay at home.
- He took TCM herbs, and gradually got healthy.
- If you got some complication without treatment, you cannot get the good life quality as usual.

## 4 GLOBAL ECONOMIC AND MEDICAL INDUSTRY HAS HUGE INFLUENCES

- 2020 the vaccine industry plant cannot produce vaccine due to the quick spread of COVID-19 in <u>India</u>.
- 2021 quick spread of COVID-19 in <u>Vietnam</u>. The sports shoes plants cannot produce and transport to all over the world.
- The same situation is in Malaysia.
- 2021 There are over 15 cities were closed in <u>China</u> due to Delta virus strain infection.

## 2021 DELTA VIRUS STILL SPREAD QUICKLY ALL OVER THE WORLD

- 2021/08/20 Daily average:
  - USA at least 100-200 thousand people are affected by DELTA virus.
  - <u>Japan</u> 15 thousand people are affected. & Malaysia 15 thousand people are affected.
- <u>USA</u> and <u>ISAEREL</u> try to 3<sup>rd</sup> vaccine injection to the citizens. So we do not have enough vaccines to give to other countries.
- 2020 <u>Singapore</u> has highly infected rate, but they have enough rapid screening, enough vaccine injection and good medical care. Their mortality rate are much lower than other countries nearby.
- 2020 <u>Vietnam</u> use border control and pandemic isolation policy is useful to control COVID-19 infection, but2021 DELTA virus still spread quickly.
- The same situation in Taiwan, the breakout of COVID-19 infection since 2021.05.18.

Taiwan still have some cases are affected by DELTA

#### 6 TRADITIONAL TREATMENT AS A COMPLEMENTARY AND ALTERNATIVE TREATMENT.

- 2021 <u>India COVID-19</u> pandemics is quickly increasing, and death rate is also increasing due to without enough vaccines & medical equipments.
- It is the same situation happened in <u>Indonesia</u> and <u>Malaysia</u>.
- Western medicine is good at vaccine, monoclonal antibody, Rapid screening and PCR test. They use high flow oxygen and ventilator in ICU.
- People in <u>Taiwan</u> count on western medicine treatment, and looking forward to add traditional treatment as a complementary and alternative treatment.

There are near 16,000 infected, and 834 dead in Taiwan. (2021.05.18.2021.-08.29.)



#### 指揮中心快訊 資料更新用期 2021/08/29

Central Epidemic Command Center (CECC) Press Release

本土 13

目前15983例(14522本土、1408境外、36敦睦艦隊、2航空器、1不明及14調查中

中央流行疫情指揮中心今(29)日公布國內新增23例COVID-19確定病 例,分別為13例本土及10例境外移入;另確診個案中新增1例死亡。

今日新增之13例本土病例(其中9例為居家隔離期間陽性者),為6例男 性、7例女性,年齡介於未滿5歲至50多歲,發病日介於今年8/16至 8/28, 個案分布為新北市11例、臺北市2例;其中9例為已知感染 源、4例關聯不明,將持續進行疫情調查,以釐清感染源。

今日新增1例死亡個案(案16067),為菲律賓籍60多歲男性,8/26出 現發燒症狀,8/27入境我國後即送醫採檢確診,並於同日死亡。

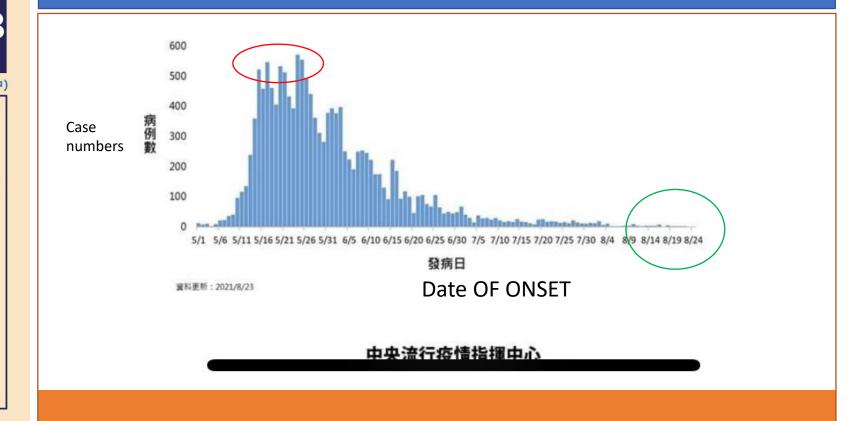
近期確診個案解隔離情形,5/11至8/27累計公布14,755位確診個案 中,已有13,673人解除隔離,解隔離人數達確診人數92.7%。

今日新增10例境外移入個案,為7例男性、3例女性,年齡介於10多 歲至60多歲,分別自中國(案16071)、柬埔寨(案16074、16075)、 美國(案16076)、緬甸(案16088、16089、16090、16091)、巴基 斯坦(案16092)及越南(案16093)入境,入境日介於8/15至8/28;詳 如新聞稿附件。

詳情請參考疾管署8/29新聞稿

#### 中央流行疫情指揮中心 關心您

#### **COVID-19 PANDEMICS OUTBREAK IN TAIWAN** (2021.05.18.2021.-08.29.)



## 8 MEDICAL CARE POLICY INTAIWAN 2020-2021

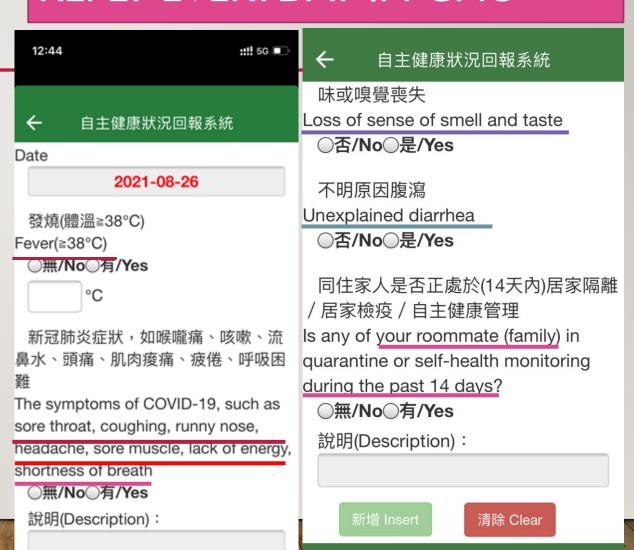
The major policy in Taiwan:

- Facial mask, Glasses, wash hands, The track of the infected people (cell phone),
- ➤ Rapid screening, PCR test, isolated hotels, 1000 negative pressure ICU beds in medical centers, Border control, Vaccine injection
- > third degree alert. (2021.05.18.-2021.08.02.)
- ➤ newly reports, 2 dose vaccines of Moderna has 85% and AZ has 70% protect ability.

#### How to protect yourself?

- CELLPHONE SELF-CHECK TABLE
- Not in crowed group, donnot go to the area where infected one went to
- Wash your hand, and wear the gloves
- Facial mask
- Protect glass
- Protect clothes
- 70% alcohol spray

#### REPLY EVERYDAY IN CMU



### WHY WE CHOOSETCM TREATMENT?

- THE ADVANTAGE:
  - **LESS EXPENSIVE (I-5 USD /PER DAY)**
  - ■EASY TO CARRY

    (TCM HERB POWDER PACK)
  - EASY TO ADJUST FOMULA (TCM HERB DECORTION)
  - ■LESS ADVERSE EFFECT ARE REPORTED
  - TO MODERATE CASES

- THE DIS-ADVANTAGE:
  - >ASYMPTOMATIC CASES
  - LESS EVIDENCED STUDIES

    (MOST ARE CASE REPORTS)
  - > LESS LAB STUDIES
  - BY WESTERN DOCTORS
  - THE VIRUS STRAIN CHANGES
    QUICKLY

## WHAT TCM CAN DO INTAIWAN? WHEN COVID-19 PANDEMICS

- ➤ 2020.06.01. THE TCMTREATMENT GUIDELINE OF COVID-19 PANDEMIC INFECTION by Taiwanese government
- ≥2020.11.16. Scientific study paper published & TCM herb powder was made
- ≥ 2021.05.18. Taipei medical doctors association announced

internet TCM services & internet TCM experience workshop







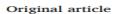
Contents lists available at ScienceDirect

Biomedicine & Pharmacotherapy

journal homepage: www.elsevier.com/locate/biopha







A traditional Chinese medicine formula NRICM101 to target COVID-19 through multiple pathways: A bedside-to-bench study



## 12 THE TCM TREATMENT GUIDELINE OF COVID-19 PANDEMIC INFECTION BY TAIWAN GOVERMENT

中醫藥新知109年6月號

### 《新型冠狀病毒病中醫臨床分期治療指引》

--

擬定單位 衛生福利部國家中醫藥研究所

## 13 TAIPEI MEDICAL DOCTORS' ASSOCIATION 2021.05.18. INTERNET TCM SERVICES



#### 台北市中醫師公會新聞稿

發稿日期: 110年5月18日(星期二) 台北市中正區青島西路11號3樓/電話02-23143456

中醫視訊就位 阻断傳播鏈 中醫 Can Help

#### 中醫參與對抗新冠病毒

5/17 中央流行疫情指揮中心公布圖內新增 335 例 COVID-19 確診病例,本土 單日高達 333 例,雙北進入三級警戒且高中職以下即日起停課至 5/28,倘若未來一 週疫情仍高居不下,蔣進入第四級警戒停止上班甚至封鎮疫區。面對來勢沟沟新冠 雙種病毒,越來越多的重症患者,送進醫院治療,為維護醫療量能,至二甲醫學與 治療,阻斷社區傳播鏈,善用這距視訊醫療勢在必行。繼 109 年疫情需要。除有 26 家中醫診所已投入視訊醫療,中醫師公會配合衛補部公告全力投入抗疫,號召基層 診所參與視訊診療,應患者需要處置防疫方劑及慢病治療、阻斷社區傳播鏈,中醫 Can Help。

#### 新冠病毒中醫辨證論治

去年爆發新延疫情,台灣多家數學醫院中醫部參與新延減壽感染患者中面治療 皆有由陽轉陰康復具體療效,依此並與衛福部國家中醫藥研究所合作,擬訂〈新型 短狀稿毒中醫臨床分期治療指引》分期治療處方:輕症方、重症方、危重症方、恢 權期方。

#### 中醫診所視訊診療就位

中醫藥研究所和中醫臨床醫師共同研發出「清冠一號」中藥配方,展行歐美國家、惟新冠變種病毒來勢沟沟,非清冠一號固定方剩即可治療。依中醫常規治療法則,需要辨證論治開立不同中藥處方治療。凡符合居家隔離、居家檢疫或自主健康管理者、請向衛生局申請看中醫,由衛生局轉介至指定通訊診療之中醫院所看診。門診慢性稳定減少向中醫院所掛號透過稅訊診療或電治台北市中醫師公會,服務專繳 02-23143456,中醫的介入治療、對新短病毒疫情、將能發揮阻斷社區傳播鏈,節省醫療變能、讓疫情緩和、才是病患之福。

中西齊心對抗新冠變種病毒,共同照護國人的健康,中醫 Can Help,天佑台灣, 疫情早日過去,大家平安健康!

台北市中醫師公會

理事長 黃建榮 / 0910-930396

- ◆125 WESTERN HOSPITALS HAS TCM DEPAERTMENT, 25 IN TAIPEI.
- ◆TAIWAN TCM INSURANCE
- COVER ,ONLY LESS THAN 4% OF
- THE GLOBAL BUDGET
- ◆30% TAIWANSES LIKE TO USE TCM TREATMENT(TCM herbs & Acupuncture)

TCM medical care in Taiwan 2020-2021	NUMBERS OF TCM DOCTORS 7000 TCM doctors
TAIPEI	2150
NORTH	898
TAICHUNG	1919
SOUTH TAINAN	919
SOUTH KAOSIUNG	1017
EAST	164

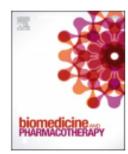
## PART 2 TCM PATHOLOGIC PROCESS IN COVID-19



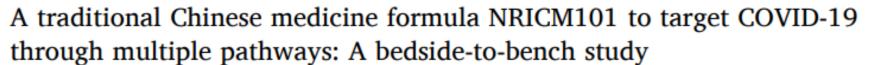
Contents lists available at ScienceDirect

#### Biomedicine & Pharmacotherapy

journal homepage: www.elsevier.com/locate/biopha



#### Original article







<sup>&</sup>lt;sup>c</sup> Department of Chinese Medicine, Tri-Service General Hospital, National Defense Medical Center, No.325, Section 2, Chenggong Road, Neihu District, Taipei 11490, Taiwan



d Department of Traditional Chinese Medicine, Taichung Veterans General Hospital, No. 1650, Taiwan Boulevard Section 4, Seatwen District, Taichung 407204, Taiwan

<sup>&</sup>lt;sup>e</sup> Division of Infectious Diseases and Tropical Medicine, Department of Internal Medicine, Tri-Service General Hospital, National Defense Medical Center, No. 325, Section 2, Chenggong Road, Neihu District, Taipei 11490, Taiwan

f Institute of Biomedical Sciences, Academia Sinica, No. 128, Section 2, Academia Road, Nankang District, Taipei 11529, Taiwan

<sup>8</sup> Genomic Research Center, Academia Sinica, No. 128, Section 2, Academia Road, Nankang District, Taipei, 11529, Taiwan

h Department of Statistic, Feng Chia University, No. 100, Wenhwa Road, Seatwen District, Taichung 40724, Taiwan

Department of Data Science and Big Data Analytics, Providence University, Taichung, No. 200, Section 7, Taiwan Boulevard, Shalu District, Taichung 43301, Taiwan School of Chinese Medicine, College of Chinese Medicine, China Medical University, No.91, Hsueh-Shih Road, Taichung 40402, Taiwan

### 16 "REPIRE AID FORMULA" RAW MATERIALS



魚腥草五錢(15g)、 板藍根五錢(15g)、 荊芥三錢(10g)、 防風二錢(6g)、 桑葉三錢(10g)、 黄芩三錢(10g)、 全瓜蔞五錢(15g)、 厚朴三錢(10g)、 薄荷三錢(10g)、 炙甘草二錢(6g)

### RESPIRE AID ™ (NRICM 101)

#### TCM HERBS FOMULA FOR COVID 19 PANDEMICS

A2105



### Respire Aid M

臺灣清冠一號 (NRICM101)

成分:魚腥草、北板藍根、黃芩、栝樓實、荊芥桑葉、薄荷、厚朴、防風、炙甘草、麥芽糊精

薄荷腦、糊精

類別:須由中醫師處方使用

用法用量:成人每次1包(5g),一天 2~4 次。 三餐飯後半小時服用。可直接口服或搭配 400cc 開水服用。

效能:解表宣肺、清熱解毒、寬胸化痰、和胃

降氣。

適應症:外感時疫。

防疫專案核准製造第1100015686號 順天堂藥廠股份有限公司 台中廠 製造 台中市西屯區工業區42路16號



#### Ingredients:

Each 5.0 grams dose contains Chinese herbal extracts equivalent to the following dry herb ingredients:

Houttuynia cordata (whole plant) Yu Xing Cao 2.5 gIsatis tinctoria (root) Ban Lan Gen 2.5 g Scutellaria baicalensis (root) Huang Qin 2.5gTrichosanthes kirilowii (fruit) Gua Lou Shi 2.5gSchizonepeta tenuifolia (herb) Jing Jie 1.5 g Morus alba (leaf) Sang Ye 1.5 g Mentha haplocalyx (herb) 1.5 g Во Не Magnolia officinalis (stem bark) Hou Po 1.5 g Saposhnikovia divaricata (root) Fang Feng 1.0 g Glycyrrhiza uralensis, baked (root) Zhi Gan Cao 1.0 g

In a natural base of non-active ingredient: Maltodextrin, Betadex, Menthol

Table 1
Demographic and clinical characteristics of patients.

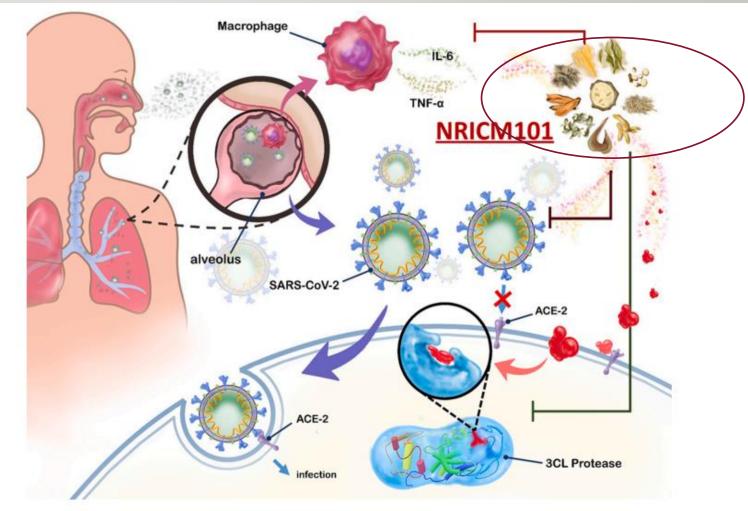
Characteristics	All patients (N = 33)	NRICM101 (n = 12)	Non- NRICM101 (n = 21)
Median age, years (range)	40 (18–80)	57 (29-80)	33 (18–74)
Age group, years (%)			
< 30	10 (30.3 %)	1 (8.3 %)	9 (42.9 %)
30-39	6 (18.2 %)	2 (16.7 %)	4 (19.0 %)
40-49	3 (9.1 %)	1 (8.3 %)	2 (9.5 %)
50-59	6 (18.2 %)	2 (16.7 %)	4 (19.0 %)
60-80	8 (24.2 %)	6 (50.0 %)	2 (9.5 %)
Sex (%)			
Male	15 (45.5 %)	6 (50.0 %)	9 (42.9 %)
Female	18 (54.5 %)	6 (50.0 %)	12 (57.1 %)
Severity <sup>1</sup> (%)			
Mild	29 (87.9 %)	8 (66.7 %)	21 (100.0 %)
Severe <sup>2</sup>	3 (9.1 %)	3 (25.0 %)	_
Critical <sup>2</sup>	1 (3.0 %)	1 (8.3 %)	_
Median days from hospitalization to 3 N <sup>3</sup> (range)	26 (8-51)	33.5 (8-44)	22 (9-51)
Median days from hospitalization to intervention (range)	-	21.5 (0-33)	_
Median days from intervention to 3 N (range)	-	9 (4–18)	-
Coexisting conditions (Comorbidity, %)	11 (33.3 %)	8 (66.7 %)	3 (14.3 %)
Hypertension	4 (12.1 %)	4 (33.3 %)	_
Hyperlipidemia	4 (12.1 %)	3 (25.0 %)	1 (4.8 %)
Type 2 diabetes	3 (9.1 %)	3 (25.0 %)	_
Others	7 (21.2 %)	4 (33.3 %)	3 (14.3 %)
Adverse effects reported	_	0	_

<sup>&</sup>lt;sup>1</sup> :Disease severity was defined according to the "Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease (COVID-19)" proposed by the United States Centers for Disease Control and Prevention.

<sup>&</sup>lt;sup>2</sup> :Severe and critical cases presenting cardiovascular symptoms were given additional TCM, in addition to NRICM101.

 $<sup>^3</sup>$  :3 N denotes patient respiratory specimens testing negative for SARS-CoV-2 three times in a row, with specimens collected  $\geq$ 24 h apart.

events. Pharmacological assays demonstrated the effects of the formula in inhibiting the spike protein/ACE2 interaction, 3CL protease activity, viral plaque formation, and production of cytokines interleukin (IL)-6 and tumor necrosis factor (TNF)-α. This bedside-to-bench study suggests that NRICM101 may disrupt disease progression through its antiviral and anti-inflammatory properties, offering promise as a multi-target agent for the prevention and treatment of COVID-19.



implified representation of NRICM101 targeting potential pathways of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) infection. mechanisms of SARS-CoV-2 pathogenesis targeted by NRICM101: binding of viral spike protein to human angiotensin-converting enzyme 2 (ACE2), 3CL that facilitates SARS-CoV-2 replication, production of pro-inflammatory cytokines interleukin (IL)-6 and tumor necrosis factor (TNF)- $\alpha$ .





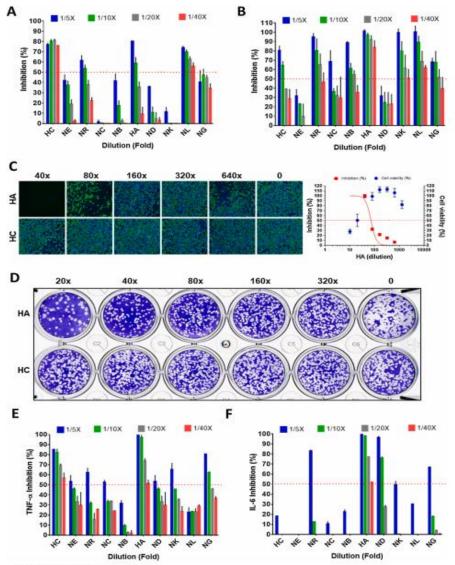


Fig. 4. Pharmacological data of single herbs of NRICM101. (A) Interaction of spike RBD to the ACE2 was determined by the ACE2-spike protein inhibition ELISA. (B) Inhibition of SARS-CoV-2 3CL protease activity. (C) Inhibition data of the immunofluorescent assay of HA and HC. (D) Plaque reduction neutralization test of HA and HC. (E,F) Inhibition data of LPS-induced expression of TNF- $\alpha$  and IL-6 in murine alveolar macrophages. The red dots indicate 50 % inhibition of 3CL protease activity. The data represented as mean  $\pm$  SD from three independent experiments. 50 % inhibition concentration (IC50) and 50 % cytotoxic concentration (IC50) were calculated by Prism software.

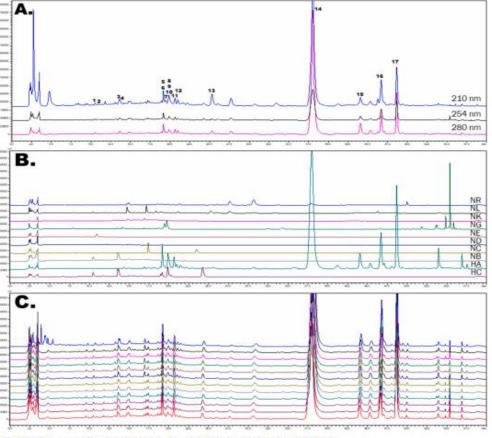


Fig. 5. The HPLC fingerprint profiles of NRICM101 decoction, 10 single herbs, and 12 batches of NRICM101. (A). The HPLC profiles of NRICM101 decoction at 210, 254, 280 nm. 1: 3-O-Caffeoylquinic acid; 2: Epigoitrin; 3: 5-O-Caffeoylquinic acid; 4: 4-O-caffeoylquinic 5: Rutin; 6: Chrysin 6-C-arabinoside; 7: Liquiritin; 8: Acetoside; 9: Quercetin 3-galactoside; 10: Quercetin 3-glucoside; 11: Chrysin 6-C-glucoside arabinoside; 12: Scutellarin; 13: Quercetin 3-rhamnoside; 14: Baicalin; 15: Norwogonin 7-O-glucuronide; 16: Oroxyloside; 17: Wogonoside. (B). The HPLC finger of the 10 single herbs at 280 nm. HA: Scutellaria root (Scutellaria baicalensis); HC: Heartleaf Houttuynia (Houttuynia cordata); NB: Mulberry Leaf (Morus alba) Saposhnikovia Root (Saposhnikovia divaricata); ND: Mongolian Snakegourd Fruit (Trichosanthes kirilowii); NE: Indigowoad Root (Isatis indigotica); NG: honey-Liquorice Root (Glycyrrhiza glabra); NK: Magnolia Bark (Magnolia officinalis); NL: Peppermint Herb (Mentha haplocalyx); NR: Fineleaf Schizonepeta Spike (St nepeta tenuifolia). (C). The HPLC fingerprints of 12 batches of decoction obtained from the TCM pharmacies of two medical centers at 280 nm.

ephedra use is found to have significant safety concern [38,39]. Aristolochic acids are known toxins and products containing them have been banned or restricted in many countries [40]. Without including these materials, NRICM101 exerted beneficial effects clinically and in vitro while ensuring safety by selecting plant-based and safe-to-use

Limitations of the study include the small sample size and limited evaluation of underlying mechanisms. As of May 31, 2020, Taiwan reported 442 positive cases, thus constraining our inferential analysis by a onset of admission. More investigation is needed to explore poseffects and underlying mechanisms of NRICM101, and determine optimal composition of herbal ingredients to maximize the form effectiveness. While the ability of NRICM101 to avert disease deve ment requires further validation, our experience in Taiwan preser multi-targeting and potentially safe and efficacious new drug candi

#### 5. Conclusion



Biomedicine & Pharmacotherapy 133 (2021) 111037



journal homepage: www.elsevier.com/locate/biophs



#### 5. Conclusion

The antiviral and anti-inflammatory effects of NRICM101 demonstrated in the study indicate that it may be used to inhibit mechanisms of SARS-CoV-2 invasion and proliferation. The urgency to alleviate COVID-19 and its associated societal burden warrants the possible contribution of this formula tested with the unconventional bed-to-bench approach.









Sept. 11, 2021 Covid - 19 and the Traditional Systems of Medicine

22

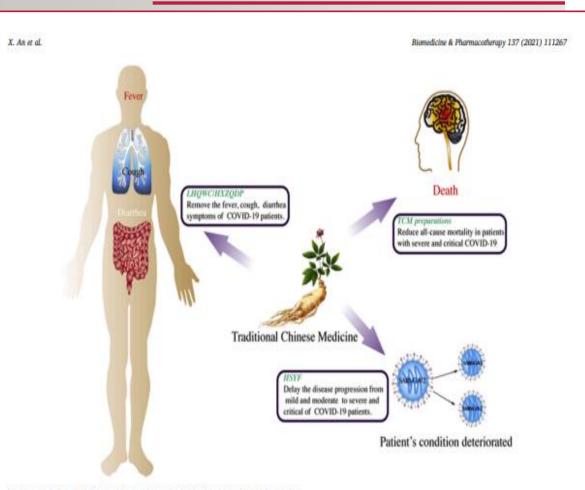


Fig. 1. Advantages of TCM in the treatment of COVID-19 based on clinical evidence.

Abbreviation: LHQWC: Lianhua Qingwen capsules; HX2QDP: Huoxiang Zhengqi dropping pill; HSYF: Hanshiyi formula.

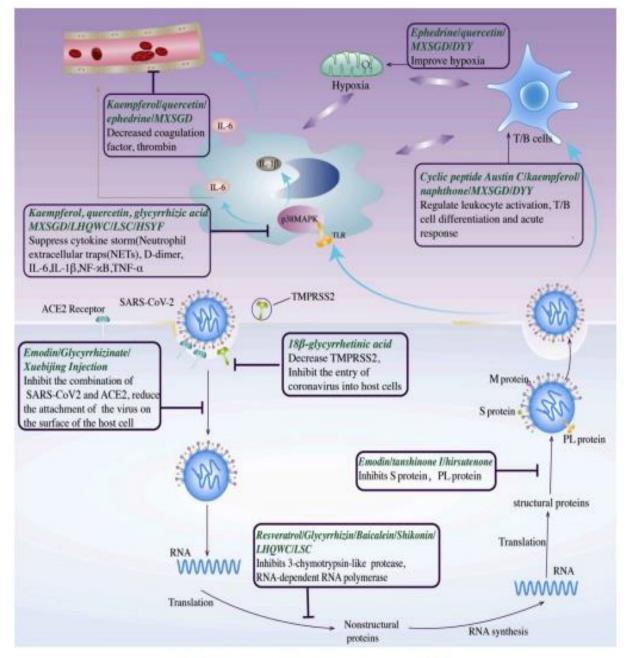
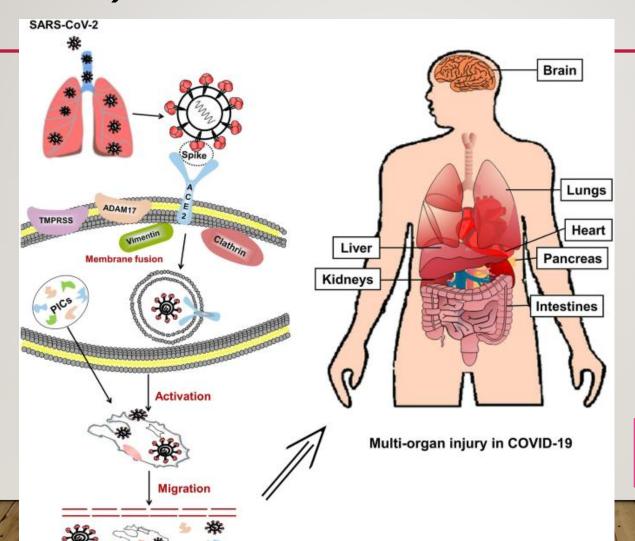


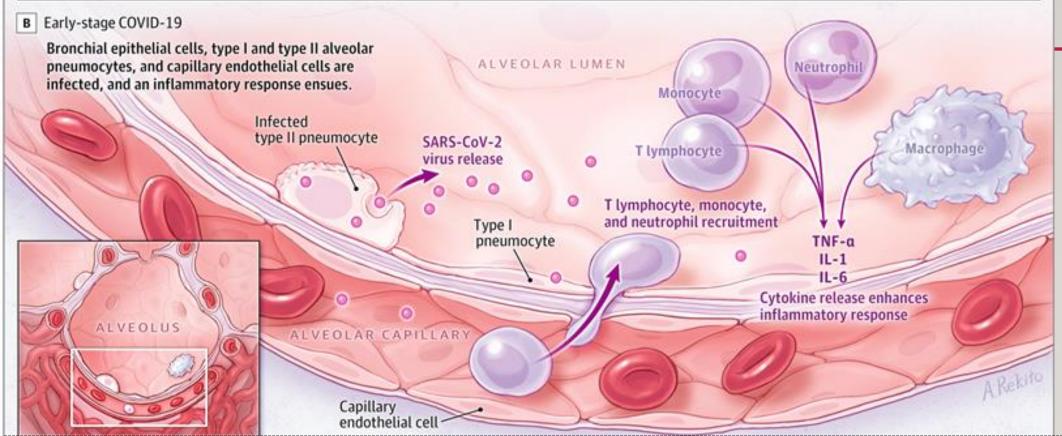
Fig. 2. The mechanism of TCM in the treatment of COVID-19.

## IMMUNOPATHOGENESIS OF CORONAVIRUS DISEASE 2019 (COVID-19)



Wentao Ni, Xiuwen Yang et al Role of angiotensin-converting enzyme 2 (ACE2) in COVID-19

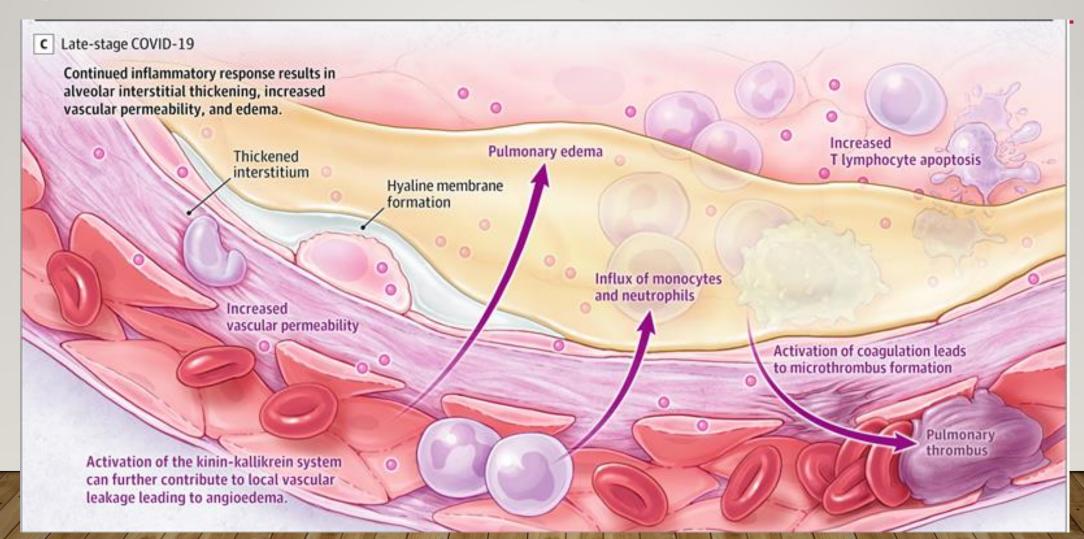
## IMMUNOPATHOGENESIS OF CORONAVIRUS DISEASE 2019 (COVID-19)



- Profound lymphopenia may occur when SARS-CoV-2 infects and kills T lymphocyte cells(Similar to other respiratory viral diseases)
- > Innate and the adaptive immune response (comprising humoral and cell-mediated immunity)
- →lymphopoiesis and increases lymphocyte apoptosis.

## IMMUNOPATHOGENESIS OF CORONAVIRUS DISEASE 2019 (COVID-19)

Diagnosis, Management, and Pathophysiology of a small and Venous Thrombosis in COVID-19, Gregory Piazza et al, JAMA. 2020;324(24) 2549. doi:10.1001/jama.2020.23422



	Asymptomatic or Presymptomatic	Mild Illness	Moderate Illness	Severe Illness	Critical Illness	
		Mild symptoms (e.g., fever, cough, or change in taste or smell); no dyspnea	Clinical or radiographic evidence of lower respiratory tract disease; oxygen saturation ≥94%	Oxygen saturation <94%; respiratory rate ≥30 breaths/min; lung infiltrates >50%	Respiratory failure, shock, and multiorgan dysfunction or failure	
Testing	Screening testing; if patient has known exposure, diagnostic testing	Diagnostic testing	Diagnostic testing	Diagnostic testing	Diagnostic testing	
Isolation	Yes	Yes	Yes	Yes	Yes	
Proposed Disease Pathogenesis						
T utilogenesis				Inflammation		
Potential		Antiviral ther	ару			
Treatment		Antib	ody therapy	Antiinflammatory therapy		
Management Considerations	Monitoring for symptoms	Clinical monitoring and supportive care	Clinical monitoring; if patient is hospitalized and at high risk for deterioration, possibly	Hospitalization, oxygen therapy, and specific therapy (remdesivir, dexamethasone)	Critical care and specific therapy (dexamethasone, possibly remdesivir)	
	vid-19, Rajesh T. Gandhi et al		remdesivir	,		

Table 2
Mechanism of TCM treatment of COVID-19.

Mechanism of TCM treatment of COVID-19.						
TCM	Method	Composition	Active ingredients	Pharmacological effects	Related cytokines	
Maxing Shigan Decoction [75]	network pharmacological	Ephedra equisetina Bge., Prunus armeniaca L., Gypsum Fibrosum, Glycyrrhiza uralensis Fisch.	Quercetin, Kaempferol, Herbacetin, Delphinidin, Resivit, Estrone, Stigmasterol, CLR; Sitosterol, Isotrifoliol, Inflacoumarin A, Kanzonol F,	inflammation, immune response, hypoxia, apoptosis	TNF, IL-1β, IL-2, MAPK14, HSP90AB1, MAPK1, JUN, VEGFA, IL-10, IL6	
麻杏石甘湯(水藥)			Quercetin, Formononetin, CaSO4, CaSO4. 2H2O, Fe, Mn, Zn			
Respiratory Detox Shot [124]	Network pharmacological	Schizonepeta tenuifolia Briq., Lonicera japonica Thunb., Forsythia suspensa (Thunb.) Vahl, Polistes olivaceous(DeGeer), Scraphularia ningpoensis Hemsl., Cleditsia sinensis Lam., Ziniphus jujuba Mill. var. spinosa (Bunge) Hu ex H.F.Chou, Glycyrrhiza uralensis Fisch., Panax ginseng C. A. Mey.	Luteolin, Licoisoflavone B, Fisetin, Quercetin, Glyasperin F, Isolicoflavonol, Semilicoisoflavone-B	Leukocyte migration, intrammation, anti- virus	VCAM-1, IBKA, ELP1, NFKBIA, ESR1, HSP90AA1, AR, PPARG, GSK3B	
Qingfei Paidu Decoction, Maxing Shigan Decoction [123]	Network pharmacology, vitro experiments	Ephedra equisetina Bge., Prunus armeniaca L., Gypsum Fibrosum, Glycyrrhiza uralensis Fisch., Cinnamomum cassia Prest, Notopterygium incisum Ting ex H.T. Chang, Alisma orientalis (Sam.) Junep., Polyporus umbeliatus (Pers.)Fries, Atractylodes macrocephala Koidz., Poria coces (Schw.)Wolf, Isatis indigotica Fort., Bupleurum chinense DC., Scuteliaria baicalensis Georgi, Pinellia ternata (Thumb.)Breit., Zingiber officinale Rosc., Aster tataricus Lf., Lonicera japonica Thumb., Tussilago farfara L., Belamcanda chinensis (L.)DC., Asarum heterotropoides Fr.Schmidt var.mandshuricum(Maxim.)Kitag., Diasscorea opposita Thumb., Citrus aurantium' L., Citrus reticulata Blanco, Pogostemon cablin (Blanco) Benth.	Amygdalin, Baicalin, Ephedrine, Glycyrrhizic acid, Hesperidin, Narirutin, Neohesperidin	Anticoagulant, Enflammation	TLR signal pathway	
Gan cao [82]	Molecular docking simulation, molecular dynamics simulation	Glycyrrhiza uralensis Fisch.	Glycyrrhetinic Acid, Glycyrrhizin A	Inhibit virus replication and interfere with the combination of virus and host	ACE-2	
96,606 classic prescriptions [73]	Data mining and web pharmacology	Glycyrrhiza uralensis Fisch., Scutellaria baicalensis Georgi, Rheum palmatum L., Bupleurum chinense DC.	Quercetin, kaempferol, 4'-hydroxy vitellogenin, glycosides, glycyrrhizin, norvitelloxanthin	inflammatory, prevent binding to host cells	ACE2, 3CL	
Lianhua Qingwen capsule [162]	Cytopathic effect (CPE) and plaque reduction test	Forsythia suspensa (Thunh.) Vahl, Lonicera japonica Thunh., Ephedra equisetina Bge., Prunus armeniaca L., Gypsum Fibrosum, Glycyrrhina uralensis Fisch., Isatis indigotica	NR	Antivirus	TNF-α, IL-6, CCL-2/ MCP-1, CXCL-10 / IP- 10	
蓮花清瘟膠囊		Fort., Rhizoma Dryopteridis, Houstymia cordata Thunb., Pogostemon cablin (Blanco) Bensh., Rheum palmatum L., Rhodiola cremitata(Hook.f.et Thoms.)H. Ohba, Mentha haplocalyx Briq.				
Liushen Capsule [125]	Cytopathic effect (CPE) and plaque reduction test	Calculus bovis, Muskmelon Base Pedicelkes Melo, TokayGecko, Bottle Brush Herb Herba Equiseti Arvensis, Pteria martensii (Dunker), Realgar	Gamabufotalin, arenobufagin, telocinobufagin, desacetylcinobufotalin, bufotalin, cinobufotalin	Antivirus, inframmation, protection of host cells	TNF-a, IL-6, IL-16, IL-8, CCL-2/MCP-1, CXCL-10/IP-10, NF-8B/MAPK, p-NF-8Bp65, p-18Ba, p-p38 MAPK, IsBa	
達原飲	Network pharmacology	Areca catechu L., Magnolla officinalis Rehd. et Wils., Amomum tsao-ko Crevost et Lemaire, Anemarrhena asphodeloides Bge., Paeonia lactiflora Pall., Scutellaria baicalensis Georgi, Glycyrrhina uralensis Fisch.	kaempferol, quercetin, 7-Methoxy-2- methyl isoflavone, naringenin, formononetin	Inflammatory, immune	IL6, MAPK3, MAPK8, CASP3, IL10, IL1B, CXCL8, MAPK1, CCL2, IFNG, IL4	
formulas were obtained from	Network pharmacology	Formula A: Rhizoma Atractylodis, Flos Lonicerae, Pericarpium Citri Reticulatae, Rhizoma Phragmitis,	Astragalus polysaccharide, Mairin, Oxysanguinarine, Stigmasterol,	Antiviral	P13 K/Akt signal pathway (continued on next page)	

X. An et al.

#### Table 2 (continued)

TCM	Method	Composition	Active ingredients	Pharmacological effects	Related cytokines
the Hubei Province Diagnosis an	od	Folium Mori, Radix Astragali seu Hedysart; Formula B: Radix Astragali seu	Dammaradienyl acetate, Stigmasterol, Hederagenin		
Treatment		Hedysari, Rhizoma Atractylodis			
Protocol for		Macrocephalae, Radix			
COVID-19		Saposhnikoviae, Cyrtomium			
[163]		fortunei J. Sm., Flos Lonicerae, Eupatorium fortunei Turcz.,			
		Pericarpium Citri Reticulatae.			
Qingfei Paidu Decoction [1	Network [64] pharmacology	Ephedra equisetina Bge., Prunus armeniaca L., Gypsum Fibrosum,	3-O-Methylviolanone, Cianidanol, (+)-Epicatechin, ZINC13130930, (2S)-	Inflammation, antiviral, lipid	ACE2, CD147, JAK- STAT signal pathway
	k茲)	Glycyrrhiza uralensis Fisch., Cinnamomum cassia Presl.	dihydrobaicalein, naringenin, SR- 01,000,767,148, cyclo(L-Tyr-l-Phe),	metabolism	
7月小下以入 <del>75</del> 7/2 <b>1</b> (/ 1	<u>NAK)</u>	Notopterygium incisum Ting ex H.T. Chang, Alisma orientalis (Sam.)	(-)-taxifolin, Eriodyctiol (flavanone)		
		Junep., Polyporus umbeliatus (Pers.)Fries, Atractylodes			
		macrocephala Koidz., Poria cocos (Schw.)Wolf, Isatis indigotica Fort.,			
		Bupleurum chinense DC., Scutellaria baicalensis Georgi,			
		Pinellia ternata (Thunh.)Breit., Zingiber officinale Rosc., Aster			
		tataricus.L.f., Lonicera japonica			
		Thunb., Tussilago farfara L.,			
		Belamcanda chinensis (L.)DC.,			
		Asarum heterotropoides Fr.Schmidt			
		var.mandshuricum(Maxim.)Kitag.,			
		Dioscorea opposita Thunb., Citrus			
		aurantium' L., Citrus reticulata			
		Blanco, Pogostemon cablin			
		(Blanco) Benth.			

Abbreviation: NR: Not reported; TNF: Tumor Necrosis Factor; IL-1β: Interleukin -1β; IL-2: Interleukin -2; MAPK14: mitogen-activated protein kinase 14; HSP90AB1: Heat shock protein HSP 90-beta; VEGFA: Vascular endothelial growth factor A; IL-10: Interleukin -10; IL-6: Interleukin -6; VCAM-1: Vascular cell adhesion protein 1; IKKA: Inhibitor of nuclear factor kappa-B kinase subunit alpha; ELP1: Elongator complex protein 1; NFKBIA: NF-kappa-B inhibitor alpha; ESR1: Estrogen receptor; AR: Androgen receptor; PPARG; Peroxisome proliferator-activated receptor; GSK3B: Glycogen synthase kinase-3 beta; TLR: Toll-like receptor; ACE2: angiotensin converting enzyme 2; CCL-2: C-C motif chemokine 2; MCP-1: Monocyte chemoattractant protein 1; CXCL-10: C-X-C motif chemokine 10; IxBα: I-kappa-B-alpha; CASP3: Caspase-3; IFNG: Immune interferon; P13K: Phosphatidylinositol 3; JAK: Janus kinase; STAT: Signal transducer and activator of transcription.

## THE PHAMACOLOGIC EFFECTS OF TCM HERB FOMULA ARE:

- ANTI-VIRAL
- INFLAMMATION
- IMMUNE RESPONSE

### COVID-19

Potential targets of COVID-19 therapies by stage of infection

Moderate Asymptomatic/ Severe presymptomatic illness illness illness + SARS-CoV-2 test but O2 saturation <94%, Mild symptoms O₂ saturation ≥94% Stage/severity: lower respiratory respiratory rate >30/min; no symptoms (eg, fever, cough, taste/smell changes); tract disease lung infiltrates >50% no dyspnea

Mild

Disease pathogenesis:

Potential treatment: Viral replication

Inflammation

Antivirals

Antibody therapy

Decrease inflammation

Critical

illness

Respiratory failure,

shock, multi-organ

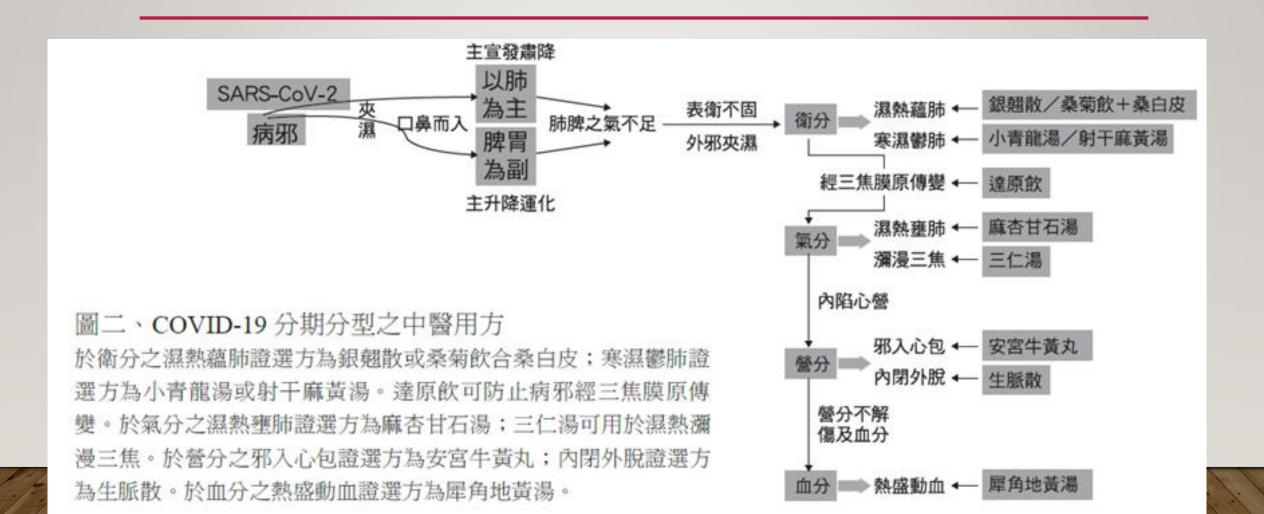
dysfunction/failure

COVID-19: coronavirus disease 2019; SARS CoV-2: severe acute respiratory syndrome coronavrus 2.

Reproduced from: Gandhi RT. The Multidimensional Challenge of Treating Coronavirus Disease 2019 (COVID-19): Remdesivir Is a Foot in the Door. Clin Infect Dis 2020; claa1132. By permission of Oxford University Press. Copyright @ 2020.

### 31 結合中西醫理論探討新冠肺炎的病程進展及治療展望

陳忠仁等;中醫藥研究論叢 (2020 /09)



#### > WHAT TCM TREATMENTS CAN DO IN TAIWAN?

3,	<sup>Z</sup> MILD (TO MODREATE)	MILD TO MODREATE	MILD TO MODREATE	severe	critical
	Peripheral skin Respiratory system- upper & lower	Gastro- instestinal system	Abdominal organs- Liver, spleen, pancreas	Loss of conscious	<ul><li>☐ Respiratory failure</li><li>☐ Shock,</li><li>☐ multi organs</li><li>dysfunction</li><li>Hypercoagulable</li><li>state</li></ul>
TCM IN TAIWAN CAN HELP	(清冠一號*), 川芎調散 銀翹散, 荊防敗毒散+葶藶子	藿香正氣散 理中湯	達原飲, 柴胡疏肝湯, 甘露消毒丹	安宮牛黃丸 牛黃清心丸 ACUPUNCTURE*	犀角地黄湯
OPD, WARD	<ol> <li>CHUAN XIONG         CHA TIAO SAN-</li> <li>YIN QIAO SAN-</li> <li>JING FANG BAI DU SAN-</li> <li>(NRICMI01)*</li> </ol>	5. HUO XIANG ZHENG QI SAN- (Abdominal fulless) 7. LI ZHONG TANG-(watery diarrhea)	DAYUAN YIN 6. CHAI HU SHU GAN TANG- 8. Gan lu xiao du dan-		

# COMMONTCM HERBAL PRESCRIPTION USED IN COVID-19

**RESPIRATORY TRACT** 

S/S

#### TCM HERBAL TREAT

COVID-19 PASSOIBLE TRANMSITTION WAY

•UPPER PART

MILD TO MODERATE

•LOWER PART

- SORE THROAT,
- COUGH
- CHILLNESS & FEVER
- GENERL
   WEAKNESS >
   MUSCLE
   SORENESS
  - ALVEOLI EDEMA

- ✓ <mark>銀翹散(YIN QIAO SAN)</mark>
- ▶順天清冠一號(NRICMI0I)
- ▶達原飲 (DAYUANYIN)

- **>-----**
- ▶+ 葶歴子(Ting li zi) , 魚腥草

### I. CHUAN XIONG CHATIAO SAN-

#### HEADACHE, FEVER



### GMP優良藥品

效 能: 祛風、止痛。
適應症:
月法用量: 《人一日服10.0g,15~8歲
及成人之2/3量,7~5歲服成 之1/2量,4~2歲服成人之 /3量,每日即用一点

中醫師處方使用之。

	效	成	分:每10.0g中含有
77	法風、止痛。	白	芷 Angelicae Dahuricae Radix 2 0g
	適應症:	甘	早 Glycyrrhizae Radix
	6正頭痛。	羌	Notopterygii Rhizoma et Radix 2 00
	下中國逐聯時 [475年] 建省	荊川	养 Schizonepetae Herba4.0g
	法用量:		号 Chuanxiong Rhizoma4.0g
	之人一日服10.0g, 15~8歲	防	辛 Asari Herba1.0g 風 Saposhnikoviae Radix1.5g
1	及成人之2/3量,7~5歲服成		17 Menthae Herba 8.00
ŀ	之1/2量,4~2歲服成人之	以_	上生栗製成浸膏400
	3量,每日服用三次,飯	(生	樂與浸膏比例 24.5: 4.0=6.13: L.OI
	足以溫開水送服之。本藥須	M	粉 Starch6.0g
1	中縣師處大庙田文		

### 2.YIN QIAO SAN-SORE THROAT, COUGH, CHILLNESS & FEVER



GMP優良藥品	
放 能: #涼透表,清熱解毒。	成分:每12公克中含有 連 题 Forsythiae Fructus
通應症: 溫病初起,發熱微惡	全銀花 Lonicerae Japonicae Flos
風寒,頭痛口渴,咳 炊咽痛。 服法用量:	淡竹葉 Lophatheri Herba
成人一次服4.0g, 15~8歲服成人之2/3量,7~5歲服成人	漢鱼鼓 Sojae Semen Praeparatum
21/2量,4~2歲服成人之 1/3量,每日服用三次,飯 以溫開水送服之。本藥	以上生藥製成浸膏
中醫師處方使用之。 10 No.: EG613003	液 約 Starch1.8g
Ext. Date: 2024 06 03	句 裝: 200g朔 膠 斯 裝

### 3. JING FANG BAI DU SAN- TX. GENERAL WEAKNESS,

MUSCLE SORENESS, FEVER



### GMP優良藥品

·	成分:每18.6g中含有	
<b>資汗解表、散風祛濕。</b>	荊 芥 Schizonepetae Herba	3.0g
を 1 日本 1 日	防 風 Saposhnikoviae Radix	3.0g
適應症:	羌 活 Notopterygii Rhizoma et Radix	3.0g
外風風寒濕邪、惡寒發熱	被 獨 活 Angelicae Pubescentis Radix	3.0g
,頭痛項強、肢體痠痛、		3.0g
	前 胡 Peucedani Radix	3.0g
思歷。	川 芎 Chuanxiong Rhizoma	3.0g
用法用量: 第二章 第二章 第二章	枳 殼 Citri Immaturus Fructus	3.0g
成人一次服6.2g, 15~8	8 桔 梗 Platycodonis Radix	3.0g
<b>岚服成人之2/3量,7~5歲</b>	TO THE	
	THE ACTIVITY OF THE REAL PROPERTY OF THE PROPE	1.5g
展成人之1/2量,4~2歲服	T T T T T T T T T T T T T T T T T T T	
成人之1/3量,每日服用		1.0g
三次, 飯後以溫開水送	关 以上生藥製成浸膏	9.5g
服之。本藥須由中醫師	而 (生藥與浸膏比例 35.5:9.5=3.74:1.0)	
處方使用之。	結晶性纖维素Microcrystalline Cellulose	5.0g
TO SEE THE SECOND PORT OF THE PROPERTY OF THE	澱 粉 Starch	4.1g
Lot No.: EG317902	包裝: 200g塑膠瓶裝	40
Exp. Date: 2023.06.04	U A. 2005至 1 1 1 1 A	

### 38 TING LI ZI



## GMP優良藥品 成分:每公克中含有 葶藶子(炒) Lepidii Semen Praeparata......4.0g 以上生藥製成浸膏......0.46g (生藥與浸膏比例 4.0:0.46=8.7:1.0) 結晶性纖維素Microcrystalline Cellulose..0.37g 羧甲基纖維素鈉...... 包裝:100g塑膠瓶裝 許可字號:衛署藥製字第057031號

39

# COVID-19 PASSOIBLE TRANMSITTION WAY

MILD TO MODERATE

#### GITRACT

- STOMACH, OMENTUM
- LOWER GITRACT

#### S/S

- ABDOMEN FULLNESS, NAUSEA, VOMITTING
- WATERY DIARRHEA
- CONSTIPATION

### **TCMTREAT**

- 達原飲 (DA YUAN YIN),
- 藿香正氣散 (HUO XIANG ZHENG QI SAN),
- 理中湯 (LI ZHONG TANG)

### 5. HUO XIANG ZHENG QI SAN-ABDOMEN FULLNESS, NAUSEA, VOMITTING, GI DISCOMFORT



GMP優良藥品	
效 能:	成分:每18公克中含有
解表化溼、理氣和中。	大腹皮 Arecae Pericarpium
適應症:	後 等 Poria
外感風寒、胃腸不適、	紫蘇葉 Perillae Folium
消化不良、吐瀉、食滯	株 皮 Citri Reticulatae Pericarpium
中暑、不服水土。 用 片用量:	台 水 Atractylodis Macrocephalae Rhizoma 2.0g
成人一次服6公克,15~8歲	半夏鶴 Pinelliae Rhizoma Fermentatum2.0g
服成人之2/3量,7~5歲服	及 計 早 Glycyrrhizae Preparata Radix
成人之1/2量, 4~2歲服成	# Zingiberis Recens Rhizoma3.0g
人之1/3量,每日服用三次,飯後以溫開水送服	大 & Jujubae Fructus 1.0g 以上生業製或浸膏 8.2g
え。本藥須由中醫師處方	(生華與淺香比例 30.0: 8.2= 3.7: 1.0)
使用之。	結晶性纖維素Microcrystalline Cellulose6.0g 股 給 Starch3.8g
Lot No.: EG651004	10日本記号:日本日本日本の地域をいない経済
Exp. Date: 2024.04.28	包 裝: 200g塑 膠 瓶 裝

### 6. CHAI HU SHU GAN TANG-

### INTERCOSTAL FULLNESS, PAINFUL

41



### GMP優良藥品 成分:每4.5g中含有 疏肝解鬱、行氣止痛。 陳 皮 Citri Reticulatae Pericarpium..4.0g 胡 Bupleuri Radix......4.0g 白 芍 Paconiae Alba Radix......3.0g 肝氣鬱結、脇肋疼痛、寒 枳 殼 Citri Immaturus Fructus.......3.0g 考 Chuanxiong Rhizoma......3.0g 附 Cyperi Rhizoma......3.0g 用法用量: 炙甘草 Glycyrrhizae Preparata Radix..1.0g 成人一次服1.5g, 15~8歲服 以上生藥製成浸膏......3.0g 成人之2/3量,7~5歲服成人 (生藥與浸膏比例 21.0: 3.0= 7.0: 1.0) 之1/2量,4~2歲服成人之 澱 粉 Starch......1.5g 1/3量,每日服用三次,飯 前以溫開水送服之。本藥 須由中醫師處方使用。

### 42 7. LI ZHONG TANG-WEAKER PULSE, COLD EXTREMITIES, WITH WATERY DIARRHEA



### GMP優良藥品

### 適應症:

四肢逆冷、自汗脈虚、不思飲食。

### 效能:

理脾健胃、溫中散寒。

### 用法用量:

成人一日服13.8公克,15~8歲服成人之2/3量,7~5歲服成人之1/2量、4~2歲服成人之1/3量,每日服用三次,飯後以溫開水送服之。本藥須由中醫師處方使用。

### 成分:每13.8公克中含有

白 术 Atractylodis Macrocephalae Rhizoma...6.0g 乾 蔓 Zingiberis Rhizoma......4.0g

甘草Glycyrrhizae Radix et Rhizoma.......6.0g

人 \$ Ginseng Radix et Rhizoma Rubra.......6.0g

以上生藥製成浸膏......6.9g

(生藥與浸膏比例22:6.9=3.19:1)

結晶性纖維素 Microcrystalline Cellulose......5.4g

澱 粉 Starch......1.5g

### 8. GAN LU XIAO DU DAN

FEVER, RED TONGUE, WHITE & YELLOWISH CREAMY TONGUE COATING ABDOMEN FULLNESS, RED URINE, CONSTIPATION,



### GMP優良藥品

	<b>处</b>
ı	過利溼、清熱解毒。
ı	通應 症:
ı	温時疫、發熱倦怠、胸悶腹
ı	、咽腫口渴、溺赤便閉。
ı	用法用量:
ı	《人一次服3.8g,15~8歲服 《人之2/3量,7~5歲服成人
ı	1/2量,4~2歲服成人之
ı	13量,每日服用三次,飯以温開水送服之。本藥
ı	由中醫師處方使用之。
	ot No.: EG746101
1	xp. Date: 2024.04.15

成分:每11.4g中含有	
滑 石 Talcum	6.0g
黄 芩 Scutellariae Radix	
茵陳蒿 Artemisiae Scopariae Herba	COST OF SECURITY AND PROPERTY AND ADDRESS.
廣 著 香 Pogostemonis Herba	1.6g
連 剱 Forsythiae Fructus	1.6g
石菖蒲 Acori Tatarinowii Rhizoma	
白豆蔻 Amomi Fructus Rotundus	1.6g
薄 荷 Menthae Herba	1.6g
木 通 Akebiae Caulis	2.0g
射 干 Belamcandae Rhizoma	1.6g
川貝母 Fritillariae Cirrhosae Bulbus	2.0g
以上生藥製成浸膏	STATE OF THE OWNER, WHEN THE PARTY OF THE PA
(生藥與浸膏比例 28.8:5.0=5.76	: 1.0)
結晶性纖維素Microcrystalline Cellulos	
澱 粉 Starch	.2.41g
羧甲基纖維素鈉	0.09g
包裝: 200g塑膠瓶裝	

44

COVID-19 PASSOIBLE TRANMSITTION WAY

SEVERE OR CRITICAL CASES

BRAIN

- S/S
- TOUNGE
- PULSE

S/S

CONSCIOUS DISTURBANCE

SKIN RED DOTS

TCM HERBAL TREAT

- ACUPUNCTURE
- 安宮牛黃丸

Sept. 11, 2021 Covid - 19 and the Traditional Systems of Medicine

## NIU HUANG QINXIN WAN (安宮牛黃丸)



### 【適應症】鎮靜養神、憂鬱失眠。

#### 【用法用量】

成人一次服5粒·15歳~8歲服成人之2/3量·7~5歲服人之1/2量·4~2歲服成人之1/3量·每日服用3次·飯以溫開水送服之。

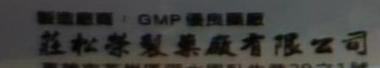
※本藥須由中醫師處方使用之。

### 【包裝型態】105粒鹽膠瓶紙盒裝

【成		分】每粒50	10mg 中含有	
4	養	7.3 mg	白藍	4.4 mg
*	*	8.8 mg	甘草	29.2 mg
B	ptt	8.8 mg	防風	8.8 mg
111	萼	7.3 mg	桔 梗	7.3 mg
598	美	14.6 mg	杏仁	7.3 mg
[50]	15	10.2 mg	麥門多	8.8 mg
26	28	8.8 mg	白芍	8.8 mg
柴	苗用	7.3 mg	肉桂	10.2 mg
茯	*	7.3 mg	乾 薑	4.4 mg
人	-	14.6 mg	大 棗	70.0 mg
RE	100	5.8 mg	蜂蜜	240.0 mg

#### 【許可字號】衞部襲製字第060031號

[製造批號] PP203001 Batch No: 2022.03.06



Exp Date :



# COVID HYPERCOAGULABLE STATE

# SEVERE COVID-19, FULMINANT ACTIVATION OF COAGULATION AND CONSUMPTION OF CLOTTING FACTORS OCCUR

Inflamed lung tissues and pulmonary endothelial cells may result in microthrombi formation.



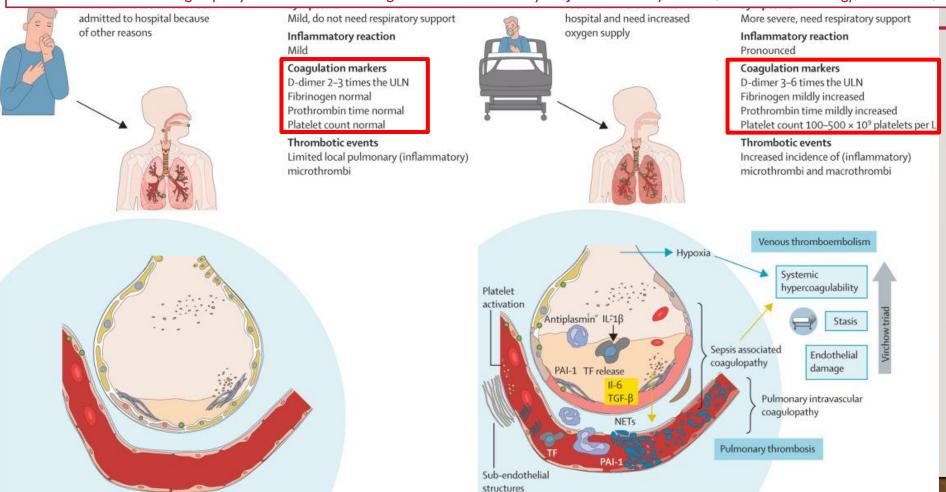
High incidence of thrombotic complications



- Deep venous thrombosis
- > Pulmonary embolism
- > Thrombotic arterial complications (eg, limb ischemia, ischemic stroke, myocardial infarction) in critically ill patients.

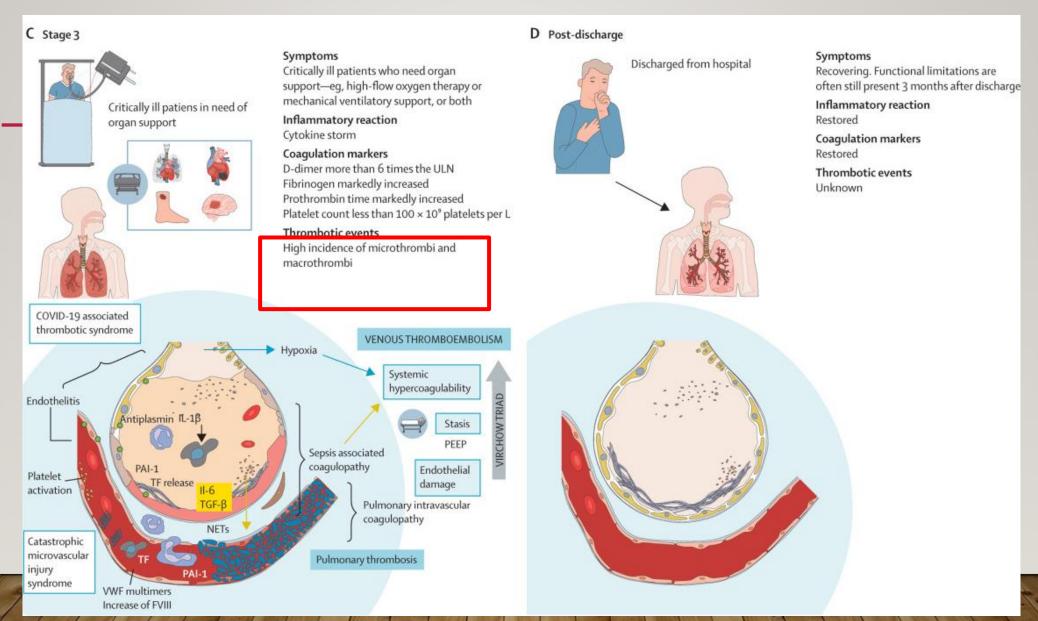
# IMMUNOPATHOGENESIS OF COVID HYPERCOAGULABLE STATE

COVID-19-associated coagulopathy and antithrombotic agents—lessons after 1 year, Jenneke Leentjens et al, Lancet Haematology, VOLUME 8, ISSUE 7, E524-E533, JULY 01, 2021

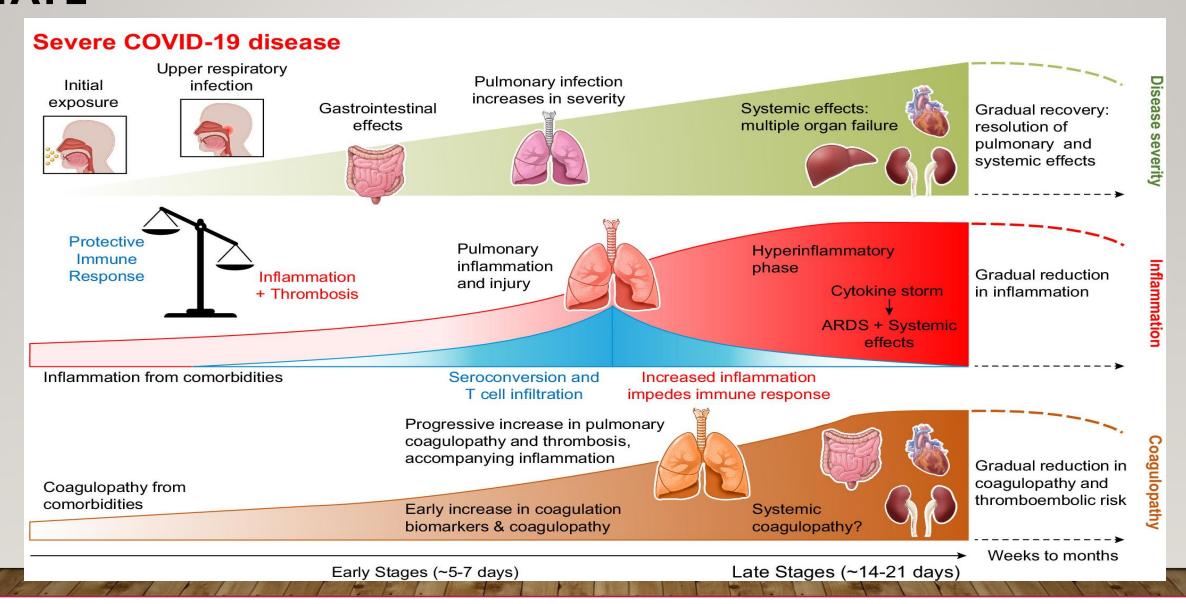


IMMUNOPATHOGENESIS OF COVID HYPERCOAGULABLE

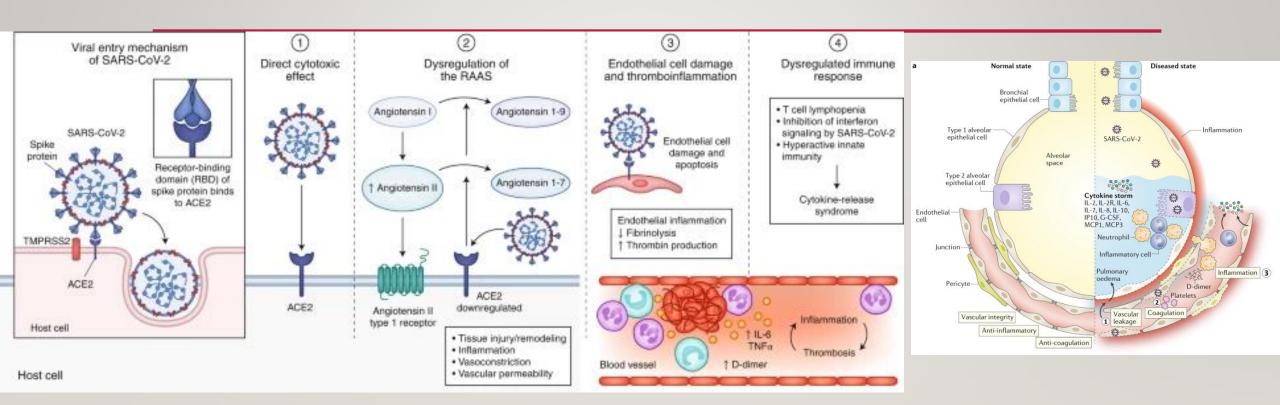
STATE



# IMMUNOPATHOGENESIS OF COVID HYPERCOAGULABLE STATE



# SEVERE COVID-19, FULMINANT ACTIVATION OF COAGULATION AND CONSUMPTION OF CLOTTING FACTORS OCCUR



Extrapulmonary manifestations of COVID-19

Nature Medicine volume 26, pages1017–1032 (2020)

COVID-19: the vasculature unleashed

Nature Reviews Immunology volume 20, pages389–391 (2020)

COVID-19 PASSOIBLE TRANMSITTION WAY

**SEVERE CASES** 

- DIC
- BLEEDING
- SEPSIS

### S/S

- HIGH FEVER,
- CONSCIOUS LOSS
- STOKE
- AMI
- DEEP VEIN THROMBOSIS

### TCMTREAT

- 犀角地黃湯
- TCM Anticoagulative agents

# OTHER CORRELATIVE DISORDERS

#### RECOVERY STAGE: ORGANS FUNCTION DETECTS

- NAIL BED O2 SATURATION DETECTION & HIGH FLOW O2 SUPPLY SOB IN SEVERE CASES - LOWER RESPIRATORY TRACK PROBLEM
- MULTI-ORGANS FAILURE (ELDER)
- WILL INDUCE KIDNEY DAMAGE
- AMI, BRAIN INFARCT & HEMORRHAGE (BLOOD CLOT INDUCED)
- CNS PROBLEM: SEIZURE, (LOSS THE SENSE OF SMELL AND TATST)

FACIAL PALSY. CONSCIOUS LOSS

Neurological Sciences (2021) 42:475-478 https://doi.org/10.1007/s10072-020-04980-8

COVID-19



Acupuncture helps to regain the consciousness of a COVID-19 patient complicated with hypoxic-ischemic encephalopathy: a case report

Bo-Yan Yeh 1 - Yen-Lung Chen 1,2 - Shih-An Chang 1 - Chung-Shu Lee 3 - Yu-Sheng Chen 1,2 @

# PART 3 TCM PREVENTION

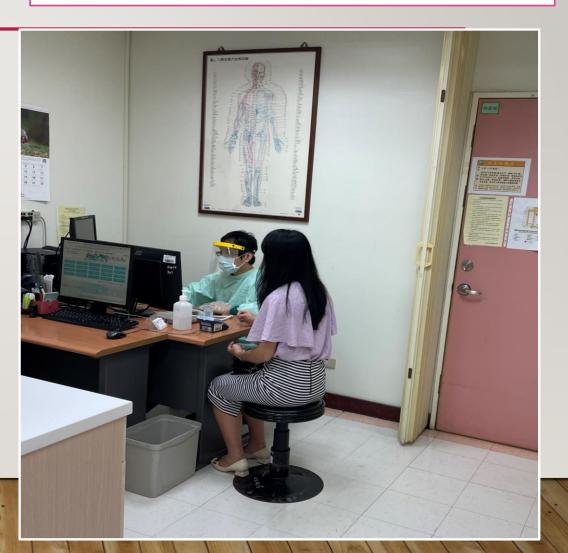
# 55 STRENGTHEN YOUR BODY

- I.SUN, WATER, AIR, FOOD
- 2. EXERCISE, TAICHI, YOGA
- 3.TCM HERBALTEA
- 4.TEN MATERIAL SOUP (WITH RICE WINE)
- 5.TCM PRESCRIPTION POWDER
- 6. ACUPUNCTURE, MOXA IN SPECIFIC POINTS

# 56 PROTECT YOURSELF WELL

# CLINICAL OBSERVATION IN OPD OF CMUH TAIPEI BRANCH

- WASH YOUR HAND CLEAN
- ALOCHOL SPREAD
- FACIAL MASK, PROTECT GLASSES
- AVOID PEOPLE GATHERING



57

# TCM PREVENTION AND STRENGHTEN YOU BODY











### TCM HERBTOTREAT SOME S/S OF COVID-19



金桔薄淡甘荊淡牛蘆銀 竹 豆蒡	Fructus Forsythiae Flos Lonicerae Radix Platycodonis Herba Menthae Herba Lophatheri Radix Glycyrrhizae Herba Schizonepetae Semen Sojae preparatum Fructus Arctii Rhizoma Phragmitis  要製成浸膏 the above herbs yi	5.0g 3.0g 3.0g 2.0g 2.5g 2.5g 2.5g 3.0g 2.0g	
an amo (生藥與 澱 粉	unt of dry extract5 浸膏比例 30.0 : 5.3 = 5.7 : 1) Corn Starch4	.3g	

Batch No.

### 59 CURRY FOOD





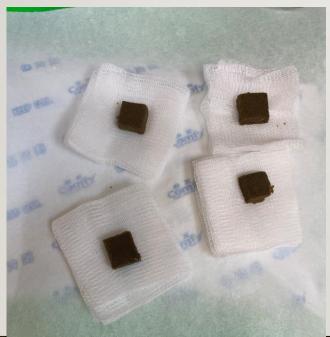
# TCM HERBAL FOOD (TEN MATERIAL SOUP)

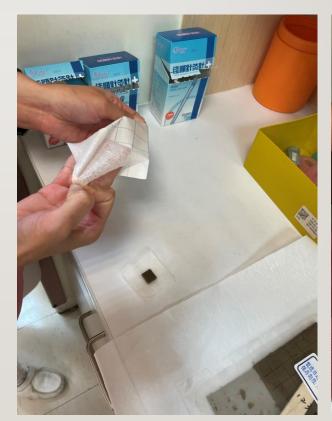




# TCM MOXA SPOTS ON ACUPOINTS (PREPARE PROCEDURE)









62

# TCM MOXA SPOTS ON ACUPOINTS TO TREAT SOME S/S OF COVID-19





## DRINK GREEN TEA TO AVOID COVID-19

### PU'ER TEA



### **GREEN TEA**



# 64 DISCUSSION

- I. COVID-19 Vaccine will have the protect ability, and the mortality rate will be decreased. BUT, INFECTION IS STILL HAPPENED.
- 2. Since the COVID-19 virus is everchanging, the S/S will changed too. We need easier way to apply TCM Methods to treat the patients.
- 3. TCM CLINICAL EXPERIENCES & SCIENTIFIC STUDIES ARE **EQUALLY IMPORTANT TO TREAT COVID-19.**

65

# CONCLUSION

- I.MILD CASES: CALL LOCALTCM DOCTORS VIA INTERNET DETECT THE PATIENTS' S/S, AND GIVE THEM TCM HERBS.
- 2. MILD & MODERATE CASES: TCM FOMULA PACK & ACUPUNCTURE IN MEDICAL CENTERS.
- 3. SEVERE & CRITICAL CASES: COMBINED BOTH WESTERN & TCM TREATMENT