

# A randomized, double-blind, placebo-controlled, multicenter trial to evaluate the clinical efficacy of a single intrapyloric injection of botulinum toxin type A (Botox®) in patients with idiopathic gastroparesis. The BIG study.

<b>Submission date</b> 09/06/2006	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 09/06/2006	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 09/06/2006	<b>Condition category</b> Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<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

Dr J.J.L. Haans

### Contact details

Leiden University Medical Center (LUMC)  
Department of Gastroenterology and Hepatology C-04-P  
Room 192  
P.O. Box 9600  
Leiden  
Netherlands  
2300 RC  
+31 (0)71 5261104  
J.J.L.Haans@lumc.nl

## Additional identifiers

EudraCT/CTIS number

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**

P05.170

## **Study information**

**Scientific Title**

**Acronym**

BIG study

**Study objectives**

Several open-label pilot studies have shown a promising effect of intrapyloric botulinum toxin injection on symptoms in severe gastroparesis. However, data from randomized, double-blind, placebo-controlled studies are not yet available. We intend to evaluate the clinical efficacy of a single intrapyloric injection of botulinum toxin type A in patients with idiopathic gastroparesis.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Not provided at time of registration

**Study design**

A randomized, double-blind, placebo-controlled, multicenter trial

**Primary study design**

Interventional

**Secondary study design**

Randomised controlled trial

**Study setting(s)**

Not specified

**Study type(s)**

Treatment

**Participant information sheet**

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

Idiopathic gastroparesis

**Interventions**

Intrapyloric injection of botulinum toxin type A 200 IU single injection or placebo single injection. Scintigraphy for solid/liquid gastric emptying (before and after treatment).

Gastroparesis cardinal symptom index questionnaire  
Quality of life (QOL) questionnaires  
Psychometric assessment and patient perception questionnaires

## **Intervention Type**

Drug

## **Phase**

Not Specified

## **Drug/device/biological/vaccine name(s)**

Botulinum toxin

## **Primary outcome measure**

Gastric emptying for solids.

1. Half-emptying time at visit 4 (follow-up: week 6) compared to visit 1b (eligibility: week 1)
2. Emptying rate per hour at visit 4 (follow-up: week 6) compared to visit 1b (eligibility: week 1)
3. One, two and four hour meal retention at visit 4 (follow-up: week 6) compared to visit 1b (eligibility week 1).

Gastroparesis cardinal symptom index (GCSI) outcome

4. Total GCSI score at visit 3, 4, 5 and 6 (follow-up: week 3, 6, 9 and 12) compared to visit 2 (randomization: week 0)
5. Mean GCSI score during follow-up (week 0-12) compared to mean GCSI score during eligibility and randomization (week 10)

## **Secondary outcome measures**

1. Gastric emptying for liquids; retention of liquid phase at 15, 30, 45, 60, 75, 90, 105 and 120 min
2. Quality of life as measured with the patient assessment of upper gastrointestinal disorders - quality of life (PAGI-QoL), the RAND-36 and EQ-5D questionnaires
3. Psychometric assessment and patient perception of gastrointestinal endoscopy

## **Overall study start date**

01/06/2006

## **Completion date**

01/06/2007

# **Eligibility**

## **Key inclusion criteria**

Patients are eligible to participate in this study if all of the following criteria are met:

1. Presence of clinical symptoms associated with idiopathic gastroparesis: nausea, vomiting, early satiety, postprandial fullness and a Gastroparesis Cardinal Symptom Index (GCSI) score  $\geq 1$  at visit 1b (eligibility; week 1)
2. Delayed gastric emptying for solids at visit 1b (eligibility; week 1) as measured with scintigraphy:
  - a. 2h retention  $\geq 60\%$ ; and/or
  - b. 4h retention  $\geq 10\%$
3. Absence of an obstructing structural lesion in the stomach or small intestine at prior diagnostic gastrointestinal endoscopy (performed within the previous 5 years) or judged absent

by the responsible physician

4. Patients, both male and female, must use adequate means of birth control during the study

5. Patients must provide written informed consent prior to any study procedures being performed

6. Patients aged between 18 and 70 years inclusive

7. Patients, in the opinion of the investigator, must be able to understand the study and comply with the study requirements

### **Participant type(s)**

Patient

### **Age group**

Adult

### **Lower age limit**

18 Years

### **Sex**

Both

### **Target number of participants**

48

### **Key exclusion criteria**

Patients are excluded from the study if any of the following criteria are met:

1. Patients with predominant abdominal pain/discomfort in the opinion of the investigator

2. Presence of an obstructing structural lesion in the stomach or small intestine if observed during treatment gastrointestinal endoscopy (visit 2, randomization; week 0)

3. Patients taking drugs that interfere with the effect of botulinum toxin type A

4. Patients previously treated with intrapyloric injection of botulinum toxin type A;

5. Females who are pregnant or lactating

6. Patients with diabetes mellitus

7. Patients with delayed gastric emptying due to systemic disorders, e.g. systemic lupus erythematosus (SLE), sclerodermia, hypothyroidism

8. Patients with disorders of neuromuscular transmission, e.g. myasthenia gravis and Eaton-Lambert syndrome

9. Patients with abdominal surgery in their medical history, except (laparoscopic) appendectomy, (laparoscopic) cholecystectomy and/or hysterectomy

10. Patients with any condition which, in the opinion of the investigator, makes the patient unsuitable for entry into the study

### **Date of first enrolment**

01/06/2006

### **Date of final enrolment**

01/06/2007

## **Locations**

### **Countries of recruitment**

Netherlands

**Study participating centre**

**Leiden University Medical Center (LUMC)**

Leiden

Netherlands

2300 RC

## **Sponsor information**

**Organisation**

Leiden University Medical Center (LUMC), Department of Gastroenterology and Hepatology (The Netherlands)

**Sponsor details**

P.O. Box 9600

Leiden

Netherlands

2300 RC

**Sponsor type**

University/education

**ROR**

<https://ror.org/05xvt9f17>

## **Funder(s)**

**Funder type**

University/education

**Funder Name**

Leiden University Medical Center (LUMC) Department of Gastroenterology and Hepatology

## **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