Risdiplam Improved Motor Function in Late Treatment of Spinal Muscular Atrophy Type 1



Maureen Njoroge^{1,2,3} Samson Gwer^{2,3,4}

1.Thika Level 5 Hospital, Kiambu, Kenya 2.Ubuntu Neurology, Nairobi, Kenya 3.Gertrude's Children's Hospital, Nairobi, Kenya 4.School of Medicine, Kenyatta University, Nairobi, Kenya

INTRODUCTION

Treatment for SMA is unavailable for patients with advanced disease. In clinical trials, patients with invasive ventilation or tracheostomy and those with history of hospitalization for a pulmonary event within the last 2 months at the time of screening were excluded from use of Risdiplam. There is limited documentation on outcomes for initiation of therapy in these patients.

OBJECTIVES

To document motor and respiratory outcomes for patients with SMA type 1 with late treatment starting points.

METHODS

We conducted a case series of five patients on follow up from September 2021 for SMA type 1 with severely limited motor skills and on treatment with Risdiplam. We assessed the disease course using the Children's Hospital of Philadelphia Infant Test of Neuromuscular Disorders (CHOP-INTEND).

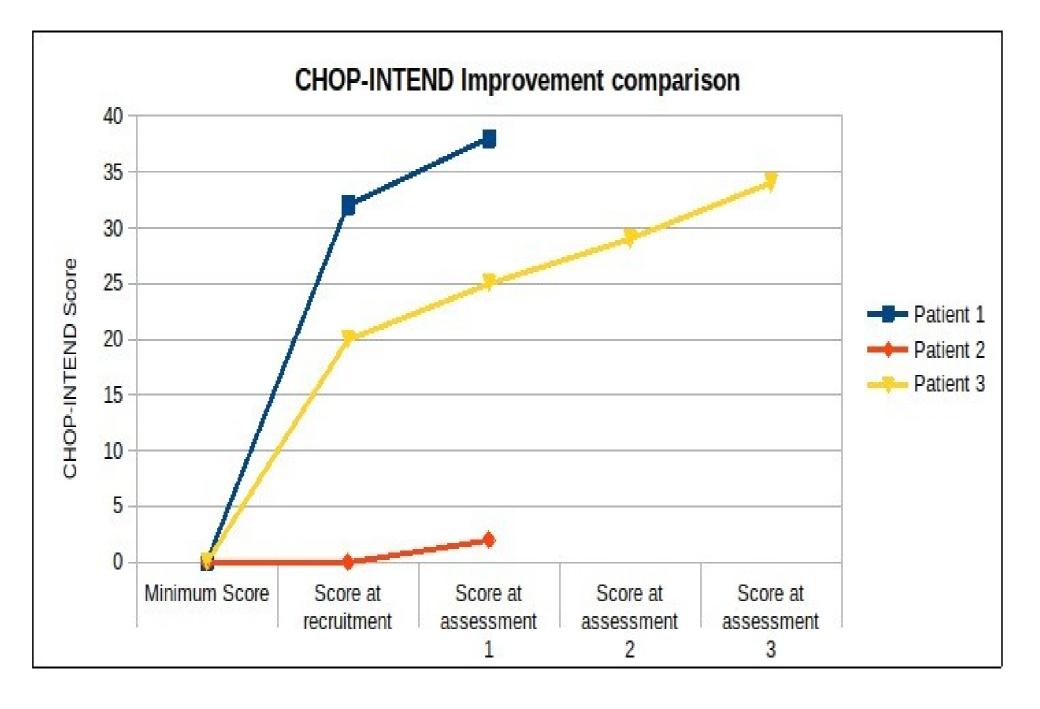
RESULTS

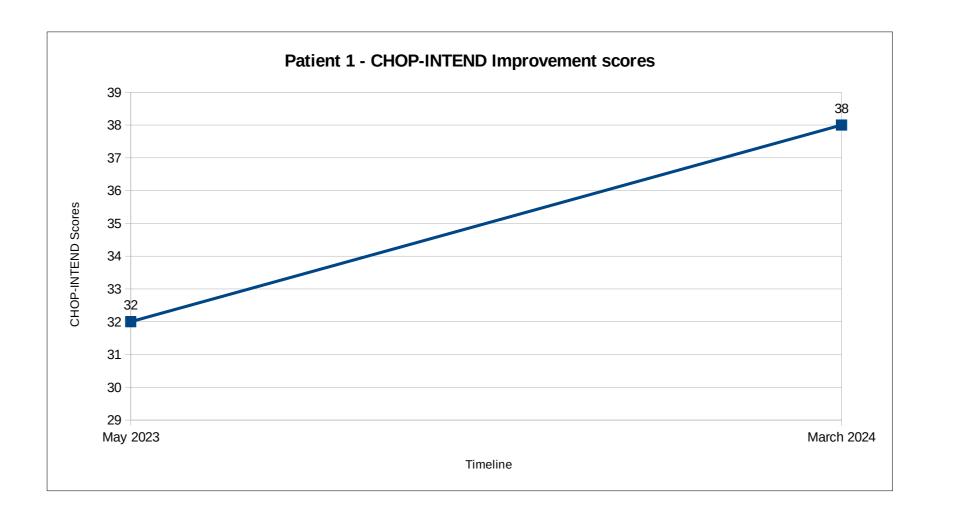
We followed up five patients, the patients' ages ranged from 3 months to 5 years at the time of recruitment into the compassionate Risdiplam program.

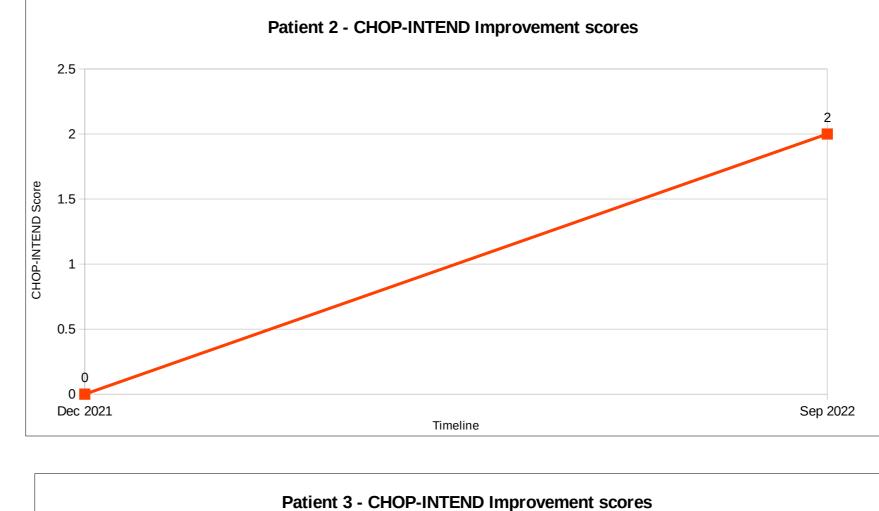
Two patients were already on respiratory support and had gastrostomy tubes by the time Risdiplam was being initiated.

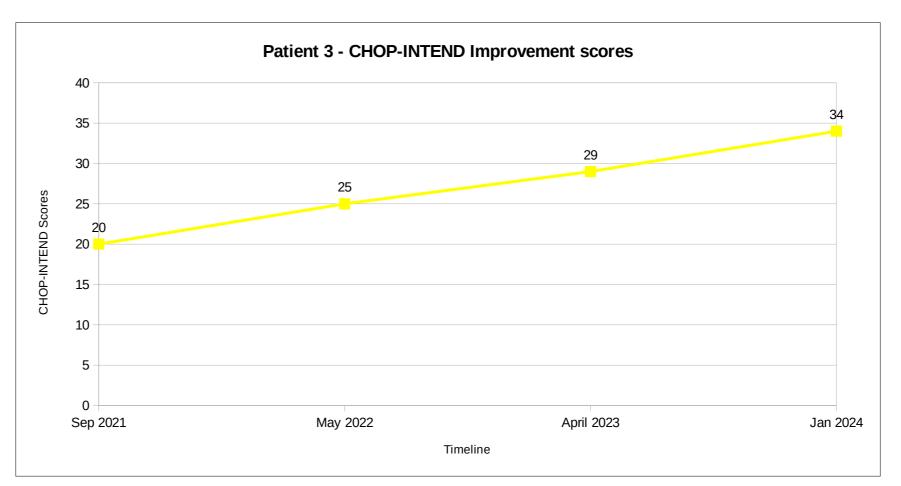
Two patients died prior to initiation of Risdiplam due to aspiration pneumonia less that two months after diagnosis.

Patient 3 improved from using respiratory support for 24 hours to 18 hours a day, complimented by occupational and physical therapy.









CONCLUSION

Risdiplam was associated with improved motor and respiratory outcomes in late treatment SMA type 1 patients.

REFERENCES

- 1. Schorling DC, Pechmann A, Kirschner J. Advances in Treatment of Spinal Muscular Atrophy - New Phenotypes, New Challenges, New Implications for Care. J Neuromuscul Dis. 2020;7(1):1-13.
- 2. Kakazu J, Walker NL, Babin KC, Trettin KA, Lee C, Sutker PB, Kaye AM, Kaye AD. Risdiplam for the Use of Spinal Muscular Atrophy. Orthop Rev (Pavia). 2021 Jul 12;13(2):25579.

ACKNOWLEDGMENT

- 1. Gertrudes Children's Hospital
- 2. Elizabeth Ombech, Afya Research Africa.