ClinicalTrials.gov Protocol Registration and Results System (PRS) Receipt
Release Date: 01/29/2013

ClinicalTrials.gov ID: NCT00910520

## Study Identification

| | |
|---|---|
| Unique Protocol ID: | 191622-520 |
| Brief Title: | Botulinum Toxin Type A for the Treatment of Patients With Idiopathic Overactive Bladder With Urinary Incontinence |
| Official Title: | |
| Secondary IDs: | |

## Study Status

| | |
|---|---|
| Record Verification: | January 2013 |
| Overall Status: | Completed |
| Study Start: | September 2009 |
| Primary Completion: | August 2011 [Actual] |
| Study Completion: | August 2011 [Actual] |

## Sponsor/Collaborators

| | |
|---|---|
| Sponsor: | Allergan |
| Responsible Party: | Sponsor |
| Collaborators: | |

## Oversight

| | |
|---|---|
| FDA Regulated?: | Yes |
| Applicable Trial?: | Section 801 Clinical Trial? Yes<br>Delayed Posting? No |

| | |
|---|---|
| IND/IDE Protocol?: | Yes |
| IND/IDE Information: | Grantor: CDER<br>IND/IDE Number: 12430<br>Serial Number:<br>Has Expanded Access? No |
| Review Board: | Approval Status:<br>Board Name:<br>Board Affiliation:<br>Phone:<br>Email: |
| Data Monitoring?: | No |
| Plan to Share Data?: | |
| Oversight Authorities: | United States: Food and Drug Administration |

## Study Description

| | |
|---|---|
| Brief Summary: | The purpose of this study is to assess the safety and effectiveness of botulinum toxin type A (onabotulinumtoxinA) in treating patients with idiopathic overactive bladder with urinary incontinence. |
| Detailed Description: | |

## Conditions

| | |
|---|---|
| Conditions: | Overactive Bladder |
| Keywords: | |

## Study Design

| | |
|---|---|
| Study Type: | Interventional |
| Primary Purpose: | Treatment |
| Study Phase: | Phase 3 |
| Intervention Model: | Parallel Assignment |
| Number of Arms: | 2 |
| Masking: | Double Blind (Subject, Caregiver, Investigator, Outcomes Assessor) |
| Allocation: | Randomized |

Endpoint Classification: Safety/Efficacy Study

Enrollment: 548 [Actual]

## Arms and Interventions

| Arms | Assigned Interventions |
|---|---|
| Experimental: onabotulinumtoxinA<br>OnabotulinumtoxinA (botulinum toxin Type A) 100 U injected into the detrusor at Day 1, followed by a repeat injection of onabotulinumtoxinA 100 U after a minimum of 12 weeks (if applicable). | Biological/Vaccine: onabotulinumtoxinA<br>OnabotulinumtoxinA (botulinum toxin Type A) 100 U injected into the detrusor at Day 1, followed by a repeat injection of onabotulinumtoxinA 100 U after a minimum of 12 weeks (if applicable). Or, if placebo is administered at Day 1, onabotulinumtoxinA 100 U injected after a minimum of 12 weeks (if applicable).<br>Other Names:<br>• BOTOX®<br>• botulinum toxin Type A |
| placebo/onabotulinumtoxinA<br>Placebo (normal saline) injected into the detrusor at Day 1, followed by an injection of onabotulinumtoxinA (botulinum toxin Type A) 100 U after a minimum of 12 weeks (if applicable). | Biological/Vaccine: onabotulinumtoxinA<br>OnabotulinumtoxinA (botulinum toxin Type A) 100 U injected into the detrusor at Day 1, followed by a repeat injection of onabotulinumtoxinA 100 U after a minimum of 12 weeks (if applicable). Or, if placebo is administered at Day 1, onabotulinumtoxinA 100 U injected after a minimum of 12 weeks (if applicable).<br>Other Names:<br>• BOTOX®<br>• botulinum toxin Type A<br>Drug: normal saline<br>Normal saline (placebo) injected into the detrusor at Day 1. |

## Outcome Measures

[See Results Section.]

## Eligibility

Minimum Age: 18 Years

Maximum Age:

Gender: Both

Accepts Healthy Volunteers?: No

Criteria: Inclusion Criteria:

- Symptoms of OAB (frequency/urgency) with urinary incontinence for at least 6 months
- Inadequate response or limiting side effects with anticholinergics for the treatment of OAB

Exclusion Criteria:

- Overactive Bladder caused by neurological condition
- Patient has predominance of stress incontinence
- History or evidence of pelvic or urological abnormality

## Contacts/Locations

Study Officials: Medical Director
Study Director
Allergan, Inc.

Locations: United States, California
Laguna Hills, California, United States

United Kingdom
London, United Kingdom

Belgium
Gent, Belgium

Germany
Tubingen, Germany

Czech Republic
Prague, Czech Republic

Poland
Warsaw, Poland

Russian Federation
Moscow, Russian Federation

## References

Citations:

Links:

Study Data/Documents:

# Study Results

## Participant Flow

Reporting Groups

| | Description |
|---|---|
| onabotulinumtoxinA | OnabotulinumtoxinA (botulinum toxin Type A) 100 U injected into the detrusor at Day 1, followed by a repeat injection of onabotulinumtoxinA 100 U after a minimum of 12 weeks (if applicable). |
| Placebo/onabotulinumtoxinA | Placebo (normal saline) injected into the detrusor at Day 1, followed by an injection of onabotulinumtoxinA (botulinum toxin Type A) 100 U after a minimum of 12 weeks (if applicable). |

Treatment Cycle 1

| | onabotulinumtoxinA | Placebo/onabotulinumtoxinA |
|---|---|---|
| Started | 277 | 271 |
| Completed | 257 | 247 |
| Not Completed | 20 | 24 |

Treatment Cycle 2

| | onabotulinumtoxinA | Placebo/onabotulinumtoxinA |
|---|---|---|
| Started | 163 [1] | 223 [1] |
| Completed | 156 | 215 |
| Not Completed | 7 | 8 |

[1] Not all participants who completed Treatment Cycle 1 went onto Treatment Cycle 2

## Baseline Characteristics

Reporting Groups

| | Description |
|---|---|
| onabotulinumtoxinA | OnabotulinumtoxinA (botulinum toxin Type A) 100 U injected into the detrusor at Day 1, followed by a repeat injection of onabotulinumtoxinA 100 U after a minimum of 12 weeks (if applicable). |
| Placebo/onabotulinumtoxinA | Placebo (normal saline) injected into the detrusor at Day 1, followed by an injection of onabotulinumtoxinA (botulinum toxin Type A) 100 U after a minimum of 12 weeks (if applicable). |

Baseline Measures

| | onabotulinumtoxinA | Placebo/onabotulinumtoxinA | Total |
|---|---|---|---|
| Number of Participants | 277 | 271 | 548 |
| Age, Customized<br>[units: Participants] | | | |
| < 40 years | 38 | 24 | 62 |
| Between 40 and 64 years | 115 | 139 | 254 |
| Between 65 and 74 years | 82 | 73 | 155 |
| ≥ 75 years | 42 | 35 | 77 |
| Gender, Male/Female<br>[units: participants] | | | |
| Female | 244 | 229 | 473 |
| Male | 33 | 42 | 75 |

## Outcome Measures

1. Primary Outcome Measure:

| | |
|---|---|
| Measure Title | Change From Baseline in Number of Daily Episodes of Urinary Incontinence |
| Measure Description | A urinary incontinence episode is defined as an incident of involuntary loss of urine as recorded in a patient bladder diary during the 3 days before the Baseline and Week 12 study visits. A negative number change from baseline indicates a reduction in incontinence episodes (improvement). |
| Time Frame | Baseline, Week 12 |
| Safety Issue? | No |

Analysis Population Description

Intent-to-treat population included all randomized patients.

Reporting Groups

| | Description |
|---|---|
| onabotulinumtoxinA | OnabotulinumtoxinA (botulinum toxin Type A) 100 U injected into the detrusor at Day 1, followed by a repeat injection of onabotulinumtoxinA 100 U after a minimum of 12 weeks (if applicable). |
| Placebo/onabotulinumtoxinA | Placebo (normal saline) injected into the detrusor at Day 1, followed by an injection of onabotulinumtoxinA (botulinum toxin Type A) 100 U after a minimum of 12 weeks (if applicable). |

Measured Values

| | onabotulinumtoxinA | Placebo/onabotulinumtoxinA |
|---|---|---|
| Number of Participants Analyzed | 277 | 271 |
| Change From Baseline in Number of Daily Episodes of Urinary Incontinence<br>[units: Incontinence episodes]<br>Mean (Standard Deviation) | | |
| Baseline | 5.52 (3.753) | 5.70 (3.858) |
| Change from Baseline at Week 12 | -2.95 (3.576) | -1.03 (3.004) |

2. Secondary Outcome Measure:

| | |
|---|---|
| Measure Title | Change From Baseline in Number of Daily Micturition Episodes |
| Measure Description | The number of micturition episodes (the number of times a patient urinates into the toilet) was recorded by the patient in a bladder diary during 3 consecutive days in the week prior to the Baseline and prior to the Week 12 study visit. A negative number change from baseline indicates a reduction in micturition episodes (improvement). |
| Time Frame | Baseline, Week 12 |
| Safety Issue? | No |

Analysis Population Description

Intent-to-treat population included all randomized patients.

Reporting Groups

| | Description |
|---|---|
| onabotulinumtoxinA | OnabotulinumtoxinA (botulinum toxin Type A) 100 U injected into the detrusor at Day 1, followed by a repeat injection of onabotulinumtoxinA 100 U after a minimum of 12 weeks (if applicable). |

| | Description |
|---|---|
| Placebo/onabotulinumtoxinA | Placebo (normal saline) injected into the detrusor at Day 1, followed by an injection of onabotulinumtoxinA (botulinum toxin Type A) 100 U after a minimum of 12 weeks (if applicable). |

Measured Values

| | onabotulinumtoxinA | Placebo/onabotulinumtoxinA |
|---|---|---|
| Number of Participants Analyzed | 277 | 271 |
| Change From Baseline in Number of Daily Micturition Episodes<br>[units: micturition episodes]<br>Mean (Standard Deviation) | | |
| Baseline | 12.01 (4.007) | 11.77 (3.648) |
| Change from Baseline at Week 12 | -2.56 (3.351) | -0.83 (2.523) |

3. Secondary Outcome Measure:

| | |
|---|---|
| Measure Title | Change From Baseline in Volume Voided Per Micturition |
| Measure Description | The total volume voided was measured over one 24-hour period in the week prior to the Baseline and Week 12 study visit and recorded by the patient in the bladder diary. This was used to calculate volume voided per micturition. A positive number change from baseline indicates an increase in volume voided per micturition (improvement). |
| Time Frame | Baseline, Week 12 |
| Safety Issue? | No |

Analysis Population Description

Intent-to-treat population included all randomized patients.

Reporting Groups

| | Description |
|---|---|
| onabotulinumtoxinA | OnabotulinumtoxinA (botulinum toxin Type A) 100 U injected into the detrusor at Day 1, followed by a repeat injection of onabotulinumtoxinA 100 U after a minimum of 12 weeks (if applicable). |
| Placebo/onabotulinumtoxinA | Placebo (normal saline) injected into the detrusor at Day 1, followed by an injection of onabotulinumtoxinA (botulinum toxin Type A) 100 U after a minimum of 12 weeks (if applicable). |

Measured Values

| | onabotulinumtoxinA | Placebo/onabotulinumtoxinA |
|---|---|---|
| Number of Participants Analyzed | 277 | 271 |
| Change From Baseline in Volume Voided Per Micturition<br>[units: milliliters]<br>Mean (Standard Deviation) | | |
| Baseline | 144.2 (57.54) | 152.5 (59.27) |
| Change from Baseline at Week 12 | 43.0 (65.27) | 12.6 (52.01) |

## Reported Adverse Events

| | |
|---|---|
| Time Frame | [Not specified] |
| Additional Description | The safety population was used to calculate the number of participants at risk for SAEs and AEs and is the total number of patients that were treated. S(AE)s are displayed for the placebo-controlled treatment Cycle 1. |

Reporting Groups

| | Description |
|---|---|
| onabotulinumtoxinA | OnabotulinumtoxinA (botulinum toxin Type A) 100 U injected into the detrusor at Day 1, followed by a repeat injection of onabotulinumtoxinA 100 U after a minimum of 12 weeks (if applicable). |
| Placebo/onabotulinumtoxinA | Placebo (normal saline) injected into the detrusor at Day 1, followed by an injection of onabotulinumtoxinA (botulinum toxin Type A) 100 U after a minimum of 12 weeks (if applicable). |

Serious Adverse Events

| | onabotulinumtoxinA | Placebo/onabotulinumtoxinA |
|---|---|---|
| | Affected/At Risk (%) | Affected/At Risk (%) |
| Total | 17/274 (6.2%) | 15/270 (5.56%) |
| Blood and lymphatic system disorders | | |
| Iron deficiency anaemia [A] † | 1/274 (0.36%) | 0/270 (0%) |
| Cardiac disorders | | |
| Acute myocardial infarction [A] † | 1/274 (0.36%) | 0/270 (0%) |

| | onabotulinumtoxinA | Placebo/onabotulinumtoxinA |
|---|---|---|
| | Affected/At Risk (%) | Affected/At Risk (%) |
| Angina pectoris [A] † | 1/274 (0.36%) | 2/270 (0.74%) |
| Atrial fibrillation [A] † | 0/274 (0%) | 1/270 (0.37%) |
| Myocardial ischaemia [A] † | 0/274 (0%) | 1/270 (0.37%) |
| Gastrointestinal disorders | | |
| Ileus [A] † | 0/274 (0%) | 1/270 (0.37%) |
| Lower gastrointestinal haemorrhage [A] † | 0/274 (0%) | 1/270 (0.37%) |
| General disorders | | |
| Chest pain [A] † | 0/274 (0%) | 1/270 (0.37%) |
| Pelvic mass [A] † | 0/274 (0%) | 1/270 (0.37%) |
| Hepatobiliary disorders | | |
| Cholecystitis [A] † | 0/274 (0%) | 1/270 (0.37%) |
| Infections and infestations | | |
| Appendicitis [A] † | 1/274 (0.36%) | 0/270 (0%) |
| Injury, poisoning and procedural complications | | |
| Femur fracture [A] † | 1/274 (0.36%) | 0/270 (0%) |
| Foot fracture [A] † | 0/274 (0%) | 1/270 (0.37%) |
| Spinal compression fracture [A] † | 1/274 (0.36%) | 0/270 (0%) |
| Tendon rupture [A] † | 1/274 (0.36%) | 0/270 (0%) |
| Investigations | | |
| Oxygen saturation decreased [A] † | 0/274 (0%) | 1/270 (0.37%) |
| Musculoskeletal and connective tissue disorders | | |
| Arthralgia [A] † | 1/274 (0.36%) | 0/270 (0%) |
| Arthropathy [A] † | 0/274 (0%) | 1/270 (0.37%) |

| | onabotulinumtoxinA | Placebo/onabotulinumtoxinA |
|---|---|---|
| | Affected/At Risk (%) | Affected/At Risk (%) |
| Foot deformity [A] † | 1/274 (0.36%) | 0/270 (0%) |
| Osteoarthritis [A] † | 1/274 (0.36%) | 2/270 (0.74%) |
| Neoplasms benign, malignant and unspecified (incl cysts and polyps) | | |
| Breast cancer [A] † | 0/274 (0%) | 1/270 (0.37%) |
| Endometrial cancer [A] † | 0/274 (0%) | 1/270 (0.37%) |
| Squamous cell carcinoma [A] † | 1/274 (0.36%) | 0/270 (0%) |
| Nervous system disorders | | |
| Cerebrovascular accident [A] † | 1/274 (0.36%) | 0/270 (0%) |
| Renal and urinary disorders | | |
| Haematuria [A] † | 1/274 (0.36%) | 0/270 (0%) |
| Urinary retention [A] † | 2/274 (0.73%) | 0/270 (0%) |
| Reproductive system and breast disorders | | |
| Vaginal disorder [A] † | 0/274 (0%) | 1/270 (0.37%) |
| Vascular disorders | | |
| Arterial thrombosis [A] † | 1/274 (0.36%) | 0/270 (0%) |
| Hypertension [A] † | 1/274 (0.36%) | 0/270 (0%) |

† Indicates events were collected by systematic assessment.
A Term from vocabulary, MedDRA (14.0)

Other Adverse Events

Frequency Threshold Above Which Other Adverse Events are Reported: 5%

| | onabotulinumtoxinA | Placebo/onabotulinumtoxinA |
|---|---|---|
| | Affected/At Risk (%) | Affected/At Risk (%) |
| Total | 115/274 (41.97%) | 47/270 (17.41%) |
| Infections and infestations | | |

| | onabotulinumtoxinA | Placebo/onabotulinumtoxinA |
|---|---|---|
| | Affected/At Risk (%) | Affected/At Risk (%) |
| Bacteriuria [A] † | 17/274 (6.2%) | 9/270 (3.33%) |
| Urinary tract infection [A] † | 66/274 (24.09%) | 26/270 (9.63%) |
| Renal and urinary disorders | | |
| Dysuria [A] † | 16/274 (5.84%) | 11/270 (4.07%) |
| Urinary retention [A] † | 16/274 (5.84%) | 1/270 (0.37%) |

† Indicates events were collected by systematic assessment.
A Term from vocabulary, MedDRA (14.0)

## Limitations and Caveats

[Not specified]

## More Information

Certain Agreements:

Principal Investigators are NOT employed by the organization sponsoring the study.

There IS an agreement between the Principal Investigator and the Sponsor (or its agents) that restricts the PI's rights to discuss or publish trial results after the trial is completed.

A disclosure restriction on the PI is that the sponsor can review results communications prior to public release and can embargo communications regarding trial results for a period that is less than or equal to 90 days from the time submitted to the sponsor for review. The sponsor cannot require changes to the communication and cannot extend the embargo.

Results Point of Contact:

Name/Official Title: Therapeutic Area Head,
Organization: Allergan, Inc
Phone: 714-246-4500 ext:
Email: clinicaltrials@allergan.com