

# Assessing the efficacy and safety of a recently introduced type of surgical device (Preserflo Microshunt) in the treatment of glaucoma

<b>Submission date</b> 19/09/2021	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 11/10/2021	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 11/10/2021	<b>Condition category</b> 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

Glaucoma is a common eye disease affecting the optic nerve and leading to irreversible blindness. This disease is thought to be caused by excess pressure inside the eye. The Preserflo Microshunt is a device similar to a tube that is implanted in the front part of the eye and allows for the drainage of fluid from the eye, relieving the pressure. The aim of this study is to determine how effective is this surgery, if it effectively lowers the pressure in the long term, if it relieves the burden of eye drops in glaucoma patients, and if it is a safe surgical option.

### Who can participate?

Data is extracted from patient files of any adult patient with glaucoma who has been implanted with the Preserflo Microshunt between June 2019 and September 2021 at the Hospital de Santa Maria, Centro Hospitalar e Universitário Lisboa Norte

### What does the study involve?

The investigators will examine the patient charts to analyze if the surgery effectively reduced eye pressure in a safe manner throughout the patients' follow-up time.

### What are the possible benefits and risks of participating?

None as this is a retrospective study

### Where is the study run from?

Hospital de Santa Maria, Centro Hospitalar e Universitário Lisboa Norte (Portugal)

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

May 2019 to December 2021

### Who is funding the study?

Universidade de Lisboa (Portugal)

Who is the main contact?

Rafael Barão

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## Contact information

### Type(s)

Scientific

### Contact name

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## Additional identifiers

## Study information

### Scientific Title

Early clinical outcomes of the Preserflo Microshunt

### Study objectives

To assess the efficacy (hypotensive power) and safety (rate of complications) of the Preserflo Microshunt, an aqueous drainage shunt aimed for the treatment of medically uncontrolled glaucoma.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

Approval pending, North Lisbon University Hospital (CHUL) and Lisbon Academic Center (CAML) Ethics Committee (Av. Prof. Egas Moniz, 1649-035 Lisboa; +351 (0)217805405; [anapimentel@chln.min-saude.pt](mailto:anapimentel@chln.min-saude.pt))

### Study design

Single-center cross sectional observational study

### Primary study design

Observational

## Study type(s)

Treatment

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

Intraocular pressure control in patients with glaucoma

## Interventions

Data is extracted from patient files (background history, glaucoma characteristics, baseline intraocular pressure [IOP], preoperative visual acuity [VA], number of ocular hypotensive medication, intra-operative and postoperative complications, follow-up from visits on day 1; at weeks 1, 4; at months 3, 6 and 12 after Preserflo Microshunt implantation; number of postoperative IOP-lowering medication at all timepoints; and previous or subsequent surgical interventions).

## Intervention Type

Procedure/Surgery

## Primary outcome(s)

The surgical success of Preserflo Microshunt implantation at 12 months postoperative, defined as at least 30% reduction in IOP from baseline and final IOP  $\leq 18$ mmHg and  $>5$  mmHg, with (qualified success) or without hypotensive drugs (absolute success)

## Key secondary outcome(s)

1. Mean IOP in mmHg measured using Goldmann applanation tonometry and retrieved from patient files at the last pre-operative visit and at day 1, day 7, months 1, 3, 6, 12, 18 and 24 postoperative (when respectively applicable)
2. Mean number of hypotensive drugs retrieved from patient files at the last pre-operative visit and at day 1, day 7, months 1, 3, 6, 12, 18 and 24 postoperative (when respectively applicable)
3. Intra-operative or postoperative complications retrieved from patient files at time of surgery, day 1, day 7, months 1, 3, 6, 12, 18 and 24 (when respectively applicable)

## Completion date

01/12/2021

## Eligibility

### Key inclusion criteria

1. Patients submitted to Preserflo Microshunt implantation for medically uncontrolled glaucoma between June 2019 and September 2021
2. Age  $\geq 18$  years and have agreed to chart review as per GDPR regulations

### Participant type(s)

Patient

### Healthy volunteers allowed

No

### Age group

Adult

**Lower age limit**

18 years

**Sex**

All

**Key exclusion criteria**

1. Pregnancy or breastfeeding
2. Severe cardiovascular disease (including a stroke or a myocardial infarction 6 months before)
3. Known allergic reaction to MMC

**Date of first enrolment**

01/06/2019

**Date of final enrolment**

30/09/2021

**Locations****Countries of recruitment**

Portugal

**Study participating centre**

**Hospital de Santa Maria, Centro Hospitalar e Universitário Lisboa Norte**

Av. Prof. Egas Moniz

Lisbon

Portugal

1649-035

**Sponsor information****Organisation**

Centro Hospitalar Lisboa Norte

**ROR**

<https://ror.org/020sr6z07>

**Funder(s)****Funder type**

University/education

**Funder Name**

Universidade de Lisboa

**Alternative Name(s)**

Universitas Olisiponensis, University of Lisbon, Technical University of Lisbon, ULisboa | Universidade de Lisboa, University of Lisbon, Portugal, New University of Lisbon (Portugal), ULisboa

**Funding Body Type**

Government organisation

**Funding Body Subtype**

Universities (academic only)

**Location**

Portugal

## Results and Publications

**Individual participant data (IPD) sharing plan**

The datasets generated during and/or analysed during the current study are/will be available upon request from any investigators whose proposed use of the data has been approved by an independent review committee ("learned intermediary") identified for this purpose, exclusively for individual participant data meta-analysis. Data requests should be addressed to Rafael Barão (rafael.barao@chln.min-saude.pt). Data willing to be shared will include relevant individual participant data that underlie the results reported in this article, after deidentification and anonymisation. Data requests may be submitted from 6 months to up to 24 months following article publication. Use of this data has been included in the patient consent form.

**IPD sharing plan summary**

Available on request