Eligibility criteria and information for clinicians:

**Study title: Adaptation to optical treatment in adults and older children with amblyopia**

Dear Colleagues,

We are conducting a small pilot study to assess how children older than 12 years and adults with anisometropic amblyopia adapt to full correction of anisometropia in spectacles. We are interested in the actual hours of wear achieved, potential barriers to adaptation, and improvements in visual function. We’re looking for your help in referring children and adults who do not currently wear their full anisometropic correction.

**What does the study involve?**

Participants will be invited to attend a Comprehensive Eye Examination at the University Optometry Clinic (if they have not had an eye exam in the last 12 months). If eligible, they will receive single vision glasses with their full anisometropic correction, paid for by the study. Participants will be asked to wear these new glasses every day for up to 24 weeks, with 6-weekly vision checks at the Grafton Campus. The glasses will be fitted with a SpecsOn monitor – a small electronic device which will record wearing time.

Participants (or parents/guardians of child participants) will also be invited to fill an online questionnaire about their amblyopia history and previous eyecare experiences. Those who are prescribed glasses in the study, and their parents/whānau, can also take part in a semi-structured interview, where they will be asked about their experiences with adapting to glasses.

**Participant Inclusion Criteria:**

- Age 12-40 years (pre-presbyopic)
- Have significant anisometropia:
  - Spherical-equivalent difference of ≥1.00 DS between eyes
  - or Cylinder difference of ≥3.00 DC between eyes
- Myopia less than -6.00DS in spherical equivalent
- Unilateral amblyopia:
  - Fellow eye BCVA of 6/7.5 (0.10 logMAR) or better
  - Amblyopic eye BCVA of 6/12 or worse
- No strabismus or small angle strabismus only (<10Δ manifest at distance and near).
- No ocular pathology.
- No previous intraocular surgery (strabismus surgery is accepted).
- Not currently undergoing any active amblyopia therapies (e.g. patching, atropine, etc).
- Not currently wearing full anisometropic correction in glasses or contact lenses. (Can be wearing balance lenses or an under-correction for anisometropia.)
- Interested in trying full correction in glasses and able to attend follow-up vision checks.

**Who should I contact?**

If you would like to refer a patient, or are interested in finding out more about this research, please contact the study principal investigator:

**Tina Gao**
Email: t.gao@auckland.ac.nz
Ph: 09 923 2955 (please leave a message)

Approved by the Auckland Health Research Ethics Committee on 14 Dec 2022 for three years. Reference number 25011.