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Exploring eye and phenotype characteristics in adults: high-definition oculo-phenomic evaluation study

Submission date 27/02/2024	**Recruitment status** No longer recruiting	[_] Prospectively registered [_] Protocol [_] Statistical analysis plan [_] Results [_] Individual participant data [_] Record updated in last year
Registration date 29/02/2024	**Overall study status** Ongoing	
Last Edited 28/02/2024	**Condition category** Eye Diseases	

Plain English summary of protocol

Background and study aims
With the growth and aging of the global population, vision impairment caused by age-related eye diseases has become a significant public health challenge worldwide. Understanding the natural progression and related factors of eye structure and function, and comparing the differences in eye structure and function between high myopia (short-sighted) and non-high myopia populations, is particularly important. This study aims to explore eye and phenotypic traits in adults.

Who can participate?
Adults who permanently live in Guangzhou without serious eye or systemic diseases

What does the study involve?
Comprehensive eye and general tests are performed every 2 years for 6 years.

What are the possible benefits and risks of participating?
Participants receive comprehensive eye and general tests and one-on-one ophthalmologist consultations based on the exam results every 2 years. All the exams follow the normal clinical operation.

Where is the study run from?
Zhongshan Ophthalmic Center, Sun Yat-sen University (China)

When is the study starting and how long is it expected to run for?
November 2022 to December 2030

Who is funding the study?
National Natural Science Foundation of China (China)

Who is the main contact?
Dr Wei Wang, wangwei@gzzoc.com

Contact information

Type(s)
Public, Scientific, Principal investigator

Contact name
Dr Wei Wang

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Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

ClinicalTrials.gov (NCT)
Nil known

Protocol serial number
HOPE-2022-v6

Study information

Scientific Title
High-Definition Oculo-Phenomic Evaluation (HOPE) Study: profiling the ocular and phenotypic traits in adults

Acronym
HOPE

Study objectives
The project aims to explore the ocular and phenotypic traits in adults through a retrospective and prospective ambispective cohort.

Ethics approval required
Ethics approval required

Ethics approval(s)
approved 11/12/2022, Zhongshan Ophthalmic Center Ethics Committee, Sun Yat-sen University (No.7 Jinsui Road, Zhujiang New Town, Guangzhou, 510060, China; +86 (0)20 87332529; zocethics@163.com), ref: 2022KYPJ247

Study design
Retrospective and prospective ambispective cohort study

Primary study design
Observational

Study type(s)
Screening

Health condition(s) or problem(s) studied
Adults with high myopia and non-high myopia control

Interventions
The HOPE study is a retrospective and prospective ambispective cohort study that includes adults from Guangzhou, China. By conducting follow-ups every 2 years over a continuous period of 6 years, an adult eye health profile is constructed. All ocular examinations will be performed at the Zhongshan Ophthalmic Center (ZOC). The examinations include: questionnaire surveys (covering basic demographic information, general medical history, ocular disease history, lifestyle habits, cognitive function, dry eye scoring), general physical examinations (height, weight, waist circumference, hip circumference, blood pressure, lung capacity, grip strength, simple physical fitness tests), and ocular examinations (visual acuity, intraocular pressure, refraction, slit lamp examination, anterior segment photography, dry eye testing, comprehensive ocular surface analyzer, ocular biometry parameters, optical coherence tomography (OCT), OCT angiography (OCTA), fundus photography, and ultra-widefield fundus imaging.

Intervention Type
Other

Primary outcome(s)
Retinal and choroidal structures and blood flow measured by optical coherence tomography angiography at baseline and each follow-up visit (2, 4 and 6 years)

Key secondary outcome(s))
There are no secondary outcome measures

Completion date
31/12/2030

Eligibility

Key inclusion criteria
1. Adults
2. Permanent residents of Guangzhou (residing for more than 6 months)
3. Volunteers for this study and have signed an informed consent form

Participant type(s)
Patient

Healthy volunteers allowed

No

Age group
Adult

Sex
All

Key exclusion criteria
1. Presence of severe ocular diseases, such as advanced cataract, glaucoma, retinal diseases, etc
2. History of corneal or intraocular surgery, radiotherapy, laser treatment
3. Presence of severe systemic diseases, such as coronary heart disease, myocardial infarction, stroke, multiple sclerosis, dementia, depression, mania, etc
4. History of life-threatening major disease treatments, such as cardiac stent placement, major surgery under general anesthesia, surgery for malignant tumors
5. Pregnant women, disabled individuals, those with communication barriers, or those unable to complete the examination

Date of first enrolment
01/01/2023

Date of final enrolment
31/12/2024

Locations

Countries of recruitment
China

Study participating centre
Zhongshan Ophthalmic Center, Sun Yat-sen University
No. 54 Xianlie Nan Road
Yuexiu District
Guangzhou
China
510060

Sponsor information

Organisation
Sun Yat-sen University

Funder(s)

Funder type
Government

Funder Name
National Natural Science Foundation of China

Alternative Name(s)
Chinese National Science Foundation, Natural Science Foundation of China, National Science Foundation of China, NNSF of China, NSF of China, National Nature Science Foundation of China, Guójiā Zìrán Kēxué Jījīn Wěiyuánhuì, , NSFC, NNSF, NNSFC

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
China

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated during and/or analysed during the current study will be available upon request from Dr Wei Wang (wangwei@gzzoc.com). Informed consent will be obtained before the participant joins the study. The study will follow the legal restrictions of the Ethics Committee of Zhongshan Ophthalmic Center, Sun Yat-sen University. For access to the data, please contact the principal investigator after the study is completed.

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes