

## Appendix Table 1: Study Eligibility Criteria

---

### Inclusion Criteria:

1. Age: 9 to <18 years
2. Patient has access to a computer (monitor screen of 11" or larger) with a CD/DVD drive and internet access for the next 12 weeks
3. Best-corrected visual acuity of  $\geq 20/25$  in each eye at distance and near
4. Exophoria at near at least 4 PD greater than at distance
5. Reduced positive fusional convergence at near (< 20 PD or fails Sheard's criterion that the PFV measures less than twice the magnitude of the near phoria). PFV is recorded as the prism magnitude where vision is first blurred (or break if no blur is reported).
6. Near point of convergence of  $\geq 6$  cm break
7. Randot Preschool stereoacuity of at least 400 seconds of arc
8. CI Symptom Survey score  $\geq 16$
9. No use of a plus add for near or base-in prism for at least 2 weeks preceding enrollment
10. Patient must be wearing appropriate refractive correction (spectacle or contact lenses) for at least 2 weeks prior to enrollment if refractive error is present (based on a cycloplegic refraction within the last 6 months) that meets the following:
  - Myopia more than -0.75D spherical equivalent (SE) in either eye
  - Hyperopia more than +2.00D SE in either eye
  - SE anisometropia >1.00D
  - Astigmatism  $\geq 1.00D$  or  $\geq 1.50D$  of meridional difference in either eyeRefractive correction for patients meeting the above refractive error criteria must meet the following guidelines:
  - SE anisometropia must be within 0.75D of the full anisometric correction.
  - Astigmatism cylinder must be within 0.75D of full correction and axis must be within 10 degrees if the cylinder is 0.75D or less, or within 6 degrees of 1.00D or greater.
  - For hyperopia, the spherical component can be reduced by up to 1.50D at investigator discretion provided the reduction is symmetrical.
  - For myopia, the SE must be within 0.75D of the full myopic correction.
11. Parent and patient understand the protocol and are willing to accept randomization.
12. Parent has home phone (or access to phone) and is willing to be contacted by Jaeb Center staff.
13. Relocation outside of area of an active PEDIG site within the next 15 months is not anticipated.

### Exclusion Criteria: A patient is excluded for any of the following reasons:

1.  $\geq 2$  logMAR line difference in best-corrected visual acuity between the two eyes
2. Constant or intermittent exotropia at distance; constant exotropia at near
3. Any esotropia at distance or near
4. Distance exophoria  $\geq 10$  PD
5. History of strabismus surgery
6. Anisometropia  $\geq 2.00D$  in any meridian between the eyes
7. Prior intraocular or refractive surgery
8. Primary vertical heterophoria greater than 1 PD
9. Diseases known to affect accommodation, vergence, and ocular motility such as multiple sclerosis, Graves orbitopathy, myasthenia gravis, diabetes mellitus, or Parkinson disease
10. Current use of any ocular or systemic medication known to affect accommodation or vergence such as anti-anxiety agents (e.g., Librium or Valium), anti-arrhythmic agents (e.g., Cifenline, Cibenzoline), anti-cholinergics (e.g., Motion sickness patch (scopolamine), bladder spasmolytic drugs (e.g., Propiverine), hydroxychloroquine, chloroquine, phenothiazines (e.g., Compazine, Mellaril, Thorazine), tricyclic antidepressants (e.g., Elavil, Nortriptyline, Tofranil)
11. Near point of accommodation >20 cm in the right eye
12. Manifest or latent nystagmus evident clinically
13. History of chronic headaches unrelated to reading activity
14. Active symptomatic allergic conjunctivitis

15. Developmental disability, mental retardation, attention deficit hyperactivity disorder (ADHD), or learning disability diagnosis that in the investigator's discretion would interfere with treatment or evaluation
  16. Household member or sibling already enrolled in the CITS OR previously enrolled in the CITT
  17. Household member is an eye professional, ophthalmic technician, ophthalmology or optometry resident, orthoptist, or optometry student, or employed in an eye care setting
  18. Acquired brain injury
  19. Previous office- or home-based vision therapy, orthoptics, home-based near-target push-ups, pencil push-ups, or home-based computer therapy
-