

RCT: MRT in Autism Spectrum Disorder - Methods

- Inclusion Criteria:
 - All subjects are 4-12 years of age
 - All subjects meet the DSM-IV diagnostic criteria for ASD
 - CARS total score > 36
 - Subject's baseline heart rate and EEG are of sufficient duration and quality that it can be processed for analysis
- Exclusion Criteria:
 - Subject's legal custodian is unable or unwilling to give informed consent
 - Subject diagnosed with any other current primary Axis I mood, anxiety, or psychotic disorder
 - Individual with a clinically defined neurological disorder including, but not limited to :
 - Any condition likely to be associated with increased intracranial pressure
 - Space occupying brain lesion
 - History of seizure
 - Cerebral aneurysm
 - Medications that lower the seizure threshold
 - Previously TMS treated
 - Significantly unstable medical conditions
 - Any condition which in the judgment of PI would prevent the subject from completion of the study
- Design: RCT
 - Phase I: 5 week double blind sham controlled treatment
 - Phase II: 5 week open label active treatment
- Evaluation:
 - Evaluation using CARS at baseline and post MRT weekly
 - EEG evaluation at baseline and post MRT weekly

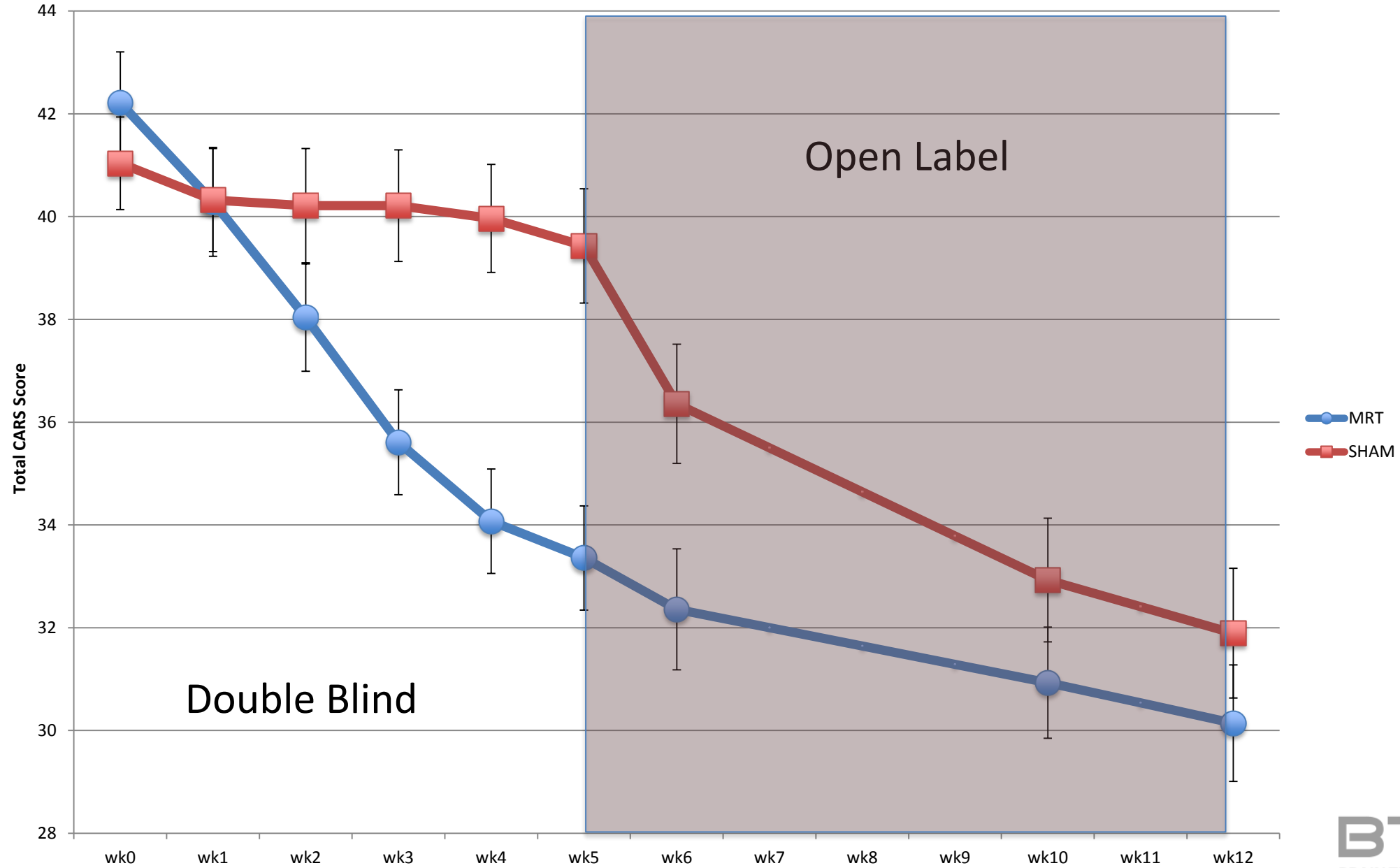


MRT-001 Results

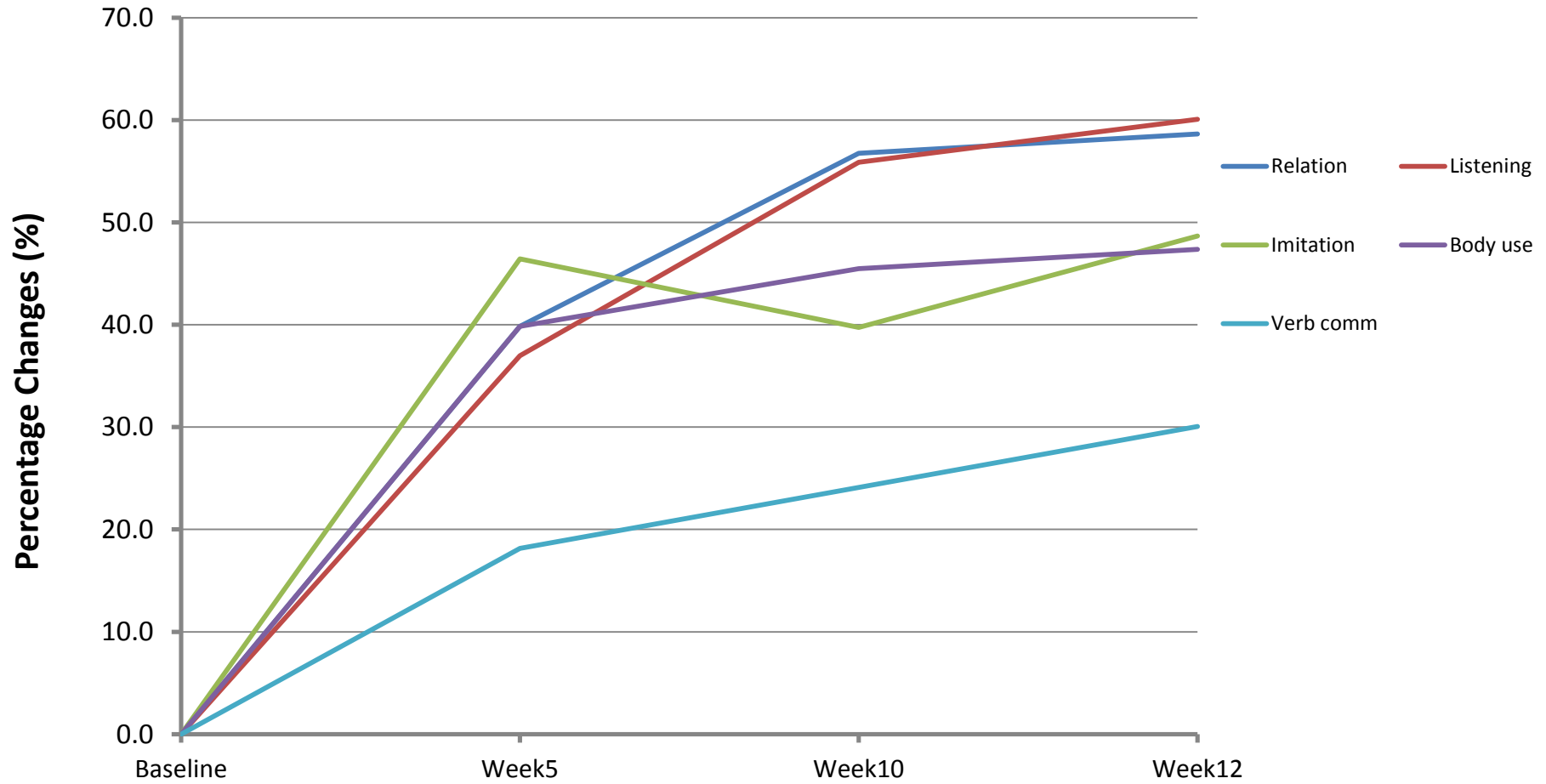
1. 28 children with ASD completed Phase I study and 17 of them completed Phase II study.
2. 1 case was excluded from final analysis due to low CARS score at baseline
3. Age: 7.2 ± 2.3 years old
4. Gender: 4 girls, 23 boys
5. Clinical symptoms improved significantly in the double blind trial phase in MRT group while Sham group remained unchanged
6. Clinical symptoms continued to improve in both groups during the open label MRT treatment
7. 4 cases showed increase in excitement during the first week of treatment and subsided automatically
8. No SAE in any study subject
9. Visible EEG improvement (Data will be analyzed separately)



ASD Symptom Change following MRT Treatment



Most Noticeable Improvement in ASD Symptoms



Improvement in Sleeping, Concentration and Decrease in Anxiety

