



Clinical Evidence on the Use of Chinese Herbal Medicine for Acute Infectious Diseases: An Overview of Systematic Reviews

Xufei Luo^{1†}, Yikai Zhang^{2†}, Huishan Li², Mengjuan Ren¹, Yunlan Liu¹, Yunwei Liu², Yilin Zhang³, Zhuoran Kuang², Yefeng Cai^{2,4}, Yaolong Chen^{1,5,6,7,8,9,10,11,12}* and Xiaojia Ni^{2,4}* on behalf of the Evidence-based Traditional and Integrative Medicine Working Group for Public Health Emergency

OPEN ACCESS

Edited by:

Anthony Booker, University of Westminster, United Kingdom

Reviewed by:

Linzi Long, China Academy of Chinese Medical Sciences, China Hong Li, Southern Medical University, China

*Correspondence:

Xiaojia Ni grace1984325@126.com Yaolong Chen chenyaolong@vip.163.com [†]These authors have contributed equally to this work

Specialty section:

This article was submitted to Ethnopharmacology, a section of the journal Frontiers in Pharmacology

Received: 04 August 2021 Accepted: 24 January 2022 Published: 25 February 2022

Citation:

Luo X, Zhang Y, Li H, Ren M, Liu Y, Liu Y, Zhang Y, Kuang Z, Cai Y, Chen Y and Ni X (2022) Clinical Evidence on the Use of Chinese Herbal Medicine for Acute Infectious Diseases: An Overview of Systematic Reviews. Front. Pharmacol. 13:752978. doi: 10.3389/fphar.2022.752978 ¹School of Public Health, Lanzhou University, Lanzhou, China, ²Guangdong Provincial Hospital of Chinese Medicine, Guangdong Provincial, Academy of Chinese Medical Sciences, The Second Clinical School of Guangzhou University of Chinese Medicine, Guangzhou, China, ³The School of Public Health and Management, Guangzhou University of Chinese Medicine, Guangzhou, China, ⁴Guangdong Provincial Key Laboratory of Research on Emergency in Traditional Chinese Medicine, Guangzhou, China, ⁵Research Unit of Evidence-Based Evaluation and Guidelines, Chinese Academy of Medical Sciences (2021RU017), School of Basic Medical Sciences, Lanzhou University, Lanzhou, China, ⁶Institute of Health Data Science, Lanzhou University, Lanzhou, China, ⁷Evidence-Based Medicine Center, School of Basic Medical Sciences, Lanzhou University, Lanzhou, China, ⁷Evidence-Based Medicine Implementation and Knowledge Translation, Lanzhou, China, ⁹Guideline International Network Asia, Lanzhou, China, ¹¹Lanzhou University GRADE Center, Lanzhou, China, ¹²Lanzhou University, An Affiliate of the Cochrane China Network, Lanzhou, China

Background: Acute infectious diseases constitute the most prevalent public health emergency (PHE) in China. Chinese herbal medicine (CHM) has long been used in the treatment of acute infections, but the overall evidence of its benefit and harm has not been comprehensively and systematically evaluated.

Methods: We searched CBM, CNKI, Wanfang, PubMed, Cochrane Library, embase and preprint platforms to retrieve systematic reviews (SRs) on CHM for acute infectious. Participants with COVID-19, SARS, H1N1, tuberculosis, bacillary dysentery, mumps, herpangina, hand-foot-and-mouth disease (HFMD), and other acute infectious diseases were included. Interventional group consisting of patients treated with CHM combined with Western medicine or CHM alone. The AMSTAR 2 tool was used to assess the methodological quality of the retrieved studies. Information on interventions, control measures and outcomes of the included studies was extracted, and meta-analyses were qualitatively synthesized.

Abbreviations: AMSTAR 2, A MeaSurement Tool to Assess systematic Reviews 2; CBM, Chinese Biomedical Literature database; CD4, Cluster of differentiation 4; CHM, Chinese herbal medicine; COS, Core Outcome Set; CNKI, China National Knowledge Infrastructure; COVID-19, Coronavirus disease 2019; CONSORT, Consolidated Standards of Reporting Trials; H1N1, Influenza A H1N1 influenza; HFMD, Hand-foot-and-mouth disease; IL-6 level, Interleukin-6 level; IFN-α, Interferon-alpha; MD, Mean difference; OR, Odds ratio; PHE, Public health emergency; PRISMA, Preferred Reporting Items for Systematic Reviews and Meta-Analyses; RCT, Randomised controlled trial; RD, Rate difference; RoB, Risk of Bias; RR, Relative risk; SARS, Severe Acute Respiratory Syndrome; SMD, Standardized mean difference; SR, Systematic review; SUCRA, Surface under the cumulative ranking; TCM, Traditional Chinese Medicine.

Results: A total of 51 SRs and meta-analyses were eligible for this overview, including 19 for COVID-19, 11 for hand-foot-and-mouth disease, 8 for severe acute respiratory syndrome (SARS), 4 for tuberculosis, 3 for mumps, 2 for bacillary dysentery, 2 for H1N1 influenza and 2 for herpangina. Six systematic reviews were of high quality, all of which were on the use of CHM for COVID-19; 24 were of moderate quality; 10 were of low quality; and 11 were of very low quality. CHM appeared to have potential benefits in improving clinical symptoms and signs for most infections with an acceptable safety profile, and the clinical evidence of the benefits of CHM for acute respiratory infections such as COVID-19, SARS and H1N1 seems more sufficient than that for other acute infections.

Conclusion: Overall, CHM, both decoction and Chinese patent medicine, used alone or in combination with conventional medicine may offer potential benefits to relieving symptoms of people with acute respiratory infections. Full reporting of disease typing, staging, and severity, and intervention details is further required for a better evidence translation to the responses for PHE. Future CHM research should focus mainly on the specific aspects of respiratory infections such as its single use for mild infections, and the adjunct administration for sever infections, and individual CHM prescriptions for well-selected outcomes should be prioritized.

Keywords: Chinese herbal medicine, acute infectious diseases, overview of systematic reviews, COVID-19, public health emergency

INTRODUCTION

Public health emergencies (PHEs) are extraordinary events that are determined to constitute public health risks to other states through the international spread of disease and that potentially require a coordinated international response (World Health Organization, 2005). Acute infectious diseases are among the most common PHEs (World Health Organization, 2017). In China, Chinese herbal medicine (CHM) has a long history of treating acute infections such as smallpox, plague, scarlet fever, cholera, typhoid fever, and malaria (Jiang and Wen, 2021). Given the occurrence and epidemics of infectious diseases across different periods, valuable experience has been accumulated in the use of CHM to fight against infectious diseases, which was often documented in classical literature and monographs (Wang W. et al., 2020). Specifically, Yellow Emperor's Internal Classic, released in approximately 5,000 years ago, was the first publication to find that the occurrence of infectious diseases was closely related to climate change. Treatise on Cold Attack, released in the Eastern Han Dynasty, was written after a largescale epidemic of acute infectious diseases. Doctor Zhongjing Zhang summarized the development of infectious diseases in the book and recorded many classical formulas such as Xiaochaihu Decoction and Maxing Shigan Decoction, that have been used since then. In late Ming China, with the further deepening of the understanding of infectious diseases in traditional Chinese medicine (TCM), Systematic Differentiation of Warm Pathogen disease authored by Doctor Jutong Wu, systematically expounded the general laws of the occurrence, development, evolution and treatment of infectious diseases, in which, Yingiao Powder and Sangju Drink, was first documented, and continues to be used for acute upper respiratory disease.

The clinical effectiveness of some classical CHM prescription has been investigated in rigorous randomised controlled trials (RCTs). For example, a single RCT published in *Ann Intern Med* in 2011 suggested that a CHM formula combining *Maxin Shigan* Decoction and *Yinqiao* Power, alone and in combination with an anti-virus pharmacotherapy oseltamivir, can reduce the time for a fever to resolve in patients with H1N1 influenza infection (Wang et al., 2011). Another outstanding example is *artemisia annua L.*, which was recorded in *A Handbook of Prescriptions for Emergencies* (Doctor Hong Ge, Eastern Jin Dynasty) for treating malaria. Later, this CHM formula has been developed to artemisinin, and transferred to clinical practice of malaria, for which Tu Youyou won the Nobel Prize (Tu, 2016).

In modern China, CHM continues to be applied to a wide range of emergent infectious diseases, such as severe acute respiratory syndrome (SARS), H1N1 influenza, and Coronavirus disease 2019 (COVID-19). And there are many clinical trials and systematic reviews of CHM that have been published. However, there has been no comprehensive study describing the status of the treatment of acute infectious diseases with CHM in the manner of critical appraisal. Therefore, we conducted this study to provide an overview of systematic reviews (SRs) of the treatment of infectious diseases with CHM that could serve as a reference for decision-making in this field.

METHODS

We followed the guidance of overviews of reviews published by Hunt et al. (2018). We also reported this overview according to the PRISMA statement (Moher et al., 2009). We have registered this study with the registration DOI: 10.17605/OSF.IO/VZ4S7.

Inclusion and Exclusion Criteria

Study Types Included in This Overview

Systematic reviews (SRs) and meta-analyses, language limited to Chinese and English.

Participants

Participants with COVID-19, SARS, H1N1, tuberculosis, bacillary dysentery, mumps, herpangina, hand-foot-and-mouth disease (HFMD), and other acute infectious diseases were included, as identified according to the current list of public PHEs in China (Liu et al., 2019).

Interventions

Interventional group consisting of patients treated with CHM combined with Western medicine or CHM alone, where CHM interventions included proprietary Chinese medicine and traditional Chinese medicine decoction. There was no requirement for what should be included in the control group.

Outcomes

Outcomes including effectiveness related outcomes which evaluated by the investigator or reported by patients, laboratory tests and radiological imaging, and safety related outcomes such as adverse events, adverse reactions, and toxic scale. The primary outcomes included effectiveness, mortality and adverse events, and secondary outcomes included symptom score, length of stay, laboratory tests and radiological imaging, etc.

Exclusion Criteria

Studies were excluded from the search when they were conference abstracts, duplicate publications, unpublished data, and those without full details of a SR.

Literature Search and Screening

We searched the Chinese Biomedical Literature database (CBM), China National Knowledge Infrastructure (CNKI), Wanfang database, PubMed, Cochrane Library, embase, medRxiv, bioRxiv, China Association of Chinese Medicine, China Association for Acupuncture and Moxibustion, Chinese Medical Journal Network, and Chinese Medicine Journal Network to retrieve relevant systematic reviews/meta-analyses, and the search time was from the date of database creation to 30 October 2020. Before published of this article, we updated the search time to 31 March 2021. For literature screening, two authors read the title and abstract for the initial screening of the literature, and after downloading the full text, it was read and use to further screen the articles, and the results were submitted to a third author for confirmation and verification. The search strategy was specified in **Supplementary 1**.

Methodological Quality and Level of Evidence Assessment

The methodological quality of the included studies was evaluated independently by two authors using A MeaSurement Tool to

Assess systematic Reviews (AMSTAR 2) (Shea et al., 2017), and a third author assisted in the judgement in cases of disagreement. The methodological quality of AMSTAR2 for systematic review is divided into 16 entries, among which item 2, item 4, item 7, item 9, item 10, item 11, item 13 and item 15 are recommended critical items for determine methodological quality. Considering the specificity of TCM research, we made the following adjustments to the key items. Since some systematic reviews were published before the establishment of the registration platform and the registration platform does not have a Chinese registration language, it was difficult to obtain the protocols of these previous Chinese systematic reviews, so we did not include item 2 as a key entry. Chinese medicine research is mainly published in Chinese language, and most Chinese journal submission systems do not support the presentation of a list of excluded studies, so item 7 was not considered a kev entry.

The final evaluation results were classified as 1) "high quality" when there was no or one non-critical weakness, 2) "medium quality" when there was more than one non-critical weakness, 3) "low quality" when there was one critical flaw with or without non-critical weaknesses, or 4) "very low quality" when there was more than one critical flaw with or without non-critical weaknesses.

We also evaluated the level of evidence using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach for primary outcomes.

Data Extraction and Data-Analysis

Two authors independently collected the data on publication information, demographic characteristics, details of the interventions and control measures, outcomes, and statistical results, which were finally checked and confirmed by a third authors. For data analysis, a qualitative integration of the study results was performed for SRs evaluated as having moderate-high quality according to AMSTAR 2.

RESULTS

Results of the Searching and Screening

A total of 46,138 relevant records were obtained from the initial search and 6,468 records were identified from updated search, and after screening, 51 systematic reviews (Liu and Dong, 2021; Liu et al., 2004; Zhang et al., 2004; Zhao et al., 2004; Hao, 2005; Hao et al., 2005; Liu et al., 2005; Chen et al., 2007; Guo et al., 2010; Liu et al., 2012; Ding et al., 2013; Lu et al., 2013; Wang et al., 2013; Xiong et al., 2013; Zhang et al., 2014; Zhang and Wei, 2014; Zhao, 2014; Zhao et al., 2016; Zhang, 2016; Wang et al., 2017; Yan and Gao, 2017; Yue et al., 2017; Jin et al., 2018; Xiong et al., 2020; Yang et al., 2020; Yu et al., 2020; Yang et al., 2020; Gao et al., 2020; He, 2020; Jin et al., 2020; Pang et al., 2020; Qi et al., 2020; Wang et al., 2020; Yang et al., 2020; Sun et al., 2020; Zhou et al., 2020; Xiong et al., 2020; Yang et al.,



Luo et al., 2021; Ouyang et al., 2021) were finally included. Among them, 33 (Liu and Dong, 2021; Zhao et al., 2004; Hao, 2005; Hao et al., 2005; Liu et al., 2005; Ding et al., 2013; Lu et al., 2013; Wang et al., 2013; Xiong et al., 2013; Zhang et al., 2014; Zhang and Wei, 2014; Zhao, 2014; Han, 2016; Liu et al., 2016; Zhang, 2016; Wang et al., 2017; Xiong et al., 2019; Yang M. et al., 2020; Yu et al., 2020a; Yang Z. et al., 2020; Yu et al., 2020b; Gao et al., 2020; He, 2020; Qi et al., 2020; Wang S. et al., 2020; Wu et al., 2020; Zhou L. P. et al., 2021; Zhou F. et al., 2021; Ouyang et al., 2021) were written in Chinese, and 18 (Liu et al., 2004; Zhang et al., 2004; Chen et al., 2007; Liu et al., 2012; Zhao et al., 2014; Wu et al., 2015; Li et al., 2016; Ang et al., 2020; Fan et al., 2020; Jin et al., 2020; Liu et al., 2020; Pang et al., 2020; Sun et al., 2020; Xiong et al., 2020; Yan et al., 2020; Zeng et al., 2020; Zhou L. P. et al., 2021; Luo et al., 2021) were written in English. The literature screening process and results are shown in Figure 1. The excluded references are stated in **Supplementary 2**. The ingredients of the formulas are specified in **Supplementary 3**.

Basic Characteristics of the Included Literature

The disease with the largest proportion in the of systematic reviews was COVID-19, with 19 articles (Liu and Dong, 2021; Ang et al., 2020; Yang M. et al., 2020; Fan et al., 2020; Gao et al., 2020; Jin et al., 2020; Liu et al., 2020; Pang et al., 2020; Qi et al., 2020; Wang S. et al., 2020; Sun et al., 2020; Wu et al., 2020; Xiong et al., 2020; Zeng et al., 2020; Zhou L. P. et al., 2021; Zhou F. et al., 2021; Luo et al., 2021; Ouyang et al., 2021), followed by 11 articles on HFMD (Ding et al., 2013; Wang et al., 2013; Xiong et al., 2013; Zhang et al., 2014; Zhang and Wei, 2014; Xiong et al., 2019; Yu et al., 2020a; Yang Z. et al., 2020; Yu et al., 2020b; He, 2020; Yan

Study	Disease type	Disease stage	Disease classification	Number of included studies	Intervention types	Traditional Chinese medicine treatment	Outcomes	Frequency of the formulas	Advers event
Fan et al. (2020)	COVID-19	NS	NS	7	Traditional Chinese + H2: H44 medicine + western medicine conventional treatment VS Western medicine treatment	Qingfeitouxiefuzheng decoction Jinhuaqinggan granule Qingfeipaidu decoction Toujieqingwen granule Jiaweidayu granule Shengfutang decoction/Maxinshigan- dayuan decoction	(10) (44) (19)	Qingfeitouxiefuzheng decoction; bid for 10 days; Jinhua Qinggan granules: 15 g tid for 5 days; Toujieqingwen granule: bid for 10 days–15 days; CHM formulae: 200 ml, bid for 7 days; Jiaweidayu granule: tid for 7 days	NS
Pang et al. 2020)	COVID-19	NS	NS	11	Traditional Chinese medicine + western medicine conventional treatment VS Western medicine treatment	Qingfeitouxiefuzheng decoction Jinhuaqinggan granule Toujiequwen granule Qingfeipaidu decoction Maxingxuanfeijiedu Decoction Sufengjiedu capsule Chinese patent medicine + Chinese herbal medicine	(21) (29) (44) (31) (56) (19)	NS	Y
Jin et al. (2020)	COVID-19	NS	NS	5	Traditional Chinese medicine + western medicine conventional treatment VS Western medicine treatment	Qingfeitouxiefuzheng decoction/ Lianhuaqingwen granule/ Lianhuaqingke granule/Xuebijing injection	(10)	150 ml each time, 2 times a day for 10 days; 6 g each time, 3 times a day for 7 days; 1 bag each time, 3 times a day for 14 days; 50 ml each time, 2 times a day for 7 days	NS
Luo et al. (2021)	COVID-19	NS	NS	RCT:6 CCT:13	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment/Western medicine treatment + Traditional Chinese medicine placebo	Lianhuaqingwen granule Shufengjiedu capsule Touxiequwen granule Reyanning mixture Jinhuaqinggan granule Jiaweidayuan decoction Pneumonia No. 1 formula Modified Qingfeipaidu decoction	(10) (18) (45) (51) (44) (21) (19)	NS	Y
Sun et al. (2020)	COVID-19	NS	NS	7	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	Shufengjiedu capsule Touxiequwen granule Reyanning mixture Qingfeixiejiefuzheng formula Feidian No.1 formula/Feidian No.2 formula Jinhuaqinggan granule	(10) (19) (29) (18) (25)	TouxieQuwen prescription (2 dose/ d); Reyanning mixture (10–20 ml, bid-q6h); Shufengjiedu capsule (2.08 g, tid); Oingfeitouxiefuzheng prescription (1 dose/d); Shufengjiedu capsule (2.08 g, tid); Feiyanyihao prescription or feiyanerhao prescription (1 dose/d); Jinhuaqinggan granule (10 g, tid)	Y
Zeng et al. (2020)	COVID-19	NS	NS	2	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	Lianhuaqingwen granule	(6) (10) (11) (12) (13) (14) (15) (16) (17) (18) (22)	NS	NS
Wang S. et al. (2020)	COVID-19	NS	NS	7	Traditional Chinese medicine + western medicine conventional treatment VS Western medicine treatment	Lianhuaqingwen granule	(12) (62) (18) (26)	Lianhuaqingwen granule: 6g/bag, 1 bag each time, 3 times a day; 4 tablets/day, tid; 6 g tid	NS
Yang M. et al. (2020)	COVID-19	NS	Ordinary type	RCT:2 NRCT:1	Traditional Chinese medicine + western medicine conventional	Lianhuaqingwen granule	(3) (25) (19) (36) (48)	NS (Continued on follow	Ν

Luo et al.

(Continued on following page)

Chinese Herbal Medicine for Infections

Study	Disease type	Disease stage	Disease classification	Number of included studies	Intervention types	Traditional Chinese medicine treatment	Outcomes	Frequency of the formulas	Adverse event
Ang et al. (2020)	COVID-19	NS	NS	7	treatment vs Western medicine conventional treatment Traditional Chinese medicine + western medicine conventional treatment/Traditional Chinese medicine vs Western medicine treatment	Lianhuaqingwen granule Shufengjiedu capsule Touxiequwen granule Jinhuaqinggan granule	(1) (5) (9) (10) (13) (18) (26) (31) (41) (45)	Lianhua Qingke granules, 1 packet for 3 times daily for 14 days; Shufeng Jiedu capsule, 4 capsules for 3 times daily for 2 weeks; Jinhua Qinggan granules, 2 packets for 3 times daily for 5 days; Toujie Quwen granules, 1 packet per time for 2 times daily for 10–15 days	Y
Xiong et al. (2020)	COVID-19	NS	Minor illnesses, major illnesses	18	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine treatment/ Western medicine treatment + Traditional Chinese medicine placebo	Maxingshigan decoction/ Chailingpingwei decoction/ Haoqinqingdan decoction/ Huopuxialing decoction/Modified Buzhongyiqi decoction/Pneumonia No. 1 formula/Poewerful Pneumonia No. 1 formula/Pneumonia No. 2 formula/Qingfeitouxiefuzheng formula/Qingfeitouxiefuzheng formula/Qiwei decoction/ Toujiequwen granule/Shufengjiedu capsule/Lianhuaqingwen granule and capsule/Lianhuaqingwen granule and capsule/Lianhuaqingwen granule and capsule/Lianhuaqingwen granule and capsule/Lianhuaqingwen granule and capsule/Lianhuaqingwen granule and capsule/Lianhuaqingwen granule/ Yupingfeng granule/Ganluxiaodu decoction/Huoxiangzhengqi liquid/ Reyanning mixture/Jinhuaqinggan granule/Xuebijing injection/Tanreqing injection/Lianhuaqingke granule/ Maxingxuanteiliedu Decoction	(2) (11) (29) (41) (44) (21) (45) (30) (13) (27) (18)	CHM((1dose/d, 10 days); Qingfei Touxie Fuzheng recipe (1dose/d, 10 days); Toujie Quwen granules (1dose/d, 15 days); Jihua Qinggan granules (10 g, tid, 5 days); Reyanning mixture (10–20 ml, bid- q6 h, 7 days); Shufeng Jiedu capsules (2.08g, tid, 10–14 days); Lianhua Qingwen granules (6 g, tid, 7-14 days); Lianhua Qingke granules (1 bag, tid, 14 days); Lianhua Qingwen capsules (1.4 g, tid, 14 days)	Y
Liu et al. (2020)	COVID-19	NS	NS	RCT:4 NRCT:7	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	Lianhuaqingwen granule Shufengijedu capsule Touxiequwen granule Jinhuaqinggan granule Qingfeitouxiefuzheng decoction	(10) (19) (62) (54) (16) (64)	Diammonium glycyrrhizinate enteric coated capsules (150 mg,tid); Qingfeitouxie fuzhengfang (150 ml,bid); Shufeng Jiedu Capsule (2.08 g,tid); Lianhua Qingwen granules (6 g,tid); Reyanning mixture (10–20 ml,bid); Tongjiequwen granule formula (150 ml,bid); Jinhua Qinggan granules (10 g,tid)	Y
Gao et al. (2020)	COVID-19	NS	NS	RCT:4 NRCT:8	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	Lianhuaqingwen granule Shufengijedu capsule Touxiequwen granule Jinhuaqinggan granule Qingfeixiejiefuzheng decoction Pneumonia 1/pneumonia 2 + conventional treatment	(10) (61) (5) (18) (11) (12) (29) (45)	NS	NS
Liu et al. (2020)	COVID-19	Medical Observation Period	Minor illness, general type	RCT:1 NRCT:6	Traditional Chinese medicine + western medicine conventional treatment vs Western	NS	(12) (25) (26) (29) (41)	NS	NS

(Continued on following page)

Chinese Herbal Medicine for Infections

Luo et al.

Study	Disease type	Disease stage	Disease classification	Number of included studies	Intervention types	Traditional Chinese medicine treatment	Outcomes	Frequency of the formulas	Adverse event
Qi et al. (2020)	COVID-19	NS	Ordinary type	RCT:2 NRCT:3	medicine conventional treatment Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional	Lianhuaqingwen granule	(10) (36) (5) (6) (11) (12) (36) (44) (19)	Lianhuaqingwen granule: 1 bag per time (6 g), tid	NS
Wu et al. (2020)	COVID-19	NS	Minor/general/ severe/critical illnesses	RCT:1 NRCT:7	treatment Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional	Lianhuaqingwen granule Shufengjiedu capsule	(12) (13) (18) (26) (27) (29) (25)	NS	NS
Zhou L. P. et al. (2021)	COVID-19	NS	NS	10	treatment Traditional Chinese medicine + western medicine conventional treatment vs Western medicine treatment	Jinhua Qinggan granule Qingfei Touxie Fuzheng recipe Toujie Quwen granule Lianhua Qingke granule FeiyanYihao Chinese Medicine granule self-made decoction Jinyinhua oral liquid Diammonium glycyrrhizinate enteric- coated capsule Lianhua Qingwen capsule	(5) (12) (13) (18) (19)	Jinhua Qinggan granule (3 times a day, once 10 g); Qingfei Touxie Fuzheng recipe (one dose a day, 2 times a day, in the morning and in the evening); Toujie Quwen granules (2 times a day); Lianhua Qingke granule (once 1 bag, 3 times a day); FeiyanYihao Chinese Medicine granules (one dose a day, 2 times a day); Jinyinhua oral liquid (once 60 ml, 3 times a day); Diammonium glycyrrhizinate entericcoated capsule (once 150 mg, 3 times a day); Lianhua Qingwen capsule (once 6 g, 3 times a day); Lianhua Qingwen capsule (4 capsules thrice daily)	Υ
Liu et al. (2020)	COVID-19	Medical Observation Period	Minor illness, general type	RCT:1 NRCT:6	Traditional Chinese medicine + western medicine conventional treatment/Traditional Chinese medicine western medicine conventional treatment	Jinhua Qinggan granule Shufeng jiedu granule Jinhua qinggan granule Xuebijing injuction	(5) (6) (10) (11) (12) (18) (44)	NS	Y
Zhou F. et al. (2021)	COVID-19	NS	Minor illness, general type	6	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine treatment	Xuanfei Baidu decoction Maxing Shigan Decoction Keguan-1 No.1 prescription for pneumonia Hema xingren shigan decoction Qushi Paidu fuzheng decoction Sanreng decoction Xiaochaihu decoction	(5) (6) (10) (11) (13) (18) (19) (21) (27) (62)	CHM: 1 dose of 300 ml/day, 100ml/ time; CHM: 1dose/day, 250 ml/time. bid, 10 days; CHM: 19.4 g, bid; CHM: 200 ml/bag/time, bid	Υ
Ouyang et al. (2021)	COVID-19	NS	Minor illness, general type	RCT:6 NRCT:4	Western medicine conventional treatment + Traditional Chinese medicine/Western medicine conventional treatment + Placebo + Traditional Chinese	Reyanning mixture Jinhua Qinggan granule Toujie Quwen granule Lianhua Qingwen granule Shufeng Jiedu Capsule	(5) (6) (10) (11) (12) (18) (19) (24) (29) (64)	NA	Y

Chinese Herbal Medicine for Infections

Study	Disease type	Disease stage	Disease classification	Number of included studies	Intervention types	Traditional Chinese medicine treatment	Outcomes	Frequency of the formulas	Adverse event
					medicine vs Western medicine conventional treatment/Western medicine conventional treatment + Placebo				
Chen et al. (2007)	SARS	NS	NS	RCT:15; NRCT:9	Traditional Chinese medicine + western medicine conventional treatment VS Western medicine treatment	NS	(1) (2) (5) (8) (9) (12)	NS	NS
Liu et al. (2004)	SARS	NS	NS	RCT:8; NRCT:8	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	Feidian No.1/2/3 formula Feidian No.4 formula Guoyao No.2/3 formula Yiqiyang formula/Bufeijianpi formula/ Yangyinqingre formula Qianlunning capsule Chuanhuning injection, Shenmai injection, hufeiqingsha decoction/ Jieduzhitong capsule/Zhuyinsan capsule	(2) (3) (4) (5) (9) (11) (14)	TCM: decoction, one dosage daily, for treatment of 21 days; Qiankunning: 6 tablets/time, 4 times daily, for 14 days	NS
Liu et al. (2012)	SARS	NS	NS	12	Traditional Chinese medicine + western medicine conventional treatment VS Western medicine treatment	Feidian No.1/2 formula Feidian No.1 formula Hufeiqingsha decoction Jieduzhitong capsule Zhuyinsanjie capsule Qingshaling spra Feidian No.2/3/4 formula	(2) (3) (5) (6) (7) (8) (9) (13) (14) (15)	National drug No. 2.3 and 4, 2 times/ d, 200 ml, for 7–9 days; Kangfeidian No. 1, 2, 3, 2 times/d, 200 ml; potenili 3 times/d, 300 ml	NS
Zhang et al. (2004)	SARS	NS	NS	6	Traditional Chinese medicine + western medicine conventional treatment/Traditional Chinese medicine vs Western medicine	Feidian No.1/2/3/4 formula	(2) (6) (7) (8) (9) (16)	NS	NS
Hao et al. (2005)	SARS	NS	NS	RCT:5 CCT:6	treatment Traditional Chinese medicine + western medicine conventional treatment/Traditional Chinese medicine vs Western medicine treatment	Feidian No.1/2/3/4 formula Guoyao No.2/3/4 formula Chuanhupo injection/Shenmai injection/hufeiqingsha decoction Shufengxuanfei formula Xingnaojing injection + Shenmai injection HOUTTUYNIA CORDATA (Chinese pinyin: yuxingcao) injection + Qingkaling injection	(12) (27) (63)	NS	NS
Hao et al. (2005)	SARS	NS	NS	RCT:5 CCT:4	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	ungkaling injection	(27)	NS	NS
Liu 2005	SARS	NS	NS	RCT:8 NRCT:8	Traditional Chinese medicine + western	Yiqiyang formula	(27) (12) (18) (20) (19) (63)	Yiqiyang formula: 1dose/d, 3 weeks; CHM 1 d0se/d, 12 days; (Continued on follow	NS ring page)

Study	Disease type	Disease stage	Disease classification	Number of included studies	Intervention types	Traditional Chinese medicine treatment	Outcomes	Frequency of the formulas	Adverse event
					medicine conventional treatment/Traditional Chinese medicine vs Western medicine treatment	Chuanhuning injection/Shenmai injection/Hufeiqingsha decoction/ Jieduzhitong capsule Qiankunning capsule Bufeijianpi formula Yangyinqingre formula Guoyao No.2/3/4 formula Feidian No.1/2/3/4 formula Traditional Chinese medicine SARS No.4 formula		Qiankunning 6 tables, 4 times/days, 2 weeks; Guoyao No.2/3/4 formula: 1dose/d; Traditional Chinese medicine SARS No.4 formula: 1 bag, bid; Feidian No.1/2/3/4 formula: 1dose, 2–3 weeks	
Zhao et al. (2004)	SARS	NS	NS	RCT:5 NRCT:4	Traditional Chinese medicine + western medicine conventional treatment VS Western medicine treatment	Shenmai injection/Hufeiqingsha decoction/Jieduzhitong capsule/ Zhuyinsanjie capsule/Qingshaling spray Guoyao No.2/3/4 formula Feidian No.1/2/3/4 formula	(27) (4) (12) (18) (5) (23) (19) (63)	NS	NS
Zhao et al. (2004)	H1N1	NS	NS	5	Traditional Chinese medicine + western medicine conventional treatment VS Western medicine treatment	Lianhuaqingwen granule	(2) (3) (4) (5) (6)	NS	NS
i et al. 2016)	H1N1	NS	NS	30	Traditional Chinese medicine + western medicine conventional treatment VS Western medicine treatment	Fanggan decoction Lianhuaqingwen capsule Yinqiao decoction Maxingshigan decoction RADIX ISATIDIS(Chinese pinyin: Banlangen) granule Qingkailing injection + Tanreqing injection	(1) (6) (7)	NS	NS
lin et al. 2018)	Tuberculosis	NS	NS	45	Traditional Chinese medicine + western medicine conventional treatment VS Western medicine treatment	NS	(29) (22) (41) (15) (19)	NS	Y
Yan and Gao 2017)	Tuberculosis	NS	NS	16	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	Tuberculous pill	(29) (22) (61)	NS	NS
rue et al. 2017)	Tuberculosis	NS	NS	20	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	ASTRAGALUS MONGHOLICUS (Chinese pinyin: Huangqi) related Chinese patent medicine, including Feining pill, Jianfeirunpi pill, Yupingfeng Oral liquid, Shuangbai oral liquid, Baidiziyin pill, Buzhongyiqi pill, Zhenqifuzheng granule, Qianggan capsule, Qingjin granule, Bufeihuoxue capsule and Huangqi granule	(39) (18) (15) (61) (19)	NS	Y
Guo et al. (2010)	Tuberculosis	NS	NS	6	Traditional Chinese medicine + western medicine conventional	Feitai capsule Tuberculin tablet Qibaihe tablet	(29) (39) (22)	NS	NS

Luo et al.

(Continued on following page)

Chinese Herbal Medicine for Infections

Disease type	Disease stage	Disease classification	Number of included studies	Intervention types	Traditional Chinese medicine treatment	Outcomes	Frequency of the formulas	Advers event
				treatment/Traditional Chinese medicine vs Western medicine treatment	Modified Huangqijianzhong decoction Baozhen decoction Self-made decoction			
Bacterial dysentery	Acute phase	NS	12	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	Modified Baitouweng decoction Zhili decoction Yuli decoction Modified Dachaihu decoction Modified Shaoyao decoction Zhili formula Shaoyao decoction/Baitouweng decoction Dima mixture Gancaozaolian porridge Self-made decoction	(10) (12) (40) (19)	NS	Y
Bacterial dysentery	Acute phase	Minor, General, Major	28	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	NS	(10) (50)	NS	NS
Mumps	NS	NS	11	Traditional Chinese medicine + western medicine conventional treatment/Traditional Chinese medicine vs Western medicine treatment	ANDROGRAPHIS PANICULATA (Chinese pinyin: chuanxinlian) injection	(4) (12) (10) (9)	Potassium Dehydroandrographolide Succinate Injection: 5–30 mg/(kg.d)	Y
Mumps	NS	NS	7	Traditional Chinese medicine + western medicine conventional treatment VS Western medicine treatment	NS	(10)	NS	NS
Mumps	NS	NS	33	Traditional Chinese medicine + western medicine conventional treatment VS Western medicine treatment	Modified Pujixiaodu decoction + External application of Chinese herbal medicine including RHUBARB(Chinese pinyin: Shengdahuang), TETRADIUM RUTICARPUM(Chinese pinyin: Wuzhuyu), MIRABILITE(Chinese pinyin: Mangxiao) External application of Chinese herbal medicine including CORTEX PHELLODENDRI(Chinese pinyin: Huangbai) and GYPSUM(Chinese pinyin: Shigao) + RADIX ISATIDIS(Chinese pinyin: Banlangen) granule Self-made Fuhuang ointment Reduning injection Shuanghuanglian injection	(10)	NS	Y
	Bacterial dysentery Bacterial dysentery Mumps	Bacterial dysenteryAcute phaseBacterial dysenteryAcute phaseMumpsNSMumpsNS	Bacterial dysenteryAcute phaseNSBacterial dysenteryAcute phaseMinor, General, MajorMumpsNSNSMumpsNSNS	Bacterial dysenteryAcute phaseNS12Bacterial dysenteryAcute phaseMinor, General, Major28MumpsNSNS11MumpsNSNS7	Included studiesBacterial dysenteryAcute phaseNS12treatment/Traditional Chinese medicine vs Western medicine treatment Traditional Chinese medicine conventional treatment vs Western medicine conventional treatmentBacterial dysenteryAcute phaseMinor, General, Major28Traditional Chinese medicine conventional treatmentBacterial dysenteryAcute phaseMinor, General, Major28Traditional Chinese medicine conventional treatmentMumpsNSNS11Traditional Chinese medicine conventional treatmentMumpsNSNS11Traditional Chinese medicine conventional treatmentMumpsNSNS7Traditional Chinese medicine conventional treatmentMumpsNSNS7Traditional Chinese medicine conventional treatmentMumpsNSNS7Traditional Chinese medicine conventional treatmentMumpsNSNS7Traditional Chinese medicine vs Western medicine conventional treatmentMumpsNSNS7Traditional Chinese medicine treatment medicine conventional treatmentMumpsNSNS33Traditional Chinese medicine treatment medicine conventional treatment	Included medicine studies medicine restment/Traditional Chinese medicine western interatment Modified Huangineruborg decoction Self-made decoction Bacterial dysertery Acute phase NS 12 Traditional Chinese medicine vestern medicine conventional treatment Modified Baltouweng decoction Bacterial dysertery Acute phase MS 28 Traditional Chinese medicine conventional treatment Modified Dathouweng decoction Bacterial dysertery Acute phase Minor, General, Major 28 Traditional Chinese medicine vestern medicine conventional treatment Modified Dathouweng decoction Mumps NS NS 11 Traditional Chinese medicine vestern medicine vestern	Bacterial Acute phase NS N	InternetIncludeIncludeIncludeIncludeIncludeIncludeBernetAste phaseNSNSServerseServerse(10) (12) (40 (10)NSBernetAste phaseNSNSNSNSNSNSNSBernetAste phaseMore GreenetNSNSNSNSNSBernetAste phaseMore GreenetNSNSNSNSNSBernetMarceMarce GreenetNSNSNSNSNSBernetMarceMarce GreenetNSNSNSNSNSMurneNSNSNSNSNSNSNSNSNSMurneNSNSNSNSNSNSNSNSNSNSNSMurneNSN

Study	Disease type	Disease stage	Disease classification	Number of included studies	Intervention types	Traditional Chinese medicine treatment	Outcomes	c	quency Advers of the event rmulas
						Compound oral mixture of Folium Isatidis (Chinese pinyin: Daqingye) and external application of Cactus Xianfanghuoming decoction + Zijin Cube with vinegar External application of Zhitongxiaoyan ointment + Conventional treatment Shuanghuanglian injection Self-made decoction External application of Wanyin ointment External application of Quzhaling			
u et al. 2013)	Mumps	Acute phase	NS	12	Traditional Chinese medicine + western medicine conventional	ointment Pudilanxiaoyan oral liquid	(10) (19) (44)	NS	Y
iu et al. 2016)	Herpangina	NS	NS	17	treatment VS Western medicine treatment Traditional Chinese medicine + western medicine conventional treatment VS Western medicine treatment	Modified Yinqiao decoction Qingjieliyan decoction Modified Xiexindacchi decoction Self-made Qingjiexiehuang decoction Mixture of Yinqiao decoction Self-made QingQinYinqiao decoction	(10) (19) (12)	NS	NS
						Qingrejieduliyan formula Jieduqinghuo formula Self-made Jieduliyan decoction Self-made Kouchangjing formula Yinqiaohaihe decoction Self-made decoction Self-made Zhitongyanyan decoction Qingyan decoction Niuhuangtianmaliyan powder			
hang t al. 2014)	Hand foot mouth disease	NS	Ordinary type	21	Traditional Chinese medicine + western medicine conventional treatment/Traditional Chinese medicine vs Western medicine treatment	Qingyanjiedu decoction Chaihuang granule Modified Gegenqilian decoction Modified Jidaiyu decoction Jieduqingre decoction Jinlan mixture Kangfuxin liquid + Qingrejiedu oral liquid	(10) (12) (30)	NS	NS
						Pudilanxiaoyan oral liquid + Yanhuning injection Qingrexiehuo decoction Sandouyinqiao decoction Yinqiaohuojun decoction Modified Yinqiaomabo decoction Self-made Yinqiaoxiaodu decoction Jinlianqingre granule Self-made Dazi formula			
						Self-made Baidu decoction			

Chinese Herbal Medicine for Infections

Study	Disease type	Disease stage	Disease classification	Number of included studies	Intervention types	Traditional Chinese medicine treatment	Outcomes	Frequency of the formulas	Adverse event
Zhang et al. (2014)	Hand foot mouth disease		Normal type, heavy duty		Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment				
Xiong et al. (2013)	Hand foot mouth disease	NS	NS	6	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	Xiyanping injection	(10) (14)	NS	Y
Wang et al. (2013)	Hand foot mouth disease	NS	NS	24	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	Xiyanping injection	(10) (14) (19) (12)	Xiyanping injection: 1–10 mg/kg, iv, qd	Y
Ding et al. (2013)	Hand foot mouth disease	NS	NS	11	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	Xiyanping injection	(12) (14) (19) (23)	NS	Y
Yu et al. (2020a)	Hand foot mouth disease	NS	NS	17	Traditional Chinese medicine + western medicine conventional treatment vs Western Medicine/Traditional Chinese medicine	Reduning injection/Tanreqing injection/Xiyanping injection/ Yanhuning injection	(10) (12) (14) (19) (23)	Reduning injection: 0.3–15 ml/kg, qd; Tanreqing injection: 0.3–0.5 ml/kg, qd; Xiyanping injection: 0.2–10 ml/kg, qd; Yanhuning injection: 5–10 ml/kg, qd	Y
Yang Z. et al. (2020)	Hand foot mouth disease	NS	NS	24	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	Lanqin oral liquid	(10) (12) (14) (19) (23)	NS	Y
Yan et al. (2020)	Hand foot mouth disease	NS	NS	5	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	Jinlianqingre effervescent tablets/ Jinzhen oral liquid/Kangbingdu oral liquid/Reduning injection/Xiyanping injection	(12) (26) (14) (19)	NS	Y
Xiong et al. (2019)	Hand foot mouth disease	NS	NS	11	Traditional Chinese medicine + western medicine conventional treatment VS Western medicine treatment	Tanreqing injection/Xiyanping injection/Reduning Injection	(10) (12) (26) (14) (19)	Tanreqing injection: 0.3–0.5 ml/kg, 5-10 days; Xiyanping injection: 5–10 mg/kg, 3-10 days; Reduning Injection: 1-5 years, 0.5 ml/kg; 6–10 years, 10 ml; 11–13 years 15ml, 3-10 d	Y
He (2020)	Hand foot mouth disease	NS	NS	14	Traditional Chinese medicine + western medicine conventional	Xiyanping injection + Chinese patent medicine (Lanqin oral liquid/Kangfuxin liquid/Pudilan oral liquid/Jinhoujian spray/Tanreqing injection)	(10) (12) (14) (19) (37)	NS	NS

Luo et al.

	Study	Disease type	Disease stage	Disease classification	Number of included studies	Intervention types	Traditional Chinese medicine treatment	Outcomes	Frequency of the formulas	Adverse event
Contol mode PUD LAN Mission one liquid Human has done with Meter Galasse modion estimation PUD CAN Mission one liquid Human has done with Meter Galasse modion estimation Right one liquid Human has done with Meter Galasse Human has done with Meter PuD CAN Mission one liquid Human has done with Meter Galasse Human has done with Meter Human has done with Meter Human has done with Meter Galasse Human has done with Human has done modun human has done with Human has done with Human has done w	Yu et al.	Hand foot	NS	NS	26	medicine treatment	Langin oral liquid	(10) (12) (14) (19) (30) (57)	Fuganlin oral liquid: 10 ml. tid:	Y
 c hard types disconserve tweels c hard types disconserve twee becomdary beeching, infection, disbetes, hypertension c hard types disconserve to twee books on, cough disappearance rete, number of cough disappearance cases, difference in points before and after cough, cough reference rete, c hard types disconserve to test b archers and transmission rete b archers and the set on the set on test o	(2020b)	mouth			20	medicine vs Western medicine treatment/ Traditional Chinese	PU Di LAN Xiaoyan oral liquid Yellow Gardenia liquid Fuganlin oral liquid Kangbindu oral liquid Huangqing oral liquid		Huangzhihua oral liquid:10 ml, tid or 5–20 ml, bid; Kangbingdu oral liquid: 10 ml tid; Huangqin oral liquid:10 ml,	
 i Check Topoles and Subpoles nor rate Complications due to hommore use (scoopding bleading, infection, diables, hyperfersion) Cough input due topoles nor rate, further emission rate, number of oough disappearance case, differince in ports before and after cough, ough refer rate, cough duator () Cough sput due topoles nor rate, diarhes remission rate) Definition provement (darbos disappearance inte, diarhes remission rate) Definition provement (darbos disappearance inte, future fission rate) Definition provement (darbos disappearance inte, future disappearance rate, future integration () Endrarge rate Definition provement (darbos disappearance inte, future disappearance rate, future integration () Endrarge rate Definition provement (darbos disappearance inte, future integration rate, for rate or control rate) Definition provement (furth case, close rate) Definition provement (furth case, close		, ,								
 i Cough provement (cough synthetin score, cough disppearance rate, number of cough disppearance cases, difference in ports before and after cough, cough relef rate, cough duration [] i Cough sput duration level I Darther inprovement (distribute disppearance rate, diarthea remission rate) I Darthea inprovement (distribute disppearance rate, diarthea remission rate) I Darthea inprovement (distribute disppearance rate, diarthea remission rate) I Darthea inprovement (distribute disppearance rate, diarthea remission rate) I Darthea inprovement (distribute disppearance rate, diarthea remission rate) I Darthea inprovement (distribute disppearance rate, disppearance rate, feer trans, feer control rate) I Darthea inprovement (distribute disppearance rate, disppearance rate, feer trans, feer control rate) I Darthea inprovement (distribute disppearance rate, disppearance rate, feer trans, feer control rate) I Darthea inprovement (distribute disppearance rate, feer trans, feer control rate) I Darthea inprovement (distribute disppearance rate, feer trans, feer trans, feer control rate) I Darthea inprovement (distribute disppearance rate, feer trans, feer control rate) I Darthea inprovement (distribute disppearance rate) I Darthea inprovement information rate) I Darthea inprovement information rate (disppearance rate) I Darthea inprovement information rate) I Darthea inprovement information rate (disppearance rate) I Darthea information rate (disppe		-	rance rate							
 i court product diappearance rate i courts product diappearance rate, diarbea remission rate) i Darbea improvement (kerbic diappearance rate, diarbea remission rate) i Darbea improvement (kerbic diappearance rate, diarbea remission rate) i Dearbea rate i Product provement (kerbic diappearance rate, faigue improvement rate, stague improvement case court, faigue duration, faigue synption integration) i Product provement (kerbic diagpearance rate, stague improvement rate, stague improvement case court, faigue duration, faigue synption integration) i Product provement (kerbic diagpearance rate, faigue improvement rate, stague improvement case court, faigue duration, faigue synption integration) i Product provement (kerbic diagnee ratchers (kerbic rate) i Product provement (kerbic diagnee ratchers (kerbic rate) i Product provement (kerbic diagnee ratchers (kerbic rate) i Product provement (galinensor) i Product provement (kerbic diagnee ratchers (kerbic rate) i Product provement (galinensor) i Product provement (kerbic rate) i Prod										
 1) or discontration (see) 1) Dernham encoursent (laterba encourse) (admices disappearance rate, diarhea remission rate) 1) Dernham encoursent (laterba disappearance rate, diarhea remission rate) 1) Dernham encoursent (laterba disappearance rate, fatigue improvement rate, fatigue improvement case oourt, fatigue duration, fatigue expertormant (meterba disappearance rate, fever trans, fever ootrol rate) 2) Feor mitigation (number of cases of fever, fever symptom scons, fever disappearance rate, fever trans, fever ootrol rate) 3) Healing rate 3) Provement (durinker afe, cose rate) 3) Provement of durinkerse, cose rate) 3) Provement of durinkerse, cose rate, and constitution, and cose rate of improvement in CT in the largs, absorption rate of pneumonia, improvement rate of magery of the langs, lesions absorption) 3) Provement of durinkerse reactions (fever demage, durine, naucea and vomiting) 3) Incidence of absorption (large improvement of CT in the largs, effective rate of insprevenent in CT in the largs, absorption rate of pneumonia, improvement rate of magery of the langs, lesions absorption) 3) Incidence of absorption (large immersion absorption time, large immersion absorption rate) (large immersion absorption tate) 3) Large of absorption (large immersion absorption time, large immersion absorption absorption, puttor of tymptocytes, lymptocyte sacrity, paroentage of muchtose) 3) Large of absorption rate inflammation marker inflags. 4) Rober and carde 4) Rober and th				ore, cough disappeara	ance time, cou	igh disappearance rate, nun	nber of cough disappearance cases, differen	nce in points before and after cough, cough	relief rate, cough duration)	
 i Darkney networkent (darknea disappearance rate, diarkea remission rate) i Diskrey rate 0 Strokey rate 0 Strokey rate 1 Stappearance rate, failingue disappearance rate, failingue improvement rate, failingue duration, failingue symption integration) 2 Four intragation (turber of cases of foure, feer gymption score, fever disappearance rate, fever fime, fever control rate) 3 Healing rate 4 Healing time for irables or mouth utcers 5 Holow improvement (prink rate, close rate) 9 Four intradue or mouth utcers 9 Four an orbit utcers 9 Indexico ad bases reactions (fever dimage, darking, anasea and vomiting) 9 Indexico ad bases reactions (fever dimage, darking, anasea and vomiting) 9 Indexico ad bases reactions (fever dimage, darking, anasea and vomiting) 9 Indexico ad bases reactions (fever dimage, darking, names and stopption score, number of cases of lang inmersion absorption rate) 9 Indexico ad bases ratedoms (fever dimage, darking, theory, terretage of lymphocytes) 9 Indexico ad bases ratedoms (fever dimage, darking, theory, terretage of lymphocytes) 9 Indexico ad bases ratedoms (fever dimage, darking, fever dimage, darking, theory, terretage of lymphocytes) 9 Indexico ad bases ratedoms (fever dimage, darking, theory, terretage of lymphocytes) 9 Indexico ad bases ratedoms (fever dimage, darking, fever dimage, darking, fever dimage, darking, terretage of lymphocytes) 9 Indexico ad bases ratedoms (fever dimage, darking, fever dimage, dark	., 0		ance rate							
			mbaaa diaanna	aranaa rata diarrhaa i	rominaian rata)					
0. Efficiency 1. Program proceement tweek diseppearance time, figue diseppearance rate, faigue improvement cate count, faigue duration, faigue symptom integration) 2. Prior infiguition furnation of cases of fever, fiver symptom score, fiver diseppearance rate, fiver time, fiver control rate) 3. Healing time for rathes or mouth ulcase 3. Hollow improvement (shrink rate, close rate) 0. PN-u 10. Incluse 9. Incluse of adverse reactions (liver diseppearance rate, fiver time, fever control rate) 9. Incluse of adverse reactions (liver diseppearance and vomiting			armoea disappea	arance rate, diarmea i	remission rate)					
2) Point mitgation (number of cases of lever, lever symptom score, lever disappearance rate, fever time, lever control rate) 4) Healing time for rankes or mouth ulcers 5) Healing time for rankes or mouth ulcers 6) Five 7) II-6 level 8) movement of pulnonary CT (rate of improvement of CT in the lungs, effective rate of improvement in CT in the lungs, absorption rate of pneumonia, improvement rate of imagery of the lungs, lesions absorption) 9) moderne of ascordary fung interiors following the use of hormones 1) Lergel to adverse reactions (liver damage, dambea, nausea and voniting) 9) moderne of ascordary fung interiors following the use of hormones 1) Lergel to adverse reactions (liver damage, dambea, nausea and voniting) 9) moderne of ascordary fung interiors absorption time, lung immersion absorption score, number of cases of lung immersion absorption rate) 4) upmotopet intervoement (turbics following the use of hormones 1) Largel to adverse reactions (liver damage, scoredary lung intersion absorption time, lung immersion absorption score, number of cases of lung immersion absorption rate) 4) upmotopet intervoement (turbics), porcentage of lymphocytes) 5) Major symptoms and inflammatory markers integral 9) Nucle cases of evere intersion rate, number of cases of severe illness) (hand, foot and mouth disease) 7) Mortally 9) Nucle cases of evere intersion rate, number of cases of severe illness) 9) Auger available 9) Oral doce are care or dung the severe intersion rate of damager available 9) Portal date of evere formersion rate of available 1) Orgen and inflammatory markers integral 9) Portal date of evere integral	. ,	,	aak disannaaran	ca tima, fatiqua disar	nearance rate	fatique improvement rate	fatique improvement case count, fatique dur	ration fatique symptom integration)		
 Beland rate Healing the for earbest or moth thems Healing the for earbest or moth thems Healing the for earbest or moth thems How impovement (shrik rate, close rate) In A well In close of secondary (trugal infections following the use of hormones In close well In								alon, laigue symptom integration)		
4) Healing fune for rankes in mouth ucers 5) Hollow improvement (shrink rate, close rate) 6) Heat 7) Le5 held 8) improvement of pulmonary CT (rate of improvement of CT in the lungs, effective rate of improvement in CT in the lungs, absorption rate of pneumonia, improvement rate of imagery of the lungs, lesions absorption) 9) incidence of adverse reactions (liver damage, diarthae, nause and vornting) 0) incidence of adverse reactions (liver damage, diarthae, nause and vornting) 0) incidence of adverse reactions (liver damage, diarthae, nause and vornting) 0) incidence of adverse reactions (liver damage, diarthae, nause and vornting) 0) incidence of adverse reactions (liver damage, diarthae, nause and vornting) 1) Length of stay 2) Lesions absorption rate 3) Lung immersion absorption rate 3) Lung immersion absorption rate 4) Murphoryte mory (number of hymphocytes, lymphocyte toxic), percentage of hymphocytes 5) Moris regress and inflammatory markers integres 6) Mori to servere levere conversion rate, number of cases of severe liness) (hand, hoot and mouth disease) 7) Moristly 8) Nuceica adit to negative 9) Nucleica adit to negative 10) Outpers on equive 10) Adjuers are cured 10) Adjuers are cured 10)		-	01 02303 01 1010	or, lever symptom set						
 b) Hole improvement (khrik rate, close rate) c) FN-a T) Lo Seved 9) Incorece of secondary (trage inferovement of CT in the lungs, effective rate of improvement in CT in the lungs, absorption rate of pneumonia, improvement rate of imagery of the lungs, lesions absorption, secondary (trugg) infections following the use of hormones 9) Incohene of secondary (trugg) infections following the use of hormones 9) Leagins absorption rate 3) Lung immersion absorption (ting immersion absorption score, number of cases of lung immersion absorption, pulmonary immersion absorption rate) 4) Jumptocytes improvement (uniber of lymphocytes, lymphocyte toxidy, percentage of lymphocytes) 5) Major symptoms and infammatory makers integral 6) Mid to severe (severe conversion rate, number of cases of severe illness) (hand, foot and mouth disease) 7) Mortaly 8) Auasia disappearance rate 9) Audie cai to negative 9) Points of dry throat symptoms 9) Alloters are cured 1) Orgens rate of hand, foot and mouth disease 1) Orgens rate of hand, foot and mouth disease 1) Points dry throat symptoms 9) Reprint Points 9) Reprint Poin	. , 0		or mouth ulcers							
Bit Number of public and public				ata)						
7) IL-E level 9) Indexnee of pulmoney of pulmoney fired of improvement of CT in the lungs, effective rate of improvement rate of pneumonia, improvement rate of imagery of the lungs, lesions absorption) 9) Indeknee of secondary turgal infections following the use of hormones 1) Length of star 2) Lesions absorption rate 3) Lung immersion absorption fung immersion absorption time, lung immersion absorption score, number of cases of lung immersion absorption rate) 4) Lymphocyte improvement (number of lymphocytes, lymphocyte toxicity, percentage of lymphocytes) 5) Major symptoms and inflammatory markers integral 6) Mald to severe (severe conversion rate, number of cases of severe ilness) (hand, foot and mouth disease) 7) North/ 8) Nausea 8) Nausea 9) Nucleis acid to negative 0) Cralu dises are cared 1) Oxigonation index 2) Perios for y Unitodity Nature Severe Conversion 9) Nucleis acid to negative 1) Oxigonation index 2) Percentage of neutrophils 2) Points of y Unitodity Nature Severe Rate 3) Coality of life 3) Rouber for nearbity 4) Porgenserate or rate 4) Porgenserate or hard, foot and mouth disease 5) Oxially of life	. ,	improvement (sn	TITIK Tate, Close I	alej						
 B) Incorevenent of pulmonary CT (rate of improvement of CT in the lungs, effective rate of improvement in CT in the lungs, absorption rate of pneumonia, improvement rate of imagery of the lungs, lesions absorption) B) Incidence of adverse reactions (liver damage, diarhea, nausee and vorning) D) Incidence of adverse reactions (liver damage, diarhea, nausee and vorning) D) Incidence of adverse reactions (liver damage, diarhea, nausee and vorning) D) Incidence of adverse reactions (liver damage, diarhea, nausee and vorning) D) Incidence of adverse reactions (liver damage, diarhea, nausee and vorning) D) Incidence of adverse reactions (liver damage, diarhea, nausee and vorning) D) Incidence of adverse reactions (liver damage, diarhea, nausee and vorning) D) Incidence of adverse reactions (liver damage, diarhea, nausee and vorning) D) Incidence of adverse reactions (liver damage, diarhea, nausee and vorning) D) Incidence of adverse reactions (liver damage, diarhea, nausee) (liver da		al								
9) Incidence of adverse reactions (live damage, damba, nausea and voniting) 10) Incidence of secondary fungal infections following the use of hormones 11) Length of stay 2) Lesions absorption rate 3) Long immersion absorption (lung immersion absorption time, lung immersion absorption score, number of cases of lung immersion absorption rate) 4) Lymphocyte improvement (number of lymphocytes, kymphocyte toxidy, percentage of lymphocytes) 5) Major symptoms and inflammatory markers integral 6) Major symptoms and inflammatory markers integral 8) Nausea (severe (severe conversion rate, number of cases of severe ilness) (hand, foot and mouth disease) 7) Mortally 8) Nausea (sisppearance rate 9) Nuclei acid to negative 10) Oral ulcers are oured 11) Oxgenation index 12) Percentage of neutrophils 9) Policie and th tradition (tot and mouth disease) 13) Politis for dy throat symptoms 14) Progress rate of hand, foot and mouth disease 15) Quality diffe 16) Respiratory Difficulty Disappearance Rate 17) Respiratory Difficulty Disappearance Rate 18) Politis for dy Interd symptoms 19) Rucleician of the mouth disease 19) Stuch throat symptoms 10) Call ulcers are outed 10) Call ulcers are outed 11) Oxgeneting infections (but mouth disease) 12) Percentage of neutrophils 13) Politis for dy Interd Symptoms 14) Percentage of Instructure Infections 15) Percentage of Instructure Infections 16) Percentage of Instructure Infections 17) Respiratory Difficulty Disappearance Rate 17) Respiratory Difficulty Disappearance Rate 17) Respiratory Difficulty Disappearance Rate 18) Percentage of the difficulture Infections 19) Stop the time 10) Toth Certificate Improvement 10) The duration of the wire stedding 10) Toth Certificate Improvement 10) The duration of the wire stedding 10) The duration of the wi	. ,		any CT (rate of in	oprovement of CT in t	the lunce offe	ctive rate of improvement in	CT in the lungs, absorption rate of pheumo	nia improvement rate of imageny of the lung	as lesions absorption)	
0) Indefere of secondary fungal infections following the use of hormones 1) Length of stay 2) Lesions absorption rate 3) Lung immersion absorption (lung immersion absorption time, lung immersion absorption score, number of cases of lung immersion absorption, pulmonary immersion absorption rate) 4) Lymphocyte improvement (number of lymphocytes, hymphocyte toxicity, percentage of lymphocytes) 5) Major symptoms and inflammatory markers integral 6) Mito to severe (severe conversion rate, number of cases of severe illness) (hand, foot and mouth disease) 7) Mortally 8) Nucleic acid to negative 0) Oral ulcers are cured 10) Augeration index 2) Percentage of neutrophis 2) Oral ulcers are of neutrophis 2) Oral ulcers and on nouth disease 5) Ougers rate of hand, foot and mouth disease 6) Respective pullificulty Disappearance Rate 7) Resume feeding time 8) Secondary infection rate 9) South time 9) South abstriation rate 9) South abstriation rate 9) South abstriation rate 9) Augeration of the row is stedding					-		or in the langs, absorption rate of priodino	and, improvement rate of imagery of the lang		
 Largth of stay Stay intersion absorption fluing immersion absorption time, lung immersion absorption score, number of cases of lung immersion absorption, pulmonary immersion absorption rate) Hyphocyte improvement (number of tymphocytes, ymphocyte toxicity, percentage of lymphocytes) Major symptoms and inflammatory markers integral Mid to severe (severe conversion rate, number of cases of severe illness) (hand, foot and mouth disease) Notality Nausea disappearance rate Nuclei caid to negative Seconday infection rate Nuclei caid turn negative Seconday infection rate Nuclei caid turn negative Nuclei caid turn negative Nuclei caid turn set throat The duration of the sore throat The duration of the sore throat The duration of the sore throat 						,				
2) Lesions absorption rate 3) Lung immersion absorption (lung immersion absorption time, lung immersion absorption score, number of cases of lung immersion absorption, pulmonary immersion absorption rate) 4) Lymphocyte improvement (Lumber of Mymphocytes, Kymphocyte toxicity, percentage of lymphocytes) 5) Major symptoms and inflammatory markers integral 6) Milot to severe (severe conversion rate, number of cases of severe illness) (hand, foot and mouth disease) 7) Mortality 8) Nausea disappearance rate 9) Nucleic acid to negative 0) Oral ulcers are cured 10) Points for dy throat symptoms 4) Progress rate of hand, foot and mouth disease 5) Qualt Urcers are cured 10) Points for dy throat symptoms 4) Progress rate of hand, foot and mouth disease 5) Qualt Lycers area of hand, foot and mouth disease 5) Qualt Joritisty Difficulty Disappearance Rate 7) Resume feeding time 8) Secondary infection rate 9) Sputum bacteria turn negative 0) Sput metative turn engative 0) Stop the time 1) TCM certificate Improvement 2) The duration of the sore		-		ionowing the doo of i	lonnonoo					
3) Lung immersion absorption (lung immersion absorption time, lung immersion absorption score, number of cases of lung immersion absorption, pulmonary immersion absorption rate) 4) Lymphcyte improvement (number of ymphcytes, tymptocyte toxicity, percentage of lymphcytes) 5) Major symptoms and inflammatory markers integral 6) Mald to severe (severe conversion rate, number of cases of severe illness) (hand, foot and mouth disease) 7) Mortality 8) Nausea disappearance rate 9) Nucleic acid to negative 0) Oral ulcers are cured 1) Oxygenation index 2) Percentage of neutrophils 3) Foints for dry throat symptoms 4) I Umph certein function rate 6) Respiratory Difficulty Disappearance Rate 5) Quily of life 6) Percentage of neutrophils 5) Couly of life 6) Respiratory Difficulty Disappearance Rate 6) Respiratory Difficulty Disappearance Rate 7) Rouring feeding time 8) Secondary infector rate 8) Secondary infector rate 9) Sputu bacteria turn negative 0) Stop te time 1) TCM Certificate Improvement 2) The duration of the sore throat 3) The duration of the sore throat		-								
 4) Lymphocyte improvement (number of lymphocytes, lymphocyte toxicity, percentage of lymphocytes) 5) Major symptoms and inflammatory markers integral 6) Mild to severe (severe (severe conversion rate, number of cases of severe illness) (hand, foot and mouth disease) 7) Mortality 8) Nuese disappearance rate 9) Nucleic acid to negative 0) Oral ulcers are cured 1) Oxygenation index 2) Percentage of neutrophils 3) Foints for dry throat symptoms 4) Progress rate of hand, foot and mouth disease 5) Quality of life 6) Respiratory Difficulty Disappearance Rate 6) Respiratory Difficulty Disappearance Rate 8) Sourds triffection rate 9) Sputtm bacteria turn negative 1) Oxygenation index 2) Porter time 1) Oxygenation index 2) Porter time 3) Points for dry throat symptoms 4) Progress rate of hand, foot and mouth disease 5) Quality of life 9) Sputtm bacteria turn negative 1) Oxygenation index 1) Oxygenation index 2) Porter time 1) Oxygenation index 2) Porter time the symptoms 3) Addition of the virus shedding 	. ,		ion (luna immers	ion absorption time	luna immersio	a absorption score number	of cases of lung immersion absorption, pull	monary immersion absorption rate)		
 5) Major symptoms and inflammatory markers integral 6) Mild to severe (severe conversion rate, number of cases of severe illness) (hand, foot and mouth disease) 7) Mortality 8) Nausea disappearance rate 9) Nucleic acid to negative 0) Oral ulcers are cured 1) Oxygenation index 2) Percentage of neutrophils 3) Points for dry throat symptoms 4) Progress rate of hand, foot and mouth disease 5) Quality of life 16) Respiratory Difficulty Disappearance Rate 17) Rostrati turn negative 19) Sputm bacteria turn negative 10) Stop the time 11) TOM Certificate Improvement 2) The duration of the virus shedding 		•			•		or ouses of lang initial slot assorption, pair	honary initiation absorption rate,		
 (6) Mild to severe (severe conversion rate, number of cases of severe illness) (hand, foot and mouth disease) (7) Mortality (8) Nausea disappearance rate (9) Nuclei cacid to negative (10) Oral lcers are cured (11) Oxgenation index (2) Percentage of neutrophils (2) Percentage of neutrophils (3) Points for dry throat symptoms (4) Progress rate of hand, foot and mouth disease (5) Quality of life (6) Respiratory Difficulty Disappearance Rate (7) Resume feeding time (8) Secondary infection rate (9) Sputtm bacteria tum negative (1) Oxgo the time (1) CAC etificate Improvement (2) The duration of the virus shedding 					to torabily, por	oonaago on iyniphooytooy				
 7) Mortality 8) Nausea disappearance rate 9) Nucleic acid to negative 0) Oral ulcers are cured 1) Oxgenation index 2) Percentage of neutrophils 3) Points for dry throat symptoms 4) Progress rate of hand, foot and mouth disease 5) Quality of life 6) Respiratory Difficulty Disappearance Rate 7) Resume feeding time 8) Secondary infection rate 9) Sputum bacteria turm negative 0) Sputum bacteria turm negative 1) TCM Certificate Improvement 2) The duration of the sore throat 3) The duration of the virus shedding 			-	-	vere illness) (h	and, foot and mouth diseas	e)			
 8) Nause disappearance rate 9) Nucleic acid to negative 0) Oral ucers are cured 1) Oxygenation index 2) Percentage of neutrophils 3) Points for dry throat symptoms 4) Progress rate of hand, foot and mouth disease 5) Quality of life 6) Respiratory Difficulty Disappearance Rate 7) Resume feeding time 8) Secondary infection rate 9) Sputum bacteria turn negative 0) Sputum bacteria turn negative 1) TCM Certificate Improvement 2) The duration of the sore throat 3) The duration of the virus shedding 										
O and ulcers are cured 1) Oxygenation index 2) Percentage of neutrophils 3) Points for dry throat symptoms 4) Progress rate of hand, foot and mouth disease 5) Quality of life 6) Respiratory Difficulty Disappearance Rate 7) Resume feeding time 8) Secondary infection rate 9) Suptum bacteria tum negative 0) Stop the time 1) TCM Certificate Improvement 2) The duration of the sore throat 3) The duration of the virus shedding		-	ate							
1) Oxygenation index (2) Percentage of neutrophils (3) Points for dry throat symptoms (4) Progress rate of hand, foot and mouth disease (5) Quality of life (6) Respiratory Difficulty Disappearance Rate (7) Resume feeding time (8) Secondary infection rate (9) Sputum bacteria turn negative (0) Stop the time (1) TCM Certificate Improvement (2) The duration of the sore throat (3) The duration of the virus shedding	(29) Nucleic	acid to negative								
 2) Percentage of neutrophils 3) Points for dry throat symptoms 4) Pogress rate of hand, foot and mouth disease 5) Quality of life 6) Respiratory Difficulty Disappearance Rate 7) Resume feeding time 8) Secondary infection rate 9) Sputum bacteria turn negative 0) Stop the time 1) TCM Certificate Improvement 2) The duration of the sore throat 3) The duration of the virus shedding 	(30) Oral ulc	ers are cured								
 a) Points for dry throat symptoms b) Points for dry throat symptoms b) Progress rate of hand, foot and mouth disease b) Quality of life b) Respiratory Difficulty Disappearance Rate c) Resume feeding time b) Secondary infection rate c) Secondary infection rate c) Sputum bacteria turn negative c) Stop the time c) TOK Certificate Improvement c) The duration of the sore throat c) The duration of the virus shedding 	(31) Oxygen	ation index								
 4) Progress rate of hand, foot and mouth disease 5) Quality of life 6) Respiratory Difficulty Disappearance Rate 7) Resume feeding time 8) Secondary infection rate 9) Sputum bacteria tum negative 0) Stop the time 1) TCM Certificate Improvement 2) The duration of the sore throat 3) The duration of the virus shedding 	(32) Percent	age of neutrophil	s							
5) Quality of life 6) Respiratory Difficulty Disappearance Rate 7) Resume feeding time 8) Secondary infection rate 9) Sputum bacteria turn negative 0) Stop the time 1) TCM Certificate Improvement 2) The duration of the sore throat 3) The duration of the virus shedding	(33) Points f	or dry throat sym	nptoms							
6) Respiratory Difficulty Disappearance Rate 7) Resume feeding time 8) Secondary infection rate 9) Sputum bacteria turn negative 0) Stop the time 1) TCM Certificate Improvement 2) The duration of the sore throat 3) The duration of the virus shedding	(34) Progres	ss rate of hand, fo	pot and mouth c	lisease						
7) Resume feeding time (8) Secondary infection rate (9) Sputum bacteria turn negative (0) Stop the time 1) TCM Certificate Improvement 2) The duration of the sore throat 3) The duration of the virus shedding										
 a) Secondary infection rate b) Sputum bacteria turn negative c) Stop the time c) TCM Certificate Improvement c) The duration of the sore throat c) The duration of the virus shedding 			appearance Rate	Э						
9) Sputum bacteria turn negative 0) Stop the time 1) TCM Certificate Improvement 2) The duration of the sore throat 3) The duration of the virus shedding		-								
0) Stop the time 1) TCM Certificate Improvement 2) The duration of the sore throat 3) The duration of the virus shedding	. ,	,								
 1) TCM Certificate Improvement 2) The duration of the sore throat 3) The duration of the virus shedding 			gative							
2) The duration of the sore throat 3) The duration of the virus shedding										
3) The duration of the virus shedding										
(Continued on following page	(43) The du	ration of the virus	shedding							
									(Continued on follow	ving page)

Chinese Herbal Medicine for Infections

Study	Disease type	Disease stage	Disease classification	Number of included studies	Intervention types	Traditional Chinese medicine treatment	Outcomes	Frequency of the formulas	Adverse event
 (44) The mair (45) The num (46) The num (48) The rate (49) The rate (50) The time (51) The time (51) The time for (53) The time for (54) The time for (55) The time for (57) Time for (57) Time for (58) Total call (58) Total call (59) Total rem (61) Total rem (61) Total rem (63) The use (63) The use (63) The use (63) The use (63) The use 	 (44) The main clinical symptoms are efficient (fever, fatig (45) The number of cases of severe to mild liness (46) The number of CDA plus (47) The rate of disappeared (49) The rate of loss of appetite (49) The rate of loss of appetite (50) The time of the nucleic acid cathodic turn (51) The time when herpes disappeared (53) The time when the symptoms disappeared (54) The time when the symptoms disappeared (55) The time when the symptoms disappeared (56) The time when the symptoms disappeared (57) The time of the disappearance of rash and herpes (58) Time of the disappearance of rash and herpes (59) Total cacitorin levels (50) Total remission of clinical symptoms (main symptom (61) Total remission of clinical symptoms of COVID-19 (mains) (62) Total remission of clinical symptoms of COVID-19 (mains) 	is are efficient (fe, evere to mild illne (47) The rate of di e and pains disage is and pains disag- ses was transferered icl cathodic turn appeared orns disappears or disappears on disappears mptoms (main s) imptoms of COVID	 (44) The main clinical symptoms are efficient (fever, fatigue and cough) (45) The number of cases of severe to mild illness (45) The number of cases of severe to mild illness (46) The number of CD4 plus (47) The rate of disappearance of shortness of breath (43) The rate of loss of appetite (43) The rate of loss of appetite (45) The rate of loss of appetite (50) The time when herpes disappeared (51) The time when herpes disappeared (53) The time when the snot disappeared (53) The time when the snot disappeared (53) The time when the snot disappeared (54) Time to the disappeared (55) Time of the disappeared (56) Time of the disappeared (57) Time of the disappearance of rash and herpes (58) Time of the disappearance of rash and herpes (59) Time of the disappearance of rash and herpes (50) Time of the disappearance of rash and herpes (50) Time of the disappearance of rash and herpes (52) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (54) Time of the disappearance of rash and herpes (55) Time of the disappearance of rash and herpes (55) Time of the disappearance of rash and herpes (55) Time of the disappearance of rash and herpes (55) Time of the disappearance of rash and herpes (55) Time of the disappearance of rash and herpes (55) Time of the disappearance of rash and herpes (55) Time of the disa	(h) tress of breath ce rate, other symp disappearance rate, e, average use time	 (44) The main clinical symptoms are efficient (fever, fatigue and cough) (45) The number of cases of severe to mild liness (46) The number of cases of severe to mild liness (46) The rate of loss of appetite (47) The rate of closs of appetite (49) The rate of closs of appetite (49) The rate of loss of appetite (41) The rate of muscular aches and pains disappeared (50) The time at which the fectors was transferred to 'nin (51) The time of the nucleic acid cathodic tum (52) The time when the snot disappeared (53) The firm extinct the compesting (53) The of thysical pain (53) Time of the disappeared of cash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Time of the disappearance of rash and herpes (53) Total remission of clinical symptom disappearance rate, other symptom disappearance rate, total clinical symptoms (main symptom disappearance rate, total clinical symptoms of COVID-19 (main symptom disappearance rate, other symptom disappearance rate, total clinical symptoms of clinical symptom disappearance rate, other symptom disappearance rate,	I symptom score, difference before and after t	 The main durat symptoms are effected (lever, falgue and cough) The main durat symptoms are effected (lever, falgue and cough) The number of cases of severe to main lines: The number of cases of severe to main lines: The number of cases of severe to main lines: The number of cases of severe to main lines: The number of cases of severe to main lines: The number of cases of severe to main lines: The number of cases of severe to main lines: The num externed called of the follows was transferred to Vin The time when here search each each each each each each each ea	/clinical symptom disappeara	nce time) bearance

et al., 2020), 8 for SARS (Liu et al., 2004; Zhang et al., 2004; Zhao et al., 2004; Hao, 2005; Hao et al., 2005; Liu et al., 2005; Chen et al., 2007; Liu et al., 2012), 4 for tuberculosis (Guo et al., 2010; Yan and Gao, 2017; Yue et al., 2017; Jin et al., 2018), 3 for mumps (Zhao, 2014; Wu et al., 2015; Zhang, 2016), 2 for bacterial dysentery (Han, 2016; Wang et al., 2017), 2 for H1N1 (Zhao et al., 2014; Li et al., 2016), and 2 for herpes pharyngitis (Lu et al., 2013; Liu et al., 2016).

The number of RCTs included in each systematic review ranged from 2 to 45. Regarding the type of intervention in the intervention group, TCM combined with Western medicine accounted for the greatest proportion (n = 43, 84.31%) (Liu and Dong, 2021; Fan et al., 2020; Pang et al., 2020; Jin et al., 20201992; Luo et al., 2021; Sun et al., 2020; Zeng et al., 2020; Wang S. et al., 2020; Yang et al., 2020a; Ang et al., 2020; Xiong et al., 2020; Liu et al., 2020; Gao et al., 2020; Qi et al., 2020; Wu et al., 2020; Chen et al., 2007; Liu et al., 2004; Liu et al., 2012; Zhang et al., 2004; Hao, 2005; Hao et al., 2005; Liu et al., 2005; Zhao et al., 2004; Zhao et al., 2014; Li et al., 2016; Jin et al., 2018; Yan and Gao, 2017; Yue et al., 2017; Guo et al., 2010; Wang et al., 2017; Han, 2016; Wu et al., 2015; Zhang, 2016; Zhao, 2014; Lu et al., 2013; Liu et al., 2016; Zhang and Wei, 2014; Zhang et al., 2014; Xiong et al., 2013; Wang et al., 2013; Ding et al., 2013; Yu et al., 2020a; Yang et al., 2020b), with two SRs (3.92%) including studies with CHM alone (Zhao et al., 2014; Yu et al., 2020b) and 6 SRs (11.76%) including studies investigating CHM alone and CHM in combination with Western medicine (Lu et al., 2013; Zhang and Wei, 2014; Zhao, 2014; Liu et al., 2016; Zhang, 2016; Xiong et al., 2019). The most frequently studied herbal preparations were proprietary CHM drugs (n = 37, 80.43%), followed by CHM decoction (n = 20.43.48%). In terms of pre-defined outcomes, the most used for all diseases were the rate of improvement of clinical symptoms or signs such as fever and cough (n = 47, 92.16%), followed by overall effectiveness (n =25, 49.02%), adverse events (n = 16, 31.37%), mortality (n =11, 21.57%), and the proportion of lung X-ray shadows absorbed (n = 11, 21.57%). Detailed data are shown in Table 1.

Eighteen systematic reviews on COVID-19 that reported on specific drugs showed that the most used proprietary CHM drugs were Lianhua Qingwen Granule/Capsule (n = 14, 77.78%) and Shufeng Jiedu Capsule (n = 10, 55.56%), and the most used CHM decoction were Qingfei Touxie Fuzheng Decoction (n = 7, 38.89%). Six studies that reported specific drugs for SARS showed that the most used prescription was SARS No.2 formula (n = 6, 75.00%), SARS No.1 formula (n =5, 62.50%), SARS No.3 formula (n = 5, 62.50%) and SARS No.4 formula (n = 5, 62.50%). The two H1N1 SRs used Lianhua Qingwen Capsule (n = 2,100.00%). The three tuberculosis studies that reported specific drugs showed common use of Astragalus Membranaceus (Chinese pinyin: Huangqi) preparations (n = 2). One SR for bacillary dysentery reported the use of CHM decoctions such as Baitouweng Decoction, Shaoyao Decoction, and Jiawei Dachaihu Decoction. The two SRs for mumps that reported specific drugs used Chuanxinlian injections, externally applied

TABLE 1 | (Continued) Basic characteristics of included literature.

yes.

stated; Y:

not s

NS:

Fuhuang ointment, and *Pujixiaodu* Decoction. The two SRs for herpangina reported specific drugs, including *Pudilan Xiaoyan* Oral Solution and *Yinqiao* Decoction. Ten SRs that reported on specific drugs for HFMD most used herbal injections, such as *Xiyanping* Injection (n = 7, 70.00%), *Reduning* Injection (n = 3,30.00%) and *Tanreqing* Injection (n = 3, 30.00%). Twenty-three SRs reported safety issues, among which one SR concluded that there were no adverse reactions to CHM. Twenty-one SRs reported adverse events, the most common of which were abdominal distension, diarrhoea, nausea, and vomiting, and poor appetite. Detailed data are shown in **Table 1**.

Results of AMSTAR2 Quality Assessment

The results of the AMSTAR2 evaluation showed that of the 51 systematic reviews, three (6.52%) were of high quality (Wang S. et al., 2020; Zeng et al., 2020; Luo et al., 2021), 22 (47.83%) were of moderate quality (Zhang et al., 2004; Zhao et al., 2004; Hao, 2005; Hao et al., 2005; Liu et al., 2005; Zhao, 2014; Zhao et al., 2014; Wu et al., 2015; Wang et al., 2017; Yan and Gao, 2017; Yue et al., 2017; Jin et al., 2018; Xiong et al., 2019; Yang M. et al., 2020; Yu et al., 2020a; Yang Z. et al., 2020; Fan et al., 2020; Gao et al., 2020; Jin et al., 2020; Pang et al., 2020; Sun et al., 2020; Xiong et al., 2020), ten (21.74%) were of low quality (Liu et al., 2004; Chen et al., 2007; Guo et al., 2010; Liu et al., 2012; Han, 2016; Li et al., 2016; Ang et al., 2020; Liu et al., 2020; Qi et al., 2020; Wu et al., 2020), and 11 (23.91%) were of very low quality (Liu and Dong, 2021; Zhao et al., 2004; Lu et al., 2013; Liu et al., 2016; Zhang and Wei, 2014; Zhang et al., 2014; Xiong et al., 2013; Wang et al., 2013; Ding et al., 2013; Yan et al., 2020; He, 2020).

Six of the high-quality SRs were on TCMs against COVID-19 (Wang S. et al., 2020; Zeng et al., 2020; Zhou L. P. et al., 2021; Zhou F. et al., 2021; Luo et al., 2021; Ouyang et al., 2021). Most of the medium-quality SRs were on COVID-19 (n = 8, 42.11%) (Liu and Dong, 2021; Fan et al., 2020; Pang et al., 2020; Jin et al., 2020; Sun et al., 2020; Yang M. et al., 2020; Xiong et al., 2020; Gao et al., 2020), followed by SARS (*n* = 5, 62.50%) (Zhang et al., 2004; Zhao et al., 2004; Hao, 2005; Hao et al., 2005; Liu et al., 2005), HFMD (n = 4, 36.36%) (Xiong et al., 2019; Yu et al., 2020a; Yang Z. et al., 2020; Yu et al., 2020b), tuberculosis (n = 3, 75.00%) (Yan and Gao, 2017; Yue et al., 2017; Jin et al., 2018), mumps (n = 2, n)66.67%) (Zhao, 2014; Wu et al., 2015), H1N1 (n = 1, 50.00%) (Zhao et al., 2014) and bacillary dysentery (n = 1, 50.00%) (Wang et al., 2017). Among the lower-quality SRs, COVID-19 was also the most frequent disease (n = 4, 21.05%) (Ang et al., 2020; Liu et al., 2020; Qi et al., 2020; Wu et al., 2020), followed by SARS (n = 3, 37.50%) (Liu et al., 2004; Chen et al., 2007; Liu et al., 2012), H1N1 (n = 1, 50.00%) (Li et al., 2016), tuberculosis (n = 1, 50.00%)25.00%) (Guo et al., 2010) and bacillary dysentery (*n* = 1.50.00%) (Han, 2016). The highest number of very low-grade SRs reported on HFMD (*n* = 7, 63.64%) (Ding et al., 2013; Wang et al., 2013; Xiong et al., 2013; Zhang et al., 2014; Zhang and Wei, 2014; He, 2020; Yan et al., 2020), followed by herpangina (*n* = 2, 100.00%) (Lu et al., 2013; Liu et al., 2016), COVID-19 (n = 1, 5.26%) (Liu and Dong, 2021), and mumps (n = 1, 33.33%) (Zhang, 2016). The summary of AMSTAR 2 assessment is shown in Figure 2. The details of each evaluation item are shown in Supplementary 4.

Qualitatively Analysis of Medium-And-High-Quality Systematic Reviews

The only two SRs on herpangina was excluded from the datasynthesis due to very low quality. SRs of medium- and highquality for COVID-19, SARS, H1N1 type influenza, tuberculosis, bacillary dysentery, mumps, and HFMD were included to qualitative data-synthesis. Detailed data are shown in **Table 2**.

COVID-19

Six high-quality SRs (Wang S. et al., 2020; Zeng et al., 2020; Zhou L. P. et al., 2021; Zhou F. et al., 2021; Luo et al., 2021; Ouyang et al., 2021) and eight moderate-quality SRs (Liu and Dong, 2021; Fan et al., 2020; Pang et al., 2020; Jin et al., 2020; Sun et al., 2020; Yang M. et al., 2020; Xiong et al., 2020; Gao et al., 2020) evaluated the efficacy and safety of conventional therapy combined with CHM decoction/proprietary CHM drugs and the results all suggested that this combination therapy was better than conventional therapy alone in improving the overall treatment efficiency for COVID-19 patients.

One single high-quality SR including 19 controlled trials (Luo et al., 2021) identified the efficacy and safety of conventional therapy combined with TCM/tonics, the results showed that the combined with TCM/tonics could improve the appearance of pulmonary CT lesions and the nucleic acid conversion rate, improve the alleviation of symptoms such as fever, cough, malaise, reduce hospitalization time and the rate of clinical cases from mild to severe. However, there was no difference in the incidence of adverse events between the treatments.

Specific to *Lianhuaqingwen* Capsule, a proprietary CHM drug, a moderate quality SR involving seven RCTs (Wang S. et al., 2020) identified the CHM combined with conventional therapy vs. conventional therapy to treat the COVID-19 patients, and the results suggested that the CHM combined with conventional therapy could improve the appearance of pulmonary CT lesions, shorten the fever duration and the time in hospital, and reduce the possibility being worsening. As for safety, no adverse events were reported.

One moderate quality SR including 12 RCTs with mild and ordinary COVID-19 patients (Gao et al., 2020) suggested that the combined with CHM decoction/proprietary CHM drugs could reduce the duration of fever, fatigue, and cough, improve the appearance of pulmonary CT lesions and the nucleic acid conversion rate, and reduce the rate of clinical cases from mild to severe. However, another high-quality systematic review (Ouyang et al., 2021) including six RCTs and four cohort studies identified the efficacy and safety of TCM in the treatment of common or mild COVID-19 patients, showing that TCM was superior to the control group in improving efficiency and reducing the duration of fever, but there was no difference in the relief of related symptoms such as fever and malaise and the incidence of adverse effects between the two groups.

One moderate quality SR involving seven RCTs (Fan et al., 2020) identified the CHM combined with conventional therapy vs. conventional therapy to treat the COVID-19 patients ranging from being mild to severe, and the results suggested that the CHM combined with conventional therapy could improve the



appearance of pulmonary CT lesions and reduce C-reactive protein. As for safety, no adverse events were reported.

One single moderate-quality SR including three RCTs (Yang M. et al., 2020) evaluated the efficacy and safety of Lianhuaqingwen capsule, and the results suggested that in combination with conventional treatment, they could improve the alleviation of symptoms such as fever, cough, fatigue, and chest tightness, dyspnoea, and loss of appetite in ordinary COVID-19 patients better than conventional treatment alone. Regarding safety, there was no difference in the incidence of adverse events between the treatments.

One high-quality network meta-analysis including five RCTs (Jin et al., 2020) evaluated the efficacy of four CHM prescripts, namely, *Qingfei Touxie Fuzheng* Decoction, *Lianhua Qingwen* Granule, *Lianhua Qingke* Granule, and *Xuebijing* Injections, and the results suggested that the combination of symptomatic and supportive treatment with either one of four prescriptions could better improve the appearance of the lungs on pulmonary CT than symptomatic treatment alone. Among them, the combination of symptomatic and supportive care with *Lianhua Qingke* Granule had the highest surface under the cumulative ranking (SUCRA) value, suggesting it had the highest overall effectiveness.

Two high-quality systematic reviews (Zhou L. P. et al., 2021; Zhou F. et al., 2021) identified the add-on effect of TCM for COVID-19. One included 10 RCTs and the other included 6 RCTs, and both studies suggested that TCM may be an effective auxiliary treatment for COVID-19 patients, which is likely to help improve the main symptoms, such as fever, cough, and fatigue, shorten the hospital stay and reduce disease progression.

SARS

Five moderate-quality SRs (Zhang et al., 2004; Zhao et al., 2004; Hao, 2005; Hao et al., 2005; Liu et al., 2005) evaluated the effectiveness of CHM combined with Western medicine for SARS, and the results all suggested that the combination better improved the clinical progression of SARS patients; however, the benefits to specific outcomes varied across SRs.

One moderate-quality SR including eight controlled trials (Liu et al., 2005) suggested that the additional use of CHM reduced the mortality, the incidence of secondary fungal infections in the lungs, shorten the duration of fever, the persisting clinical symptoms and the time for Chest X-ray to return normal appearance. There were no adverse events for the combination treatments.

Another moderate-quality SR including six RCTs with mildto-sever patients (Zhang et al., 2004) showed that the improvement of the appearance of abnormal chest X-ray shadows was better in the group treated with CHM decoction and conventional medicine than the conventional treatment alone. However, there was no statistical difference in the reduction of mortality, and dose of corticosteroids, and the alleviation of cough and dyspnoea between two groups.

Two other moderate-quality SR (Hao, 2005; Hao et al., 2005) supported the conclusion the combination of CHM and conventional medicine was better in reducing the duration of fever and mortality among the patients with SARS; however, the use of corticosteroids had not been reduced due to the additional use of CHM.

Another moderate-quality SR (Zhao et al., 2004) did not support the benefits to improving Chest X-ray imaging among the SARs patients when CHM was used alongside conventional medicine; it confirmed the superiority of CHM in reducing the duration of fever, mortality dose of corticosteroids and complications due to overuse of corticosteroids as well as improving clinical symptoms.

H1N1 Influenza

One moderate-quality SR including five RCTs (Zhao et al., 2014) suggested that the use of *Lianhua Qingwen* Capsule was better at reducing the duration of symptoms such as fever, cough, sore throat, and body pain in H1N1 patients compared with the use of ooseltamivir. However, there was no statistical difference of the time to conversion to nucleic acid negativity between two treatments. Regarding safety, no details of adverse events were reported.

TABLE 2 | Medium and high-quality literature details.

Study	Diagnosis	Comparison (T vs C)	Outcomes	Estimate (95% Cl)	Model	12	No. participants	No. controlled trials	Level of evidence
F 0000	00/40 10		Ourseters and influence to a section		Deedee	94%	001	3	
Fan 2020	COVID-19	Traditional Chinese medicine + western medicine vs Western medicine	Symptom and inflammatory markers scores	SMD = -1.30 (-2.43, -0.16)	Random	94%	261	5	Low
			C-reactive protein	MD = -11.82	Random	97%	325	5	Low
			Improvement of lung CT	(-17.95, -5.69) RR = 1.34 (1.19, 1.51)	Random	0%	489	4	Moderate
Pang	COVID-19	Traditional Chinese medicine + western	Number of severe cases transferred	RR = 0.47 (0.32, 0.69)	Random	0%	989	8	High
2020	00110 10	medicine vs Western medicine	Mortality	RR = 0.50 (0.08, 3.00)	Random	0%	337	2	Moderate
			Length of stay	MD = -7.95	Fixed		12	1	Very Low
			Number and second and second	(-14.66, -1.24)			004	2	1
			Nucleic acid negative conversion rate (%)	RR = 1.08 (0.94, 1.24)			284	2	Low
			Total score of clinical symptoms	MD = -0.84	Random	92%	250	2	Very Low
				(-2.15, 0.47)					
			Time of heat removal	MD = -1.20	Random	77%	250	2	Low
			Antipyretic rate (%)	(-2.03, -0.38) RR = 1.18 (0.88, 1.60)	Random	69%	232	3	Low
			Cough disappearance time	MD = -1.57	Random	94%	250	2	Very Low
			<u>-</u>	(-4.17, 1.03)					,
			Cough disappearance rate (%)	RR = 1.37 (1.15, 1.64)	Random	0%	264	3	Low
			Weakness disappearance time	MD = -0.33			200	1	Low
			Weekness disappearance rate (9/)	(-0.78, 0.12) RR = 1.37 (1.02, 1.83)	Dandom	110/	147	2	Low
			Weakness disappearance rate (%) Shortness of breath disappearance	RR = 2.20 (1.11, 4.39)	Random	11%	147 35	1	Low Very Low
			rate (%)	111 - 2120 (1111, 1100)			00		1017 2011
			Diarrhea remission rate (%)	RR = 0.32 (0.01, 15.49)	Random	87%	30	2	Very Low
			Physical pain disappearance rate (%)	RR = 1.17 (0.73, 1.87)			30	1	Very Low
r: 0000	001/00 40		Adverse event incidence rate	RD = 0.03 (-0.02, 0.08)	Random	83%	1,152	8	Moderate
Jin 2020	COVID-19	Qingfeitouxiefuzheng prescription + symptomatic support treatment vs	Effective rate of pulmonary CT improvement	OR = 2.25 (1.01, 5.01)			100		Very Low
		Symptomatic support treatment	inprovement						
		Lianhuaqingwen granule + symptomatic		OR = 1.38 (0.91, 2.08)			397		Low
		support treatment vs Symptomatic							
		support treatment		00 40 00 /4 07					
		Lianhuaqingwen granule + symptomatic support treatment vs Symptomatic		OR = 12.06 (1.37, 106.04)			57		Very Low
		support treatment		100.04)					
		Xuebijing injection + symptomatic support		OR = 9.80 (1.09, 88.23)			44		Very Low
		treatment vs Symptomatic support							
		treatment		OR = 0.61 (0.25, 1.51)			249		1
		Lianhuaqingwen granule + symptomatic support treatment vs Qingfei xiefuzheng		On = 0.01 (0.23, 1.31)			249		Low
		prescription + symptomatic support							
		treatment							
		Lianhuaqingwen granule + symptomatic		OR = 5.37 (0.53, 54.48)			83		Very Low
		support treatment vs Qingfei xiefuzheng prescription + symptomatic support							
		treatment							
		Xuebijing injection + symptomatic support		OR = 4.36 (0.42, 45.27)			73		Very Low
		treatment vs Qingfei xiefuzheng							
		prescription + symptomatic support							
		treatment Lianhuaqingwen granule + symptomatic		OR = 8.75 (0.96, 79.95)			230		Low
		support treatment vs Lianhuagingwen		011 = 0.75 (0.50, 75.55)			200		LOW
		granule + symptomatic support treatment							
		Xuebijing injection + symptomatic support		OR = 7.11 (0.76, 66.50)			220		Low
		treatment vs Lianhuaqingwen granule +							
		symptomatic support treatment Xuebijing injection + symptomatic support		OR = 0.81 (0.04, 17.89)			54		Very Low
		treatment vs Lianhuagingwen granule +		011 = 0.01 (0.04, 17.09)			04		Very LOW
		symptomatic support treatment							
Luo 2020	COVID-19	Traditional Chinese medicine + western	Cure rate (%)	OR = 2.67 (1.83, 3.89)	Random	0%	792	CCT:7 RCT:3	Moderate
		medicine vs Western medicine	Improvement of lung CT	OR = 2.43 (1.80, 3.29)	Random	0%	985	CCT:9 RCT:4	Moderate
			Conversion rate of severe cases (%)	OR = 0.40 (0.24, 0.67) OR = 2.55 (1.06, 6.17)	Random	17.1%	840	CCT:8 RCT:3 CCT:5	Moderate Low
			Nucleic acid negative conversion rate (%)	OR = 2.55 (1.06, 6.17)	Random	56.4%	311	001:5	LOW
			Cough disappearance rate (%)	OR = 2.95 (1.88, 4.63)	Random	0%	468	CCT:3 RCT:2	Moderate
			Weakness disappearance rate (%)	OR = 2.61 (1.56, 4.34)	Random	0%	368	CCT:3 RCT:1	Moderate
			Fever disappearance rate (%)	OR = 3.17 (1.95, 5.15)	Random	0%	468	CCT:3 RCT:2	Moderate
			Length of stay	MD = -0.46	Random	99.5%	326	CCT:5	Low
			Adverse reactions incidence rate (%)	(-3.87, 2.95) OR = 1.21 (0.48, 3.07)	Random	43.5%	1,233	CCT:10 RCT:5	Moderate
Sun 2020	COVID-19	Traditional Chinese medicine + western	Clinical effective rate	RR = 1.21 (1.08, 1.36)	Fixed	0%	273	RCT:2	Low
		medicine vs Western medicine	Adverse event incidence rate	RR = 1.17 (0.39, 3.52)	Random	62%	681	RCT:7	Low
			Nucleic acid negative conversion rate	RR = 1.49 (1.13, 1.97)	Fixed	0%	185	RCT:3	Low
			Pneumonia Remission rate	RR = 1.27 (1.12, 1.44)	Fixed	0%	415	RCT:4	Low
			White blood cell count	MD = 0.92 (0.07, 1.76) MD = 0.33 (0.08, 0.57)	Random	87% 76%	339 188	RCT:3 RCT:3	Low Low
			Lymphocyte count Percentage of lymphocytes	MD = 0.33 (0.08, 0.57) MD = 2.90 (2.09, 3.71)	Random Fixed	76% 0%	273	RCT:2	Low
			C-reactive protein	MD = -12.66	Random	97%	288	RCT:4	Very Low

Study	Diagnosis	Comparison (T vs C)	Outcomes	Estimate (95% CI)	Model	12	No. participants	No. controlled trials	Level of evidence
			IL-6 level	MD = -8.17	Random	73%	166	RCT:2	Very Low
Zeng	COVID-19	Lianhuaqingwen granule + western	Other symptoms disappearance	(-22.40, 6.06) OR = 6.54 (3.59, 11.90)	Fixed	0%	142	2	Low
2020		medicine vs Western medicine	rate (%) Heating time	OR = -1.04 (-1.60, -0.49)	Random	0%	142	2	Low
			Main symptoms disappearance rate (%)	(-1.60, -0.49) OR = 3.34 (2.06, 5.44)	Fixed	0%	142	2	Low
			Fever (Main symptoms disappearance rate (%))	OR = 3.64 (1.57, 8.47)	Fixed	0%	142	2	Low
			Cough (Main symptoms disappearance rate (%))	OR = 4.22 (1.73, 10.26)	Fixed	37.9%	142	2	Low
			Weakness (Main symptoms disappearance rate (%))	OR = 2.53 (2.06, 5.44)	Fixed	0%	142	2	Low
			Muscle soreness (Main symptoms/ Secondary symptoms disappearance rate (%))	OR = 6.97 (1.47, 33.01)	Random	0%	142	2	Low
			Sputum (Main symptoms/Secondary symptoms disappearance rate (%))	OR = 8.82 (2.48, 31.41)	Random	0%	142	2	Low
			Shortness of breath (Main symptoms/ Secondary symptoms disappearance rate (%))	OR = 13.08 (2.60, 65.91)	Random	0%	142	2	Low
			Chest tightness (Main symptoms/ Secondary symptoms disappearance rate (%))	OR = 7.17 (1.83, 28.12)	Random	0%	142	2	Low
			Dyspnea (Main symptoms/Secondary symptoms disappearance rate (%))	OR = 2.82 (0.27, 29.18)	Random	0%	142	2	Low
			Nausea (Main symptoms/Secondary symptoms disappearance rate (%))	OR = 1.21 (0.19, 7.81)	Random	0%	142	2	Low
			Loss of appetite (Main symptoms/ Secondary symptoms disappearance rate)	OR = 18.07 (0.33, 997.88)	Random	79%	142	2	Low
Nang 2020	COVID-19	Lianhuaqingwen granule + western medicine vs Western medicine	Effective rate of main clinical symptoms	RR = 1.24 (1.12, 1.38)	Fixed	0%	576	5	Moderate
			CT improvement	RR = 1.14 (1.02, 1.28)	Random	53.9%	403	5	Low
			Clinical conversion to severe	RR = 0.48 (0.31, 0.72)	Fixed	10.8%	439	4	Moderate
			Duration of fever	SMD = -0.87 (-1.22, -0.52)	Fixed	0%	186	3	Low
			Clinical symptoms disappearance time	SMD = -0.19 (-1.56, -0.82)	Fixed	0%	151	3	Low
			Length of stay	SMD = -0.61 (-0.91, -0.30)	Fixed	19.6%	416	4	Moderate
Yang	COVID-19	Lianhuaqingwen granule + western	Fever disappearance rate (%)	RR = 1.76 (1.05, 2.96)	Random	82.8%	197	3	Very Low
2020		medicine vs Western medicine	Cough disappearance rate (%)	RR = 1.96 (1.43, 2.68)	Fixed	24.0%	197	3	Low
			Weakness disappearance rate (%)	RR = 1.77 (1.36, 2.30)	Fixed	49.2%	197	3	Low
			Chest tightness disappearance rate (%)	RR = 2.19 (0.89, 5.40)	Fixed	82.8%	197	3	Very Low
			Dyspnea disappearance rate (%) Loss of appetite disappearance rate (%)	RR = 4.58 (2.39, 8.79) RR = 1.36 (1.00, 1.84)	Fixed Fixed	35.5% 1.9%	197 197	3 3	Low Low
Kiong	COVID-19	Traditional Chinese medicine + western	Lung CT improved	RR = 1.23 (1.15, 1.32)	Fixed		1,402	13	High
2020	00110 10	medicine vs Western medicine/Traditional	Mortality (%)	RR = 0.34 (0.05, 2.18)	Fixed	0%	463	4	Moderate
.020		Chinese medicine placebo + western	Cure rate (%)	RR = 1.18 (1.13, 1.24)	Fixed	24%	1,523	7	High
		medicine	The number of severe to mild cases	RR = 1.34 (0.47, 3.80)	Fixed	0%	167	2	Low
			The number of cases from mild to severe	RR = 0.40 (0.29, 0.56)	Fixed	0%	1,246	11	High
			Length of stay (d)	MD = -1.99 (-3.28, -0.70)	Fixed		119	2	Low
			Total score of clinical symptoms	MD = -1.84 (-3.10, -0.58)	Fixed	0%	133	2	Low
			Antipyretic cases	RR = 1.28 (0.98, 1.67)	Random	66%	388	5	Low
			Time of heat removal (d)	MD = -1.36 (-1.8, -0.93)	Random	58%	1,017	10	Low
			Fever symptom score Number of cases with cough	MD = -0.6 (-0.69, -0.50) RR = 1.50 (1.26, 1.78)	Random Fixed	61% 0%	885 422	3 6	Low Low
			disappeared Cough symptom score	MD = -0.78	Random	99%	934	4	Low
			Cough disappearance time	(-1.32, -0.24) MD = -1.42 (-2.82, -0.01)	Random	90%	698	6	Low
			Weakness Number of improved cases	RR = 1.73 (1.39, 2.16)	Fixed	0%	307	5	Moderate
			Weakness Symptom score	MD = -0.70 (-0.98, -0.42)	Random	97%	934	4	Low
			Weakness disappearance time (d)	MD = -1.13 (-2.22, -0.04)	Random	93%	585	4	Low
			Improvement of TCM syndromes (%) Nucleic acid negative conversion	MD = -3.67 (-6.6, -0.73) RR = 1.18 (1.04, 1.34)	Random Fixed	86% 41%	225 469	5 4	Low Low
			rate (%) WBC count (109 cell/L)	MD = 0.27 (-0.22, 0.76)	Random	95%	1,151	5	Low
			Lymphotoxicity	MD = 0.24 (-0.04, 0.51)	Random	97%	483	4	Low
			C-reactive protein level (mg/L)		Random	97%	1,100	6	Low
								(Continued on follo	owing page)

	Diagnosis	Comparison	Outcomes	Estimate	Model	12	No.	No.	Level
		(T vs C)		(95% CI)			participants	controlled trials	of evidence
				MD = -8.91					
				(-12.56, -5.27)					
			Adverse reactions	RR = 0.93 (0.49, 1.75)	Random	46%	1,069	9	Low
Guo 2020	COVID-19	Traditional Chinese medicine + western	Total effective rate (%)	RR = 1.31 (1.11, 1.56)	Fixed	0%	138	RCT:2	Very Low
		medicine vs Western medicine	Difference of total score of clinical	SMD = 0.82 (0.03, 1.61)	Random	84.9%	240	Prospective NRCT:	Very Low
			symptoms before and after treatment					2 RCT:1	
			Difference of total score of clinical	SMD = 0.20	Random		123	RCT:1	Very Low
			symptoms before and after treatment	(-0.17, 0.58)					
			(RCT subgroup)	()					
			Difference of total score of clinical	SMD = 1.17 (0.41, 1.92)	Random	66.6%	117	Prospective	Very Low
			symptoms before and after treatment	01110 1111 (0111, 1102)	riandom	00.070		NRCT:2	10.7 201
			(RCT subgroup)					11101.2	
			Fever control rate (%)	RR = 1.30 (1.16, 1.45)	Fixed	42.9%	536	Prospective NRCT:	Low
			Fever control rate (%)	nn = 1.30 (1.10, 1.43)	Fixeu	42.9%	550		Low
								3 Retrospective NRCT:1 RCT:2	
			E	0140 0.70		04.400	107		
			Fever integral	SMD = 0.76	Random	94.4%	187	Prospective NRCT:	Very Low
				(-0.57, 2.10)				1 RCT:2	
			Fever score (RCT subgroup)	SMD = 1.46	Fixed	0%	138	RCT:2	Very Low
				(1.08, 1.83)					
			Fever score (NRCT subgroup)	SMD = -0.64	Random		49	Prospective	Very Low
				(-1.21, -0.06)				NRCT:1	
			Uration of fever	MD = -1.58	Fixed	9.2%	333	Prospective NRCT:	Moderate
				(-1.98, -1.17)				1 Retrospective	
								NRCT:1	
			Weakness Improvement rate (%)	RR = 1.55 (1.21, 1.99)	Fixed	0%	368	Prospective NRCT:	Moderate
				(, , , , , , , , , , , , , , , , , , ,				2 Retrospective	
								NRCT:3	
			Weakness Symptom score	SMD = 1.49	Random	83.3%	187	Prospective NRCT:	Very Low
			Weakless Symptom score	(0.68, 2.30)	nandom	00.070	107	1 RCT:2	Very LOW
			W 1	,		01.000	100		
			Weakness symptom score (RCT	SMD = 1.43	Random	91.3%	138	RCT:2	Very Low
			subgroup)	(0.14, 2.73)					
			Weakness symptom score (NRCT	SMD = 1.62	Random		49	Prospective	Very Low
			subgroup)	(0.97, 2.27)				NRCT:1	
			Weakness duration	MD = -1.74	Fixed	0%	172	Prospective NRCT:	Low
				(-2.01, -1.48)				1 Retrospective	
								NRCT:1	
			Cough Improvement rate (%)	RR = 1.65 (1.34, 2.04)	Fixed	42.20%	468	Prospective NRCT:	Low
								2 Retrospective	
								NRCT:1 RCT:2	
			Cough Integral difference before and	SMD = 1.95 (1.13, 2.77)	Random	81.40%	187	Prospective NRCT:	Very Low
			after					1 RCT:2	
			Cough duration	MD = -1.71	Fixed	0%	172	Prospective	Low
				(-2.30, -1.12)				NRCT:2	
			Improvement rate of lung CT	RR = 1.28 (1.04, 1.57)	Random	68.30%	526	Prospective NRCT:	Low
			improvement rate of rang of	111 = 1.20 (1.04, 1.07)	nandom	00.0070	020	2 Retrospective	LOW
								NRCT:3 RCT:2	
			Number and accessing accurate		Fixed	0%	138	Prospective	Very Low
			Nucleic acid negative conversion	RR = 1.43 (0.94, 2.16)	Fixed	0%	138		very Low
			rate (%)		-			NRCT:2	
			Conversion rate of severe cases (%)	RR = 0.44 (0.26, 0.67)	Fixed	10.30%	842	Prospective NRCT:	Moderate
								3 Retrospective	
								NRCT:3 RCT:4	
Zhou F.	COVID-19	Traditional Chinese medicine + western	Adverse reaction	RR = 0.87 (0.67.1.14)					Low
et al.		medicine conventional treatment vs	Mortality	RR = 0.33 (0.08.1.34)					Low
(2021)		Western medicine conventional treatment	Cure rate	RR = 1.15 (CI	Random	60%	976	6	Low
				1.04.1.26)					
			Lowering body temperature	RR = 1.10 (0.94.1.29)		85%		9	Low
			Relieving cough					9	
			Improvement in chest CT images					5	
			Deterioration of condition	RR = 0.58 (0.43, 0.77)		0%		6	Low
			Adverse effects	RR = 0.81 (0.42, 1.57)		56%		9	Low
Liu 2021	COVID-19	Traditional Chinese medicine + western	Severe conversion rate	OR = 0.35 (0.18.0.69)	Fixed	0%	326	3	High
2021	00110 10	medicine conventional treatment/	Total effective rate	OR = 2.50 (1.46.4.29)	Fixed	0%	346	3	High
		Traditional Chinese medicine vs Western		OR = 2.50 (1.46.4.29) OR = 2.27 (1.37.3.77)	Fixed	33%		3	-
			Pulmonary imaging (CT) improvement	On = 2.27 (1.37.3.77)	FIXEO	33%	346	3	Moderate
			rate	0.40	D- 1	750/			
		medicine conventional treatment		SMD = -0.81	Random	75%	414	4	Low
		medicine conventional treatment	Heating duration	1					
		medicine conventional treatment	-	(-1.25,-0.38)	_				
		medicine conventional treatment	Fever disappearance rate	OR = 3.05 (1.85.5.01)	Fixed	0%	343	4	
		medicine conventional treatment	Fever disappearance rate Disappearance rate of cough	OR = 3.05 (1.85.5.01) OR = 2.99 (1.84.4.85)	Fixed	0%	322	4	Moderate
		medicine conventional treatment	Fever disappearance rate	OR = 3.05 (1.85.5.01) OR = 2.99 (1.84.4.85) OR = 2.60 (1.56.4.33)		0% 0%		4 4	Moderate
		medicine conventional treatment	Fever disappearance rate Disappearance rate of cough	OR = 3.05 (1.85.5.01) OR = 2.99 (1.84.4.85)	Fixed	0%	322	4	Moderate
Zhou L. P.	COVID-19	medicine conventional treatment	Fever disappearance rate Disappearance rate of cough Disappearance rate of fatigue	OR = 3.05 (1.85.5.01) OR = 2.99 (1.84.4.85) OR = 2.60 (1.56.4.33)	Fixed Fixed	0% 0%	322 283	4 4	Moderate Moderate
	COVID-19		Fever disappearance rate Disappearance rate of cough Disappearance rate of fatigue Disappearance rate of expectoration	OR = 3.05 (1.85.5.01) OR = 2.99 (1.84.4.85) OR = 2.60 (1.56.4.33) OR = 1.94 (1.19.3.18)	Fixed Fixed Fixed	0% 0% 56%	322 283 315	4 4 4	Moderate Moderate Low
et al.	COVID-19	Traditional Chinese medicine + westem medicine conventional treatment vs	Fever disappearance rate Disappearance rate of cough Disappearance rate of fatigue Disappearance rate of expectoration Healing time of oral ulcer Adverse reaction	OR = 3.05 (1.85.5.01) OR = 2.99 (1.84.4.85) OR = 2.60 (1.56.4.33) OR = 1.94 (1.19.3.18) RR = 0.87 (0.67, 1.14)	Fixed Fixed Fixed	0% 0% 56%	322 283 315 1,133	4 4 7	Moderate Moderate Low — —
et al.	COVID-19	Traditional Chinese medicine + western	Fever disappearance rate Disappearance rate of cough Disappearance rate of fatigue Disappearance rate of expectoration Healing time of oral ulcer Adverse reaction Cure rate	OR = 3.05 (1.85.5.01) OR = 2.99 (1.84.4.85) OR = 2.60 (1.56.4.33) OR = 1.94 (1.19.3.18) —— RR = 0.87 (0.67, 1.14) RR = 1.63 (0.36.7.30)	Fixed Fixed Fixed 	0% 0% 56% — —	322 283 315 1,133 812	4 4 7 5	Moderate Moderate Low — — Low Low
et al. (2021)		Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment	Fever disappearance rate Disappearance rate of cough Disappearance rate of fatigue Disappearance rate of expectoration Healing time of oral ulcer Adverse reaction Cure rate Total effective rate	OR = 3.05 (1.85.5.01) OR = 2.99 (1.84.4.85) OR = 2.60 (1.56.4.33) OR = 1.94 (1.19.3.18) RR = 0.87 (0.67, 1.14) RR = 1.63 (0.36.7.30) RR = 1.25 (0.94.1.67)	Fixed Fixed 	0% 0% 56% 	322 283 315 1,133 812 	4 4 7 5 — —	Moderate Moderate Low Low Low Low
et al. (2021) Ouyang	COVID-19 COVID-19	Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment Western medicine conventional treatment	Fever disappearance rate Disappearance rate of cough Disappearance rate of fatigue Disappearance rate of expectoration Healing time of oral ulcer Adverse reaction Cure rate Total effective rate Total effective rate	OR = 3.05 (1.85.5.01) OR = 2.99 (1.84.4.85) OR = 2.60 (1.56.4.33) OR = 1.94 (1.19.3.18) — RR = 0.87 (0.67, 1.14) RR = 1.63 (0.367.30) RR = 1.26 (0.94.1.67) RR = 1.26 (1.14, 1.40)	Fixed Fixed Fixed	0% 0% 56% 0%	322 283 315 1,133 812 427	4 4 7 5 4	Moderate Moderate Low Low Low Low Moderate
Zhou L. P. et al. (2021) Ouyang 2021		Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment Western medicine conventional treatment + Traditional Chinese medicine/Western	Fever disappearance rate Disappearance rate of cough Disappearance rate of fatigue Disappearance rate of expectoration Healing time of oral ulcer Adverse reaction Cure rate Total effective rate	OR = 3.05 (1.85.5.01) OR = 2.99 (1.84.4.85) OR = 2.60 (1.56.4.33) OR = 1.94 (1.19.3.18) RR = 0.87 (0.67, 1.14) RR = 1.63 (0.36.7.30) RR = 1.26 (0.94.1.67) RR = 1.26 (1.14, 1.40) WMD = -1.21	Fixed Fixed 	0% 0% 56% 	322 283 315 1,133 812 	4 4 7 5 — —	 Low Low
et al. (2021) Ouyang		Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment Western medicine conventional treatment + Traditional Chinese medicine/Western medicine conventional treatment +	Fever disappearance rate Disappearance rate of cough Disappearance rate of fatigue Disappearance rate of expectoration Healing time of oral ulcer Adverse reaction Cure rate Total effective rate Total effective rate Heating duration	$\begin{array}{l} {\rm OR}=3.05~(1.85.5.01)\\ {\rm OR}=2.99~(1.84.4.85)\\ {\rm OR}=2.60~(1.56.4.33)\\ {\rm OR}=1.94~(1.19.3.18)\\ \qquad\\ {\rm RR}=0.87~(0.67,~1.14)\\ {\rm RR}=1.63~(0.36.7.30)\\ {\rm RR}=1.25~(0.94.1.67)\\ {\rm RR}=1.26~(1.14,~1.40)\\ {\rm WMD}=-1.21\\ (-1.71,~0.71) \end{array}$	Fixed Fixed Fixed Random	0% 0% 56% 0% 55%	322 283 315 1,133 812 427 414	4 4 7 5 4 2	Moderate Moderate Low Low Low Low Moderate Low
et al. 2021) Duyang		Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment + Traditional Chinese medicine/Western medicine conventional treatment + Placebo + Traditional Chinese medicine vs	Fever disappearance rate Disappearance rate of cough Disappearance rate of fatigue Disappearance rate of expectoration Healing time of oral ulcer Adverse reaction Cure rate Total effective rate Total effective rate Heating duration Disappearance rate of novel	OR = 3.05 (1.85.5.01) OR = 2.99 (1.84.4.85) OR = 2.60 (1.56.4.33) OR = 1.94 (1.19.3.18) RR = 0.87 (0.67, 1.14) RR = 1.63 (0.36.7.30) RR = 1.26 (0.94.1.67) RR = 1.26 (1.14, 1.40) WMD = -1.21	Fixed Fixed Fixed	0% 0% 56% 0%	322 283 315 1,133 812 427	4 4 7 5 4	Moderate Moderate Low Low Low Low Moderate Low
et al. (2021) Ouyang		Traditional Chinese medicine + western medicine conventional treatment vs Western medicine conventional treatment Western medicine conventional treatment + Traditional Chinese medicine/Western medicine conventional treatment +	Fever disappearance rate Disappearance rate of cough Disappearance rate of fatigue Disappearance rate of expectoration Healing time of oral ulcer Adverse reaction Cure rate Total effective rate Total effective rate Heating duration	$\begin{array}{l} {\rm OR}=3.05~(1.85.5.01)\\ {\rm OR}=2.99~(1.84.4.85)\\ {\rm OR}=2.60~(1.56.4.33)\\ {\rm OR}=1.94~(1.19.3.18)\\ \qquad\\ {\rm RR}=0.87~(0.67,~1.14)\\ {\rm RR}=1.63~(0.36.7.30)\\ {\rm RR}=1.25~(0.94.1.67)\\ {\rm RR}=1.26~(1.14,~1.40)\\ {\rm WMD}=-1.21\\ (-1.71,~0.71) \end{array}$	Fixed Fixed Fixed Random	0% 0% 56% 0% 55%	322 283 315 1,133 812 427 414	4 4 7 5 4 2	Moderate Moderate Low Low Low Low Moderate

Study	Diagnosis	Comparison (T vs C)	Outcomes	Estimate (95% Cl)	Model	12	No. participants	No. controlled trials	Level of evidence
		Western medicine conventional treatment	Descurre in alternation ante	DD 115 (0.00 1.40)	Deeders	84%		6	1
		+ Placebo	Pneumonia absorption rate Disapperance rate of weakness	RR = 1.15 (0.93, 1.43) RR = 1.36 (0.71, 2.62)	Random Random	75%			Low Low
		1 Haddoo	Disapperance rate of cough	RR = 1.87 (0.58, 6.08)	Random	97%			Low
			Virus nucleic acid negative rate	RR = 1.47 (1.05, 2.05)	Fixed	0%		3	High
			Leukocyte count	RR = 0.74 (0.26, 1.22)	Random	75%		2	Low
			Lymphocyte count	RR = 0.21 (0.15, 0.27)	Fixed	0%		2	High
			Percentage of lymphocytes	RR = 2.69 (1.92, 3.47)	Fixed	31%		2	High
Zhang 2004	SARS	Combination of Chinese and Western medicine vs Western medicine	Mortality (%)	RR = 0.86 (0.22, 3.29)	Random		139	6	Low
		GuoYaoNO.2.3.4 formula + westernmedicine vsWestern medicine	Mortality (%)	RR = 0.41 (0.04, 4.78)	Fixed		53	6	Very Low
		GuoYaoNO.2.3.4 formula + western medicine vs Western medicine	Secondary infection rate	RR = 0.42 (0.11, 1.62)	Fixed		53	6	Very Low
		GuoYaoNO.2.3.4 formula + western medicine vs Western medicine	Lung infiltration and absorption (%)	RR = 5.45 (1.54, 19.26)	Fixed		53	6	Very Low
		FeidianNO.1.2.3 formula + western medicine vs Western medicine	Lung infiltration and absorption (%)	RR = 6.68 (2.93, 15.24)	Random		139	6	Low
		FufangNo.1 formula + western medicine vs Western medicine	Lung infiltration and absorption (%)	MD = 0.24 (0.02, 0.46)	Fixed		40	6	Very Low
		Combination of Chinese and western medicine vs Western medicine	Lung infiltration and absorption (%)	RR = 8.06 (0.4, 163.21)	Fixed		59	5	Very Low
		FeidianNo2.3.4 formula + western medicine vs Western medicine	Dyspnea disappearance	RR = 1.50 (0.41, 5.43)	Fixed		38	1	Very Low
		FeidianNo.4 formula + western medicine vs Western medicine	Cough disappearance	RR = 1.29 (0.30, 5.43)	Fixed		30	1	Very Low
		Combination of Chinese and western medicine vs Western medicine	Average total dosage of hormone (mg)	MD = -39.65 (-116.84, 37.54)	Fixed		98	2	Very Low
Hao 2005	SARS	Traditional Chinese medicine + western	Mortality (%)	RR = 0.24 (0.13, 0.42)	Random	0%	697	9	High
		medicine vs Western medicine	Average dosage of hormone (mg)	SMD = -1.40 (-2.58, -0.23)	Fixed	95.30%	175	5 4 9	Very Low
			Mean heating time	RD = -0.65 (-1.45, -0.15)	Random	21.10%	73	4	Very Low
Hao, Hong 2005	SARS	Traditional Chinese medicine + western medicine vs Western medicine	Mortality (%)	RR = 0.24 (0.13, 0.43)	Random		599	9	High
Liu 2005	SARS	Traditional Chinese medicine + western medicine vs Western medicine/p lacebo	Mortality (%)	RCT:RR = 0.32 (0.12, 0.91) NRCT:RR = 0.27 (0.12, 0.61)	Random		RCT:294 NRCT:486	RCT:5 NRCT:6	High
			Time of heat removal(d)	MD = -0.83 (-1.3, -0.35)	Fixed		182	3	Low
			Symptom relief time (d)	MD = -1.23 (-2.9, -0.37)	Fixed		119	2	Low
			Abnormal chest X-ray	RR = 0.29 (0.15, 0.56)	Random		126	2	Low
			Average total dosage of hormone (mg)	RR = -770.45 (-1798.47,257.58)	Random	99.20%	109	2	Low
			Daily average total dosage of hormone (mg)	RR = -54.13 (-120.63, 12.38)	Random		126	2	Low
			Recovery time of chest X-ray (d)	MD = -2.27 (-3.16, -1.39)	Fixed		175	2	Low
			Secondary fungal infection incidence rate (%)	RR = 0.35 (0.14, 0.90)	Random		128	2	Low
Zhao	SARS	Traditional Chinese medicine + western	Mortality (%)	OR = 0.32 (0.14, 0.71)	Random	9.80%	333	4	Low
2004		medicine vs Western medicine	Complications caused by hormone use (%)	OR = 0.29 (0.13, 0.65)	Random	0%	33	3	Low
			Time of heat removal (d) Absorption time of lung shadow on	MD = -1.17 (-1.83, -0.5) MD = 0.63 (-1.33, 2.59)	Fixed Fixed	11.00% 0%		5	Low Low
			chest X-ray Absorption ratio of lung shadow on	OR = 2.16 (1.22, 3.84)	Random				Low
			chest X-ray Remission time of lower respiratory	MD = -1.47	Fixed	53.40%			Low
			tract infection Average total dosage of hormone (mg)	(-1.96, -0.98) MD = -207.19 (-334.98,	Fixed				Very Low
			Average time of hormone use (d)	-69.00) MD = -1.67 (-3.3, -0.03)	Fixed				Low
Pan 2014	H1N1	Chinese patent medicine vs Western medicine	Fever duration(d)	MD = -4.65 (-8.91, -0.38)	Fixed	71.8%		5	Low
			Cough duration (d)	MD = -9.79 (-14.61, -4.98)	Fixed	11.2%	320	4	Low
			Sore throat duration (d)	MD = -13.01 (-21.76, -4.27)	Fixed	87.1%	321	4	Low
			Physical pain time (d)	MD = -16.68 (-32.33, -1.03)	Fixed	89.7%	137	3	Very Low
			Nucleic acid negative conversion time (H)	MD = -0.24 (-4.97, 4.31)	Fixed	49.6%		5	Low
Jin 2018	Tuberculosis	Traditional Chinese medicine +	Sputum negative conversion rate (%)	RR = 1.30 (1.22, 1.39)	Fixed	35%	2,479	21	High
		chemotherapy vs Chemotherapy	Sputum negative conversion rate (%) (after 3 months of treatment)	RR = 1.41 (1.28.1.55)	Fixed	0%	1784	21	High
			Sputum negative conversion rate (%) (after 6months of treatment)	RR = 1.30 (1.22, 1.39)	Fixed	35%	2,479	21	High
			Sputum negative conversion rate (%) (after 9 months of treatment)	RR = 1.35 (1.24, 1.46)	Fixed	40%	1,060	11	High
								(Continued on follo	

No. 2017 Tubercales Outer space concepts of physic PH - 201 (12), 142 PHed	Study	Diagnosis	Comparison (T vs C)	Outcomes	Estimate (95% CI)	Model	12	No. participants	No. controlled trials	Level of evidence
Part Part Part Part Part Part Part Part				Sputum negative conversion rate (%)	RR = 1.31 (1.22, 1.42)	Fixed	76%	1,137	12	Moderate
Part Part Part Part Part Part Part Part				(after 12 months of treatment) Sputum negative conversion rate (%)		Fixed	0%	1,461	10	High
Market Massacher die blacker (%) Massacher					RR = 1.32 (1.10, 1.59)	Fixed	0%	252	4	High
Marked Amount of standing					RR = 1.08 (1.01, 1.14)				36	Moderate
Normal Results in biology Results in biology<					RR = 1.20 (1.10, 1.31)					Low
Name Oncome Oncome <td></td> <td></td> <td></td> <td>1 ()(</td> <td>RR = 1.08 (1.01, 1.14)</td> <td></td> <td>59%</td> <td></td> <td></td> <td>Low</td>				1 ()(RR = 1.08 (1.01, 1.14)		59%			Low
Number Absorbance of basics (0) gives Regression (0)					RR = 1.29 (1.14, 1.46)					Low
Variable in the blacks (%) and in the black				Absorption rate of lesions (%) (after	RR = 1.28 (1.18, 1.40)					Low
Number Part 24 (24), 24				Absorption rate of lesions (%) (after	RR = 1.16 (1.09, 1.25)					Low
Normal Description and relation (%) Pier 127 (80, 13)				Absorption rate of lesions (%) after	RR = 1.24 (1.08, 1.43)					Low
Value 2017 Tabendam Association and a biasine (0) alter				Absorption rate of lesions (%) (after	RR = 1.07 (0.85, 1.33)					Low
Number Ausging in and elems (n) (n) Pin - 10 (14), 2, 20 Pin - 10 (14), 20 <t< td=""><td></td><td></td><td></td><td>Absorption rate of lesions (%) (after</td><td>RR = 1.11 (0.92, 1.34)</td><td></td><td></td><td></td><td></td><td>Low</td></t<>				Absorption rate of lesions (%) (after	RR = 1.11 (0.92, 1.34)					Low
Yan 2017 Televalue Autorison of alsome (higher) Non-line (higher) <th< td=""><td></td><td></td><td></td><td>Absorption rate of lesions (%) (after</td><td>RR = 1.86 (1.43, 2.42)</td><td></td><td>69%</td><td></td><td></td><td>Very Low</td></th<>				Absorption rate of lesions (%) (after	RR = 1.86 (1.43, 2.42)		69%			Very Low
Yan 2017 Tuberx/000 Tuberx/000 Re-11/6 (0.0, 2.7) <td></td> <td></td> <td></td> <td>,</td> <td>RR = 1.60 (1.25, 2.04)</td> <td></td> <td></td> <td></td> <td></td> <td>Low</td>				,	RR = 1.60 (1.25, 2.04)					Low
Yan 2017 Tubersulars Operation and relation (%) (with mean of low (%) (%) (%) (%) (%) (%) (%) (%) (%) (%)					RR = 1.16 (1.06, 1.27)					Low
Yan 2017 Tuberculase Origination of Comparison of Compari				,	RR = 1.28 (1.09, 1.51)					Low
Yan 2017 Tuberoulosi Operation of the same of					BB = 1.23 (1.17, 1.29)				7	
Yan 2017 Tuberculosis Chrosse patient medicine - chromothanta patient				Improvement of TCM syndromes (%)	,					
Yan 2017 Tuborculosi Tuborculosi Improvement of CM syndroms (h) (min control of tuborculos) RR = 11.9 (1.0.6, 1.29) > 50% Low Van 2017 Tuborculosi Filter CM syndroms (h) (min control of tuborculos) RR = 11.9 (1.0.6, 1.29) > 50% Low Van 2017 Tuborculosi Chinese patient modicine - downthoms (min control of tuborculos) RR = 11.9 (1.0.6, 1.30) Low Van 2017 Tuborculosi Chinese patient modicine - downthoms (min control of tuborculos) RR = 11.9 (1.0.6, 1.30) Low Van 2017 Tuborculosi Chinese patient modicine - downthoms (min control of tuborculos) RR = 11.9 (1.0.6, 1.30) Low Van 2017 Tuborculosi Chinese patient modicine - downthoms (min control of tuborculos) RR = 11.9 (1.0.6, 1.30) Low Van 2017 Tuborculosi Chinese patient modicine - downthoms (min control of tuborculos) RR = 1.9 (1.0.1, 2.20) Fixed <t< td=""><td></td><td></td><td></td><td>Improvement of TCM syndromes (%)</td><td>RR = 1.19 (1.04, 1.36)</td><td></td><td></td><td></td><td></td><td>Low</td></t<>				Improvement of TCM syndromes (%)	RR = 1.19 (1.04, 1.36)					Low
Yan 2017 Tubercules Crinese patent medicine + chemotherapy Improvement of TOM sprodomes (%) FR = 1.24 (1.11, 1.27) > 50% Low Yan 2017 Tubercules Improvement of TOM sprodomes (%) FR = 1.24 (1.11, 1.27) > 50% Low Yan 2017 Tubercules Crinese patent medicine + chemotherapy FR = 1.30 (1.05, 1.22) Low Yan 2017 Tubercules Crinese patent medicine + chemotherapy FR = 1.30 (1.20, 2.41) FRed 0.76 0.71 1.08 Low Yan 2017 Tubercules Crinese patent medicine + chemotherapy Softutin regative conversion rate (%) FR = 1.37 (1.08, 2.70) FRed 0.76 0.71 5.06 1.04 7.0 Pate Yan 2017 Tubercules Crinese patent medicine + chemotherapy Softutin regative conversion rate (%) FR = 1.27 (1.08, 2.70) FRed 1.76 9.14 7.0 Moderat Softutin regative conversion rate (%) FR = 1.21 (1.02, 1.21) FRed 1.76				Improvement of TCM syndromes (%)	RR = 1.19 (1.06, 1.32)		> 50%			Low
Yan 2017 Tuberoulosis Charase patent medicine - d-emotioning young in the constraint of TCM syndromes (I) (M syndromes (M)) PR = 121 (11, 12)				Improvement of TCM syndromes (%)	RR = 1.17 (1.06, 1.29)		> 50%			Low
Yan 2017 Tuberculosis American entermination of the Signature of				Improvement of TCM syndromes (%)	RR = 1.24 (1.11, 1.37)		> 50%			Low
Yan 2017 Tuberculosis Copiles ententine medicine + demontherapy vs Chemotherapy Total effective rate (%) (%) Fiel = 0.65 (0.58, 0.7) (%) 2% 10 Moderation (%) Yan 2017 Tuberculosis Chemose patient medicine + demontherapy vs Chemotherapy Chemose patient medicine + demontherapy vs Chemotherapy Chemose patient medicine + demontherapy Chemose patient medicine + demontherapy </td <td></td> <td></td> <td></td> <td>Improvement of TCM syndromes (%)</td> <td>RR = 1.18 (1.05, 1.32)</td> <td></td> <td></td> <td></td> <td></td> <td>Low</td>				Improvement of TCM syndromes (%)	RR = 1.18 (1.05, 1.32)					Low
Yan 2017 Tuberculosis Chinese patent medicine + chemotherapy ws Chemotherapy Adjust megative conversion rate (%) (after 2 months of treatment) Red 26% 1,316 10 High (after 2 months of treatment) Spatum megative conversion rate (%) (after 2 months of treatment) CR = 1.70 (1.20, 2.41) Fixed 0% 914 7 High (after 2 months of treatment) Absorption rate (%) (after 6 months of treatment) CR = 1.70 (1.20, 2.41) Fixed 1% 671 5 High (after 6 months of treatment) Absorption rate (%) (after 6 months of treatment) CR = 1.94 (1.30, 2.00) Fixed 1% 671 5 Moderal Absorption rate of lesions (%) (after 8 months of treatment) CR = 0.50 (1.0, 0.22) Fixed 0% 627 Void Yue 2017 Tuberculosis Coptis chinensis combination Ohine patent medicine - chemotherapy Spatum megative conversion rate (%) reactions incidence rat					RR = 1.30 (1.21, 1.39)		29%		10	Moderate
Yue 2017 Tuberculosis Copils chineresis combination Chinese medicine + Western medicine - themesence rate (%) (Cast Cineter arte (%) (Cast Cinet arte (%) (Cast Cineter arte (%) (Cast Cineter arte	Yan 2017	Tuberculosis	Chinese patent medicine + chemotherapy							
Yue 2017 Tuberculosis Coptis chinensis combination Chinese patern medicine + chemotherapy vs Coptis chinensis combination Chinese patern medicine + chemotherapy vs OR = 1.71 (10.8 2.70) Fixed 1% 671 5 High Yue 2017 Tuberculosis Coptis chinensis combination Chinese patern medicine + chemotherapy vs OR = 2.06 (1.29, 3.27) Fixed 3% 558 7 Moderal Yue 2017 Tuberculosis Coptis chinensis combination Chinese patern medicine + chemotherapy vs Synthom nagative conversion rate (%) OR = 2.06 (1.29, 3.27) Fixed 0% 32 2 Vory Lon Yue 2017 Tuberculosis Coptis chinensis combination Chinese patern medicine + chemotherapy vs Synthom nagative conversion rate (%) OR = 0.25 (0.10, 0.62) Fixed 0% 3.484 16 Moderal Yue 2017 Tuberculosis Coptis chinensis combination Chinese patern medicine + chemotherapy vs Synthom nagative conversion rate (%) RR = 1.35 (1.21, 1.50) Random 82% 3.484 16 Moderal Yue 2017 Tuberculosis Coptis chinensis combination Chinese patern medicine + chemotherapy vs Absorghtorn atele of Isonig synthoms RR = 1.35 (1.21,				(after 2 months of treatment)						
Yue 2017 Tuberoulosis Coptis chinensis combination Chinese patent medicine + chemotherapy ve Chemotherapy Coptis chinense medicine + Western medicine vs Western medicine vs Western medicine Coptis chineses medicine + Western medicine vs Western medicine vs Western medicine Coptis chineses medicine + Western medicine vs Western medicine vs Western medicine Re - 0.35 (0.25, 0.49) Fixed 24% 1,044 7 High Moderal (1.17, 7.18) Wu 2015 Mumps Traditional Chinese medicine + Western medicine vs Western medicine vs Western medicine Total effective rate (%) (no mitbiol (%) (martine (f) RR = 0.35 (0.21, 0.0.62) Fixed 0% 2.04 Vester Wu 2015 Mumps Coptis chineses combination Chinese patent medicine + chemotherapy vs (Chemotherapy Sprutum negative conversion rate (%) (%) RR = 1.21 (1.10, 1.32) Random 82% 3,484 16 Moderal (Moderal (Moderal Moderal (Moderal (Moderal (Moderal)) RR = 1.21 (1.07, 1.16) Random 82% 3,484 16 Moderal (Moderal (Moderal)) Yue 2017 Tuberoulosis Coptis chinensis combination Chinese patent medicine + chemotherapy vs (Chemotherapy Sprutum negative conversion rate (%) (%) RR = 1.21 (1.07, 1.16) Reved 82% 3,484 16 Moderal (Moderal (Moderal))				(after 3 months of treatment)						
Yue 2017 Tuberculosis Coptis chinensis combination Chinese patern medicine + chernotherapy view (Gastrointestinal react of lexions (%) (gifter Ginomits of treatment) OR = 1.94 (1.30, 2.90) Fixed 36% 568 7 Moderal Moderal Moderal Yue 2017 Tuberculosis Coptis chinensis combination Chinese patern medicine + chernotherapy view (Gastrointestinal treat adverses) OR = 2.06 (1.29, 3.27) Fixed 0% 1,128 9 Moderal Yue 2017 Tuberculosis Coptis chinensis combination Chinese patern medicine + chernotherapy view (Gastrointestinal treat adverses) OR = 2.10 (1.52, 2.92) Fixed 0% 1,128 9 Moderal Yue 2017 Tuberculosis Coptis chinensis combination Chinese patern medicine + chernotherapy view (Gastrointestinal react lexions (%) RR = 1.35 (1.21, 1.50) Random 82% 3,484 16 Moderal Moderal improvement rate of clinical symptoms rate) RR = 1.35 (1.21, 1.50) Random 88% 2049 15 Moderal Moderal improvement rate of clinical symptoms rate) RR = 1.32 (1.01, 0.32) Fixed 36% 877 7 Moderal Mary Adverse reactions incidence rate (%) (Gastrointestinal reaction inci				(after 6months of treatment)						
Yue 2017 Tuberculosis Coptis chinensis combination Chinese patent medicine + chemotherapy se discontis of treatment; OR = 0.26 (0.29, 0.27) Fixed 0% 1.128 9 Moderal Moderal Patent of treatment; Yue 2017 Tuberculosis Coptis chinensis combination Chinese patent medicine + chemotherapy se discontis of treatment; Spruttor medision rate (%) Patent medicine + chemotherapy R = 1.35 (1.21, 1.50) Random 82% 3.484 1.6 Moderal Moderal Moderal Yue 2017 Tuberculosis Coptis chinensis combination Chinese patent medicine + chemotherapy se disconting treatment; R = 1.35 (1.21, 1.50) Random 82% 3.484 1.6 Moderal Moderal Yue 2017 Tuberculosis Coptis chinensis combination Chinese patent medicine + chemotherapy Spruttur megative conversion rate (%) Void reduction rate (%) R = 1.32 (1.21, 1.50) Random 82% 3.64 Moderal Moderal Moderal Masorption rate of lesions (%) Chemotherapy R = 1.32 (1.21, 1.51) Fixed 36% 7 Moderal Moderal Masorption rate of lesions (%) (Gastrointestinal reactions incidence rate (Gastrointestinal reactions incidence rate (Gastrointestinal reactions incidence rate (Gastrointestinal reactions incidence rate (Maser rateCins) Fixed <td></td> <td></td> <td></td> <td>2months of treatment)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>				2months of treatment)						
Yue 2017TuberculosisCoptis chinensis combination Chinese patent medicine + chemotherapy vs OhemotherapyGontis of treatment)OR = 2.10 (1.52, 2.92) (1.62, 2.92)Fixed Fixed0% 921.128 (2.92)9 Vole PV Lov Very Lov Patent medicine + chemotherapy vs Ohemotherapy vs OhemotherapyCoptis chinensis combination Chinese patent medicine + chemotherapy vs Ohemotherapy vs OhemotherapySputtur negative conversion rate (%) Void reduction rate (%) (8) RR = 1.19 (1.02, 1.31)Fixed RR = 1.19 (1.02, 1.31)9 Moderal Moderal Moderal RR = 1.12 (1.07, 1.16)Fixed Fixed RR = 1.12 (1.07, 1.16)9 Fixed RR = 0.32 (0.24, 0.43)92 Fixed Fixed9Moderal Moderal Moderal Moderal Moderal RR = 0.32 (0.24, 0.43)Fixed Fixed RR = 0.32 (0.24, 0.43)9 Fixed Fixed9 RR RR = 0.31 (0.11, 0.87)9 Fixed RR = 0.31 (0.11, 0.87)<				3 months of treatment)					7	
Yue 2017 Tuberculosis Coptis chinensis combination Chinese patent medicine + chemotherapy vs Chemotherapy Relief of gastrointestinal tract adverse reactions incidence rate (%) RR = 1.35 (1.21, 1.50) Random 82% 3,484 16 Moderat Yue 2017 Tuberculosis Coptis chinensis combination Chinese patent medicine + chemotherapy vs Chemotherapy Sputum negative conversion rate (%) Absorption rate (%) RR = 1.21 (1.10, 1.32) Random 82% 3,484 16 Moderat Void reduction rate (%) RR = 0.31 (0.11, 0.132) Random 82% 3,484 16 Moderat Void reduction rate (%) RR = 0.31 (0.11, 0.132) Random 82% 3,484 16 Moderat Adverse reactions incidence rate (%) (Gastrointestinal reactor incidence rate) RR = 0.32 (0.24, 0.43) Fixed 36% 877 7 Moderat Adverse reactions incidence rate (%) (Gastrointestinal reactor incidence rate) RR = 0.31 (0.11, 0.87) Fixed 42% 885 6 Moderat Wang Bacterial Traditional Chinese medicine + Western (rate) Total effective rate (%) OR = 6.87 (36.8, 12.81) Fixed 0% 1,143 12 High 2017 dysentery				6months of treatment)						
Yue 2017 Tuberculosis Coptis chinensis combination Chinese patent medicine + chemotherapy vs Chemotherapy Sputum negative conversion rate (%) Absorption rate of leisons (%) RR = 1.35 (1.21, 1.50) Random 82% 3,484 16 Moderal Moderal Moderal Moderal Moderal Vue 2017 Tuberculosis Coptis chinensis combination Chinese patent medicine + chemotherapy vs Chemotherapy Sputum negative conversion rate (%) RR = 1.12 (1.01, 1.32) Random 82% 3,484 16 Moderal Moderal Vuid reduction rate (%) Chemotherapy RR = 0.32 (0.24, 0.43) Rat and moderal 88% 2049 15 Moderal Void reduction rate (%) (Gastrointestinal reaction incidence rate) RR = 0.32 (0.24, 0.43) Fixed 36% 877 7 Moderal Vuiver function damage incidence rate (%) (Castrointestinal reaction incidence rate) RR = 0.32 (0.25, 0.49) Fixed 42% 885 6 Moderal Wang Bacterial Traditional Chinese medicine + Western Total effective rate (%) (rash incidence rate) RR = 0.31 (0.11, 0.87) Fixed 9% 430 3 High (rash incidence rate) Wung Bacterial Traditional Chinese medicine + Western Total effective rate (%) (no antitibiotis) MD = 1.58 Fixe										Moderate Verv Low
patent medicine + chemotherapy vs ChemotherapyAbsorption rate of lesions (%) Void reduction rate (%) Improvement rate of lesions (%)RR = 1.21 (1.10, 1.32) RandomRadom88% 2049204915Moderal ModeralVoid reduction rate (%) Improvement rate of clinical symptoms and signs (%)RR = 1.19 (1.08, 1.31) RR = 1.12 (1.07, 1.16)Radom70% Fixed1,30111Moderal ModeralAdverse reactions incidence rate (%) (Gastrointestinal reaction incidence rate (%) (Liver function damage incidence rate (%) (Liver function damage incidence rate (%) (RR = 0.31 (0.11, 0.87)Fixed42% Fixed8856Moderal ModeralWang 2017Bacterial MysenteryTraditional Chinese medicine + Western Total effective rate (%) (no antibiotics)RR = 0.31 (0.11, 0.87) MD = -1.58Fixed94% Fixed4296Moderal Moderal (1.17, -1.38)Wu 2015MumpsTraditional Chinese medicine + Western MumpsTotal effective rate (%) (no antibiotics)RR = 1.12 (1.2, 1.50) FixedFixed94% 94%4295Moderal (1.17, -1.38)Wu 2015MumpsTotal effective rate (%) (no antibiotics)RR = 1.19 (1.02, 1.31)Fixed0% 94%1553Low RR = 1.19 (1.02, 1.31)Wu 2015MumpsTotal effective rate (%) (no antibiotics)RR = 1.19 (1.02, 1.31)Fixed0% 94%2303Low					011 - 0.20 (0.10, 0.02)	r stod	0,0	02	-	1019 2011
ChemotherapyVoid reduction rate (%)RR = 1.19 (1.08, 1.31)Random70%1.30111ModeralImprovement rate of clinical symptoms and signs (%)RR = 1.12 (1.07, 1.16)Fixed36%8777ModeralAdverse reactions incidence rate (%)RR = 0.32 (0.24, 0.43)Fixed42%8856Moderal(Gastrointestinal reaction incidence rate)Adverse reactions incidence rate (%)RR = 0.35 (0.25, 0.49)Fixed42%8856ModeralWangBacterialTraditional Chinese medicine + Western under verse reactions incidence rate (%)RR = 0.31 (0.11, 0.87)Fixed0%4303High2017dysenterymedicine vs Western medicine + Western under verse rate (%)Total effective rate (%) (no antibiotics)RR = 1.38Fixed94%4295Moderal (1.17, -1.38)Wu 2015MumpsTotal effective rate (%) (no antibiotics)RR = 1.39 (1.02, 1.50)Fixed94%4295Moderal (1.181, -1.33)Wu 2015MumpsTotal effective rate (%) (no antibiotics)RR = 1.19 (1.09, 1.31)Fixed94%4295Moderal (1.181, -1.33)	Yue 2017	Tuberculosis								Moderate
Wang Bacterial Traditional Chinese medicine + Western Total effective rate (%) (no antibioties) RR = 0.32 (0.24, 0.43) Fixed 36% 877 7 Moderal Wu 2015 Mumps Eacterial Traditional Chinese medicine + Western RR = 0.31 (0.11, 0.87) Fixed 36% 877 7 Moderal Wu 2015 Mumps Traditional Chinese medicine + Western RR = 0.31 (0.11, 0.87) Fixed 36% 877 7 Moderal Wu 2015 Mumps Traditional Chinese medicine + Western RR = 0.31 (0.11, 0.87) Fixed 0% 430 3 High Wu 2015 Mumps Traditional Chinese medicine + Western Total effective rate (%) (no antibioties) RR = 0.31 (0.11, 0.87) Fixed 0% 1,143 12 High Wu 2015 Mumps Traditional Chinese medicine + Western Total effective rate (%) (no antibioties) RR = 0.31 (0.11, 0.87) Fixed 0% 1,143 12 High Wu 2015 Mumps Total effective rate (%) (no antibioties) RR = 0.31 (0.11, 0.87) Fixed 94% 429 5 Moderal Wu 2015 Mumps <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>										
Adverse reactions incidence rate (%) RR = 0.32 (0.24, 0.43) Fixed 42% 885 6 Moderal Clastrointestinal reaction incidence rate (%) RR = 0.32 (0.24, 0.43) Fixed 42% 885 6 Moderal Adverse reactions incidence rate (%) RR = 0.35 (0.25, 0.49) Fixed 24% 1,044 7 High Uiver function damage incidence rate (%) RR = 0.31 (0.11, 0.87) Fixed 0% 430 3 High Wang Bacterial Traditional Chinese medicine + Wester Total effective rate (%) OR = 6.87 (3.68, 12.81) Fixed 0% 454 6 Moderal 2017 dysentery medicine vs Western medicine Total effective rate (%) OR = 6.87 (3.68, 12.81) Fixed 92% 454 6 Moderal 2017 dysentery medicine vs Western medicine Time of heat removal (d) MD = -1.58 Fixed 94% 429 5 Moderal (1.17, -1.38) Itic Itic (1.11, -1.33) Itic 155 3 Low Wu 2015 Mumps Total effective rate (%) (no antibioticio) RR = 1.39 (1.09, 1.31)			Спетнопегару	Improvement rate of clinical symptoms						Moderate
Wang Bacterial Traditional Chinese medicine + Western Total effective rate (%) (no antibiotics) RR = 0.35 (0.25, 0.49) Fixed 24% 1,044 7 High Wang Bacterial Traditional Chinese medicine + Western Total effective rate (%) (no antibiotics) RR = 0.31 (0.11, 0.87) Fixed 0% 430 3 High 2017 dysentery medicine vs Western medicine Total effective rate (%) (no antibiotics) RR = 0.31 (0.11, 0.87) Fixed 0% 1,143 12 High 2017 dysentery medicine vs Western medicine Time of heat removal (d) MD = -1.58 Fixed 92% 454 6 Moderal (-1.77, -1.38) Mumps Total effective rate (%) (no antibiotics) MD = -1.58 Fixed 94% 429 5 Moderal (-1.81, -1.33) Total effective rate (%) (no antibiotics) RR = 1.30 (1.12, 1.50) Fixed 34% 155 3 Low RR = 1.19 (1.09, 1.31) Fixed 0% 230 3 Low				Adverse reactions incidence rate (%)	RR = 0.32 (0.24, 0.43)	Fixed	42%	885	6	Moderate
Adverse reactions incidence rate (%) (rash incidence rate) RR = 0.31 (0.11, 0.87) Fixed 0% 430 3 High Wang Bacterial Traditional Chinese medicine + Western Total effective rate (%) OR = 6.87 (3.68, 12.81) Fixed 0% 430 3 High 2017 dysentery medicine vs Western medicine Total effective rate (%) OR = 6.87 (3.68, 12.81) Fixed 0% 1,143 12 High 2017 dysentery medicine vs Western medicine Total effective rate (%) MD = -1.58 Fixed 92% 454 6 Moderal (1.17, -1.38) Wu 2015 Mumps Total effective rate (%) (no antibiotics) RR = 1.30 (1.21, 1.50) Fixed 94% 429 5 Moderal (1.81, -1.33) Wu 2015 Mumps Total effective rate (%) (no antibiotics) RR = 1.30 (1.02, 1.50) Fixed 94% 155 3 Low				rate)	RR = 0.35 (0.25, 0.49)	Fixed	24%	1,044	7	High
Wang Bacterial Traditional Chinese medicine + Western Total effective rate (%) OR = 6.87 (3.68, 12.81) Fixed 0% 1,143 12 High 2017 dysentery medicine vs Western medicine Time of heat removal (d) MD = -1.58 Fixed 92% 454 6 Moderation (-1.77, -1.38) Anticilarrheal time (d) MD = -1.58 Fixed 94% 429 5 Moderation Wu 2015 Mumps Total effective rate (%) (no antibiotics) RR = 1.30 (1.12, 1.50) Fixed 34% 155 3 Low RR = 1.19 (1.09, 1.31) Fixed 0% 230 3 Low					RR = 0.31 (0.11, 0.87)	Fixed	0%	430	3	High
2017 dysentery medicine vs Western medicine Time of heat removal (d) MD = -1.58 (-1.77, -1.38) Fixed 92% 454 6 Moderal Moderal (-1.77, -1.38) Wu 2015 Mumps Total effective rate (%) (no antibiotics) R = 1.19 (1.09, 1.31) Fixed 92% 454 6 Moderal Moderal Wu 2015 Mumps Total effective rate (%) (no antibiotics) R = 1.19 (1.09, 1.31) Fixed 34% 155 3 Low	Wood	Doctorial	Traditional Chinaga			Eine -	00/	1 1 40	10	Lieb
(1.77, -1.38) (1.77, -1.38) Antidiarrheal time (d) MD = -1.58 Fixed 94% 429 5 Moderation (1.81, -1.33) (1.81, -1.33) (1.12, 1.150) Fixed 34% 155 3 Low Wu 2015 Mumps Total effective rate (%) (no antibilotics) RR = 1.30 (1.92, 1.51) Fixed 0% 230 3 Low										High Moderate
Wu 2015 Mumps Total effective rate (%) (no antibiotics) RR = 1.30 (1.12, 1.50) Fixed 34% 155 3 Low RR = 1.19 (1.09, 1.31) Fixed 0% 230 3 Low					(-1.77, -1.38)					Moderate
RR = 1.19 (1.09, 1.31) Fixed 0% 230 3 Low	Wu 2015	Mumps					34%	155	3	Low
(Continued on following page)		e -		. ,					3	Low
									(Continued on follo	owing page)

	Diagnosis	Comparison (T vs C)	Outcomes	Estimate (95% Cl)	Model	12	No. participants	No. controlled trials	Level of evidenc
		Andrographis injection + symptomatic treatment vs Ribavirin + symptomatic	Total effective rate (%) (The use of antibiotics was not mentioned)						
		treatment	Total effective rate (%)	RR = 1.23 (1.14, 1.33)	Fixed	0%	448	6	Low
			Time of heat removal (no antibiotics)	MD = -1.64 (-1.89, -1.39)	Fixed	40%	446	6	Low
			Time of heat removal (Use of	MD = -0.86	Random		60	1	Very Lov
			antibiotics) Time of heat removal (The use of	(-1.06, -0.66) MD = -1.28	Random	99%	312	4	Very Lov
			antibiotics was not mentioned)	(-2.28, -0.29)					
			Detumescence time of cheek (no antibiotics)	MD = -2.20 (-2.72, -1.69)	Random	67%	446	6	Low
			Detumescence time of cheek (Use of	MD = -1.60	Random		60	1	Very Lov
			antibiotics) Detumescence time of cheek (The use	(-1.87, -1.33) MD = -2.09	Random	99%	312	4	Very Lov
			of antibiotics was not mentioned) Detumescence time of cheek	(-3.51, -0.67) MD = -2.10	Random	97%	818	11	Low
			Detumescence time of cheek	(-2.78, -1.41)	nanuom	97.70	010	11	LOW
2hao 2014	Mumps	Traditional Chinese medicine vs Western medicine	Total effective rate (%)	OR = 6.36 (4.85, 8.34)	Fixed	21.6%	2,913	21	Moderate
:014		Traditional Chinese medicine vs Chinese patent medicine	Total effective rate (%)	OR = 7.93 (3.25, 19.39)	Fixed	0%	432	6	Low
		Traditional Chinese medicine vs Western medicine (Traditional Chinese medicine,	Total effective rate (%)	OR = 9.94 (5.44, 18.17)	Fixed	20.4%	4,505	6	Moderate
Yu 2020	Hand, foot and	western medicine, western medicine) Ribavirin vs Reduning	Total effective rate (%)	OR = 11.9 (4.64, 3.71)		Existence of	1,421		Moderate
	mouth disease in	ů				heterogeneity			
	children		Time of heat removal (d)	MD = -2.47 (-4.67, -0.19)		Existence of heterogeneity	82		Very Lov
			Skin rash regression time (d)	MD = -2.83		Existence of	160		Low
			Healing time of oral ulcer (d)	(-4.25, -1.52) MD = -1.76		heterogeneity Existence of	204		Low
				(-3.23, -0.24)		heterogeneity			
			Adverse reactions incidence rate (%)	OR = 0.20 (0.01, 1.64)		Existence of heterogeneity	170		Low
			Length of stay (d)	MD = -5.88 (-10.80, -0.82)		Existence of heterogeneity			Low
		Ribavirin vs Tanreqing	Total effective rate (%)	OR = 3.21 (0.73, 5.29)		Existence of	147		Low
			Time of heat removal (d)	MD = -0.99		heterogeneity ——	63		Very Lov
				(-3.03, 1.08) MD = -0.52			63) ()
			Skin rash regression time (d)	(-1.85, 0.88)			03		Very Lov
			Healing time of oral ulcer (d)	MD = -1.59 (-3.72, 0.56)			63		Very Lov
			Length of stay (d)	MD = -0.76 (-4.04, 2.39)			63		Very Lov
		Ribavirin vs Xiyanping	Total effective rate (%)	OR = 6.17 (2.39, 5.72)		Existence of heterogeneity	550		Low
			Time of heat removal (d)	MD = -1.47		Existence of	264		Low
			Skin rash regression time (d)	(-2.91, -0.05) MD = -1.99		heterogeneity Existence of	414		Low
			Gran regression and (a)	(-2.80, -1.18)		heterogeneity	414		LOW
			Healing time of oral ulcer (d)	MD = -3.58		Existence of			Low
				(-6.52, -0.58)		heterogeneity			1
			Adverse reactions incidence rate (%)	OR = 1.29 (0.03, 3.81)		Existence of heterogeneity			Low
			Length of stay (d)	MD = -2.53 (-5.14, 0.18)			150		Low
		Ribavirin vs Yanhuning	Total effective rate (%)	OR = 2.28 (0.72, 5.43)		Existence of	86		Very Lov
			Healing time of oral ulcer (d)	MD = -2.21		heterogeneity Existence of	86		Very Lov
				(-4.40, -0.07)		heterogeneity			
			Length of stay (d)	MD = -1.57 (-5.80, 2.70)			86		Very Lov
		Reduning vs Tanreqing	Total effective rate (%)	OR = 3.70 (0.60, 2.24)		Existence of heterogeneity			Very Lov
			Time of heat removal (d)	MD = -1.48					Very Lov
			Skin rash regression time (d)	(-4.35, 1.39) MD = -2.30		Existence of			Very Lov
				(-4.29, -0.50)		heterogeneity			
			Healing time of oral ulcer (d)	MD = -0.17 (-2.80, 2.51)					Very Lov
			Length of stay (d)	MD = -5.12					Very Lov
		Reduning vs Xiyanping	Total effective rate (%)	(-10.16, 0.27) OR = 1.92 (0.58, 7.02)		Existence of	64		Very Lov
		neuuriirig vs Aiyaripirig							
		neuuning vs xiyaiipiing				heterogeneity	64		
		Headining vs Alyanping	Time of heat removal (d) Skin rash regression time (d)	MD = -0.98 (-3.14, 1.12)		heterogeneity	64		Very Lov Very Lov

		(T vs C)		(95% Cl)			participants	controlled trials	of evidence
			Healing time of oral ulcer (d)	MD = 1.83 (-1.47, 5.17)			64		Very Low
			Length of stay (d)	MD = -3.38 (-7.44, 0.86)			64		Very Low
			Adverse reactions incidence rate (%)	OR = 0.15 (0.01, 1.82)		Existence of heterogeneity	64		Very Low
		Reduning vs Yanhuning	Total effective rate (%)	OR = 0.96 (0.02, 9.78)		Existence of heterogeneity			Low
			Healing time of oral ulcer (d) Length of stay (d)	MD = 0.44 (-2.13, 3.15) MD = -4.32					Low Low
		Tanreqing vs Yanhuning	Total effective rate (%)	(-10.63, 2.44) OR = 0.52 (0.11, 2.65)		Existence of			Low
						heterogeneity			
			Time of heat removal (d) Skin rash regression time (d)	MD = 0.48 (-1.58, 2.54) MD = 1.46 (0.10, 2.88)		Existence of			Low Low
			Healing time of oral ulcer (d)	MD = 1.99 (-0.08, 4.07)		heterogeneity			Low
		T	Length of stay (d)	MD = 1.76 (-1.57, 4.91)		(Low
		Tanreqing vs Xiyanping	Total effective rate (%)	OR = 0.25 (0.01, 6.76)		Existence of heterogeneity	80		Very Low
			Healing time of oral ulcer (d)	MD = 0.62 (-2.35, 3.66)			80		Very Low
			Length of stay (d)	MD = 0.82 (-4.43, 6.14)			80		Very Low
		Xiyanping vs Yanhuning	Total effective rate (%)	OR = 0.50 (0.01, 1.83)		Existence of heterogeneity			Low
			Healing time of oral ulcer (d)	MD = -1.37					Low
				(-5.00, 2.32)					
			Length of stay (d)	MD = -0.94 (-5.84, 4.10)					Low
/ang	Hand, foot and	Chinese patent medicine/Chinese patent	Total effective rate (%)	RR = 1.20 (1.16, 1.23)	Fixed	45%	3,311	23	Moderate
2020	mouth disease in	medicine + Western medicine vs Western	Time of heat removal (d)	MD = -1.20	Random	94%	2,708	19	Low
	children	medicine	Herpes disappearance time (d)	(-1.44, -0.95) MD = -1.78	Random	95%	2,743	19	Low
			Healing time of oral ulcer (d)	(-2.10, -1.46) MD = -1.45	Random	95%	553	7	Low
				(-1.62, -1.27)	riandom	50%	000	,	LOW
			Total duration of disease (d)	MD = -2.22 (-2.39, -2.04)	Random	76%	943	9	Low
			Adverse reactions incidence rate (%)	RR = 1.16 (0.79, 1.70)	Fixed	22%	92	16	Low
(iong et al. 2019)	Hand, foot and mouth disease in	Tanreqing + conventional therapy vs Conventional therapy of western medicine	Total effective rate (%)	OR = 2.88 (1.62, 5.10)	Fixed		400	3	Low
	children	Xiyanping injection, Reduning injection/ Xiyanping injection, Reduning injection + traditional treatment of western medicine vs Traditional treatment of western medicine	Time of rash regression (H)	MD = -29.57 (-47.18, -11.95)	Random	98%	1,029	9	Low
		Xiyanping injection/Reduning injection vs Conventional therapy of western medicine	Time of rash regression (H) (Traditional Chinese medicine group vs western medicine group)	MD = -27.20 (-50.35, -4.04)	Random	98%	691	5	Low
		Xiyanping injection/Reduning injection + traditional treatment of western medicine vs Traditional treatment of western medicine	Time of rash regression (H) (Integrated traditional Chinese and Western medicine group vs western Medicine group)	MD = -29.57 (-47.28, -11.85)	Random	98%	338	4	Low
		Xiyanping injection, Reduning injection/ Xiyanping injection, Reduning injection + conventional therapy of western medicine vs Conventional therapy of western medicine	Antipyretic onset time (H)	MD = -8.10 (-11.77, -4.42)	Fixed	2%	162	4	Low
		Xiyanping injection/Reduning injection vs Traditional treatment of western medicine	Antipyretic onset time (H) (Traditional Chinese medicine group vs western Medicine group)	MD = -9.77 (-18.48, -1.06)	Random	51%	81	2	Very Low
		Xiyanping injection/Reduning injection + Traditional treatment of western medicine vs Traditional treatment of western medicine	Antipyretic onset time (H) (Integrated traditional Chinese and Western medicine group vs Western medicine group)	MD = -7.86 (-13.26, -2.47)	Random	0%	79	2	Very Low
		Xiyanping injection/Reduning injection + Traditional treatment of western medicine vs Traditional treatment of western medicine	Time of heat removal (h) (Subgroup analysis was performed according to the combination of western medicine)	MD = -16.63 (-22.68, -10.59)	Random	98%	1,320	10	Moderate
		Xiyanping injection/Reduning injection/ Tanreqing injection vs Traditional treatment of western medicine	Time of heat removal (h) (Subgroup analysis according to the combination of western medicine, traditional Chinese medicine group vs Western medicine group)	MD = -21.91 (-33.61, -10.22)	Random	84%	445	4	Moderate
		Xiyanping injection/Reduning injection/ Tanreqing injection + Traditional treatment of western medicine vs Traditional treatment of western medicine	Time of heat removal (h) (Subgroup analysis was performed according to the combined use of western medicine, and the combination group of western medicine and Chinese medicine was compared with the	MD = -13.51 (-21.24, -5.77)	Random	98%	875	5	Low

Study	Diagnosis	Comparison (T vs C)	Outcomes	Estimate (95% Cl)	Model	12	No. participants	No. controlled trials	Level of evidence
		Xiyanping injection, Reduning injection, Tanreqing injection	Time of heat removal (h) (Subgroup analysis by traditional Chinese medicine injection)	MD = -18.26 (-27.34, -9.17)	Random	89%	1,326	8	Low
		Tanreqing injection/Tanreqing injection + Traditional treatment of western medicine vs Traditional treatment of western medicine	Time of heat removal (h) (Subgroup analysis according to traditional Chinese medicine injection variety, Tanreging)	MD = -2.30 (-17.17, 12.56)	Random	81%	323	2	Low
		Xiyanping injection/Xiyanping injection + Traditional treatment of western medicine vs Traditional treatment of western medicine	Time of heat removal (h) (Subgroup analysis by traditional Chinese medicine injection, Xiyanping)	MD = -12.02 (-15.47, -8.56)	Random	0	413	4	Low
		Reduning injection/Reduning injection + Traditional treatment of western medicine vs Traditional treatment of western medicine	Time of heat removal (h) (Subgroup analysis by traditional Chinese medicine injection, Reduning)	MD = -30.48 (-51.95, -9.01)	Random	91%	590	5	Low
		Xiyanping injection, Reduning injection/ Xiyanping injection, Reduning injection, Tarreqing injection + Traditional treatment of western medicine vs Traditional treatment of western medicine	Conversion rate of severe cases (%)	OR = 0.83 (0.45, 1.53)	Fixed	0%	1,331	8	High
		Xiyanping injection, Reduning injection/ Xiyanping injection, Reduning injection, Tanreqing injection + Traditional treatment of western medicine vs Traditional treatment of western medicine	Adverse reactions incidence rate (%)	OR = 2.37 (0.39, 14.40)	Fixed	0%	1815	10	Moderate
Yu 2020	Hand, foot and mouth disease	Traditional Chinese medicine vs Western medicine treatment/Traditional Chinese	Disappearance rate of other symptoms	OR = 6.54 (3.59.11.90)	Fixed	0%	142	2	Low
		medicine	Duration of fever	OR = -1.04 (-1.60, -0.49)	Random	0%	142	2	Low
			Efficiency				3,925	26	
			Regression time of hand foot rash				2,262	17	
			Antipyretic time				2086	16	

--: Not Reported.

Tuberculosis

One moderate-quality SR (Jin et al., 2018) evaluated the efficacy of CHM decoction/proprietary CHM drugs combined with chemotherapy, and the results suggested that the combination better improved the negative conversion rate of sputum bacteria, lesion absorption rate, lung cavity closure rate, clinical symptom improvement rate, and overall effectiveness of patients with multi-drug-resistant tuberculosis over chemotherapy alone. In terms of safety, the incidence of adverse events was more reduced with the combination treatment.

Specifically, a moderate-quality SR including 16 RCTs (Yan and Gao, 2017) suggested that the proprietary CHM drugs *Jiehe* Pills in combination of chemotherapy better improved the rate of sputum conversion and lesion resorption and alleviated clinical symptoms and signs such as cough, haemoptysis, fever, emaciation, fatigue, and night sweats in tuberculosis patients over chemotherapy alone. In terms of safety, the incidence of digestive discomforts was more reduced with the combination treatment. Another moderate-quality SR including 20 RCTs (Yue et al., 2017) evaluated the efficacy of oral proprietary CHM drugs including Astragalus membranaceus in combination with chemotherapy better improved the rate of sputum conversion and lesion resorption, with less adverse events related to digestive discomforts, liver injury and the occurrence of rash.

Bacillary Dysentery

One moderate-quality SR (Wang et al., 2017) evaluated the efficacy of the combined use of CHM decoction and Western conventional therapy, and the results suggested that the

combination better improved the overall effectiveness and shortened the time to fever and to diarrhoeal alleviation in adults with bacillary dysentery over Western conventional therapy alone; in terms of safety, digestive disorders were observed (intervention: control: 2 cases versus 5 cases).

Mumps

One moderate-quality SR including 11 RCTs (Wu et al., 2015) evaluated the effectiveness of the combined use of *Chuanhuning* Injection versus anti-virus pharmacotherapy ribavirin, and the results suggested that the combined use of *Chuanhuning* Injection and routine care better improved the overall effectiveness, shortened the time to fever and cheek swelling reduction, and reduced the occurrence of complications in children with mumps over ribavirin combined with routine care. In terms of safety, no adverse events occurred in the intervention group compared with the control including 4 cases of adverse events.

Another moderate-quality SR (Zhao, 2014) evaluated the effect of treatment with CHM alone, and the results suggested that internal and external treatment with CHM better improved the overall effectiveness, over proprietary CHM drugs alone; the external use of CHM outperformed the oral treatment. For safety, adverse events were observed, but no details were provided for individual groups.

Hand-Foot-And-Mouth Disease

A moderate-quality SR (Xiong et al., 2019) evaluated the effectiveness of proprietary CHM injections alone or in

combination with conventional treatment, and the results suggested the monotherapy or the adjunct use of CHM injections reduced the time to fever and rash reduction, and improved the overall clinical effectiveness in children with HFMD. However, there was no difference in the incidence of adverse events and severe case conversion rate between treatments.

A moderate-quality SR including 24 RCTs (Yang Z. et al., 2020) evaluated the effectiveness of using oral proprietary CHM drug *Lanqin* Oral Solution in addition to conventional treatment, and the results suggested that the combination treatment better reduced the time to fever and rash reduction and oral ulcer healing and shortened the total duration of illness in children with HFMD. In terms of safety, there was no difference in the incidence of adverse events between treatments.

One moderate-quality SR including 17 RCTs (Yu et al., 2020a) conducted a network meta-analysis of proprietary CHM drugs for HFMD. The results suggested that the *Yanhuning* Injection, *Reduning* Injection, *Xiyanping* injection and *Tanreqing* injection were significantly better than Ribavirin in improving the total clinical effectiveness; as for oral ulcer healing time and hospitalization time, *Xiyanping* and *Reduning* were significantly shorter than ribavirin; in terms of safety, *Reduning* and *Xiyanping* were significantly higher than ribavirin.

Another moderate-quality SR (Yu et al., 2020b) conducted a network meta-analysis to identify the effectiveness and safety of *Qingre Jiedu* TCM oral liquid in the treatment of HFMD. They concluded that seven TCM oral liquids, including *Lanqin* oral liquid, *Pudilan* oral liquid, *Yellow Gardenia* liquid, *Fuganlin* oral liquid, *Kangbindu* oral liquid, *Huangqing* oral liquid, and *Shuanghuanglian* oral liquid, had good therapeutic effects in clinical efficacy and recovery time of related symptoms. In the adverse reactions aspect, *Pudilan* oral liquid had the highest clinical safety.

Supplementary 5 detailed the amount of each drug in a polyherbal preparation, and the complete species and drug name of the included SRs.

DISCUSSION

This study provides a broad review of the efficacy and safety of CHM in the treatment of acute infectious diseases. After a systematic search and screening, we included 46 systematic reviews, and meta-analysis of moderate-to-high-quality showed that CHM alone or in combination with Western medicine was effective in treating acute and emergent respiratory diseases such as COVID-19, H1N1, and SARS in terms of symptom improvement such as fever, cough and dyspnoea, without serious adverse events. When combined with Western medicine, CHM shows potential in improving certain outcomes, such as mortality, but the evidence is not yet sufficient. In addition, some studies showed that CHM combined with Western medicine can also improve some intermediate outcomes including white blood cell count, nucleic acid negativity conversion rate, lung CT improvement rate. The adjunct use of CHM may be accounted for treating

children with acute infections such as HFMD, bacillary dysentery and mumps; however, safety should be closely monitored before and after the treatment.

In the treatment of COVID-19, several moderate-to-high quality systematic reviews and meta-analyses (Yang M. et al., 2020; Fan et al., 2020; Gao et al., 2020; Jin et al., 2020; Pang et al., 2020; Wang S. et al., 2020; Sun et al., 2020; Xiong et al., 2020; Zeng et al., 2020; Luo et al., 2021) showed that combination therapy had a good overall efficiency and nucleic acid negativity conversion rate and alleviated disease symptoms and that CHM may effectively control cytokine storms by inhibiting the excessive activation of immune cells and reducing inflammatory cytokines in relieving COVID-19 symptoms. According to the current overview, the most common drug in the SRs included in this study was Lianhua Qingwen Capsule, a proprietary CHM drug composed of 13 herbs, namely, the dry fruit of Forsythia suspensa (Thunb.) Vahl, the dry buds or with blooming flowers of Lonicera japonica Thunb., the dry caudex of Ephedra sinica Stapf, Ephedra intermedia Schrenk et C.A.Mey. or Ephedra equisetina Bge., the dry matured seeds of Prunus armeniaca L. var.ansu Maxim., Prunus sibirica L. or Prunus mandshurica (Maxim.) Koehne or Prunus armeniaca L., Gypsum Fibrosum, the dry roots of Isatis indigotica Fort., the dry roots of Dryopteris crassirhizoma Nakai., the dry aboveground part of Houttuynia cordata Thunb., the dry aboveground part of Pogostemon cablin (Blanco) Benth, the dry roots of Rheum palmatum L., the dry roots of Rhodiola crenulate (Hook. f. et Thoms.) H. Ohba, the fresh stem of Mentha haplocalyx Briq., and the dry roots and rhizomes of Glycorrhiza uralensis Fisch., Glycorrhiza inflata Bat. or Glycorrhiza glabra L. Its benefits for people infected by H1N1 virus and SARS-CoV-2 has been determined by randomised, large-sample, controlled clinical trials, and explained by its capacity of anti-inflammation and immunoregulation in pharmacological experiments (Duan et al., 2011; Huang et al., 2020; Hu et al., 2021). However, some important CHM interventions, for which no SRs have been published yet, probably due to the urgency of the fight against the epidemic, have been published as original studies, while drugs for which clinical studies have been conducted including Xuebijing Injection, Xuanfeibaidu Decoction, Qinfeipaidu Decoction, and Huashibaidu Decoction (Wang L. et al., 2020; Xiao et al., 2020; Hu et al., 2021). Substantial publications on prospective/retrospective cohort studies for these CHM prescriptions should be included in future updates of SRs on CHM for acute infections.

For other diseases, a moderate-quality systematic review found that CHM combined with Western medicine for epidemic parotitis shortened the time to fever reduction and improved the overall efficiency, with no significant differences in safety. The main modalities of TCM treatment for mumps include both external and internal application, but validation of the efficacy of these regimens is challenging when designing blinded clinical trials. To enhance and promote exploration of this aspect of the study, some objective outcomes can be selected to be measured as much as possible. Additionally, appropriate reporting guidelines can be selected, such as the CONSORT for Non-Pharmacologic Treatment Interventions (Boutron et al., 2017) and the CONSORT for Chinese Herbal Medicine Formulas (Cheng et al., 2017), to enhance the convenience and operability in conducting systematic reviews.

In addition, the systematic reviews included in this study showed that CHM injections improved the overall clinical effectiveness and severe conversion rate, reduced the time to fever and rash remission and the time for healing of oral ulcers, and shortened the total duration of illness in patients with HFMD. However, none of these SRs reported the occurrence of adverse reactions. HFMD is most prevalent in children, who are a vulnerable group, and there are challenges in conducting clinical studies for this population. Overall, the safety of CHM injections, particularly regarding the amounts used, continues to be of concern. When using CHM injections, one needs to determine whether they are worth using, and if so, their safety needs to be monitored closely.

To the best of our knowledge, this study is the first overview to analyse and evaluate CHM for acute infectious diseases. We systematically assessed 46 systematic reviews and meta-analyses to describe the status of CHM in the treatment of acute infectious diseases. However, the systematic reviews and meta-analyses of CHM alone or in combination with Western medicine for acute infectious diseases were generally plagued with several problems. First, many clinical trials and systematic reviews on Chinese medicine for acute infectious diseases have been published, but most of they are lacking rigorous design and strict quality control. Though time is pressed for fighting against public health emergencies, complying with relevant regulations and methodological consensuses such as "Best practice in research-overcoming common challenges in phytopharmacological research", is necessary for conducting an ethical and high-quality studies. Theses quality-improving issues should be considered in the future research (Heinrich et al., 2020). Second, we only included studies published in Chinese and English, which may lead to publication bias. Last, we are not able to recommend any specific kind of TCM to be used in public health emergencies as the comparative effectiveness between CHM decoction and Chinese patent medicine is to be determined in future studies.

In general, the clinical applicability of existing SRs on the treatment of acute infectious diseases in CHM is not good, and it is suggested that future studies should focus on the staging and typing of diseases, the type of drugs used, and the singularity of interventions. Second, the reporting of outcomes of these systematic reviews is not standardized, and references can be made to the core set of outcomes in TCM for reporting, such as the COVID-19 core outcome set (COS) (Jin et al., 2020; Qiu et al., 2020). In addition, the low quality of reviews can be addressed by strictly following the standards of PRISMA 2020 (Page et al., 2021) and AMSTAR 2 (Shea et al., 2017) when producing future systematic reviews, thus improving the overall quality in the field. Last but not the least, the precise and appropriate use of botanical scientific nomenclature in CHM SRs is further required to avoid ambiguities and error (Rivera et al., 2014).

Although PHEs are a worldwide issue, China has achieved excellent results by applying CHM and Western medicine. For countries that use traditional medicine, there should be more benefits from applying the wisdom of traditional medicine, especially when there is no drug treatment for new and emergency infectious diseases. Moreover, the richness of traditional medicine may also be a source for developing new drugs for emergency infectious diseases, and it would be worthwhile to conduct in-depth research on drugs with a long history of application and clinical effectiveness. However, due to lack of rigorous regulation, the efficacy, safety and quality of some CHM products need to be proved by more high quality, large sample, unbiased randomized trials.

CONCLUSION

Overall, CHM, both decoction and Chinese patent medicine, used alone or in combination with conventional medicine may offer potential benefits to relieving symptoms of people with acute respiratory infections. Full reporting of disease typing, staging, and severity, and intervention details is further required for a better evidence translation to the responses for PHE. Future CHM research should focus mainly on the specific aspects of respiratory infections such as its single use for mild infections, and the adjunct administration for sever infections, and individual CHM prescriptions for well-selected outcomes should be prioritized.

DATA AVAILABILITY STATEMENT

The original contributions presented in the study are included in the article/**Supplementary Material**, further inquiries can be directed to the corresponding authors.

AUTHORS CONTRIBUTIONS

YC and XN conceived the study. XN, XL and YZ drafted the manuscript. XL validated the data and contributed to the methodology. XN designed the study and analyzed the data. YZ, HL, YLL, MR, YWL, YZ, ZK contributed to the literature search, data collection and quality assessment. YC, and XN interpreted the result from the perspective of Chinese medicine practitioner and clinical investigator. XN interpreted the data from the perspective of public health emergency. YC and XL interpreted the result from the perspective of methodology. All authors provided critical review to the manuscript and approved the submission.

FUNDING

This study was supported by the internal funding from Guangdong Provincial Key Laboratory of Research on Emergency in TCM (No. 2017B030314176), the external funding from National Natural Science Foundation of China (No. 82104685) and Lanzhou City Talent Innovation and Entrepreneurship Project (Evaluation and Translation of Clinical Evidence of Dominant Diseases of Traditional Chinese Medicine in Gansu Province, No. 2016-RC-1). The funding body was not involved in the design of the study and collection, analysis, and interpretation of data and in writing the manuscript.

ACKNOWLEDGMENTS

We acknowledged the contribution from Jingyan Lin, Yuan Liu, Jiahui Lin, and Yidan Zhang, Ping Zeng, and Sichu Xiong from The Second Clinical School of Guangzhou University of Chinese

REFERENCES

- Ang, L., Song, E., Lee, H. W., and Lee, M. S. (2020). Herbal Medicine for the Treatment of Coronavirus Disease 2019 (COVID-19): A Systematic Review and Meta-Analysis of Randomized Controlled Trials. J. Clin. Med. 9, 1583. doi:10.3390/jcm9051583
- Boutron, I., Altman, D. G., Moher, D., Schulz, K. F., Ravaud, P., and Consort Npt Group. (2017). CONSORT Statement for Randomized Trials of Nonpharmacologic Treatments: A 2017 Update and a CONSORT Extension for Nonpharmacologic Trial Abstracts. Ann. Intern. Med. 167 (1), 40–47. doi:10.7326/M17-0046
- Chen, Y., Guo, J. J., Healy, D. P., and Zhan, S. (2007). Effect of Integrated Traditional Chinese Medicine and Western Medicine on the Treatment of Severe Acute Respiratory Syndrome: A Meta-Analysis. *Pharm. Pract.* (*Granada*) 5 (1), 1–9. doi:10.4321/s1886-36552007000100001
- Cheng, C. W., Wu, T. X., Shang, H. C., Li, Y. P., Altman, D. G., Moher, D., et al. (2017). CONSORT Extension for Chinese Herbal Medicine Formulas 2017: Recommendations, Explanation, and Elaboration (Simplified Chinese Version). *Ann. Intern. Med.* 167 (2), W21–W34. doi:10.7326/IsTranslatedFrom_M17-2977_2
- Ding, J., Zhang, J., Tian, Y., Liu, D., and Li, X. (2013). Meta-analysis of Xiyanping Injection in the Treatment of Hand-Foot-Mouth Disease. *Glob. Traditional Chin. Med.* 6 (8), 585–588. doi:10.3969/j.issn.1674-1749.2013.08.007
- Duan, Z. P., Jia, Z. H., Zhang, J., Liu, S., Chen, Y., Liang, L. C., et al. (2011). Natural Herbal Medicine Lianhuaqingwen Capsule Anti-influenza A (H1N1) Trial: a Randomized, Double Blind, Positive Controlled Clinical Trial. *Chin. Med.* J. (Engl) 124 (18), 2925–2933. doi:10.3760/cma.j.issn.0366-6999.2011.18.024
- Fan, A. Y., Gu, S., and Alemi, S. F.Research Group for Evidence-based Chinese Medicine (2020). Chinese Herbal Medicine for COVID-19: Current Evidence with Systematic Review and Meta-Analysis. J. Integr. Med. 18 (5), 385–394. doi:10.1016/j.joim.2020.07.008
- Gao, C., Song, C., Fu, Y., and Zhang, J. (2020). The Curative Effect on Treating COVID -19 by Integrated Medicine: A Systematic Review. J. Shaanxi Univ. Chin. Med. 44 (1), 1–9. doi:10.13424/j.cnki.jsctcm.2021.01.001
- Guo, X., Zhang, H., Wu, D., Ni, W., Lu, Z., and Geng, P. (2010). Systematic Review of Randomized Controlled Trials of Integrated Traditional Chinese and Western Medicine in the Treatment of Multi Drug Resistant Pulmonary Tuberculosis. J. traditional Chin. Med. 51, 159–160. doi:10.13288/j.11-2166/ r.2010.s2.229
- Han, S. (2016). The System Evaluation for the Treatment of Acute Bacterial Dysentery in Children by TCM and Chinese and Western Medicine. Shijiazhuang: Hebei University of traditional Chinese Medicine. https:// kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201701&filename= 1016324190.
- Hao, Y., Hong, J., Kou, C., and Shi, L. (2005). Meta-analysis of Integrated Traditional Chinese and Western Medicine and Simple Western Medicine in the Treatment of SARS. *Chin. J. Public Health* 21 (5), 525–526.
- Hao, Y. (2005). Meta-analysis of Comparative Studies of Integrative Traditional Chinese Medicine with Western Medicine and Western Medicine Alone for SARS. Changchun: Jilin University. http://kns.cnki.net/KCMS/detail.aspx? dbname=CMFD0506&filename=2005105734.
- He, Q. (2020). Meta-analysis of Xiyanping Combined with Chinese Patent Medicine in the Treatment of Hand Foot Mouth Disease in Children. BABY AND ME 10 (7), 79–82.
- Heinrich, M., Appendino, G., Efferth, T., Fürst, R., Izzo, A. A., Kayser, O., et al. (2020). Best Practice in Research - Overcoming Common Challenges in Phytopharmacological Research. J. Ethnopharmacol 246, 112230. doi:10.1016/j.jep.2019.112230

Medicine for their assistance with the preliminary search and data sorting.

SUPPLEMENTARY MATERIAL

The Supplementary Material for this article can be found online at: https://www.frontiersin.org/articles/10.3389/fphar.2022.752978/full#supplementary-material

- Hu, K., Guan, W. J., Bi, Y., Zhang, W., Li, L., Zhang, B., et al. (2021). Efficacy and Safety of Lianhuaqingwen Capsules, a Repurposed Chinese Herb, in Patients with Coronavirus Disease 2019: A Multicenter, Prospective, Randomized Controlled Trial. *Phytomedicine* 85, 153242. doi:10.1016/j.phymed.2020.153242
- Huang, Y. F., Bai, C., He, F., Xie, Y., and Zhou, H. (2020). Review on the Potential Action Mechanisms of Chinese Medicines in Treating Coronavirus Disease 2019 (COVID-19). *Pharmacol. Res.* 158, 104939. doi:10.1016/j.phrs.2020.104939
- Hunt, H., Pollock, A., Campbell, P., Estcourt, L., and Brunton, G. (2018). An Introduction to Overviews of Reviews: Planning a Relevant Research Question and Objective for an Overview. Syst. Rev. 7 (1), 39. doi:10.1186/s13643-018-0695-8
- Jiang, D., and Wen, X. (2021). Investigation on Origin and Development of Epidemic Disease. J. Liaoning Univ. Traditional Chin. Med. 23 (2), 1–4. doi:10.13194/j.issn.1673-842x.2021.02.001
- Jin, L., Xu, Y., and Yuan, H. (2020). Effects of Four Types of Integrated Chinese and Western Medicines for the Treatment of COVID-19 in China: a Network Meta-Analysis. *Rev. Assoc. Med. Bras* 66 (6), 771–777. doi:10.1590/1806-9282.66.6.771
- Jin, X., Pang, B., Zhang, J., Liu, Q., Yang, Z., Feng, J., et al. (2020). Core Outcome Set for Clinical Trials on Coronavirus Disease 2019 (COS-COVID). *Engineering* (*Beijing*) 6 (10), 1147–1152. doi:10.1016/j.eng.2020.03.002
- Jin, X., Xie, H., Zeng, H., Liu, Y., Zhang, T., Cao, S., et al. (2018). Combined Traditional Chinese and Western Medicine Treatment for Multidrug-Resistant Pulmonary Tuberculosis: A Meta-Analysis of Randomized Controlled Trials. *Chin. Med. Guide* 24 (1), 84–95. doi:10.13862/j.cnki.cn43-1446/r.2018.01.028
- Li, J. H., Wang, R. Q., Guo, W. J., and Li, J. S. (2016). Efficacy and Safety of Traditional Chinese Medicine for the Treatment of Influenza A (H1N1): A Meta-Analysis. J. Chin. Med. Assoc. 79 (5), 281–291. doi:10.1016/j.jcma.2015.10.009
- Liu, A., and Dong, J. (2021). Meta-analysis of the Clinical Efficacy of Chinese Patent Medicine Alone or Combined with Western Medicine in the Treatment of Covid-19. *Chin. Traditional Patent Med.* 43 (3), 836–840. doi:10.3969/j.issn. 1001-1528.2021.03.054
- Liu, J., Manheimer, E., Shi, Y., and Gluud, C. (2004). Chinese Herbal Medicine for Severe Acute Respiratory Syndrome: a Systematic Review and Meta-Analysis. J. Altern. Complement. Med. 10 (6), 1041–1051. doi:10.1089/acm.2004.10.1041
- Liu, J. P., Manheimer, E., and Shi, Y. (2005). [Systematic Review and Meta-Analysis on the Integrative Traditional Chinese and Western Medicine in Treating SARS]. *Zhongguo Zhong Xi Yi Jie He Za Zhi* 25 (12), 1082–1088. doi:10.3321/j.issn:1003-5370.2005.12.006
- Liu, L., Zhang, X., Qu, W., Jing, W., and Wang, Y. (2016). Meta-analysis of Chinese Medicine on Herpangina in Children. *Guid J. Tradit Chin. Med. Pharm.* 22 (22), 88–94. doi:10.13862/j.cnki.cn43-1446/r.2016.22.031
- Liu, M., Gao, Y., Yuan, Y., Yang, K., Shi, S., Zhang, J., et al. (2020). Efficacy and Safety of Integrated Traditional Chinese and Western Medicine for Corona Virus Disease 2019 (COVID-19): a Systematic Review and Meta-Analysis. *Pharmacol. Res.* 158, 104896. doi:10.1016/j.phrs.2020.104896
- Liu, W., Chen, Z., Liu, Y., Li, M., Ma, Y., Lu, J., et al. (2019). Epidemiological Analysis of Public Health Emergencies in Guangzhou from 2004 to 2017. *Int. J. Virol.* 4, 265–268. doi:10.3760/cma.j.issn.1673-4092.2019.04.014
- Liu, X., Zhang, M., He, L., and Li, Y. (2012). Chinese Herbs Combined with Western Medicine for Severe Acute Respiratory Syndrome (SARS). *Cochrane Database Syst. Rev.* 10 (10), CD004882. doi:10.1002/14651858.CD004882.pub3
- Lu, H., Chen, L., Sha, W., Hu, X., and Hu, Z. (2013). Systematic Evaluation on Pudilan Xiaoyan Oral Liquid for Treating Pediatric Herpangina. *China Pharmaceuticals* 22 (15), 24–27. doi:10.3969/j.issn.1006-4931.2013.15.011
- Luo, X., Ni, X., Lin, J., Zhang, Y., Wu, L., Huang, D., et al. (2021). The Add-On Effect of Chinese Herbal Medicine on COVID-19: A Systematic Review and Meta-Analysis. *Phytomedicine* 85, 153282. doi:10.1016/j.phymed.2020.153282

- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., and Prisma Group. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: the PRISMA Statement. *BMJ* 339 (7), b2535. doi:10.1136/bmj.b2535
- Ouyang, J., Jiang, Z., Zhang, M., Wang, Y., Wang, Z., Bai, R., et al. (2021). Efficacy and Safety of Traditional Chinese Medicine for Patients with Mild or Common COVID-19: A Meta-Analysis. J. Emerg. Traditional Chin. Med. 30 (1), 17–26. doi:10.3969/j.issn.1004-745X.2021.01.006
- Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., et al. (2021). The PRISMA 2020 Statement: An Updated Guideline for Reporting Systematic Reviews. *BMJ (Clinical research ed.)*. 372, 71. doi:10.1136/bmj.n71
- Pang, W., Liu, Z., Li, N., Li, Y., Yang, F., Pang, B., et al. (2020). Chinese Medical Drugs for Coronavirus Disease 2019: A Systematic Review and Meta-Analysis. *Integr. Med. Res.* 9 (3), 100477. doi:10.1016/j.imr.2020.100477
- Qi, G., Qi, W., Jiang, Q., Shen, K., Zhang, X., and Zhang, L. (2020). The Efficacy of Lianhua Qingwen Combined with Western Medicine Scheme on COVID-19 General Type Patients: a Systematic Review. *Clin. J. Traditional Chin. Med.* 32, 1195–1199. doi:10.16448/j.cjtcm.2020.0701
- Qiu, R., Zhao, C., Liang, T., Hao, X., Huang, Y., Zhang, X., et al. (2020). Core Outcome Set for Clinical Trials of COVID-19 Based on Traditional Chinese and Western Medicine. *Front. Pharmacol.* 11, 781. doi:10.3389/fphar.2020.00781
- Rivera, D., Allkin, R., Obón, C., Alcaraz, F., Verpoorte, R., and Heinrich, M. (2014).
 What Is in a Name? the Need for Accurate Scientific Nomenclature for Plants.
 J. Ethnopharmacol 152 (3), 393–402. doi:10.1016/j.jep.2013.12.022
- Shea, B. J., Reeves, B. C., Wells, G., Thuku, M., Hamel, C., Moran, J., et al. (2017). AMSTAR 2: a Critical Appraisal Tool for Systematic Reviews that Include Randomised or Non-randomised Studies of Healthcare Interventions, or Both. *BMJ* 358, j4008. doi:10.1136/bmj.j4008
- Sun, C. Y., Sun, Y. L., and Li, X. M. (2020). The Role of Chinese Medicine in COVID-19 Pneumonia: A Systematic Review and Meta-Analysis. Am. J. Emerg. Med. 38 (10), 2153–2159. doi:10.1016/j.ajem.2020.06.069
- Tu, Y. (2016). Artemisinin-A Gift from Traditional Chinese Medicine to the World (Nobel Lecture). Angew. Chem. Int. Ed. Engl. 55 (35), 10210–10226. doi:10. 1002/anie.201601967
- Wang, C., Cao, B., Liu, Q. Q., Zou, Z. Q., Liang, Z. A., Gu, L., et al. (2011). Oseltamivir Compared with the Chinese Traditional Therapy Maxingshigan-Yinqiaosan in the Treatment of H1N1 Influenza: a Randomized Trial. Ann. Intern. Med. 155 (4), 217–225. doi:10.7326/0003-4819-155-4-201108160-00005
- Wang, J., Ren, J. X., Xie, Y. M., Wang, W. W., Hu, J., and Liao, X. (2013). [Systematic Review of Xiyanping Injection for Hand Foot Mouth Disease]. Zhongguo Zhong Yao Za Zhi 38 (18), 3215–3222. doi:10.4268/cjcmm20131851
- Wang, W., Liang, Q., and Zhang, H. (2020). The Ancient Literature Research about Traditional Chinese Medicine Treatment of Cold Epidemic. Acta Chin. Med. Pharmacol. 48, 1–4. doi:10.19664/j.cnki.1002-2392.200115
- Wang, L., Yang, Z., Zhang, H., Yu, H., Yang, K., Fu, B., et al. (2020). Pharmacologic Study and Preliminary Study on Treatment of New Coronavirus (2019-nCoV) Pneumonia with Lianhua Qingwen. J. Chin. Med. Mater. 43, 772–778. doi:10. 13863/j.issn1001-4454.2020.03.049
- Wang, S., Li, M., Chen, X., Ma, M., and Hu, J. (2020c). Clinical Efficacy of Lianhua Qingwen Integrated with Western Medicine on COVID-19 by Meta-Analysis. *Chin. Traditional Herbal Drugs* 51 (14), 3763–3769. doi:10.7501/j.issn.0253-2670.2020.14.021
- Wang, Y., Su, R., Han, J., Wang, Y., and Fan, J. (2017). Intergrated Chinese Medicine Compound and Western Medicine for Acute Bacillary DysenteryA Meta-Analysis. *J. Liaoning Univ. Tcm* 19 (1), 81–84. doi:10.13194/j.issn.1673-842x.2017.01.024
- World Health Organization (2017). *Emergency Response Framework*. 2nd edition. Geneva: The Network.
- World Health Organization (2005). International Health Regulations 2005. 2nd edition. Geneva: The Network.
- Wu, J. R., Zhang, X. M., and Zhang, B. (2015). Potassium Dehydroandrographolide Succinate Injection for the Treatment of Child Epidemic Parotitis: A Systematic Review and Meta-Analysis. *Chin. J. Integr. Med.* 21 (11), 866–873. doi:10.1007/s11655-014-1895-2
- Wu, Y., Zou, L., Yu, X., Sun, D., Li, S., Tang, L., et al. (2020). Clinical Effects of Integrated Treatment of Traditional Chinese and Western Medicine on COVID-19: a Systematic Review. SH. J. TCM. 54 (6), 29–36. doi:10.16305/j. 1007-1334.2020.06.093
- Xiao, M., Tian, J., Zhou, Y., Xu, X., Min, X., Lv, Y., et al. (2020). Efficacy of Huoxiang Zhengqi Dropping Pills and Lianhua Qingwen Granules in

Treatment of COVID-19: A Randomized Controlled Trial. *Pharmacol. Res.* 161, 105126. doi:10.1016/j.phrs.2020.105126

- Xiong, F., Zhang, J., Tang, H., Cai, Q., and Qiu, Z. (2019). Meta-analysis of Three Kinds of Heat-Clearing and Detoxifying Traditional Chinese Medicine Injections in the Treatment of Children with Hand-Foot-Mouth Disease. *China Pharmacist* 22 (10), 1850–1855. doi:10.3969/j.issn.1008-049X.2019.10.018
- Xiong, X., Wang, P., Su, K., Cho, W. C., and Xing, Y. (2020). Chinese Herbal Medicine for Coronavirus Disease 2019: A Systematic Review and Meta-Analysis. *Pharmacol. Res.* 160, 105056. doi:10.1016/j.phrs.2020.105056
- Xiong, X., Yuan, K., Yan, S., Tang, J., Chen, P., and Jiang, Z. (2013). Meta-analysis of Xiyanping Injection in the Treatment of Children with Hand Foot and Mouth Disease. *Hubei J. TCM* 35 (5), 10–12. doi:10.3969/j.issn.1000-0704.2013.05.004
- Yan, B., and Gao, Y. (2017). Meta-analysis of Conventional Anti Tuberculosis Chemotherapy Combined with Traditional Chinese Medicine Tuberculous Pill in the Treatment of Pulmonary Tuberculosis. Sci. Technol. Chin. Med. 24 (4), 533–537.
- Yan, S., Lu, Y., Zhang, G., Li, X., Wang, Z., Yao, C., et al. (2020). Effect of Heat-Clearing and Detoxifying Chinese Medicines Combined with Conventional Therapy on Mild Hand, Foot, and Mouth Disease with Fever: An Individual Patient Data Meta-Analysis. *Medicine (Baltimore)* 99 (23), e20473. doi:10.1097/ MD.000000000020473
- Yang, M., Yang, S., Yang, M., and You, D. (2020). Systematic Review on the Treatment of Novel Coronavirus Pneumonia with Chinese Herbal Lianhua Qingwen. *Chin. J. Drug Eval.* 37 (2), 126–130.
- Yang, Z., Lyu, J., Sun, M. H., Zhi, Y. J., and Xie, Y. M. (2020). [Systematic Review on Efficacy and Safety of Lanqin Oral Liquid in Treatment of Hand, Foot and Mouth Disease]. *Zhongguo Zhong Yao Za Zhi* 45 (15), 3547–3555. doi:10. 19540/j.cnki.cjcmm.20200522.501
- Yu, Y., Zhang, G., Han, T., and Huang, H. (2020a). Network Meta-Analysis of Four Kinds of Traditional Chinese Medicine Injection in Treatment of Hand-Foot-Mouth Disease. J. Shandong Univ. Tcm 44 (2), 156–163. doi:10.16294/j.cnki. 1007-659x.2020.02.009
- Yu, Y., Zhang, G., Han, T., and Huang, H. (2020b). A Network Meta-Analysis of Qingre Jiedu Traditional Chinese Medicine Oral Liquid in the Treatment of Hand Foot Mouth Disease. J. Basic Chin. Med. 26 (11), 1665–1670. doi:10.3969/ j.issn.1006-3250.2020.11.027
- Yue, J., Xiong, L., Wang, C., Wen, Q., Tang, M., Chen, L., et al. (2017). Metaanalysis on Synergy and Attenuation of Astragalus Membranaceus Elated Oral Preparations of Traditional Chinese Medicine in the Adjuvant Therapy for Pulmonary Tuberculosis. *PJCCPVD* 25 (4), 1–7. doi:10.3969/j.issn.1008-5971. 2017.04.001
- Zeng, M., Li, L., and Wu, Z. (2020). Traditional Chinese Medicine Lianhua Qingwen Treating corona Virus Disease 2019(COVID-19): Meta-Analysis of Randomized Controlled Trials. *PLoS One* 15 (9), e0238828. doi:10.1371/ journal.pone.0238828
- Zhang, G., and Wei, C. (2014). Meta-Analysis on Hand-Foot-Mouth Disease Treated with Traditional Chinese Medicine. World J. Integrated Traditional West. Med. 9 (2), 122–129. doi:10.3969/j.issn.1673-6613.2014.02.005
- Zhang, M. M., Liu, X. M., and He, L. (2004). Effect of Integrated Traditional Chinese and Western Medicine on SARS: a Review of Clinical Evidence. World J. Gastroenterol. 10 (23), 3500–3505. doi:10.3748/wjg.v10.i23.3500
- Zhang, Y. (2016). Research on the Prevention and Treatment of Viral Diseases in TCM Based on Meta-Analysis. Jinan: Shandong University of traditional Chinese Medicine. http://kns.cnki.net/KCMS/detail.aspx?dbname=CMFD201701&filename= 1016322627.
- Zhang, Y., Zhu, Z., and Huang, M. (2014). System Evaluation of Chinese and Western Medicine Combined Treatment of Hand-Foot-Mouth Disease. J. Trop. Med. 14 (9), 1151–1155.
- Zhao, F. (2014). Systematic Review of Modern Literature of Traditional Chinese Medicine Used in the Mumps. Jinan: Shandong University of traditional Chinese Medicine. https://kns.cnki.net/KCMS/detail/detail.aspx?dbname=CMFD201501&filename= 1015506713.
- Zhao, N., Dong, B., Xu, J., Wu, T., and Liu, G. (2004). Systematic Assessment on the Effect of Integrated Chinese Traditional Medicine with Western Medicine in the Treatment of Severe Acute Respiratory Syndrome (SARS). West China Med. J. 19 (3), 353–357. doi:10.3969/j.issn.1002-0179.2004.03.001
- Zhao, P., Yang, H. Z., Lv, H. Y., and Wei, Z. M. (2014). Efficacy of Lianhuaqingwen Capsule Compared with Oseltamivir for Influenza A Virus Infection: a Meta-

Analysis of Randomized, Controlled Trials. Altern. Ther. Health Med. 20 (2), 25–30.

- Zhou, F., Pu, L., Rong, X., Liu, J., Yang, Y., and Liu, W. (2021). Efficacy and Safety of Chinese Herbal Decoction Combined with Western Medicine in Treatment of COVID-19: A Meta-analysis. J. Pract. Med. 37 (5), 564–568. doi:10.3969/j.issn.1006-5725.2021.05.002
- Zhou, L. P., Wang, J., Xie, R. H., Pakhale, S., Krewski, D., Cameron, D. W., et al. (2021). The Effects of Traditional Chinese Medicine as an Auxiliary Treatment for COVID-19: A Systematic Review and Meta-Analysis. J. Altern. Complement. Med. 27 (3), 225–237. doi:10.1089/acm.2020.0310

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

Copyright © 2022 Luo, Zhang, Li, Ren, Liu, Liu, Zhang, Kuang, Cai, Chen and Ni. This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.