

Effectiveness of laser treatment for high eye pressure and early-stage glaucoma in Saudi Arabia

Submission date 30/10/2024	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 31/10/2024	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 31/10/2024	Condition category Eye Diseases	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

Plain English summary of protocol

Background and study aims

This study aimed to see how effective a laser treatment called selective laser trabeculoplasty (SLT) is at lowering eye pressure in people with high eye pressure or early-stage glaucoma. It also looked at how this treatment affects the use of eye medications and identified which patient characteristics are linked to better treatment outcomes.

Who can participate?

Patients with ocular hypertension (high eye pressure) or mild primary open-angle glaucoma (a common type of glaucoma) were included in this study.

What does the study involve?

Participants underwent the SLT procedure and had their eye pressure, medication use, and other factors monitored over the course of one year.

What are the possible benefits and risks of participating?

None

Where is the study run from?

The study was conducted at King Abdulaziz University in Jeddah, Saudi Arabia.

When is the study starting and how long is it expected to run for?

The study collected data retrospectively from January 2023 to January 2024.

Who is funding the study?

The study was initiated and funded by the investigator.

Who is the main contact?

Nawaf Almarzouki, Nawaf.almarzouki@gmail.com

Contact information

Type(s)

Public, Scientific, Principal investigator

Contact name

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Additional identifiers

Clinical Trials Information System (CTIS)

Nil known

ClinicalTrials.gov (NCT)

Nil known

Protocol serial number

Nil known

Study information

Scientific Title

Outcomes of selective laser trabeculoplasty as primary treatment for ocular hypertension and mild open angle glaucoma in the Saudi Arabian population

Study objectives

The aim of this study was to assess the efficacy of selective laser trabeculoplasty (SLT) in reducing intraocular pressure (IOP), evaluate its impact on medication use, and identify patient characteristics associated with treatment success

Ethics approval required

Ethics approval required

Ethics approval(s)

approved 26/08/2024, Unit of Biomedical Ethics Research Ethics Committee (REC) (King Abdulaziz University Hospital, Jeddah, 21589, Saudi Arabia; +966 126952063; [med.rcommittee@kau.edu.sa](mailto:rcommittee@kau.edu.sa)), ref: 247-24

Study design

Observational retrospective cohort study

Primary study design

Observational

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Outcomes of laser treatment on intraocular pressure

Interventions

Patients with ocular hypertension (OHT) or mild primary open-angle glaucoma (POAG) underwent selective laser trabeculoplasty.

IOP, medication use, and potential influencing factors were monitored over one year

Intervention Type

Other

Primary outcome(s)

Intraocular pressure measured retrospectively using patient records

Key secondary outcome(s)

Glaucoma drops reduction measured retrospectively using patient records

Completion date

30/10/2024

Eligibility**Key inclusion criteria**

Ocular hypertension or mild open angle glaucoma

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Total final enrolment

27

Key exclusion criteria

Advanced glaucoma or previous ocular surgery

Date of first enrolment

01/01/2023

Date of final enrolment

30/01/2024

Locations

Countries of recruitment

Saudi Arabia

Study participating centre

King Abdulaziz University Hospital

Jeddah

Saudi Arabia

21589

Sponsor information

Organisation

King Abdulaziz University

ROR

<https://ror.org/02ma4wv74>

Funder(s)

Funder type

Industry

Funder Name

Investigator initiated and funded

Results and Publications

Individual participant data (IPD) sharing plan

The data set available upon request from the author: Nawaf almarzouki@gmail.com

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes