

REAL-WORLD VISUAL OUTCOMES BY HEALTHCARE INSURANCE WITH PRESCRIPTION DIGITAL TREATMENT FOR AMBLYOPIA: PUPIL Registry Analysis

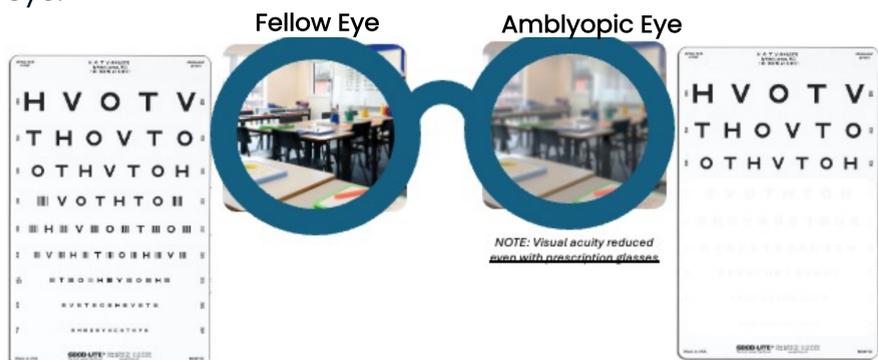
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BACKGROUND

Amblyopia is a common visual condition where visual acuity is reduced in one eye due to neurologic suppression of that eye.¹



Prior studies have shown disparities in amblyopia treatment outcomes in children with Medicaid insurance.² Luminopia is a binocular, digital treatment, shown in phase 1, 2 and 3 trials to improve amblyopic eye best corrected visual acuity (BCVA).^{3,4}

Patient view of software inside VR headset, while wearing appropriate refractive correction



Contrast reduction of fellow eye content to overcome amblyopic suppression

Complementary dichoptic masking superimposed on content to encourage binocular fusion.

INDICATION: Luminopia is indicated for improvement in visual acuity in amblyopia patients age 4 to <13, associated with anisometropia and/or with mild strabismus. Luminopia is for Prescription Use Only. Please see the Luminopia Directions for Use at luminopia.com/dfu for more information

Relevant Financial Disclosures: MI: Consultant, Speaker (Luminopia), SH: Employee (Luminopia)

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- NCT06429280, patients at participating sites undergoing 12+ weeks of treatment with an amblyopia diagnoses eligible for inclusion. Data submitted up to 3/4/2025 included for analysis.

OBJECTIVE

Evaluate best-corrected visual acuity (BCVA) and treatment usage, across insurance types in the PUPIL Registry⁵

METHODS

PUPIL Registry

Patients Using Prescription Luminopia

Registry queried for any patient:
 • < 18 years of age, completed Luminopia treatment, with follow-up data
 Outcomes evaluated:
 • Change in BCVA while on treatment, by sub-groups
 • Treatment usage and duration
 • Multivariable analysis to identify significant predictors of BCVA gains

CONCLUSIONS

Among these Registry patients:

- In routine clinical practice, Medicaid-insured children on Luminopia achieved comparable visual outcomes to commercially-insured children, unlike real-world outcomes observed with traditional amblyopia treatments.
- Treatment naïve and more severe amblyopic children experienced greater vision improvements.
- Similar usage patterns observed regardless of insurance coverage type.

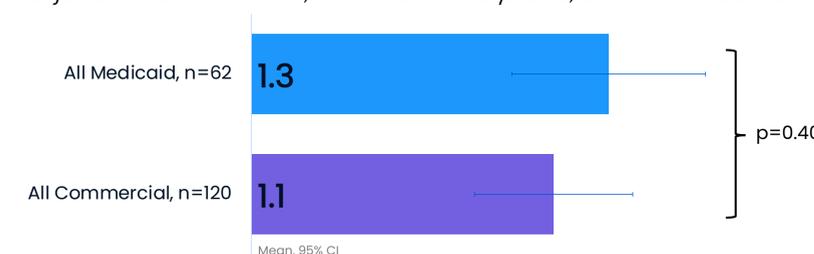
RESULTS

34% of children in the Registry covered by Medicaid; diverse amblyopia conditions represented

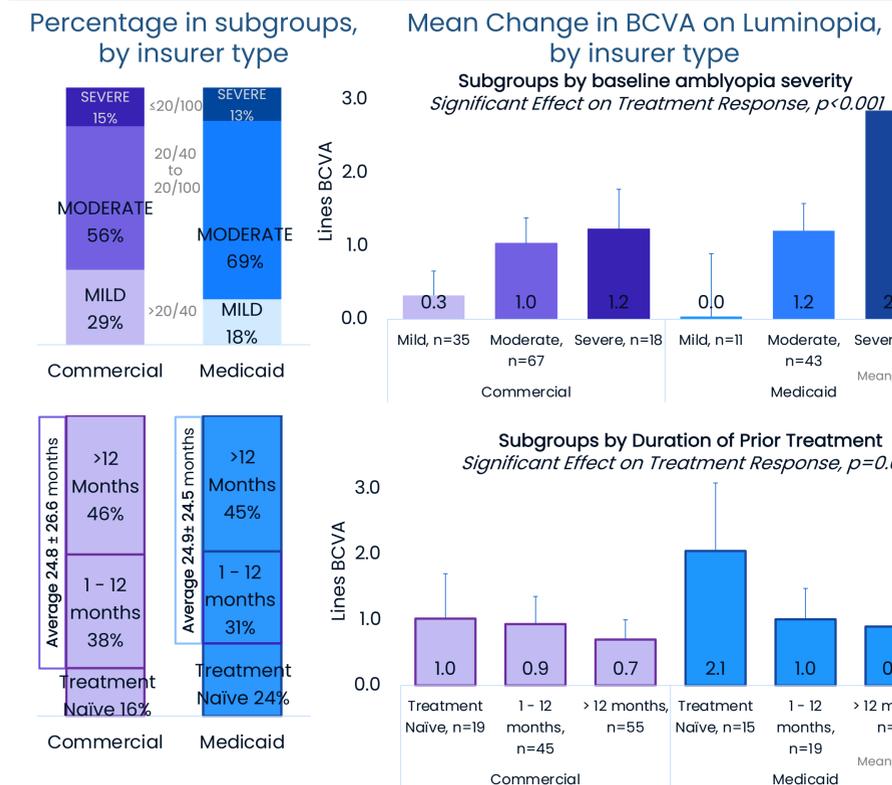
Patient Demographics		Children with Commercial Plans n=120	Children with Medicaid n=62
Age (years)	Mean ± SD	7.2 ± 2.7	7.5 ± 2.2
	4 to 7, n (%)	75 (63)	38 (61)
	8 to 12, n (%)	36 (30)	20 (32)
Sex	Female, n (%)	54 (45)	30 (48)
	Male, n (%)	66 (55)	32 (52)
Amblyopia type	With strabismus, n (%)	63 (53)	40 (65)
	Without strabismus, n (%)	51 (43)	19 (30)
	Deprivational, n (%)	5 (4)	3 (5)

No significant difference in BCVA outcomes of children covered by Medicaid or commercial plans (p=0.401)

Change in BCVA from Baseline to End of Treatment, by insurer type adjusted for Baseline BCVA, Prior Treatment Exposure, Duration of Treatment



Greater BCVA gains associated with a worse baseline BCVA, treatment naïvety, and more treatment usage



Similar treatment usage for children on Medicaid and commercial plans



No serious adverse events reported for any patient
 Consistency in top show selection

