UNSW OPTOMETRY & VISION SCIENCE

UNSW SYDNEY

PARTICIPANT INFORMATION STATEMENT AND CONSENT FORM

The response of the eye to different ocular allergy eyedrops.

Scientia Professor Fiona Stapleton

1. **What is the research study about?**

You are invited to take part in this research study because you responded to our study advertisement, and you may be eligible to participate in this study. The research study aims to understand the effect time course of change of different ocular allergy treatment eyedrops on a specific ocular surface inflammatory cell density and morphology; these cells are named dendritic cell.

This Participants Information Sheet/Consent Form (PISCF) informs you about the research study. It explains the tests and research involved so that you can decide if you would like to participate in the research. Please read this information carefully. Ask questions about anything that you don't understand or want to know more about.

2. **Who is conducting this research?**

The study is being carried out by the following researchers:

Role	**Name**	**Organisation**
Chief Investigator	Prof Fiona Stapleton	UNSW, School of Optometry and Vision Science
Co-investigator	Prof Isabelle Jalbert	UNSW, School of Optometry and Vision Science
Co-investigator	Dr Blanka Golebiowski	UNSW, School of Optometry and Vision Science
Student Investigator	Mr Ali Alghamdi	UNSW, School of Optometry and Vision Science
Research Funder:	None	

3. **Inclusion/Exclusion Criteria**

Before you decide to participate in this research study, we need to ensure that it is ok for you to take part. The research study is looking to recruit people who meet the following criteria:

- Be at least 18 years of age or older.
- Positive result in the skin prick test (an allergy test used to identify allergens responsible for triggering symptoms in allergic diseases).
- All participants must have current active allergic conjunctivitis symptoms (including itchy eyes or watery eyes or burning feeling or feeling like there is dirt or grit in your eyes) or signs (including redness or conjunctival chemosis or conjunctival papillae or conjunctival follicles), with or without a prior diagnosis of ocular allergy or hay fever.
- Able to read and comprehend English and give informed consent as demonstrated by signing a record of informed consent.

Participants who meet the following criteria will be excluded from the study:

- Severe eye allergy (reflective from the total symptoms scores of the allergy questionnaires) including vernal keratoconjunctivitis and atopic keratoconjunctivitis.
- Negative result in the skin prick test.
- Severe asthma.
- Severe eczema.
- Past anaphylactic episode.
- Previous allergic reaction to any component of topical eyedrops used in this study including benzalkonium chloride preservative.
- Pregnant or breastfeeding/childbirth within three months from the date of recruitment.

- Regular contact lens wear (wearing contact lenses for at least two or more full days in a week).
- All other ocular surface diseases except allergic conjunctivitis.
- Ocular diseases that involve the cornea.
- Active intraocular inflammation.
- History of corneal refractive surgery.
- Systematic conditions affecting the ocular surface include diabetes, thyroid disorder, rheumatoid arthritis and Sjögren syndrome.
- Systematic conditions affecting the ocular surface include diabetes, thyroid disorder, rheumatoid arthritis and Sjögren syndrome.

4. Do I have to take part in this research study?

Participation in this research study is voluntary. If you do not want to take part, you do not have to. If you decide to take part and later change your mind, you are free to withdraw from the study at any stage.

If you decide you want to take part in the research study, you will be asked to:

- Read the information carefully (ask questions if necessary);
- Sign and return the consent form if you decide to participate in the study;
- Take a copy of this form with you to keep.

5. What does participation in this research require, and are there any risks involved?

If you agree to participate you will be asked to complete the following research procedures:

Eligibility screening: Your eligibility to participate in the study will be screened in two phases using an eligibility questionnaire and a skin prick test in the first phase. The investigator will ask questions about your history of allergic symptoms by telephone or in person. Your eligibility will be confirmed in the second phase (Skin Prick Test) with your informed consent. The two phases may be on the same day or on two different days at your convenience. The investigator will notify you if you are ineligible to participate in this study.

After determining the eligibility of the participants and signing the consent form, included participants will start a washout period (1 week) and will be given commercially available lubricant eyedrops.

Randomisation: To ensure that each participant has an equal chance of being placed in any group, participants will be allocated randomly (based on a computer-generated list) to each of the study groups, like the flip of a coin. Each group will be assigned to receive either topical antihistamine and mast cell stabiliser eyedrops (dual-acting agent), or corticosteroid eyedrops in the treatment group, and lubricant eyedrops as the control group. Intervention categories will be pre-packed in sealed envelopes and randomly labelled (intervention A, intervention B, and intervention C). Each envelope will have instructions of use and a sufficient amount of dosage for the treatment period.

Skin prick test: The skin prick test will be conducted freely to determine whether you are suitable to take part in the study. For the skin prick test your arm will first be cleaned with alcohol. A drop of each of the most common aeroallergen extracts and positive and negative controls will be placed onto a marked area of the skin of your forearm. Using a sterile lancet (needle), a small prick through the drop will be made. This will allow a small amount of allergen to enter the skin. If you are allergic to the tested allergen, a small lump (wheal) will appear at the site of testing after 10-15 minutes. The size of this lump will be measured to confirm your allergy status. This test will be conducted in the UNSW Health

Service. Skin prick tests are considered very safe. Whilst slightly uncomfortable, they are usually well tolerated. Local itch and swelling (on your arm) normally subside within 1 to 2 hours. Prolonged or severe swelling is extremely rare. Occasionally you will experience a feeling of dizziness or light-headedness and need to lie down. Skin prick test will take approximately 15 minutes.

Based on the results of the skin prick test, the investigator may decide to include or exclude you for the rest of the study. If you participate in the entire study the following procedures will be conducted. These tests will take approximately 60 minutes.

1. **History taking:** a review of demographics, and eye and medical history will be conducted verbally.

2. **Questionnaires:** Participants will be asked to complete questionnaires related to eye and nose allergy symptoms: Numerical Rating Scale (NRS), Mini Rhinoconjunctivitis Quality of Life Questionnaire (Mini-RQLQ), Ocular Surface Disease Index (OSDI), Aston University Allergy Questionnaire (AUAQ), the dry eye questionnaire for the detection of dry eye (Dry Eye Questionnaire: DEQ-5) and the Eye Allergy Patient Impact Questionnaire (EAPIQ). Changes in symptoms during the treatment will be recorded using the Numerical Rating Scale (NRS). Changes in symptoms and signs will be recorded, reported and analysed from both eyes as appropriate.

3. **Visual acuity assessment:** Measurement of the standard of vision achieved with the participants' usual spectacle correction in place (if any), will be measured using standard letter charts. Measurements will be taken separately for each eye. Pinhole acuity will be attempted for those without 6/6 vision.

4. **The Perkins Tonometer:** The Perkins tonometer is a handheld applanation model used to measure eye pressure. The principle of applanation tonometry is based on the force required to flatten a certain area of the spherical surface of the cornea is the same as the pressure inside the eye. The Perkins tonometer is a very popular handheld applanation tonometer used in humans.

5. **The Oculus Keratograph 5M (K5):** This is an advanced corneal topographer with a built-in real keratometer and a colour camera optimized for external imaging. In our study, the tear film break-up time will be measured automatically and non-invasively. Testing Tear break-up time help determining the stability of the tear film.

6. **Slit lamp biomicroscopy:** Slit lamp biomicroscope that allows focussing a thin slit of light into the eye to examine the ocular surface and anterior segment will be used to detect and record eye surface signs, including conjunctival and limbal redness, conjunctival chemosis, papillae and follicles.

7. **Ocular staining:** A wetted fluorescein strip (harmless yellow dye) and a wetted lissamine green strip (harmless green dye) will then be mildly touched to the loose soft tissue lying of the lower lid. Participants will be asked to blink continuously to enable the smooth spreading of the stain over the eye, allowing for the evaluation of any surface defects. These dyes are routinely used in optometry practices worldwide and are safe to use.

8. **Confocal microscopy:** A confocal microscope will be used to visualise the corneal sub-basal corneal nerves and inflammatory cell in living imaging technique. A probe that emits harmless laser light will come in contact with the transparent front part of the eye for approximately 5 minutes, and

microscopic images of the cornea will be captured. Images will be captured from the right eye only. To avoid any discomfort to the patient or causing abrasions on the transparent surface of the eye a topical anaesthetic will be applied on the tested eye and a soft lubricating gel will be applied over the microscope probe.

All the above-mentioned clinical procedures (except the Skin Prick Test) will be repeated for the eligible participants in the follow-up visits as shown in the table of procedures below.

Table 1: Table of Procedures

	Visits							
			Treatment visits (14 days)					**Post-treatment visits (14 days)**
Conducted procedure (Approximate time)	**Visit 1 (2 hours)**	**One week Wash-out period**	**Visit 2 (1 hour)**	**Visit 3 (1 hour)**	**Visit 4 (1 hour)**	**Visit 5 (1 hour)**	**End of the treatment period**	**Visit 6 (1 hour)**	**Visit 7 (1 hour)**
Medical history	X								
Questionnaires and record forms	X		X	X	X	X		X	X
Skin prick test	X								
Visual acuity			X	X	X	X		X	X
Perkins Tonometer			X	X	X	X		X	X
The Oculus Keratograph 5M (K5)			X	X	X	X		X	X
Slit lamp examination			X	X	X	X		X	X
Ocular staining			X	X	X	X		X	X
Confocal microscopy			X	X	X	X		X	X

Study Interventions:
After you have been included to the study and completed the washout period, you will be instructed to install one drop in each eye, twice daily, for two weeks (14 days). During the treatment period, follow-up visits will be conducted 24 hours, 7 days and 14 days from the start of the treatment, Following the treatment period, post-treatment visits on days 21 and 28 will be conducted. The total duration of the study will be approximately 5 weeks including the washout period.

Study group	**Intervention**

Treatment group 1	Zaditen unit dose (ketotifen) 0.025%
Treatment group 2	Prednisolone sodium phosphate unit dose 0.5%
Placebo	Systane Hydration Unit Dose 0.7 ml

We do not expect the study procedures to cause any harm to you. However, if you experience any feelings of distress because of participation in this study, you can let the research team know and they will provide you with assistance. The Red Eye Clinic within UNSW Optometry Clinic is available with therapeutically endorsed optometrists to provide acute eye care. The UNSW Health Service is available to provide medical care if required. You are free to withdraw from the research at any time; your decision will not affect your relationship with UNSW and the research team members.

Study medications are usually prescribed to treat allergy conjunctivitis. As per the inclusion criteria, all participants must have a positive skin prick test and active allergic conjunctivitis based on the clinical assessment and allergy questionnaires. All medications used in this study are expected to improve symptoms and signs of allergy conjunctivitis, and each treatment has its own potential ocular side effects. The most common side-effect that can be tolerated in the optometry clinic or by stopping the treatment includes:

- headache
- corneal abrasions
- eye irritation
- eye pain
- blurred vision and/or problems seeing clearly
- photophobia.

For any complicated adverse effects including:

- injury
- punctate keratitis
- severe corneal erosion
- severe corneal abrasions
- cataract

which are rare cases, participants will be asked to stop the treatment and be referred to a proper specialist in case of further treatment.

Participants with a history of allergic conjunctivitis will be invited to participate in a second study visit to repeat all the above-mentioned clinical procedures except the skin prick test.

In addition, the name of all participants who agree to provide their contact details for the prize draw will enter the lucky draw at the Optometry Clinic at the School of Optometry and Vision Science. The draw will take place at the end of the study after the completion of all data collection, and the winner will be notified through their contact details. The winner will be awarded a $200 gift voucher.

6. What are the possible benefits of taking part?

We hope to use the information we get from this research study to benefit others who have allergic conjunctivitis by understanding more about the effect of different treatments for ocular allergy on the ocular surface inflammatory cell (dendritic cell) which in turn may help us to understand when we should stop the treatment and minimise drugs' side effects. Possible benefits may include knowing which substances you are allergic to and the level of allergic response you display to them.

7. **What will happen to information about me?**
By signing the consent form, you consent to the research team collecting and using information about you for the research study. The research team will store the data collected from you for this research project for a minimum of 15 years after the publication of the research results. The information about you will be stored in a re-identifiable format where any identifiers such as your name, address, date of birth will be replaced with a unique code.

Information collected from you in an electronic format stored on a UNSW password protected OneDrive only accessible to the approved research investigators and backed up regularly onto the UNSW network server. Information collected from you using paper-based measures will be stored in the following locked filing cabinet at the School of Optometry and Vision Science and only the approved research investigators will have access to this information.

The information you provide is personal information for the purposes of the Privacy and Personal Information Protection Act 1998 (NSW). You have the right of access to personal information held about you by the University, the right to request correction and amendment of it, and the right to make a complaint about a breach of the Information Protection Principles as contained in the PPIP Act. Further information on how the University protects personal information is available in the UNSW Privacy Management Plan.

8. **How and when will I find out what the results of the research study are?**
The research team intend to publish and/ report the results of the research. All Information will be published in a way that will not identify you. If you would like to receive a copy of the results you can let the research team know by inserting your email or mailing address in the consent form. We will only use these details to send you the results of the research.

9. **What if I want to withdraw from the research study?**
If you do consent to participate, you may withdraw at any time. You can do so by completing the 'Withdrawal of Consent Form' which is provided at the end of this document or you can ring the research team and tell them you no longer want to participate. Your decision not to participate or to withdraw from the study will not affect your relationship with UNSW. If you decide to leave the research study, the researchers will not collect additional information from you. You can request that any identifiable information about you be withdrawn from the research project.

10. **What if I have a complaint or any concerns about the research study and will I receive compensation if suffer any injuries or have complications?**
If you suffer any injuries or complications as a result of this research project, you should contact the study team as soon as possible and you will be assisted with arranging appropriate medical treatment. If you are eligible for Medicare, you can receive any medical treatment required to treat the injury or complication, free of charge, as a public patient in any Australian public hospital.

Complaints Contact
If you have a complaint regarding any aspect of the study or the way it is being conducted, please contact the UNSW Human Ethics Coordinator:

Position	UNSW Human Research Ethics Coordinator
Telephone	+ 61 2 9385 6222
Email	humanethics@unsw.edu.au

HC Reference Number	HC230343

11. What should I do if I have further questions about my involvement in the research study?

The person you may need to contact will depend on the nature of your query. If you require further information regarding this study or if you have any problems which may be related to your involvement in the study, you can contact the following member/s of the research team:

Research Team Contact Details

Name	Ali Alghamdi
Position	Student-Investigator
Telephone	+61 2 9385 4375
Email	ali.alghamdi@unsw.edu.au

Chief Investigator

Name	Prof Fiona Stapleton
Position	Chief-Investigator
Telephone	+61 293854375
Email	f.stapleton@unsw.edu.au

Name	Prof Isabelle Jalbert
Position	Co-Investigator
Telephone	+61 290657692
Email	i.jalbert@unsw.edu.au

Name	Dr Blanka Golebiowski
Position	Co-Investigator
Telephone	+61 293854502
Email	b.golebiowski@unsw.edu.au

Support Services Contact Details

If at any stage during the study, you become distressed or require additional support from someone not involved in the research please call:

Name/Organisation	Dr Kathleen Watt
Position	Clinical Director
Telephone	+61 2 9385 4639
Email	kathleen.watt@unsw.edu.au

Consent Form – Participant providing own consent

Declaration by the participant

- ☐ I understand I am being asked to provide consent to participate in this research study;
- ☐ I have read the Participant Information Sheet, or someone has read it to me in a language that I understand;
- ☐ I understand the purposes, study tasks and risks of the research described in the study;
- ☐ I provide my consent for the information collected about me to be used for the purpose of this research study only.
- ☐ I have had an opportunity to ask questions and I am satisfied with the answers I have received;
- ☐ I freely agree to participate in this research study as described and understand that I am free to withdraw at any time during the study and withdrawal will not affect my relationship with any of the named organisations and/or research team members;
- ☐ I would like to receive a copy of the study results via email or post, I have provided my details below and ask that they be used for this purpose only;
- ☐ I understand that I will be given a signed copy of this document to keep.
- ☐ I would like to receive a copy of the study results via email or post, I have provided my details below and ask that they be used for this purpose only.
- ☐ I agree to provide my contact details for the prize draw;

Name: _____

Address: _____

Email Address: _____

Participant Signature

Name of Participant (please print)	
Signature of Research Participant	
Date	

Declaration by Researcher*

- ☐ I have given a verbal explanation of the research study, its study activities and risks and I believe that the participant has understood that explanation.

Researcher Signature*

Name of Researcher (please print)	
Signature of Researcher	
Date	

+An appropriately qualified member of the research team must provide the explanation of, and information concerning the research study. All parties signing the consent section must date their own signature.

Form for Withdrawal of Participation

I wish to **WITHDRAW** my consent to participate in this research study described above and understand that such withdrawal **WILL NOT** affect my relationship with The University of New South Wales.

- ☐ I am withdrawing my consent and I would like any identifiable information collected about me which I have provided for the purpose of this research study withdrawn.

- ☐ I am withdrawing my consent to participate in further components of this research and provide my permission for the research team to retain and/or use information collected about me which I have provided for the purpose of this research.

- ☐ I am withdrawing my consent and I understand that any information already published and/or not linked to my identity cannot be withdrawn from the research.

Participant Signature

Name of Participant (please print)	
Signature of Research Participant	
Date	

The section for Withdrawal of Participation should be forwarded to:

CI Name:	Prof Fiona Stapleton
Email:	Chief-Investigator
Phone:	+61 2 9385 4375
Postal Address:	Rupert Myers Building (North Wing), School of Optometry and Vision Science, The University of New South Wales, UNSW SYDNEY NSW 2052 AUSTRALIA