

# Binocular visual function in glaucoma

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We hypothesise that glaucoma patients with non-overlapping visual field defects have poorer binocular visual performance while performing complex visual tasks than would be predicted from their visual field. Knowledge on this topic is highly...

<b>Ethical review</b>	Not applicable
<b>Status</b>	Other
<b>Health condition type</b>	-
<b>Study type</b>	Observational non invasive

## Summary

### ID

NL-OMON19868

### Source

Nationaal Trial Register

### Brief title

Binocular visual function in glaucoma

### Health condition

Glaucoma

## Sponsors and support

**Primary sponsor:** University Medical Center Groningen (UMCG)

**Source(s) of monetary or material Support:** The European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 661883

## Intervention

## Outcome measures

### Primary outcome

differences between interocular difference in visual acuity, binocular summation ratio,

Interocular balance point in binocular brightness integration as well as the dominance ratio in rivalry and finally direction of motion integration.

## **Secondary outcome**

NA

## **Study description**

### **Background summary**

To determine the influence of glaucoma on binocular visual function we propose to measure (1) contrast sensitivity functions, monocularly and binocularly, (2) brightness integration, (3) motion integration, and (4) resolving conflicting information between eyes (binocular rivalry).

### **Study objective**

We hypothesise that glaucoma patients with non-overlapping visual field defects have poorer binocular visual performance while performing complex visual tasks than would be predicted from their visual field. Knowledge on this topic is highly relevant as it dictates the necessity of (intensifying) glaucoma treatment in those patients without overlapping visual field defects

### **Study design**

NA

## **Contacts**

### **Public**

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## Eligibility criteria

### Inclusion criteria

Glaucoma patients between ages 50 and 80, who visit the ophthalmology clinic at University Medical Center Groningen, that have provided the signed informed consent form and meet the inclusion-exclusion criteria. Healthy subjects between ages 50 and 80, who have provided the signed informed consent form and returned the questionnaire with results which do not indicate ophthalmic nor binocular abnormalities.

### Exclusion criteria

Glaucoma Patients Visual acuity less than 0.8 Non-glaucomatous visual field loss. Healthy Subjects Visual acuity less than 0.8 Any binocular dysfunction Any visual field loss Intraocular pressure above 21 mmHg Positive family history of glaucoma.

## Study design

### Design

Study type: Observational non invasive

Intervention model: Other

**Control:** N/A , unknown

### Recruitment

NL

Recruitment status: Other

Start date (anticipated): 01-07-2019

Enrollment: 20

Type: Unknown

### IPD sharing statement

**Plan to share IPD:** Undecided

## Ethics review

Not applicable

Application type:

Not applicable

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

Register	ID
NTR-new	NL7749
CCMO	NL70288.042.19

## Study results