

# Research on the comprehensive therapy for impaired glucose tolerance (IGT) by traditional Chinese medicine

**Submission date**  
10/06/2008

**Recruitment status**  
No longer recruiting

☐ Prospectively registered

☐ Protocol

**Registration date**  
10/07/2008

**Overall study status**  
Completed

☐ Statistical analysis plan

☐ Results

**Last Edited**  
03/05/2011

**Condition category**  
Nutritional, Metabolic, Endocrine

☐ Individual participant data

☐ Record updated in last year

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

Prof Xiao-Lin Tong

### Contact details

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Beijing  
China  
100053

## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

### Secondary identifying numbers

2006BAI04A04-02

# Study information

## Scientific Title

### Study objectives

Some randomised controlled trials have specifically examined the effects of lifestyle and drug interventions on the prevention of type 2 diabetes. The aim of our randomised controlled trial is to study the effects of traditional Chinese medicine on the prevention of type 2 diabetes, which has not yet been carried out to date.

### Hypothesis:

Lifestyle intervention combined with traditional Chinese medicine could reverse IGT to normal, and decrease associated risks of type 2 diabetes and cardiovascular diseases.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Medical Ethics Committee, Guang'an Men Hospital, China Academy of Chinese Medical Sciences. on 28/02/2008

### Study design

Randomised double-blind placebo-controlled clinical trial

### Primary study design

Interventional

### Secondary study design

Randomised controlled trial

### Study setting(s)

Not specified

### Study type(s)

Treatment

### Participant information sheet

Patient information can be found at: <http://www.gamh.com.cn/tangniaobing/zqtys.htm> (in Chinese)

### Health condition(s) or problem(s) studied

Type 2 diabetes/ cardiovascular diseases

### Interventions

1. Traditional Chinese medicine Tian-qi Jiang-tang Capsule™, 5 capsules three times a day, combined with lifestyle interventions
2. Placebo combined with lifestyle interventions

Lifestyle interventions: Diabetes experts will give a talk on physical exercise and diet to a group of participants at baseline, lasting about 45 minutes. In addition, the researchers (usually doctors) will give advice to the participants individually at baseline and every 3 months. We will examine the results of the lifestyle interventions every 3 months by questionnaires, and will adjust the individual advice according to the results of the questionnaires.

Total duration of interventions: 3 years

### **Intervention Type**

Other

### **Phase**

Not Specified

### **Primary outcome measure**

Blood glucose (FPG and 2hPG of OGTT) at baseline, and every 3 months during intervention (3 years) and follow-up (6 months).

### **Secondary outcome measures**

Risk of cardiovascular disease, assessed by the following:

1. Blood lipid, assessed at baseline, 6, 12, 18, 24, 30 and 36 months
2. Blood pressure, measured at baseline and then every 3 months during the intervention (3 years) and follow-up (6 months)
3. BMI, measured every 3 months during the intervention (3 years) and follow-up (6 months)
4. Electrocardiogram (ECG), carried out every 6 months during the intervention (3 years)

The following will be assessed in a sub-group of approximately 500 participants:

1. HbA1c, assessed every 6 months during the intervention (3 years)
2. Urinary albumin excretion rate (UAER), assessed at baseline, at 3, 6, 12 and 36 months
3. High-sensitivity C-reactive protein (hs-CRP) baseline, 12 and 36 months
4. Adiponectin, baseline, 12 and 36 months
5. OGTT:
  - 5.1. At baseline (0 hour), assessed at baseline and every 3 months during the intervention (3 years) and follow-up (6 months)
  - 5.2. 0.5 hours, assessed at baseline, 6, 12, 24 and 36 months
  - 5.3. 1 hour, assessed at baseline, 12 and 36 months
  - 5.4. 2 hours, assessed at baseline and then every 3 months during the intervention (3 years) and follow-up (6 months)
6. Insulin level:
  - 6.1. Baseline insulin level, measured at baseline (0 month) and every three months until 12 months, and then 24 and 36 months
  - 6.2. Insulin level at 0.5 hours, measured at baseline (0 month) and every three months until 12 months, and then 24 and 36 months
  - 6.3. Insulin level at 1 hour, measured at baseline (0 month), 12 and 36 months
  - 6.4. Insulin level at 2 hours, measured at baseline, every three months until 12 months, and then 24 and 36 months

Note: We will choose the participants who will likely to be compliant for the sub-group study.

### **Overall study start date**

01/03/2008

**Completion date**

31/12/2010

## Eligibility

**Key inclusion criteria**

1. Both males and females
2.  $25 \leq \text{age} \leq 70$
3. Intravenous plasma glucose: Fasting plasma glucose (FPG)  $< 7.0$  mmol/L and 2-hour plasma glucose (2hPG) of oral glucose tolerance test (OGTT)  $< 11.1$  mmol/L,  $\geq 7.8$  mmol/L
4. Deficiency of both qi and yin syndromes accompanied by heat
5. Taking no medicine for treatment of IGT
6.  $18.5 \text{ kg/m}^2 < \text{body mass index (BMI)} < 30 \text{ kg/m}^2$
7. Voluntariness, and signed letter of consent
8. Those who do not take part in any other trials within 3 months

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

2,000 (As of 03/05/2011; 804 participated)

**Key exclusion criteria**

1. Acute cardiovascular disease and myocardial infarction within 6 months
2. Proliferative retinopathy that needs to be treated by laser
3. Not compliant
4. Mental disease
5. Pregnant or lactating women; women without contraception
6. Allergic to any traditional chinese medicine
7. Co-morbid with other endocrine disease or serious protopathy
8. Systolic blood pressure (SBP)  $\geq 160$  mmHg, diastolic blood pressure (DBP)  $\geq 100$  mmHg and secondary hypertension
9. Cholesterol (CHO)  $\geq 6.22$  mmol/L (240 mg/dl) or low density lipoprotein (LDL)  $\geq 4.14$  mmol/L (160 mg/dl)
10. Patients who are treated by other hypoglycemic drug

**Date of first enrolment**

01/03/2008

**Date of final enrolment**

31/12/2010

# Locations

## Countries of recruitment

China

## Study participating centre

Guang'an Men Hospital

Beijing

China

100053

# Sponsor information

## Organisation

Ministry of Science and Technology of the People's Republic of China (China)

## Sponsor details

Yi NO.15

Fu-xing Street

Beijing

China

100862

## Sponsor type

Government

## Website

<http://www.most.gov.cn>

## ROR

<https://ror.org/027s68j25>

# Funder(s)

## Funder type

Government

## Funder Name

Ministry of Science and Technology of the People's Republic of China, National Key Technology R&D Programme (China)

# Results and Publications

## Publication and dissemination plan

Not provided at time of registration

## Intention to publish date

## Individual participant data (IPD) sharing plan

## IPD sharing plan summary

Not provided at time of registration