

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

comparison of wavefront-guided and cross-cylinder photorefractive keratectomy in correcting medium-high astigmatism

Protocol summary

Summary

The aim of this study is to compare the visual and refractive results of wavefront-guided and cross-cylinder photorefractive keratectomy by visx and nidek laser systems in correcting medium-high astigmatism. 50 eyes of 25 patients with stable refraction are randomly selected for wavefront-guided photorefractive keratectomy between December 2009 and December 2010. Then the results will be compared with findings of 48 patients who had been previously operated by cross-cylinder approach two years ago. Patients with pachymetry less than 470 microns are excluded. Correction of astigmatism is the primary outcome.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT138902083827N1**

Registration date: **2009-11-22, 1388/09/01**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2009-11-22, 1388/09/01

Registrant information

Name

Mohammad Reza Sedghipour

Name of organization / entity

Tabriz University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 41 1330 6619

Email address

sedghipm@tbzmed.ac.ir

Recruitment status

Recruitment complete

Funding source

Tabriz University of Medical Sciences

Expected recruitment start date

2009-11-22, 1388/09/01

Expected recruitment end date

2010-11-22, 1389/09/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

comparison of wavefront-guided and cross-cylinder photorefractive keratectomy in correcting medium-high astigmatism

Public title

Comparison of wavefront-guided and cross-cylinder photorefractive keratectomy in correcting medium-high astigmatism

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: stable refraction, astigmatism more than 1.50 diopter, age 20-50 years Exclusion criteria: any ocular pathology, pachymetry less than 470 micron, connective tissue disease, asymmetric astigmatism, tear film abnormality

Age

From **20 years** old to **50 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: 98

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Other

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Tabriz University of Medical Sciences

Street address

Gholghasht street

City

Tabriz

Postal code

Approval date

empty

Ethics committee reference number

3099/4/5

Health conditions studied

1

Description of health condition studied

medium-high astigmatism

ICD-10 code

H52

ICD-10 code description

Disorders of refraction

Primary outcomes

1

Description

correction of astigmatism

Timepoint

preoperative and six months postoperative

Method of measurement

refraction

Secondary outcomes

1

Description

visual acuity

Timepoint

preoperative and six months postoperative

Method of measurement

snellen chart

2

Description

visual aberrations

Timepoint

preoperative and six months postoperative

Method of measurement

aberrometry

Intervention groups

1

Description

wavefront-guided photorefractive keratectomy

Category

Treatment - Surgery

2

Description

cross-cylinder photorefractive keratectomy

Category

Treatment - Surgery

Recruitment centers

1

Recruitment center

Name of recruitment center

Nikookari Hospital

Full name of responsible person

Rana Sorkhabi,MD

Street address

Abbasi avenue

City

Tabriz

2

Recruitment center

Name of recruitment center

Mehr Hospital

Full name of responsible person

Mohammad Reza Sedghipour,MD

Street address

Taleghani street

City

Tabriz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Research Secretary, Tabriz University of Medical Sciences

Full name of responsible person

Dr. Mohammad Reza Rashidi

Street address

Gholghasht street, second central building, Tabriz University of Medical Sciences

City

Tabriz

Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes

Title of funding source

Research Secretary, Tabriz University of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Tabriz University of Medical Sciences

Full name of responsible person

Mohammad Reza Sedghipour, MD

Position

Associate Professor

Other areas of specialty/work

Street address

Nikookari Hospital, Abbasi avenue,

City

Tabriz

Postal code

Phone

+98 41 1657 5609

Fax

Email

sedghipm@yahoo.com

Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity

Tabriz University of Medical Sciences

Full name of responsible person

Rana Sorkhabi, MD

Position

Assistant Professor

Other areas of specialty/work

Street address

Nikookari Hospital, Abbasi avenue

City

Tabriz

Postal code

Phone

+98 41 1657 5609

Fax

Email

sorkhabi_r@yahoo.com

Web page address

Person responsible for updating data

Contact

Name of organization / entity

Tabriz University of Medical Sciences

Full name of responsible person

Rana Sorkhabi, MD

Position

Assistant Professor

Other areas of specialty/work

Street address

Abbasi avenue

City

Tabriz

Postal code

Phone

+98 41 1657 5609

Fax

Email

sorkhabi_r@yahoo.com

Web page address

Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty