

NCC 'GET CONNECTED 2026' POSTER ABSTRACTS
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Poster Abstracts

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The importance of treatment adherence in myopia control

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Purpose: Adherence (also referred to as compliance) to myopia control therapy is important in attaining optimal outcomes. This study reports a comprehensive review of treatment adherence, the methods used, and whether adherence was associated with myopia control efficacy.

Method: The recent International Myopia Institute white paper on Interventions for Controlling Myopia Onset and Progression tabulated the results of 68 randomized clinical trials for six categories of myopia control interventions: spectacles, soft contact lenses, overnight orthokeratology, atropine, combination therapy, and red-light therapy. All 68 studies were reviewed in order to identify whether adherence was measured and reported, how it was assessed, and whether treatment adherence was associated with myopia control efficacy.

Results: Of the 68 clinical trials reviewed, 44 measured treatment adherence (65%). Surveying the child, parent, or both at study visits was the most common approach ($n = 18$). Among 21 atropine trials, 14 measured adherence, usually having children keep a diary ($n = 6$) or assessing unused drug at each visit ($n = 7$). Six of 7 red-light trials measured adherence, 5 using directly acquired data from the instrument. Only 1 of 10 orthokeratology trials assessed adherence, along with 2 of 5 combination trials. Several studies excluded non-adherent participants from their analysis. Among the studies measuring treatment adherence 8 found an association with myopia control efficacy (18%)—4 spectacle, 2 soft contact lens, and 2 red light studies.

Conclusions: Adherence was measured in around two-thirds of the myopia control trials reviewed with a meaningful number showing that higher adherence is associated with better outcomes. Future clinical trials should strive for more consistent assessment of adherence, not excluding non-adherent participants, and always including adherence as a covariate in analyses.

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