

# Effects of bimatoprost and latanoprost on ocular hemodynamics in normal tension glaucoma: a randomised trial

|                                        |                                                   |                                                                                                   |
|----------------------------------------|---------------------------------------------------|---------------------------------------------------------------------------------------------------|
| <b>Submission date</b><br>09/03/2005   | <b>Recruitment status</b><br>No longer recruiting | <input type="checkbox"/> Prospectively registered<br><input type="checkbox"/> Protocol            |
| <b>Registration date</b><br>21/03/2005 | <b>Overall study status</b><br>Completed          | <input type="checkbox"/> Statistical analysis plan<br><input checked="" type="checkbox"/> Results |
| <b>Last Edited</b><br>18/02/2008       | <b>Condition category</b><br>Eye Diseases         | <input type="checkbox"/> Individual participant data                                              |

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

**Contact name**  
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**Contact details**  
Martinistr. 52  
Hamburg  
Germany  
20246

## Additional identifiers

**Protocol serial number**  
1723427327/3

## Study information

**Scientific Title**

**Study objectives**

It is hypothesised that locally applied prostaglandins improve ocular haemodynamics in normal tension glaucoma patients.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

The study was performed in accordance to institutional, national, and international guidelines and was approved by the local ethics committee.

### **Primary study design**

Interventional

### **Study design**

Randomised controlled trial

### **Study type(s)**

Treatment

### **Health condition(s) or problem(s) studied**

Normal tension glaucoma

### **Interventions**

Administration of latanoprost or bimatoprost eye drops.

### **Intervention Type**

Drug

### **Phase**

Not Specified

### **Drug/device/biological/vaccine name(s)**

Bimatoprost, latanoprost

### **Primary outcome(s)**

Ocular perfusion is assessed by Doppler imaging. Primary endpoints are the peak systolic velocity (PSV) and end-diastolic velocity (EDV) in the short posterior ciliary artery.

### **Key secondary outcome(s)**

Secondary endpoints are:

1. The PSV and EDV in:
  - 1.1. The long posterior ciliary artery,
  - 1.2. The central retinal artery, and
  - 1.3. The ophthalmic artery
2. Resistivity index, pulsatility index and time average velocity (maximum and mean) in all four vessels
3. Intraocular pressure

### **Completion date**

31/12/2003

# Eligibility

## Key inclusion criteria

Progressive normal tension glaucoma patients. Progression was defined as progressive excavation of the optic disc (funduscopy and controlled by the Heidelberg retina tomography [HRT]) and/or progressive visual field loss in the Humphrey perimeter over the last 6 - 12 months.

## Participant type(s)

Patient

## Healthy volunteers allowed

No

## Age group

Adult

## Sex

All

## Key exclusion criteria

1. Treated open angle glaucoma
2. Intraocular pressure greater than 21
3. Non-compliance

## Date of first enrolment

01/01/2003

## Date of final enrolment

31/12/2003

# Locations

## Countries of recruitment

Germany

## Study participating centre

Martinistr. 52

Hamburg

Germany

20246

# Sponsor information

## Organisation

University Medical Center Hamburg-Eppendorf (Germany)

**ROR**

<https://ror.org/01zgy1s35>

## Funder(s)

**Funder type**

University/education

**Funder Name**

University Medical Center Hamburg-Eppendorf (Germany)

## Results and Publications

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 | 05/04/2005   |            | Yes            | No              |