Efficacy and safety of the Xiaoyao pill for improving the clinical symptoms of stagnation of liver qi (chi) and spleen deficiency

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
17/09/2020		[X] Protocol		
Registration date	Overall study status	Statistical analysis plan		
24/09/2020	Completed	[X] Results		
Last Edited 31/05/2024	Condition category Mental and Behavioural Disorders	☐ Individual participant data		

Plain English summary of protocol

Background and study aims

Symptoms of depression include loss of interest, loss of sleep and appetite, fatigue and inattention. About 322 million people worldwide suffer from depression, accounting for 4.4% of the world's total population. There are about 54.8 million cases in China, accounting for 4.2% of the Chinese population. In Traditional Chinese Medicine (TCM), the Xiaoyao pill is the fundamental prescription for symptoms of stagnation of liver qi and spleen deficiency. The aim of this study is to assess the effects of the Xiaoyao pill for mild to moderate depression and provide clinical evidence for the biological basis of TCM.

Who can participate?

Patients aged 18-65 with mild to moderate depression

What does the study involve?

Participants are randomly allocated to either the Xiaoyao pill group or the placebo group, receiving either Xiaoyao pill or placebo (dummy pill) twice a day for four consecutive weeks. Depression symptoms are measured at the start of the study and after 2 and 4 weeks. Blood and fecal samples are also collected at the start and the end of treatment to further explore the potential mechanism. This study will take some measures to protect patients from serious adverse events.

What are the possible benefits and risks of participating?

The potential benefit is that depression patients with symptoms of stagnation of liver qi and spleen deficiency may have improved symptoms and quality of life from the Xiaoyao pill treatment. No obvious side effects are documented. During the course of treatment it may be identified that there are some adverse reactions for the patient. This study has procedures in place to safeguard patients. Patients at risk will be counselled by their therapists and signposted to specialist services as appropriate.

Where is the study run from?
Beijing University of Chinese Medicine (China)

When is the study starting and how long is it expected to run for? September 2020 to September 2022

Who is funding the study? National Natural Science Foundation (China)

Who is the main contact? Prof. Jiaxu Chen xys_clinic2020@163.com

Contact information

Type(s)

Scientific

Contact name

Prof Jiaxu Chen

Contact details

No. 11, Bei San Huan Dong Lu Chaoyang District Beijing China 100029 +86 (0)10-64286656 xys clinic2020@163.com

Type(s)

Public

Contact name

Mrs Zhe Xue

Contact details

No. 11, Bei San Huan Dong Lu Chaoyang District Beijing China 100029 +86 (0)10-64286656 xuezhesanctity@163.com

Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

81630104 (National Natural Science Foundation)

Study information

Scientific Title

Xiaoyao pill for the treatment of stagnation of liver qi and spleen deficiency with depression: a multi-center randomized controlled double-blind trial

Study objectives

The trial aims to assess the therapeutic effects of Xiaoyao pill for mild to moderate depression. The aim is to provide clinical evidence for the biological basis of traditional Chinese medicine (TCM).

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 04/06/2020, Ethics Committee of Beijing University of Chinese Medicine (No. 11, Bei San Huan Dong Lu, Chaoyang District, Beijing,100029, China; +86 (0)10 53911431;bucmyxll@126.com), ref: 2020BZYLL0304

Study design

Multi-centre double-blinded randomized placebo-controlled parallel clinical trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Mild to moderate depression with symptoms of stagnation of liver qi and spleen deficiency

Interventions

The 108 eligible participants will be allocated to the experimental or placebo arm based on a random lottery. Participants will be required to take the medicine twice daily for four consecutive weeks and the dosage is 9 g twice a day.

The experimental intervention is the Xiaoyao pill. Xiaoyao pills are water honey pills (Z20013060) produced by Jiuzhitang Co., Ltd. The appearance and specifications of the placebo are the same as Xiaoyao pills.

Intervention Type

Drug

Phase

Phase IV

Drug/device/biological/vaccine name(s)

Primary outcome(s)

Depression with symptoms of stagnation of liver qi and spleen deficiency, assessed using the Hamilton Depression scale (HAMD) at baseline, 1 week, 2 weeks and 4 weeks

Key secondary outcome(s))

Overall health measured using TCM symptoms Scale at baseline, 1 week, 2 weeks and 4 weeks

Completion date

30/09/2022

Eligibility

Key inclusion criteria

- 1. Meet the Diagnostic Statistics Manual of Mental Disorders (DSM-5) regarding the diagnosis of mild to moderate depression
- 2. A score between 20 and 35 on HAMD
- 3. Meet the TCM criteria of liver depression and spleen deficiency syndrome
- 4. Aged between 16 18 years old, both genders
- 5. Patients agree to participate in this trial and assign the informed consent
- 6. Capable of reading and follow-up treatment, and permanently live locally

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Kev exclusion criteria

- 1. Bipolar depression, treatment-resistant depression and severe suicidal risk
- 2. History of bipolar disorder, schizophrenia, obvious psychotic symptoms and depression disorder caused by non-addictive substances
- 3. Combine with severe cardiovascular diseases, cerebrovascular diseases, hepatic diseases, renal diseases, hematological disease, cancer, or other severe primary diseases
- 4. Pregnant or lactating women
- 5. Inability to finish the compliance test, judge the efficacy and have complete data
- 6. Involved with any other clinical trial at the time of consent

Date of first enrolment

30/10/2020

Date of final enrolment

30/12/2021

Locations

Countries of recruitment

China

Study participating centre

The First Affiliated Hospital of Jinan University (Guangzhou Overseas Chinese Hospital)

613 W. Huangpu Avenue Guangzhou China 510630

Study participating centre

The Affiliated Brain Hospital of Guangzhou Medical University

No.36, Mingxin Road Fangcun Liwan District Guangzhou China 510370

Study participating centre

Dongfang Hospital (Beijing University of Chinese Medicine Second Affiliated Hospital)

No. 6 Fangxingyuan 1st Block Fengtai District Beijing China 100078

Study participating centre
Beijing Anding Hospital Capital Medical University

5 Ankang Hutong Xicheng District Beijing China 100088

Peking University Sixth Hospital

No. 51 Hua Yuan Bei Road Haidian District Beijing China 100191

Study participating centre Tongde Hospital of Zhejiang Province

No. 234 Gucui Road Hangzhou China 310012

Study participating centre

Beijing University of Chinese Medicine Third Affiliated Hospitail

Chaoyang District Anwai Xiaoguan Street No. 51 Beijing China 100029

Study participating centre

Shiyan Hospital of Integrated Traditional Chinese and Western Medicine

No.221 Hanjiang North Road Shiyan China 442010

Sponsor information

Organisation

Beijing University of Chinese Medicine

Funder(s)

Funder type

Government

Funder Name

National Natural Science Foundation of China

Alternative Name(s)

Chinese National Science Foundation, Natural Science Foundation of China, National Science Foundation of China, NNSF of China, NSF of China, National Nature Science Foundation of China, Guójiā Zìrán Kēxué Jījīn Wěiyuánhuì, , NSFC, NNSF, NNSFC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

China

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		20/04/2024	31/05/2024	Yes	No
<u>Protocol article</u>		04/01/2022	07/11/2023	Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes