Guangdong Regional Report 2020-2022

2023 CGCM Meeting
Chengdu, China
August 22, 2023

1

Member Institutes

Member Institutes

At present, Guangdong Branch of CGCM include 8 member institutes:

Guangzhou University of Chinese Medicine： One of the earliest 4 Chinese medicine colleges in China.

Sun Yat-Sen University: A key university directly of the Ministry of Education, “Double First-Class” university.

College of Pharmacy, Jinan University: One of the top pharmacy colleges in China. "Double First-Class"disciplines.

Guangdong Provincial Hospital of Chinese Medicine(GDHCM)： The largest both in scale and services amount in China.

Member Institutes

At present, Guangdong Branch of CGCM include 8 member institutes:

Southern Medical University: One of the top universities in China which is the earliest hospital of western medicine with department TCM.

Guangdong Pharmaceutical University: One of the top three pharmaceutical universities in China.

South China Botanical Garden, Chinese Academy of Sciences : The largest botanical garden in China and one of the protection organization of rare plant resource

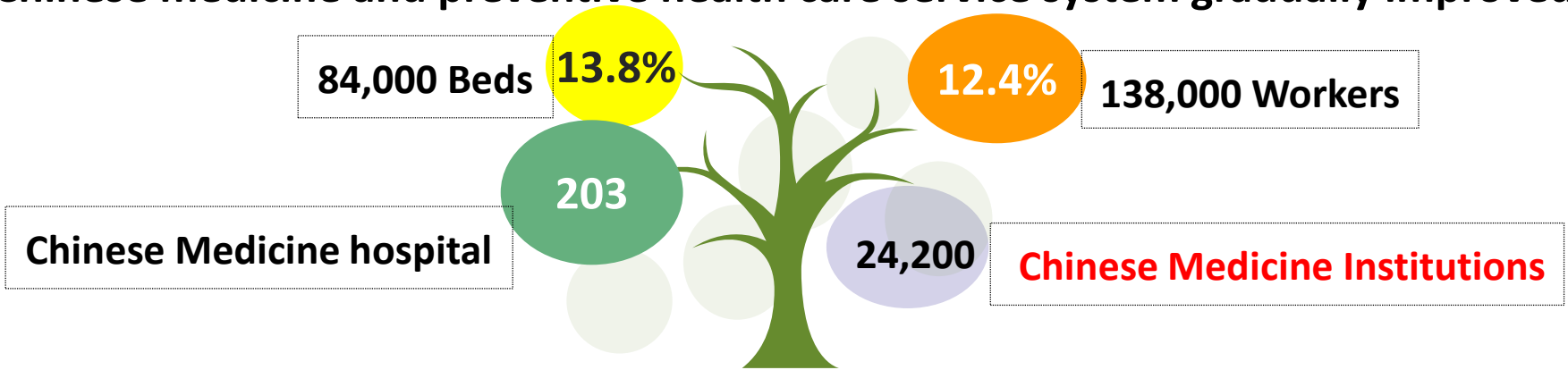
National Engineering Research Center for Modernization of TCM: One of the earliest 4 engineering centers of Chinese herbal medicine in China.

2

Review of the Chinese Medicine development in Guangdong province

Medical Care by the end of 2022

Chinese medicine and preventive health care service system gradually improved.

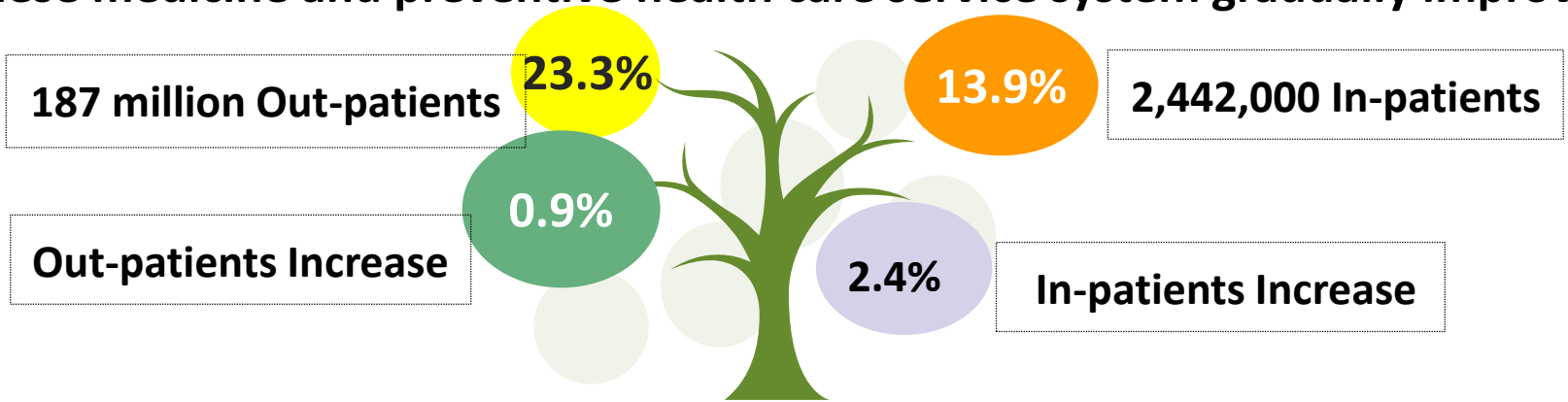


Chinese Medicine resources in Guangdong continue to grow, the efficiency of service utilization is improved of Chinese Medicine service.

By the end of 2022, the total number of CM medical institutions in the province reached 24,200 (an increase of 535 over the previous year), including 203 CM hospitals, 309 CM outpatient departments, 5,609 CM clinics, and 18,063 village clinics (mainly CM).

Medical Care by the end of 2022

Chinese medicine and preventive health care service system gradually improved.



In 2022, medical institutions in the Guangdong provided 187 million outpatient services of Chinese Medicine, accounting for 23.3% of the total in the province, including 62.679 million in Chinese Medicine hospitals, 20.373 million in Chinese Medicine outpatient departments (institutes), 60.565 million in Chinese Medicine village clinics, and 43.617 million in other institutions.

Medical Care

Guangzhou University of Chinese Medicine
Guangdong Provincial Hospital of Chinese Medicine

The affiliated hospitals of Guangzhou University of CM is at the top of comprehensive medical services. The second affiliated hospital "Guangdong Provincial Hospital of Chinese Medicine (GDHCM)" is the one with the largest service within China, with 6.44 million out-patient services and 159,000 in-patients services in 2022.





Medical Care

Competitiveness in Top 100 Hospitals of Chinese Medicine

- Published by HongKong Ailib Hospital Management Research Center
- both the first and the second affiliated hospitals of Guangzhou University of CM have ranked in the top ten.
- Guangdong Provincial Hospital of CM (the second affiliated hospital of Guangzhou University of CM) have ranked in the first in successive ten years.

名次	医院	得分	省（区、市）	城市	级别	信息化评级 (EMR/互联互通/智慧服务)
1	广东省中医院	876.83	广东	广州	三甲	五级/五级乙等/-
2	江苏省中医院	865.29	江苏	南京	三甲	五级/四级甲等/-
3	上海中医药大学附属龙华医院	849.39	上海	上海	三甲	-/五级乙等/-
4	中国中医科学院广安门医院	843.75	北京	北京	三甲	五级/五级乙等/-
5	中国中医科学院西苑医院	828.95	北京	北京	三甲	-/四级甲等/-
6	上海中医药大学附属曙光医院	820.49	上海	上海	三甲	-/四级甲等/-
7	北京中医药大学东直门医院	808.00	北京	北京	三甲	-/四级甲等/-
8	广州中医药大学第一附属医院	798.51	广东	广州	三甲	-/五级乙等/-
9	天津中医药大学第一附属医院	789.15	天津	天津	三甲	
10	辽宁中医药大学附属医院	781.37	辽宁	沈阳	三甲	

Talent Team

Chinese Medicine talent team is growing

- Academician of Chinese Academy of Engineering
  Xinsheng Yao，(new) Liang Liu
- National Masters of Chinese Medicine
  Tietao Deng，Guowei Xuan，Daihan Zhou，(new) Yi Lin
- National Famous Doctors of Chinese Medicine
  Maocai Liu，Jianxing Qiu，Huiqing Ouyang
  (new) Zhongde Zhang，Songping Luo，Baotian Chen，Zhiping Lyu

Liang Liu

Yi Lin

Zhongde Zhang

Songping Luo

Baotian Chen

Zhiping Lyu

Talent Team

Chinese medicine talent team has expand steadily.

- **By the end of 2022, there were 57,000 CM practicing (include assistant) physicians in Guangdong Province,**
- **21.2% increase over 2019;**

Education

- 7 National Key and Cultivation Disciplines
- 41 Key Clinical Disciplines of State Administration of Traditional Chinese Medicine
- 19 High-level Key Clinical Disciplines of State Administration of Traditional Chinese Medicine in 2023
- “Double First-Class” university and disciplines of the Ministry of Education

  Sun Yat-Sen University

  Jinan University

  Guangzhou University of Chinese Medicine

Education

- Clinical Medicine discipline in both Guangzhou University of CM and Southern Medical University have ranked into ESI World Top 1%

- SUSY
- 20 disciplines into the ESI of the front 1% Global Rank , 9 rank the ESI of the front 0.1% .

- Jinan University
- 17 disciplines ranked into ESI Global Top 1% in the , 9 ranked into ESI Global Top 0.5%.

Industry

The important distributing centers of Chinese Medicine

- Guangzhou qingping Chinese medicinal materials professional market
- Pu-ning Chinese medicinal materials professional market

MCMP
华南现代中医药城

LuoFu Medicine Valley

GIMP
广州国际医药港
GUANGZHOU INTERNATIONAL MEDICINE PORT

- Guangzhou international medicine port
- The Loufu medicine valley
- South China modern Chinese medicine Park

Scientific Research

The inheritance and innovation progress

2 National Awards

- **1 National Science and Technology Progress Second Award**

  "Theoretical Innovation and Clinical Application of Acupuncture in the Treatment of Ischemic Stroke" (Guangzhou University of Chinese Medicine)

- **1 First Prize for Scientific Research of the Higher Academy of the Ministry of Education**

  Key Technologies and Applications of Ancient Method Processing, Inheritance and Innovation" (National Engineering Research Center for Modernization of TCM)

Scientific Research

The inheritance and innovation progress is remarkable

Chinese Medicine Award for recent 4 years

- **8 first prizes of Guangdong Science and Technology Award**

Guangzhou University of Chinese Medicine (2)

Jinan University,

Guangdong Provincial Hospital of Chinese Medicine (2)

The First Affiliated Hospital of Guangzhou University of Chinese Medicine

Guangzhou Baiyunshan Zhongyi Pharmaceutical Co. Ltd

Guangdong Yifang Pharmaceutical Co. Ltd

High-level Scientific Research Base

- **State Key Laboratory of Dampness Syndrome of Chinese Medicine (GDHCM, 2021)**

In 2021, it was approved to establish the only state key laboratory of Chinese medicine in China

- **South China National Botanical Garden (South China Botanical Garden, 2022)**

In 2022, established with the approval of the State Council, it is the second national botanical garden in China

High-level Scientific Research Base

State Key Laboratory of Traditional Chinese Medicine Syndrome (GDHCM, 2023)

In 2023, it was approved to be established, the first batch of national key laboratories of Chinese medicine in China

High-level Scientific Research Base

- **State Clinical Medical Research Center**
  (Southern Medical University)

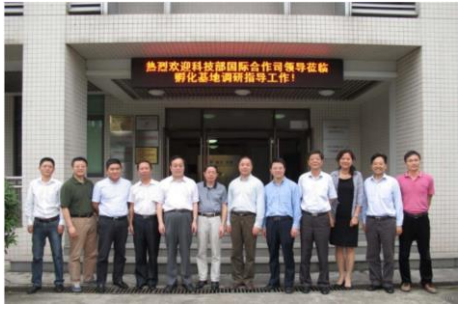
- **2 State Chinese Medicine Clinical Research Center**
  (Guangzhou University of CM, GDHCM)

- **2 National Heritage and Innovation Center**
  (Guangzhou University of CM, GDHCM)

- **National Engineering Research Center for Modernization of TCM**
  (Livzon Pharmaceutical Group Inc., Guangzhou University of CM)

High-level Scientific Research Base

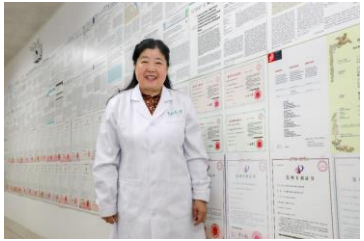
- National Incubator for Science and Technology Enterprises
  (Guangdong Pharmaceutical University)
- National innovation platform for the integration of industry and education in medical research
  (Guangzhou University of Chinese Medicine)
- National "Flagship" Cooperation Hospital of Chinese and Western Medicine
  (Southern Medical University)



High-level Scientific Research Base

- **Guangdong-Hong Kong-Macao Joint Laboratory of Traditional Chinese Medicine and Immune Disease Research (GDHCM)**

- **Guangdong Engineering and Technology Research Center for Quality and Efficacy Re-evaluation of Post-marketed TCM (SYSU)**



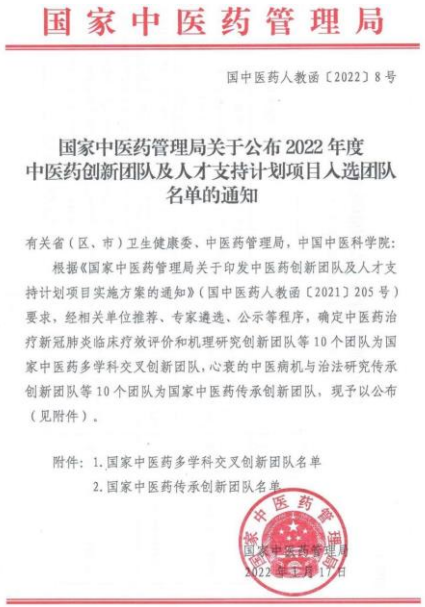
Scientific Research Institute / Lab

Phase I Clinical Research Center complied with FDA standard in GDHCM

The first biological resource center in Chinese medicine system with CNAS Certify in GDHCM

Landmark Achievements

- **National Multidisciplinary Innovation Teams of Chinese Medicine**
  (Epidemic Diseases and Covid-19) (GDHCM)
  Established in 2022
- **National Inheritance and Innovation Teams of Chinese Medicine**
  (Heart Failure, Autoimmune Diseases)
  (Guangzhou University of CM, GDHCM)
  Established in 2022



国家中医药管理局

国中医药人教函〔2022〕8号

国家中医药管理局关于公布2022年度中医药创新团队及人才支持计划项目入选团队名单的通知

有关省（区、市）卫生健康委、中医药管理局，中国中医科学院：

根据《国家中医药管理局关于印发中医药创新团队及人才支持计划项目实施方案的通知》（国中医药人教函〔2021〕205号）要求，经相关单位推荐、专家遴选、公示等程序，确定中医药治疗新冠肺炎临床疗效评价和机理研究创新团队等10个团队为国家中医药多学科交叉创新团队，心衰的中医病机与治法研究传承创新团队等10个团队为国家中医药传承创新团队，现予以公布（见附件）。

附件：1. 国家中医药多学科交叉创新团队名单
2. 国家中医药传承创新团队名单

国家中医药管理局
2022年11月17日

Landmark Achievements
GDHCM

- **Since 2020, we have published**
  - **18 textbooks and 145 academic monographs.**
  - **4 National Standards and 7 Local Standards**
  - **4 Clinical Guidelines**
  - **3 ISO international information standards**
  - **1 ISO international standard**
    - **"Chinese Medicine-*Sinomenium acutum* stem"**

Landmark Achievements
GDHCM

- **Since 2020, we have obtained**
  - **47 invention patents and 95 model patents**
  - **12 software copyrights**
  - **14 research achievements were transformed with a cumulative transformation of 166 million yuan**

"Fuzheng Jiedu Granules" achieved the transformation of 100 million yuan

"Jian'er Jiedu Granules" achieved the transformation of 40 million yuan

张忠德创立的扶正解毒方（FZJD）和柴胡救肺方（CHJF）在治疗新冠重症方面颇有疗效
Fuzheng Jiedu (FZJD) and Chai-Hu-Jiu-Fei (CHJF) recipes, formulated by Prof. Zhang, exerted great therapeutic effects on severe COVID-19.

- FZJD专利号（Patent）：ZL 2020 1 0224547.5
- 阳气虚衰、疫毒侵肺证的重症患者(Severe patients with the syndromes of Yang Qi deficiency and SARS-CoV-2 invading lung)

扶正解毒方(Fuzheng Jiedu recipe)

制附子
Radix Aconiti Lateralis Preparata

干姜
Rhizoma Zingiberis

炙甘草
Radix et Rhizoma Glycyrrhizae Preparata

金银花
Flos Lonicera

皂角刺
Spina Gleditsiae

五爪龙
Radix Ficus Hirta

广藿香
Herba Pogostemonis

陈皮
Pericarpium Citri Reticulatae

柴胡救肺方(Chaihu Jiufei recipe)

柴胡
Radix Bupleuri

黄芩
Radix Scutellaria

法半夏
Rhizoma Pinelliae Praeparatum

生姜
Rhizoma Zingiberis Recens

大枣
Ziziphus jujuba Mill

枳实
Fructus Aurantii Immaturus

大黄
Radix et Rhizoma Rhei

桃仁
Semen Persicae

白芍
Radix Paeoniae Alba

一项临床研究来评估FZJD和CHJF颗粒治疗COVID-19重症的疗效
We conducted a clinical study to assess the therapeutic effects of FZJD and CHJF granules on severe COVID-19 patients.

- 研究类型：单中心回顾性研究（n=477）
- Clinical research type: single center and retrospective study (n=477)
- 研究对象：2020.1.15~2020.3.30在武汉诊治的重症COVID-19患者
- Objects: severe COVID-19 patients from Wuhan in January 15, 2020 to March 30, 2020
- 研究分组：常规治疗/常规治疗加CHM颗粒（1/1）
- Groups: Treated with usual care plus CHM granules / only usual care (1:1)
- 评价指标：倾向评分匹配
- Assessment: propensity score matching
- 结局：28 d临床症状改善
- Outcome: 28-day clinical improvement

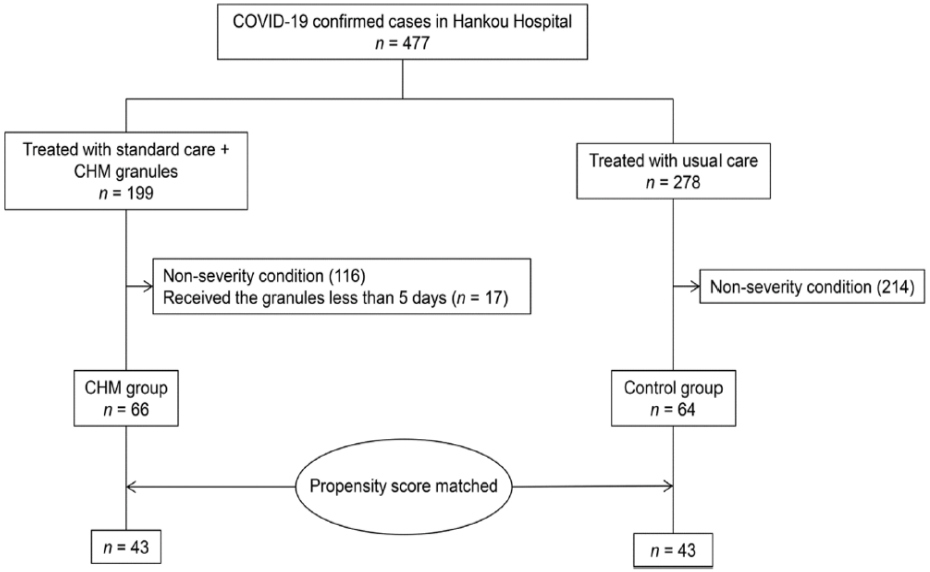


Fig. 1. Study flow chart.

注：CHM达标FZJD和CHJF颗粒（ Note: CHM, including FZJD and CHJF granules）

Wang et al. Phytomedicine, 2021

FZJD显著降低新冠重症死亡率（21% vs 5%）
FZJD significantly decreased the mortality rate of severe COVID-19 patients and the duration of fever.

Secondary outcomes of the groups.

Variables	Total		Control group		CHM group		*p*
Mortality rate on Day 28	*N*	No. (%)	*N*	No. (%)	*N*	No. (%)	
Survival	86	75 (87%)	43	34 (79%)	43	41(95%)	0.049
Death	86	11 (13%)	43	9 (21%)	43	2 (5%)	
Duration of main symptoms (days)	*N*	Median (IQR)	*N*	Median (IQR)	*N*	Median (IQR)	
Duration of fever	29	5 (3.5–7.5)	14	7 (5–9.3)	15	4 (2–5)	0.002
Duration of cough	76	18 (13.9–22.1)	38	21 (13.0–29.0)	38	16 (11.6–20.4)	0.441
Duration of dyspnea	76	20 (15.4–24.5)	36	20 (13.7–26.3)	40	19 (12.6–25.4)	0.793
Lung lesion ratio from CT images	*N*	Percentage	*N*	Percentage	*N*	Percentage	
Before treatment	55	30 ± 18	29	26 ± 16	26	35 ± 19	0.081
After treatment	55	29 ± 19	29	28 ± 18	26	29 ± 21	0.832
Difference	55	1 ± 18	29	2 ± 13	26	5 ± 22	0.267

CHM: Chinese herbal medicine.

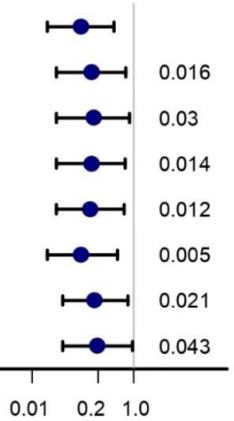
Wang et al. Phytomedicine, 2021

扶正解毒方（FZJD）降低新冠重症转化率达84%
Fu-Zheng-Jie-Du recipe (FZJD) significantly decreased the risk of disease deterioration in high-risk patients, reaching 84%.

A retrospective cohort study

- P: High-risk patients with mild to moderate COVID-19
- I: Fuzheng Jiedu (FZJD) group: FZJD+usual care
- C: No FZJD group: usual care.
- O: Outcome: the proportion of progression to severe COVID.

Analysis	Progression to severe disease(%)	OR(95%CI)	P value
No. of events/no. of high−risk patients (%)			
FZJD group	2/70 (2.86)		
No FZJD group	29/122 (23.77)		
Crude analysis−OR (95CI)	0.09 (0.02~0.41)		
Model 1 Multivariable analysis−OR (95CI)[a]	0.15 (0.03~0.7)		0.016
Model 2 Multivariable analysis−OR (95CI)[b]	0.16 (0.03~0.83)		0.03
Adjusted for propensity score[c]	0.15 (0.03~0.68)		0.014
With matching[d]	0.14 (0.03~0.65)		0.012
With IPW[e]	0.09 (0.02~0.48)		0.005
With SMRW[e]	0.17 (0.04~0.77)		0.021
With PA[e]	0.19 (0.04~0.95)		0.043



Associations between FZJD use and disease progression in the crude analysis, multivariable analysis, and propensity-score analyses

Unpublished data

COVID-19患者康复后6个月，以慢性炎症为特征的心血管疾病发生率显著增加，尤其是大于65岁的老年患者

The incidence of cardiovascular disorders featured by chronic inflammation increased obviously at 6-month after recovery from COVID-19, especially in elder (≧ 65 years old)

Table 3. Summary of Findings for new diagnoses of chronic conditions after SARS-CoV-2 infection.

Outcome	Subgroup Number of Studies	Relative findings HR (95% CI)	Conclusion Certainty for relative findings	Excess cases per 1000 people over 6 monthss (95% CI)
Cardiovascular disorders				
1. Any cardiovascular disorder	Inpatients, 18-64 y 1 study	4.30 (1.93 to 9.57)*	Small-to-moderate increase Low[a,b]	11.87 (3.35 to 30.82)
	Inpatients, ≥65 y 1 study	2.90 (2.26 to 3.72)	Large increase Low[a,b]	45.79 (30.36 to 65.55)
	Outpatients/mixed, <18y 2 studies	1.16 (1.12 to 1.20)	Little-to-no difference Low[b,c,1]	NE
	Outpatients/mixed, 18-64 y 4 studies	1.62 (1.21 to 2.17)	Small-to-moderate increase Moderate[d]	1.29 (0.44 to 2.43)
	Outpatients/mixed, ≥65 y 3 studies	1.82 (1.57 to 2.13)	Small-to-moderate increase High	12.41 (8.62 to 17.1)
2. Acute coronary disease	Outpatients/mixed, <18y 1 study	3.32 (0.42 to 26.23)	Very Low[b,D]	NE
	Outpatients/mixed, 18-64 y 4 studies	1.54 (1.16 to 2.06)	Small-to-moderate increase Moderate[d]	0.53 (0.16 to 1.04)
	Outpatients/mixed, ≥65 y 3 studies	1.79 (1.52 to 2.10)	Small-to-moderate increase High	6.23 (4.1 to 8.67)
3. Arrhythmias/ dysrhythmias	Outpatients/mixed, <18y 2 studies	1.21 (1.02 to 1.44)	Little-to-no difference Moderate[d]	NE
	Outpatients/mixed, 18-64 y 4 studies	1.69 (1.46 to 1.96)	Small-to-moderate increase Moderate[b]	3.88 (2.59 to 5.4)
	Outpatients/mixed, ≥65 y 3 studies	1.83 (1.65 to 2.02)	Small-to-moderate increase High	12.56 (9.84 to 15.43)
4. Cardiomyopathy	Outpatients/mixed, 18-64 y 2 studies	2.81 (2.31 to 3.42)	Large increase High	1.26 (0.91 to 1.69)
	Outpatients/mixed, ≥65 y 2 studies	1.90 (1.16 to 3.13)	Small-to-moderate increase Moderate[d]	6.19 (1.1 to 14.65)
5. Heart failure	Outpatients/mixed, <18y 1 study	0.56 (0.08 to 3.92)	Very Low[b,D]	NE
	Outpatients/mixed, 18-64 y 3 studies	2.07 (1.71 to 2.52)*	Small-to-moderate increase High	0.92 (0.61 to 1.3)
	Outpatients/mixed, ≥65 y 2 studies	2.01 (1.77 to 2.27)*	Small-to-moderate increase High	12.77 (9.73 to 16.05)

Gaudet et al. medRxiv. 2023

SARS-CoV-2 Delta变异株感染的COVID-19或重症患者中伴随心血管疾病者占比最大
Cardiovascular diseases patients accounted for a largest proportion of Delta variant infected or severe COVID-19.

Delta 变异株感染的 COVID-19 的基础疾病特征（%）

The characteristics of basic diseases in Delta variant infected COVID-19 patients

Items	Total（n=166）	Asymptomatic infection（n=5）	Non-severe（n=123）	Severe（n=38）	χ^2	*P*
Hypertension	32(19.3)	0(0)	16(13.0)	16(42.1)	15.434	<0.001
Diabetes	13(7.8)	0(0)	5(4.1)	8(21.1)	--	0.003*
Chronic cardiovascular diseases	8(4.8)	0(0)	3(2.4)	5(13.2)	--	0.019*
Chronic lung diseases	11(6.6)	1(20.0)	5(4.1)	5(13.2)	--	0.057*
Chronic kidney diseases	3(1.8)	0(0)	1(0.8)	2(5.3)	--	0.139*
Chronic liver diseases	1(0.6)	0(0)	1(0.8)	0(0)	--	0.764*
Nervous system diseases and sequelae	5(3.0)	0(0)	2(1.6)	3(7.9)	--	0.086*
Malignant tumors	3(1.8)	0(0)	1(0.8)	2(5.3)	--	0.139*

COVID-19 重症病例的基础疾病特征（%）

The characteristics of basic diseases in severe COVID-19 patients (%)

Items	Total（n=101）	28 d-survival（n=83）	28 d-death（n=18）	χ^2	*P*
Hypertension	57(56.4)	45(54.2)	12(66.7)	0.933	0.334
Diabetes	36(35.6)	25(24.8)	11(61.1)	6.916	0.013
Chronic cardiovascular diseases	19(18.8)	15(18.1)	4(22.2)	0.167	0.683
Cerebrovascular diseases	17(16.8)	10(9.9)	7(38.9)	5.816	0.0.16
Chronic lung diseases	17(16.8)	16 (19.3)	1(5.6)	1.130	0.288
Chronic kidney diseases	6(5.9)	3(3.6)	3(16.7)	2.476	0.116
Chronic liver diseases	2(2.0)	2(2.4)	0(0)	--	1.000*
Malignant tumors	7(6.9)	6(7.2)	1(5.6)	0.000	1.000

Unpublished data

COVID-19重症患者中病毒性肺炎及慢性炎症疾病高发的老年人群占比最大
The elder (≧ 65 years old) patients accounted for a largest proportion of severeCOVID-19, in which the incidence rate of viral pneumonia and chronic inflammation diseases is high.

两组人口统计学资料及疾病基线特征比较（n=115）

The compare of Demographic data and baseline disease characteristics between two groups

Items	Total （n=115）	Exposed to FZJD （n=57）	Non-exposed to FZJD （n=58）	*P*
Gender （n, %）				
Male	85 (73.9)	40 (70.2)	45 (77.6)	0.366
Female	30 (26.1)	17 (29.8)	13 (22.4)	
Age＞65 岁 （n, %）	95 （82.6）	48 （84.2）	47 （81.0）	0.653
Chronic basic diseases （n, %）	97(87.4)	48(84.2)	49 (90.7)	0.300
Hypertension	65(58.6)	36 (63.2)	29 (53.7)	0.312
Diabetes	39 (35.1)	20 (35.1)	19 (35.2)	0.991
Coronary heart diseases	21 (18.9)	12 (21.1)	9 (16.7)	0.555
Cerebrovascular diseases	20 (18.0)	10 (17.5)	10 (18.5)	0.894
Chronic respiratory diseases	19 (17.1)	9 (15.8)	10 (18.5)	0.703
COPD	12 (10.8)	5 (8.8)	7 (13.0)	0.477
Bronchial asthma	4 (3.6)	3 (5.3)	1 (1.9)	0.335
Bronchiectasis	9 (8.1)	2 (3.5)	7 (13.0)	0.088
Chronic kidney diseases	7 (6.3)	4 (7.0)	3 (5.6)	1.000
Chronic liver diseases	3 (2.7)	2 (3.5)	1 (1.9)	1.000
Malignant tumors	8 (7.2)	2 (3.5)	6 (11.1)	0.152

Unpublished data

FZJD在降低重症转化率方面，尤其对病毒性肺炎和心血管疾病高发的老年人群和未接种疫苗人群疗效明显，具有良好安全性

FZJD decreased the rate of severe transformation of COVID-19 patients and had good safety, especially in elder (with high incidence of viral pneumonia and cardiovascular diseases) and non-vaccinated ones.

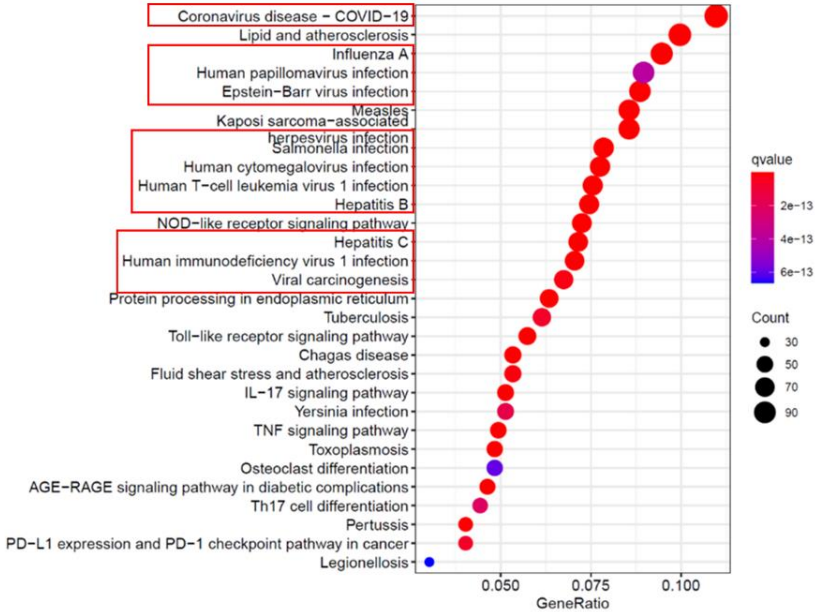
Subgroup	n.total	Exposed to FZJD (n, %)	Non-exposed to FZJD (n, %)	adj.OR（95%CI）*	adj.P*	P for interaction
Gender						
Male (n=93)	15(16.1)	1 (3.2)	14 (22.6)	0.1 (0.01~0.95)	0.045	0.881
Female (n=99)	16(16.2)	1 (2.6)	15 (25)	0.15 (0.02~1.27)	0.082	
Age						
＜65(n=98)	10(10.2)	2 (6.2)	8 (12.1)	0.65 (0.1~4.09)	0.649	0.014
≥65(n=94)	21(22.3)	0 (0)	21 (37.5)	0 (0~Inf)	-	
Admission classification						
asymptomatic , Mild(n=46)	7(15.2)	1 (4.5)	6 (23.1)	0.23 (0.02~2.81)	0.251	0.49
Moderate (n=144)	24(16.7)	1 (2.1)	23 (24)	0.09 (0.01~0.7)	0.022	
Vaccination						
NO(n=79)	28(35.4)	0 (0)	28 (45.2)	0 (0~Inf)	-	0.004
YES(n=110)	3(2.7)	2 (3.8)	1 (1.7)	2.81 (0.22~35.94)	0.428	

	Exposed to FZJD			Non-exposed to FZJD		
	Frequency	Count (n)	occurrence rate	Frequency	Count (n)	occurrence rate
Total adverse events	2	2	1.47%	7	7	5.7%
Adverse events related to used drugs	1	1	0.7%	0	0	-
Severe adverse events	0	0	0	0	0	0

Unpublished data

网络药理学显示FZJD与包括COVID-19在内的十几种病毒感染性疾病相关，并存在众多COVID-19作用靶点

Network pharmacology showed that FZJD was related to more than ten viral infectious diseases, such as COVID-19, and had plenty of potential targets of COVID-19.



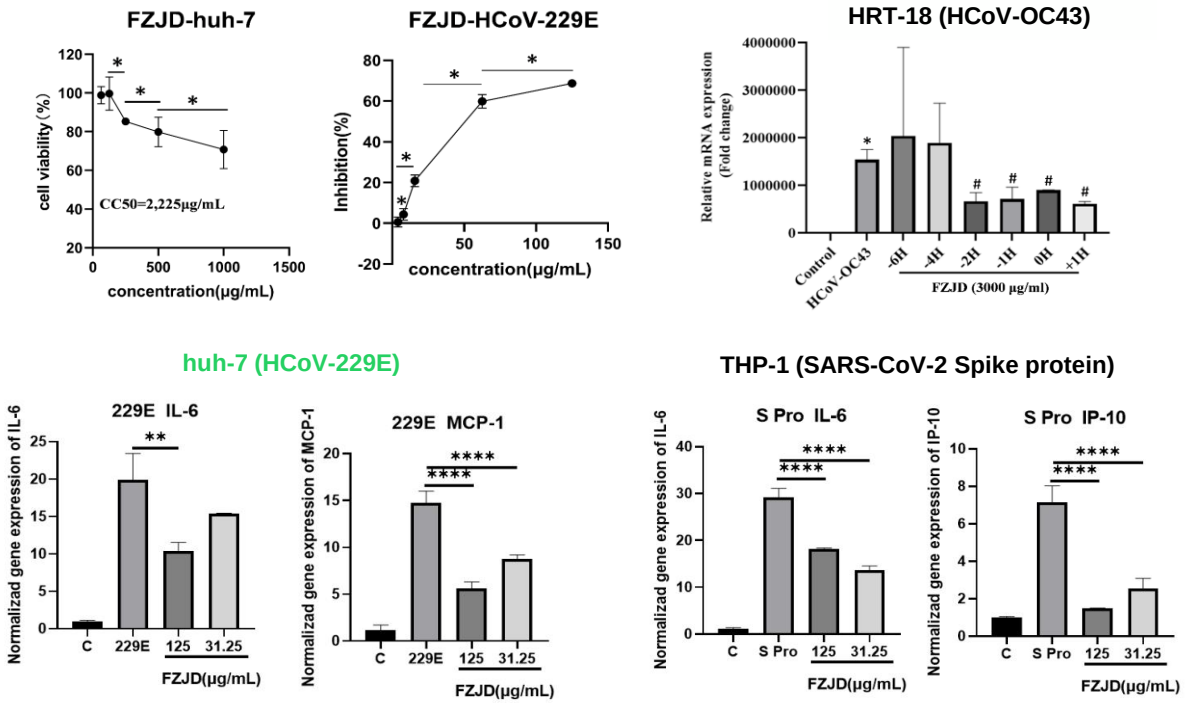
A.靶点韦恩图。

PTGS1、PTGS2、RELA、BCL、MAPK3、MAPK1、CASP3、BAD、SOD1、CAT、PPARG、CALM1、NOS2、DPP4、BAX、MAPK8、CREB1、PLA2G4A、CASP8、PRKCA、MAPK14、IL1B、EGFR、BCL2L1、FOS、RB1、IL6、STAT1、HSPA5、HMOX1、ICAM1、CCL2、PRKCB、NOS3、HSPB1、IL2、SERPINE1、IL1A、PARP1、CXCL11、CXCL2、CRP、CXCL10、CD40LG、IRF1、ALB、CDK4、MCL1、IL4

B.潜在作用靶点。

李国炜等.中国国境卫生检疫杂志,2021

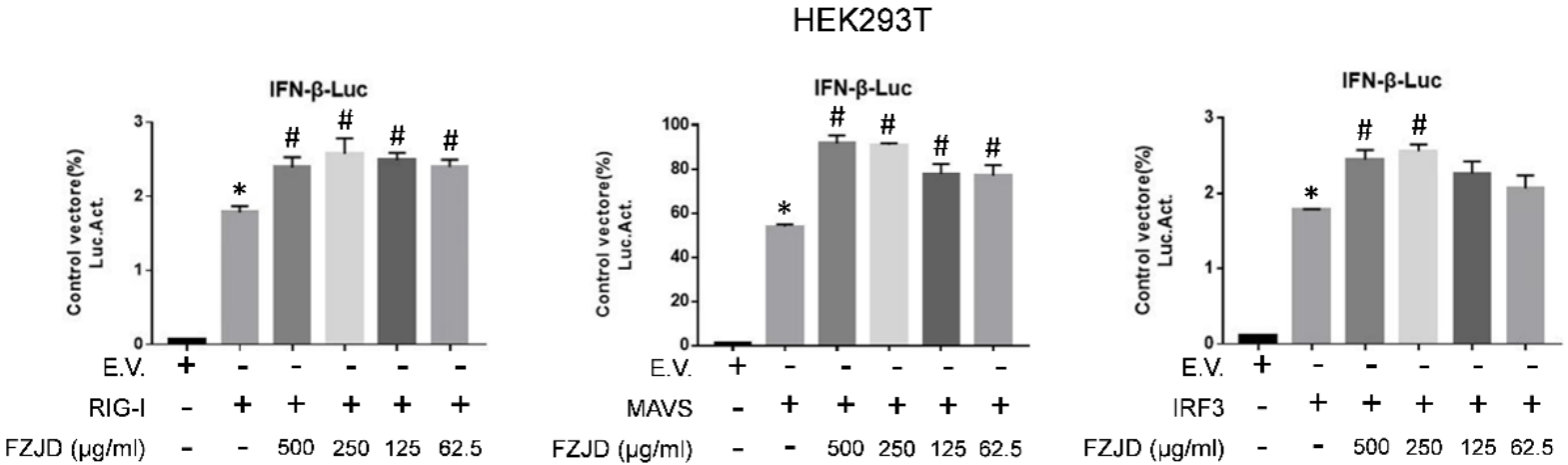
FZJD抑制冠状病毒复制及病毒感染引起的炎症反应
FZJD inhibited the replication of coronaviruses and the following inflammation.



*P < 0.05 VS Control. #P < 0.05 VS HCoV-OC43. **P < 0.01. ****P < 0.0001.

Unpublished data

FZJD能够激活RIG-I/MAVS/IFN-I信号通路
FZJD activated RIG-I/MAVS/IFN-I signaling pathways.



*P < 0.05 VS E.V.. #P < 0.05 VS RIG-I/MAVS/IRF3 (Non-exposed to FZJD)

Unpublished data

Multi-center, prospective observational study
Five township hospitals in Yangshuo County, Guangxi, China

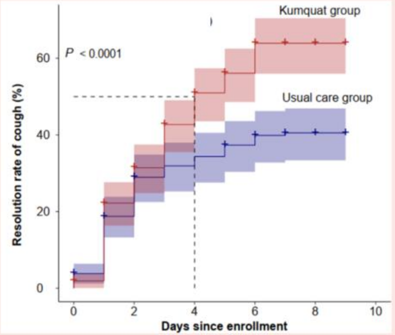
Inclusion criteria:
- mild or moderate COVID-19
- present with cough (total Cough Evaluation Test score > 5)
- written informed consent

Exclusion criteria:
- allergic to Kumquat tea;
- with chronic lung disease
- heavy smokers
- unable to follow up regularly
- pregnant women;
- with severe comorbidities
- participated in other clinical trials within 1 month prior to this study.

Kumquat decoction group (n=481)

Usual care group (n=282)

Primary outcomes
Time from the study baseline to sustained cough resolution



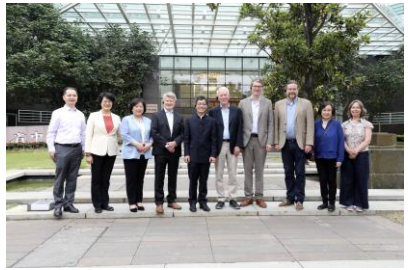
Analyses (Kumquat decoction vs. Usual care)	**Cough resolution**	***P*-value**
Difference in restricted mean survival time, days (Kumquat decoction -Usual care)	-0.742 (-1.235~ -0.25)	0.003
Crude analysis-HR (95% CI)	1.30 (1.04~1.62)	0.022
Multivariable analysis-HR (95% CI)	1.33 (1.06~1.68)	0.015
Propensity-score analyses-HR (95% CI)		
With Matching (209 vs. 209)	1.94 (1.48~ 2.53)	< 0.001
With pairwise algorithmic model	1.31 (1.02~1.68)	0.034
Propensity Score adjusted	1.30 (1.04~1.64)	0.023

International Cooperation

Cooperation with more than 30 nations and regions.

Guangdong is adjacent to Hong Kong and Macao, facing Southeast Asia, With special cultural, geographical, climate , economic and trade advantages, It has cooperated with more than 30 countries and regions in the world.

International Cooperation



GDHCM cooperate with Karolinska Institutet in Sweden
(Guangdong Provincial Hospital of Chinese Medicine)

Chinese-Australian International Research Center of CM
(Guangdong Provincial Hospital of Chinese Medicine)

GDHCM cooperate with Utrecht University in Netherlands
(Guangdong Provincial Hospital of Chinese Medicine)

Our Good Wish

Human health will be better served by developing sincere collaboration and conducting significant researches.

Looking forward to your sincere cooperation!


Thanks!