# THE EFFICACY OF NUSINERSEN TREATMENT IN SPINAL MUSCULAR ATROPHY: A SYSTEMATIC REVIEW

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### INTRODUCTION

Spinal muscular atrophy (SMA) is an autosomal recessive neuromuscular disorder, affecting 1 in 10000 live births, of which presentation varies from early infantile death to progressive weakness of the muscles. A therapeutic agent Nusinersen is being used to treat SMA.

### METHODS

The systematic review was conducted complying with PRISMA reporting standards. 508 articles were identified using key-words: "Nusinersen", "Spinraza". After excluding ineligible reports - 23 studies were included in the review.

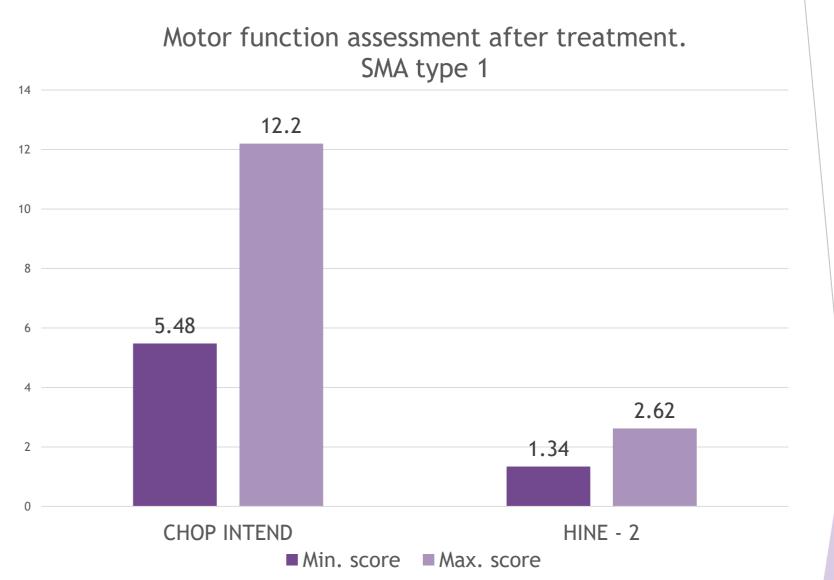
## CONCLUSIONS

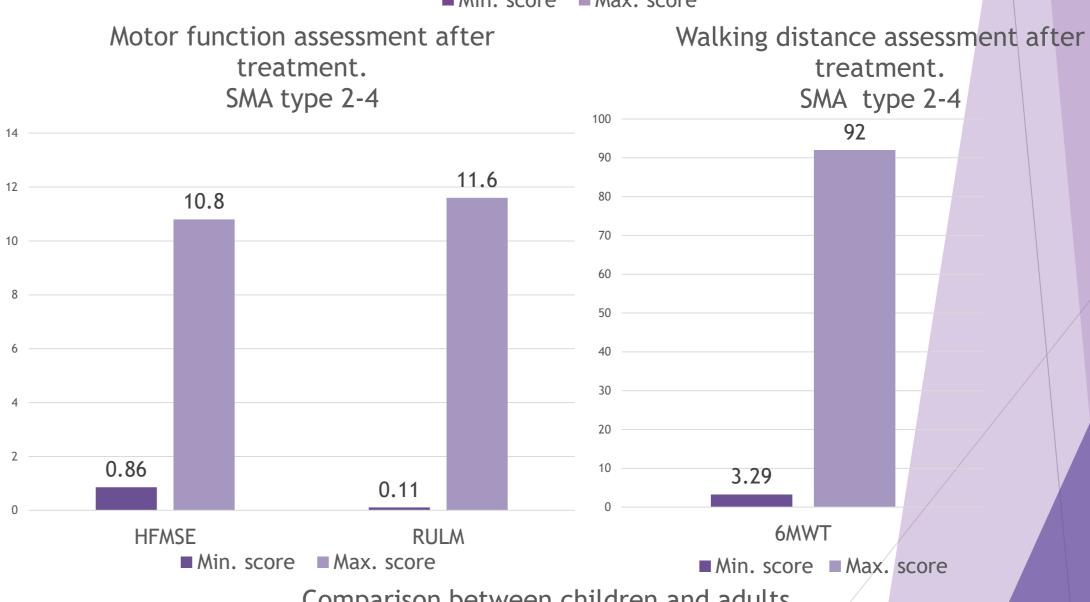
Nusinersen had a positive effect on the motor function of patients diagnosed with SMA across all types. The best response to medication is exhibited in the youngest children, less apparent in adults.

### AIM

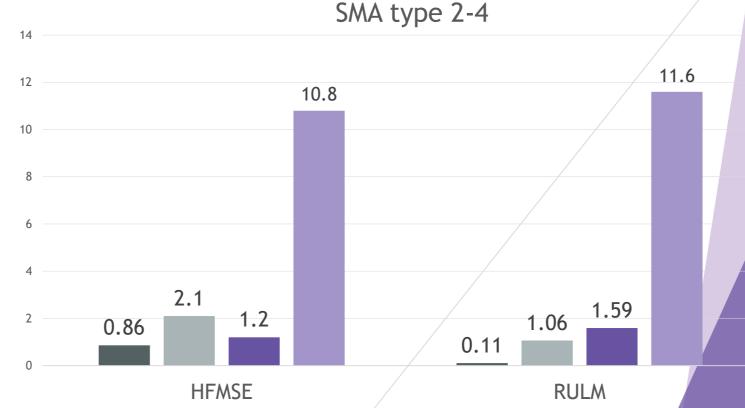
To review the literature analyzing the efficacy of Nusinersen in treating children and adults with SMA.

#### RESULTS





Comparison between children and adults.



■ Min. score (adults) ■ Max. score (adults) ■ Min. score (children) ■ Max. score (children \*Min. score = average minimum improvement in scale score from baseline to motor function

\*Max. score = average maximum improvement in scale score from baseline to motor function

