Evaluating femtosecond laser assisted cataract and lens surgery

Submission date	Recruitment status	Prospectively registered
21/08/2012	No longer recruiting	<pre>Protocol</pre>
Registration date	Overall study status	Statistical analysis plan
30/08/2012	Completed	Results
Last Edited	Condition category	Individual participant data
07/12/2017	Eye Diseases	Record updated in last year

Plain English summary of protocol

Background and study aims

In femtosecond laser-assisted surgery a laser is used to create tiny incisions in the eye through which the old cloudy lens or cataract is removed and the new lens is implanted. The system has recently been introduced into the European Union and clinical use is limited, so we are evaluating the use of this system.

Who can participate?

Adults (aged over 16) undergoing refractive lens or cataract surgery.

What does the study involve?

Data on the results of your surgery will be analysed. We will also carry out some additional tests before and after surgery to determine the health of your eyes.

What are the possible benefits and risks of participating?

The additional tests are all non-contact, non-invasive and involve no discomfort. It is likely to take a maximum of 1 hour of extra time to perform these. There is no additional charge for you to be part of the study. The measurements performed will be providing additional information about the health of your eyes. However, overall it is unlikely that you will benefit personally from helping with this research project, but the results of the research should be of benefit to the large number of patients in the future.

Where is the study run from? Moorfields Eye Hospital (UK)

When is the study starting and how long is it expected to run for? August 2012 to August 2013

Who is funding the study? Investigator initiated and funded (UK)

Who is the main contact? Julian Stevens info@julianstevens.co.uk

Contact information

Type(s)

Scientific

Contact name

Mr Julian Stevens

Contact details

81 Britannia Walk London United Kingdom N1 7RH +44 20 7251 4835/4836 info@julianstevens.co.uk

Additional identifiers

Protocol serial number

Protocol version 4.3

Study information

Scientific Title

Prospective observational study to evaluate femtosecond laser lens fragmentation, anterior capsulotomy cataract and lens extraction surgery

Study objectives

To describe the safety of femtosecond laser lens fragmentation and anterior capsulotomy assisted cataract and lens surgery

Ethics approval required

Old ethics approval format

Ethics approval(s)

NRES Committee London - City Road & Hampstead, 30/01/2012, ref: 12/LO/0042

Study design

Prospective observational study

Primary study design

Observational

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Cataract, refractive error

Interventions

This is an observational study of surgery outcomes.

Intervention Type

Procedure/Surgery

Primary outcome(s)

To record any complications or adverse events

Key secondary outcome(s))

To describe the ability of the intraocular femtosecond laser to successfully perform an anterior capsulotomy and phakofragmentation during cataract/lens surgery.

Completion date

28/08/2013

Eligibility

Key inclusion criteria

Any subject planned to undergo femtosecond laser assisted lens surgery. These subjects will already meet these criteria:

- 1. Subjects must be adults (>16 years), undergoing refractive lens or cataract surgery
- 2. Subjects must provide informed consent, have signed the written informed consent form, and been given a copy
- 3. Subjects must have a calculated average corneal power after of \leq 50.00 D in the eye to be implanted
- 4. Subjects must have a pharmacologically dilated pupil >6.0 mm, in the eye to be implanted
- 5. The central anterior chamber depth must be >2.0 mm (Pentacam)
- 6. Subjects must be willing and able to return for scheduled follow up examinations for 3 months after surgery

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

- 1. Subjects with subluxated crystalline lens
- 2. Subjects with endothelial dystrophy, guttata, in the eye to be implanted
- 3. Subjects with keratoconus (or keratoconus suspect) in the eye to be implanted or K>50 D
- 4. Subjects with distorted or unclear corneal mires on topography maps of the eye to be implanted
- 5. Subjects with a history of Herpes zoster or Herpes simplex keratitis.
- 6. The central anterior chamber depth <2.0 mm (Pentacam)
- 7. Tremor with head titubation
- 8. Subjects who are participating in any other ophthalmic drug or device clinical trial during the time of this clinical investigation

Date of first enrolment 28/08/2012

Date of final enrolment 28/08/2013

Locations

Countries of recruitment United Kingdom

England

Study participating centre 81 Britannia Walk London United Kingdom N1 7RH

Sponsor information

Organisation

Moorfields Eye Hospital (UK)

ROR

https://ror.org/03tb37539

Funder(s)

Funder type

Other

Funder Name

Investigator initiated and funded

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?

Participant information sheet
Participant information sheet
11/11/2025 No Yes