

# Randomised trial of detrusor botulinum toxin injection compared to placebo in idiopathic detrusor overactivity

**Submission date**  
11/04/2005

**Recruitment status**  
No longer recruiting

☒ Prospectively registered

☐ Protocol

**Registration date**  
26/05/2005

**Overall study status**  
Completed

☐ Statistical analysis plan

☒ Results

**Last Edited**  
14/02/2013

**Condition category**  
Urological and Genital Diseases

☐ Individual participant data

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

Dr Douglas Tincello

### Contact details

Robert Kilpatrick Clinical Sciences Building  
PO Box 65  
Leicester Royal Infirmary  
Leicester  
United Kingdom  
LE2 7LX  
+44 (0)116 252 3165  
dgt4@le.ac.uk

## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

# Study information

## Scientific Title

## Acronym

RELAX

## Study objectives

The principal research objectives for this trial are:

1. To determine the efficacy of detrusor muscle botulinum toxin A (BOTOX®) injection at relieving symptoms of detrusor overactivity
2. To examine the side effects and complications of detrusor muscle BOTOX® injection
3. To collect basic cost effectiveness data including EuroQol 5D data to allow simple cost effectiveness calculations to be done

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Not provided at time of registration

## Study design

Randomised controlled trial

## Primary study design

Interventional

## Secondary study design

Randomised controlled trial

## Study setting(s)

Not specified

## Study type(s)

Treatment

## 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

Detrusor overactivity

## Interventions

Prior to 16/03/10:

Women will be randomised to receive either a single treatment with 200 IU of botulinum toxin A (BOTOX®) into the detrusor muscle (10 units in 1 ml in 20 separate sites, sparing the trigone), or

a single treatment of injection of normal saline (placebo) (20 separate injections of 1 ml) into the detrusor muscle.

Modified 16/03/10:

Women will be randomised to receive either a single treatment with 200 IU of botulinum toxin A (BOTOX®) into the detrusor muscle (10 units in 1 ml in 20 separate sites, sparing the trigone), or a single treatment of injection of placebo (injection vehicle) into the detrusor muscle.

### **Intervention Type**

Other

### **Phase**

Not Applicable

### **Primary outcome measure**

Diary recorded urinary voiding frequency per 24 hours measured at 6 months. A minimum of two complete diary days will be accepted as valid data. A window of 2 to +8 weeks around the 6 month follow up visit will be allowed.

### **Secondary outcome measures**

#### **a. Diary measures**

1. Urgency episode frequency/24 hours at 3 and 6 months
2. Incontinence episode frequency at 3 and 6 months
3. Urgency severity assessed by IUSS26 at 3 and 6 months

#### **b. Questionnaire measures**

1. International Consultation on Incontinence Questionnaire short form score (ICIQ-SF)
2. Incontinence Quality of Life (IQOL) questionnaire score

#### **c. Physical measures**

1. Incidence of complications (including voiding dysfunction, urinary tract infection, haematuria, dysuria, reported muscle weakness)
2. Need for additional treatment during follow up, defined as a new prescription for drugs, or a new referral for other therapies
3. Interval between treatment and patient reported return of troublesome symptoms

#### **d. Health economics**

1. EuroQol 5D data compared between baseline, 6 weeks and 6 months follow up
2. Estimated costs of each treatment, using reported health care contacts at 6 weeks and 6 months

### **Overall study start date**

01/02/2006

### **Completion date**

31/10/2010

## **Eligibility**

### **Key inclusion criteria**

1. 8 weeks of continued treatment with oral anticholinergic medication, with a screening Patient Global Impression of Improvement (PGI-I) scale score of 'a little better' or 'worse'. This point of the scale represents a reduction of incontinence episode frequency of around 50% (Slack, unpublished data).
2. 8 weeks of continued treatment, with a verbal response that the treatment has not provided acceptable improvement
3. Treatment stopped because of side effects within 8 weeks
4. Previous treatments stopped because of lack of efficacy, and currently receiving no treatment

Additionally, patients will report at least 8 voids per 24 hours, with at least 2 urgency episodes per 24 hours. Urgency episodes will be defined as those rated as 'moderate' or higher on the Urgency severity scale, and urge incontinence episodes will be defined as recorded leakage in association with an urgency episode.

**Participant type(s)**

Patient

**Age group**

Adult

**Sex**

Female

**Target number of participants**

240

**Key exclusion criteria**

1. Patients with known multiple sclerosis, stroke, spinal injury, or other neurological disease
2. Patients with pre-existing voiding dysfunction (flow rate less than 5th centile, or post void residual volume greater than 100 ml)
3. Patients fulfilling the exclusion criteria for the licensed indications of botulinum toxin (myasthenia gravis and Eaton Lambert syndrome, or allergy to constituents of BOTOX® injection)
4. Patients with co-existing urodynamic stress incontinence

**Date of first enrolment**

01/02/2006

**Date of final enrolment**

31/10/2010

**Locations****Countries of recruitment**

England

United Kingdom

**Study participating centre**

**Robert Kilpatrick Clinical Sciences Building**  
Leicester  
United Kingdom  
LE2 7LX

## **Sponsor information**

### **Organisation**

University Hospitals of Leicester NHS Trust (UK)

### **Sponsor details**

Research and Development Office  
Leicester General Hospital  
Gwendolen Road  
Leicester  
England  
United Kingdom  
LE5 4PW  
+44 (0)116 249 0490  
Carolyn.maloney@uhl-tr.nhs.uk

### **Sponsor type**

Hospital/treatment centre

### **ROR**

<https://ror.org/02fha3693>

## **Funder(s)**

### **Funder type**

Charity

### **Funder Name**

Moulton Charitable Trust (UK)

### **Funder Name**

Added 16./03/10: Wellbeing of Women (UK)

## **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

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	01/09/2012		Yes	No
<a href="#">Results article</a>	results	01/01/2013		Yes	No