

Supplemental Material S4. Detailed summary of auditory-perceptual ratings of motor speech impairment.

Group	Case	Syndrome dx	SIT score (%)	Overall MSI severity	AOS severity	Dysarthria severity	Auditory-perceptual MSI predominance (AOS ⁺ , Dys ⁺) ^a	Salient motor speech features ^b
MSI–	1	lvPPA	100	0.75	1	0	—	slowed rate, syllable segregation, sequencing difficulty, speech initiation difficulty
	2	lvPPA	99	0.25	0.25	0	—	syllable segregation
	3	lvPPA	98	0.25	0.25	0	—	slowed rate, speech initiation difficulty
	4	lvPPA	95	1	1	0.5	—	inconsistent sound distortions, sequencing difficulty
	5	lvPPA	98	1	1.5	0.5	—	inconsistent sound distortions, sequencing difficulty, syllable segregation
	6	lvPPA	96	0.25	0.25	0	—	inconsistent sound distortions, sequencing difficulty, speech initiation difficulty
	7	lvPPA	92	0.5	0.75	0	—	slowed rate, speech initiation difficulty, syllable segregation, voice quality
	8	lvPPA	99	0.75	1.25	0.5	—	slowed rate, sequencing difficulty, speech initiation difficulty, other prosodic
	9	lvPPA	95	1.5	1.5	0.5	—	slowed rate, inconsistent sound distortions, speech initiation difficulty
Group Mean (SD), MSI–			97.1 (2.6)	0.69 (0.49)	0.86 (0.64)	0.22 (0.43)	—	Top 5 features (in order) ^c : difficulty sequencing, slowed rate, inconsistent sound distortions, speech initiation difficulty, syllable segregation
MSI+	10	PPAOS	91	0.75	0.5	0.75	Dys ⁺	slowed rate, consistent sound distortions consistent, insufficient breath support, prosodic abnormalities
	11	nfvPPA	94	1.5	1.5	0.5	AOS ⁺	slowed rate, inconsistent sound distortions, syllable segregation
	12	CBS	71	2	2	0.25	AOS ⁺	slowed rate, inconsistent sound distortions, speech initiation difficulty, syllable segregation
	13	PSP	97	0.25	0.25	0	AOS ⁺	sequencing difficulty, syllable segregation
	14	nfvPPA	94	0.75	0.75	0.25	AOS ⁺	slowed rate, inconsistent sound distortions, speech initiation difficulty, voice quality
	15	PSP	5	3	0	3	Dys ⁺	slowed rate, speech initiation difficulty, prosodic abnormalities

	16	PPAOS	100	1.5	1	0.75	AOS ⁺	slowed rate, speech initiation difficulty, syllable segregation, other prosodic, voice quality
	17	PPAOS	98	1	1	0.5	AOS ⁺	slowed rate, inconsistent sound distortions, sequencing difficulty, syllable segregation, other prosodic
	18	PPAOS	96	1	0.75	0.75	=	inconsistent sound distortions, consistent sound distortions, respiratory difficulty, sequencing difficulty, speech initiation difficulty, syllable segregation
	19	CBS	71	3	2.5	3	Dys ⁺	slowed rate, consistent sound distortions, respiratory difficulty, speech initiation difficulty
	20	nfvPPA	2	3	1.5	3	Dys ⁺	slowed rate, consistent sound distortions, nasality, syllable segregation
Group Mean (<i>SD</i>), MSI+			74.3 (36.6)	1.61 (1.01)	1.07 (0.81)	1.18 (1.19)	—	Top 5 features (in order) ^c : slowed rate, syllable segregation, speech initiation difficulty, inconsistent sound distortions, consistent sound distortions
<p>Overall MSI Severity, Apraxia Severity, and Dysarthria Severity are rated according to the following rubric:</p> <p>0 = Normal/no impairment</p> <p>0.5 = questionable/very mild impairment</p> <p>1 = mild impairment</p> <p>2 = moderate impairment</p> <p>3 = severe impairment</p> <p>See Supplemental Material S2 for full operational description of each category. Summary ratings in table are averages across 2 raters.</p>								

^aPredominant impairment based on independent auditory-perceptual ratings, rated for the MSI+ group only. Predominance determined from a ratio of mean (across 2 SLP raters) scores for AOS:Dysarthria severity. “AOS+” (i.e., mean rated severity AOS > Dys) indicates predominant apraxic impairment; “Dys+” (i.e., mean rated severity Dys > AOS) indicates predominant dysarthric impairment; “=” (i.e., mean rated severity AOS = Dys) indicates no predominance of either apraxia or dysarthria.

^bIndividual, prespecified features (e.g., slowed rate, consistent sound distortions) were rated per patient as present/absent by clinician raters. Features listed as “salient” are those indicated as present by at least 1 rater.

^cTop features defined by ranking of total sum of “present” ratings per feature across both raters for the MSI–, MSI+ groups.