Supplementary Material

Poster Title:
A Balancing Act: Low-dose Atropine Significantly Slows Pediatric Myopia Progression Without A Clinically Meaningful Risk of Rebound

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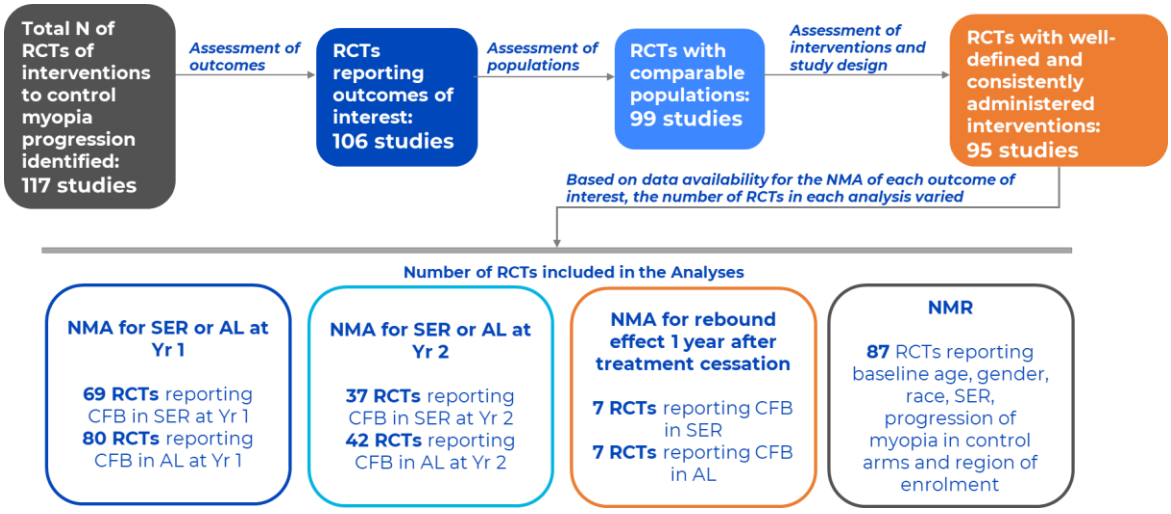
Contents

Process for the selection of RCTs for evidence synthesis by means of a network meta-analysis

A systematic literature review identified 117 unique randomised control trials. The database search for the systematic literature review was performed on the 13 September 2024. Evidence connectivity was assessed after grouping treatments evaluated in each RCT based on the type of intervention (optical, pharmacological, light-based or combination) into 24 different types of pediatric myopia control interventions. The feasibility of ITCs was evaluated by qualitatively examining between-study heterogeneity in study designs, patient populations, interventions, outcome definitions and assessments. Twenty-two RCTs were considered sources of significant clinical or methodological heterogeneity and were therefore excluded from the quantitative synthesis. Examples of methodological heterogeneity included dose-switching before the first annual outcome assessment (1, 2), loss of randomization after year one of treatment administration (3) or potential efficacy bias as some RCTs evaluating atropine therapy permitted the concurrent use of undercorrected or multifocal spectacles in both intervention and control arms but have not monitored or enforced it. (4,5). RCTs involving myopic children with esophoria, high accommodative lag or other near phorias were also excluded from the analytic sample. Their exclusion was based on clinical heterogeneity, as evidence indicates that these conditions interact with myopia treatment efficacy (6-9).

Supplementary Figure

Figure 1. Decision tree summarizing the network meta-analysis feasibility assessment process and findings



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