Clinical Trial Protocol
Iranian Registry of Clinical Trials

11 Jun 2026

A Randomized, Double-blind, Phase III, Parallel, Active-controlled Clinical Trial to Evaluate the Non-inferiority of the Efficacy and Safety of Dyston in Comparison with Dysport for the Treatment of Chronic Migraine in Adults

Protocol summary

Study aim
Comparison of the Safety and Efficacy of Dyston with Dysport in the treatment of adult patients with chronic migraine; A Phase III, Randomized, Double-blind, Non-Inferiority Clinical Trial

Design
Controlled, double-blind, randomized, phase 3, sample size of 92

Settings and conduct
After assessing the eligibility criteria, CM patients will be enrolled to the study at Sina hospital, and randomized in a 1:1 ratio to receive either dyston or dysport after completing the 4 weeks baseline period. This study is double-blind (patient and physician), and consists of 4 visits (1 month interval) and the headache diaries will be assessed, after proper instruction on how they should be completed

Participants/Inclusion and exclusion criteria
Inclusion Criteria Men and women of 18 to 65 years Diagnosis of CM according to ICHD-3 Informed and written consent. Exclusion Criteria Previous treatment with BonTA for CM and/ or cosmetic purposes with an interval of less than 3 months Diagnosis of myasthenia gravis, Eaton-Lambert syndrome, ALS or any other significant disease that might interfere with neuromuscular function Subject is currently participating or has participated in the last 3 months in another clinical study in which the subject has, is, or will be exposed to an investigational or non-investigational drug or device Confirmed allergy to botulinum toxinA or any of the product components Patients diagnosed with major depression Patients diagnosed with any serious systemic diseases such as renal or hepatic failure, any other neurologic diseases like MS, epilepsy, and any other diseases that in the opinion of the investigator would put the patient at risk Females of childbearing age with confirmed or suspected pregnancy, those planning on conceiving during the trial duration and women who are breastfeeding

Intervention groups
Dyston or Dysport, up to 500 IU

Main outcome variables
50% responder rate

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20201104049265N3**
Registration date: **2022-01-30, 1400/11/10**
Registration timing: **registered_while_recruiting**

Last update: **2022-01-30, 1400/11/10**
Update count: **0**

Registration date
2022-01-30, 1400/11/10

Registrant information

Name
Seyyedeh Maryam Afshani

Name of organization / entity
Arta Zist Pharmed

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Iran (Islamic Republic of)

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2022-01-15, 1400/10/25
Expected recruitment end date
2022-11-16, 1401/08/25
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
A Randomized, Double-blind, Phase III, Parallel, Active-controlled Clinical Trial to Evaluate the Non-inferiority of the Efficacy and Safety of Dyston in Comparison with Dysport for the Treatment of Chronic Migraine in Adults

Public title
A Prospective, Phase III Clinical Trial to Evaluate the Non-inferiority of Dyston® to Dysport® for Chronic Migraine Treatment in Adults
Purpose
Treatment
Inclusion/Exclusion criteria
Inclusion criteria:
Men and women of 18 to 65 years Diagnosis of chronic migraine (≥15 headache days a month for > 6 months) Headaches must have at least two of the following characteristics: unilateral location, pulsating quality, moderate-severe pain intensity and/or aggravation by or causing avoidance of routine physical activity (e.g. Walking or climbing stairs), nausea and/or vomiting, photophobia and phonophobia Informed and written consent
Exclusion criteria:
Previous treatment with botulinum toxin for chronic migraine Previous treatment with botulinum toxin for cosmetic purposes with an interval of less than three months Diagnosis of myasthenia gravis, Eaton-Lambert syndrome, amyotrophic lateral sclerosis or any other significant disease that might interfere with neuromuscular function Subjects not willing to comply with the study visits Subject is currently participating or has participated in the last 3 months in another clinical study in which the subject has, is, or will be exposed to an investigational or non-investigational drug or device Confirmed allergy to botulinum toxin-A or any of the product components Patients diagnosed with major depression Patients diagnosed with any serious systemic diseases such as renal or hepatic failure, any other neurologic diseases like multiple sclerosis, epilepsy, and any other diseases that in the opinion of the investigator would put the patient at risk Females of childbearing age with confirmed or suspected pregnancy, those planning on conceiving during the trial duration and women who are breastfeeding
Age
From **18 years** old to **65 years** old
Gender
Both

Phase
3

Groups that have been masked

- Participant
- Care provider
- Investigator

Sample size
Target sample size: **92**
Randomization (investigator's opinion)
Randomized
Randomization description
Random sequencing of patients using random permutation blocks, blocks with the size of 4, for a total of 68 patients (1: 1 ratio) is generated online at sealedenvelope.com. The generated random sequence will be provided at the study site. According to each random code, anonymous codes are labeled on each vial (two intervention groups) and placed in the drug stock at the study site. After ensuring the patient's eligibility and obtaining informed consent, the assigned vial is injected for the patient according to the order specified in the randomization sheet.
Blinding (investigator's opinion)
Double blinded
Blinding description
This study will be performed as a double-blind clinical trial. The appearance of both of the vials is made sure to be the same to maintain blinding of the physician. The patients will also be blinded to the assigned intervention.
Placebo
Not used
Assignment
Parallel
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Research Ethics Committees of School of Medicine-Tehran University of Medical Sciences
Street address
Central Headquarters of the Ministry of Health, Qods Town, Tehranbetween South Flamek and Zarafshan St., Treatment and Medical Education, Sima-ye-Iran St.,
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Tehran
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Tehran
Postal code
۱۴۱۹۹۴۳۴۷۱
Approval date
2022-01-15, 1400/10/25
Ethics committee reference number
IR.TUMS.MEDICINE.REC.1400.1227

Health conditions studied

1

Description of health condition studied
Chronic migraine without aura
ICD-10 code
G43.7
ICD-10 code description
Chronic migraine without aura

2

Description of health condition studied
Chronic migraine with aura
ICD-10 code
G43.1
ICD-10 code description
Migraine with aura

Primary outcomes

1

Description
50% responder rate; meaning the proportion of patients with a ≥50% decrease from baseline in the frequency of headache days.
Timepoint
baseline (week -4), week 0, week 4, 8, and 12
Method of measurement
Headache diary

Secondary outcomes

1

Description
30% responder rate; meaning the proportion of patients with a ≥30% decrease from baseline in the frequency of headache days.
Timepoint
Baseline (week -4), week 0, 4, 8, and 12
Method of measurement
Headache diary

2

Description
Reduction of the duration of migraine attacks
Timepoint
Baseline (week -4), week 0, 4, 8, and 12
Method of measurement
Headache diary

3

Description
Reduction of the intensity of the migraine attacks
Timepoint
Baseline (week -4), week 0, 4, 8, and 12
Method of measurement
Headache diary

4

Description
Reduction of the patient's PHQ-9 depression score
Timepoint
Baseline (week -4), week 0, 4, 8, and 12
Method of measurement
Headache diary

5

Description
Improvement of the patient's quality of life according to HIT-6
Timepoint
Baseline (week -4), week 0, 4, 8, and 12
Method of measurement
Headache diary

6

Description
Reduction of the patient's disability scores according to MIDAS
Timepoint
Baseline (week -4), week 0, 4, 8, and 12
Method of measurement
Headache diary

7

Description
Incidence of any adverse events
Timepoint
Throughout the study period
Method of measurement
Headache diary

8

Description
Reduction of acute migraine medication consumption
Timepoint
Baseline (week -4), week 0, 4, 8, and 12
Method of measurement
Headache diary

Intervention groups

1

Description
1st Intervention group: Dyston®, 500 IU single-use, sterile vial for reconstitution, up to 500 units administered intramuscularly in the corrugator, procerus, superior frontalis, temporalis, splenius capitis, occipitalis, and the trapezius muscles
Category
Treatment - Drugs

2

Description
2nd Intervention group: Dysport®, 500 IU single-use, sterile vial for reconstitution, up to 500 units administered intramuscularly in the corrugator, procerus, superior frontalis, temporalis, splenius capitis, occipitalis, and the trapezius muscles
Category
Treatment - Drugs

Recruitment centers

1

Recruitment center
Name of recruitment center
Sina Hospital, Tehran, Iran
Full name of responsible person
Dr. Mansoureh Togha
Street address
Imam Khomeini St., Hassan Abad Square, Sina Hospital
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Postal code
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Phone
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toghae@sina.tums.ac.ir

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Imen Vaccine Alborz
Full name of responsible person
Setayesh Sadeghi
Street address
No. 110- Khajeh Nasir Tusi St.- Bahman St.- Sepehr Industrial Town- Nazarabad- Alborz- Iran
City
Nazarabad
Province
Alborz
Postal code
3331495900
Phone
+98 26 4533 4189
Email
info@imenvaccine.com
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Imen Vaccine Alborz
Proportion provided by this source
100
Public or private sector
Private
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Industry

Person responsible for general inquiries

Contact
Name of organization / entity
Arta zist pharmed
Full name of responsible person
Setayesh Sadeghi
Position
Medical department manager
Latest degree
Specialist
Other areas of specialty/work
Medical Pharmacy
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Person responsible for scientific inquiries

Contact
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Full name of responsible person
Maryam Afshani
Position
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Latest degree
Medical doctor
Other areas of specialty/work
Medical Pharmacy
Street address
Units 603 and 604, 6th floor, No. 18, Ryan Vanak Bldg, West corner of Sheikh Baha'i Square
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Person responsible for updating data

Contact

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Position

Medical department supervisor

Latest degree

Medical doctor

Other areas of specialty/work

Medical Pharmacy

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

Undecided - It is not yet known if there will be a plan to make this available

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

Undecided - It is not yet known if there will be a plan to make this available

Informed Consent Form

Undecided - It is not yet known if there will be a plan to make this available

Clinical Study Report

Undecided - It is not yet known if there will be a plan to make this available

Analytic Code

Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary

Undecided - It is not yet known if there will be a plan to make this available