## Department of Ophthalmology & Visual Sciences, Faculty of Medicine, The Chinese University of Hong Kong

#### PARTICIPANT INFORMATION SHEET

Subthreshold micropulse yellow (577 nm) laser versus half-dose photodynamic therapy for central serous chorioretinopathy: a randomized controlled pilot study

Principal investigator: Prof. Mårten Erik Brelén Assistant Professor, Department of Ophthalmology & Visual Sciences, CUHK Honorary Resident, Department of Ophthalmology, Hong Kong Eye Hospital

#### **Introduction and purpose**

You have been diagnosed with central serous chorioretinopathy (CSCR). In this study, we aim to compare the efficacy and safety of half-dose photodynamic therapy (PDT) and subthreshold micropulse yellow (577-nm) laser in CSCR. 120 participants will be recruited in this study. 60 participants will be from Hong Kong Eye Hospital.

#### **Study procedures**

If you agree to participate in this study, you will be randomized into the half-dose PDT group or the subthreshold micropulse yellow (577-nm) laser group at a ratio of 1:1. If both eyes meet the inclusion criteria, only the right eye will be included in bilateral cases. Patients and investigators will be masked to the treatment allocation group till the end of the study. The group allocation will not be changed after initial assignment.

In photodynamic therapy, a light-sensitive medicine called verteporin (Visudyne) is injected into the bloodstream. Laser light is then shone into the eye, which activates the medicine and the abnormal choroidal blood vessels is treated. In micropulse laser, a continuous-wave laser beam is chopped into a train of tiny, repetitive, low energy pulses, to treat the areas of diseased retinal pigment epithelium (RPE), inducing resorption of the subretinal fluid.

In the micropulse laser group, 30 ml normal saline will be infused instead of verteporfin, before application of micropulse laser. After treatment, you need to wear protective spectacles and avoid strong light for 2 days. You will need to attend clinic follow up visits at Hong Kong Eye Hospital or CUHK Eye Centre at 1, 3, 6, 9 and 12 months after the treatment. All investigations will be performed during your routine follow-up visits. No extra visits are necessary. Upon follow up, you will you will receive microperimtery and imaging with optical coherence tomography (OCT). Fluorescein angiography (FA) and indocyanine green angiography (ICGA) will be performed for patients with persistent subretinal fluid after the treatment, as decided by the doctors.

Retreatment will be considered if the patients meet two of the three following criteria: decreased visual acuity of at least one line from baseline, presence of subretinal fluid on OCT, and significant leakage on angiography. Patients in the PDT group will be considered for retreatment every 6 months whereas patients in the micropulse laser group will be considered for retreatment every 3 months. Patients who have persistent subretinal fluid after 3 treatments of micropulse laser will receive half-dose photodynamic therapy as rescue therapy,

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3 months after the third micropulse laser treatment. In the PDT group, patient who have persistent subretinal fluid 6 months after the initial treatment will receive second half-dose photodynamic therapy.

Electronic data will be only saved in physically-secured and password-protected computers in our research office. Refusal to participate or withdrawal at any time will not prejudice normal medical care.

#### **Benefits**

You will receive treatment of CSCR with either half-dose photodynamic therapy (PDT) or subthreshold micropulse yellow (577-nm) laser, which are effective treatment for CSCR. There are non-invasive investigations that are standard follow-up routines for all CSCR patients. Performing these investigations may allow better understanding of your retinal and choroidal condition after the treatment.

#### **Risks**

Participation in this study would require more frequent assessment and follow up during the study period.

Risks of half dose photodynamic therapy include:

- Temporary visual disturbances (abnormal vision, decreased vision, defects in the visual field).
- Pain, swelling, bleeding, or inflammation at the site where the verteporfin medicine is injected. Some people also experience low back pain related to the injection of the medicine.
- Photosensitivity reactions.
- Permanent visual deterioration may occur in a small proportion of patients.

Visual deterioration associated with subthreshold micropulse yellow (577-nm) laser is rare. Scarring of the macula is uncommon for micropulse laser. Normal saline will be infused before application of micropulse laser. Persistence or recurrence of subretinal fluid can occur after half-dose PDT or micropulse laser. Retreatment will be needed for persistent or recurrent disease.

Optical coherence tomography and microperimetry are non-invasive investigations. FA and ICGA are generally safe investigations, but a minority of patients may have nausea and allergy to contrast with rash or urticaria (<1%). Anaphylactic shock is very rare (<0.01%). You can contact the study coordinators if you have any further queries.

#### **Update of information**

You will be informed of the relevant update of information if there is new information about the current study which may affect the continuation of the current study.

#### Cost of the study

There will be no charges for the treatments. No monetary reward will be received for participating this study.

## Alternative treatments if patient opts for not joining the study

You can opt not to take the allocated treatment and just receive the standard of care.

### **Expected Duration of Research**

1 year

## Circumstances under which your participation in the Research will be terminated

The research will be terminated upon voluntary withdrawal from the patient.

## Arrangements after termination of study

You will receive the standard of care.

#### Compensation and Treatment available for study related injury

If you are physically or mentally injured during your participation in this study, the investigator will provide medical treatment or refer you to other treatment. Participants are not giving up any of your legal rights by signing this form.

## **Confidentiality**

Electronic data will be only saved in physically-secured and password-protected computers in our research office. Information from this study will be submitted to the Chinese University of Hong Kong for statistical analysis. Only the overall result will be published and your identity will remain confidential. Records and results of all study investigations can be destroyed on your request in future. By signing a written informed consent form, you are (or your legally acceptable representative is) authorizing the Research Ethics Committee (REC) and the regulatory authority(ies) a direct access to your original medical records for verification of clinical trial procedures and/or data, without violating your confidentiality, to the extent permitted by the applicable laws and regulations.

Under the laws of Hong Kong (in particular the Personal Data (Privacy) Ordinance, Cap 486), you enjoy or may enjoy rights for the protection of the confidentiality of your personal data, such as those regarding the collection, custody, retention, management, control, use (including analysis or comparison), transfer in or out of Hong Kong, non-disclosure, erasure and/or in any way dealing with or disposing of any of your personal data in or for this study. For any query, you should consult the Privacy Commissioner for Privacy Data or his officer (Tel no.: 2827 2827) as to the proper monitoring or supervision of your personal data protection so that your full awareness and understanding of the significance of compliance with the law governing privacy data is assured.

#### **Voluntary Participation / Withdrawal**

Your participation in this study is entirely voluntary. You will be updated of new information that may be relevant to your willingness to continue participation in the study. You are allowed as much time as you need to consider participation in this study, or to discuss with your relatives prior to signing the consent. You can call us via the contact telephone number provided on this information sheet when you need help to make your decision. You also can express your wish to participate during future routine clinic visits. You have the right to refuse participation or to withdraw from this study at any time, with no prejudice towards your present or future medical treatments at the Chinese University of Hong Kong or any of the hospitals involved. After signing the consent form, a copy of signed consent form will be given. Even after signing the consent form, you are free to withdraw your consent and discontinue your participation in the study at any time. Once you request to withdraw, all

clinical data arising from study investigations will be deleted. The clinical data in the medical records will, however, be retained for future clinical management.

## For further information, you can contact:

Study coordinators: Ms Margaret Chow

Telephone no.: 3943 5818

Address: Department of Ophthalmology & Visual Sciences,

3/FArgyle street 147K Argyle Street Hong Kong Eye Hospital, Hong

If you have any questions about your rights as a patient or about research related injuries, you may contact you may contact Research Ethics Committee (Kowloon Central / Kowloon East)

Telephone no.: 35068888

Address : Block S, Queen Elizabeth Hospital, 30 Gascoigne Road, Kowloon

#### **Consent form**

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CONSENT FORM			
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my doctor(s). I certify that al	l information provided is dy at any time, without h	medications and procedures decided true and correct. I understand that I a aving to give a reason for withdrawin are.	am
Ethics Committee (REC) an	d the regulatory authorit on of clinical trial proced	tial. I agree to authorize the Resear ty(ies) a direct access to your originures and/or data, without violating you le laws and regulations.	nal
Name of Participant	Signature	Date	
Name of Witness	Signature	Date	
Name of investigator	Signature	Date	

the signed Consent Form.

After signing this consent form, I will receive the Participant Information Sheet and a copy of