

# Effect of obesity on asthma outcomes in acute exacerbation

<b>Submission date</b> 17/07/2010	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 12/08/2010	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 12/08/2010	<b>Condition category</b> Respiratory	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Prof Gang Wang

**Contact details**  
Pneumology Group  
Department of Integrated Traditional Chinese and Western Medicine  
Sichuan University  
Chengdu  
China  
610041

## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
N/A

## Study information

**Scientific Title**

Effect of obesity on asthma outcomes in acute exacerbation: a multicentre interventional cohort study

**Study objectives**

The prevalence of both obesity and asthma is increasing throughout the Western world and increased body mass index (BMI) may be a risk factor for the development of asthma. Recent studies have indicated that obese subjects with asthma report greater resistance to therapy and poorer asthma control than normal-weight subjects with asthma. However effect of obesity on asthma outcomes in acute exacerbation remains unclear.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

The Medical Ethics Committee of West China Hospital at Sichuan University approved on the 21st June 2010.

**Study design**

Multicentre interventional single-arm cohort study

**Primary study design**

Interventional

**Secondary study design**

Non randomised controlled trial

**Study setting(s)**

Hospital

**Study type(s)**

Screening

**Participant information sheet**

Not available in web format, please use the contact details below to request a patient information sheet

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

Mild to moderate asthma in acute exacerbation

**Interventions**

According to Chinese cut-off criteria of obesity, the subjects with asthma are divided into four groups which are the underweight group with BMI less than 18.5 kg/m<sup>2</sup>, the normal group with BMI between 18.5 and 23.9 kg/m<sup>2</sup>, the overweight group with BMI between 24.0 and 27.9 kg/m<sup>2</sup>, and the obese group with BMI greater than 28.0 kg/m<sup>2</sup>.

Interventions for all groups: beta-2-agonists (salbutamol), systemic steroids (0.5 - 1 mg/kg) if necessary.

Period of treatment: 7 days, no follow-up.

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome measure**

The number of patients with use of systemic steroids and steroid dose, and the number of patients with hospital admission, which are evaluated at days 4 and 8.

**Secondary outcome measures**

1. The number of puffs of beta agonists (salbutamol) recorded in asthma diary by the patient himself every day during 7-day study
2. Lung functions (PEF), which are assessed at hours 0, 2, 4, 6, 8, 10, 12 after recruitment, and in morning and evening every day during 7-day of treatment

**Overall study start date**

30/07/2010

**Completion date**

30/06/2011

**Eligibility****Key inclusion criteria**

1. Mild to moderate asthma in acute exacerbation
2. Male and female patients between 15 and 75 years
3. Within 72 hours of onset of acute asthma
4. Ability to provide written informed consent

**Participant type(s)**

Patient

**Age group**

Adult

**Sex**

Both

**Target number of participants**

2000

**Key exclusion criteria**

1. Use of systemic steroids or immunosuppressive agents within one month before recruitment, or history of life-threatening asthma requiring treatment with intubation and mechanical ventilation
2. Maintenance therapy with symbicort, or rescue therapy with formoterol or anticholinergic agents
3. Current alcoholism or drug abuse
4. Lung diseases other asthma

5. Severe diseases of cardiovascular, hepatic, renal, central nervous system, haematopoietic system cancer
6. Significant medical illness (other than asthma) that is not stable
7. History of respiratory tract infection within the previous 6 weeks
8. Pregnancy or breast-feeding
9. The inability to understand and complete this study
10. Peptic ulcer or gastrointestinal haemorrhage
11. Intolerance to beta-2-agonists or steroids

**Date of first enrolment**

30/07/2010

**Date of final enrolment**

30/06/2011

## **Locations**

**Countries of recruitment**

China

**Study participating centre****Pneumology Group**

Chengdu

China

610041

## **Sponsor information**

**Organisation**

West China Hospital at Sichuan University (China)

**Sponsor details**

Guoxue street No. 37

Chengdu

China

610041

**Sponsor type**

Hospital/treatment centre

**Website**

<http://eng.cd120.com/>

**ROR**

<https://ror.org/007mrxy13>

# Funder(s)

## Funder type

Government

## Funder Name

Doctoral Fund of Ministry of Education of China (China) (ref: 20070610155)

## Funder Name

National Natural Science Foundation of China (China) (ref: 30971326; 30901907)

## 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 Wěiyuánhùi, NSFC, NNSF, NNSFC

## Funding Body Type

Government organisation

## Funding Body Subtype

National government

## Location

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