Supplemental Material S7. Narrative summary of the included studies with speech production as outcome measure for which we did not obtain IPD.

Study	*N*	Narrative summary
Albery & Enderby, 1984	46	Investigated the efficacy of intensive speech therapy (*n* = 25) vs conventional weekly therapy (*n* = 21). Speech production was measured via the Edinburgh articulation test. On a *mean* level, speech production of those receiving intensive speech statistically significantly improved, but not to a peer-level. Those receiving conventional therapy did not improve substantially. We were not able to judge whether any individual improved to a clinically relevant degree.
Alighieri, Bettens, Bruneel, Sseremba, et al., 2020 *	8	Investigated short, intensive SLT for patients with CLP in Uganda. Speech production was measured as PCC. The authors concluded that the intervention was effective based on a statistically significant median change between *pre*- and *post*-intervention. We were not able to judge whether any individual improved to a clinically relevant degree. Also, individuals possibly overlapped between this study and (Alighieri et al., 2019; Luyten et al., 2016).
Alighieri, Bettens, Bruneel, D'haeseleer, et al., 2020 *	14	Investigated 10 hours of speech therapy divided over two weeks. Speech production was measured as PCC. The authors concluded that the intervention was effective based on a statistically significant mean change between *pre*- and *post*-intervention. We were not able to judge whether any individual improved to a clinically relevant degree.
Chisum et al., 1969	11	Investigated the efficacy of a six-month period of speech remediation. Speech production was measured on articulation tests. The authors concluded that the intervention was effective based on a statistically significant reduction in *mean* articulation errors between *pre*- and *post*-intervention (but articulation was, after intervention, on *average* not on peer-level). We were not able to judge whether any individual improved to a clinically relevant degree.
Ha, 2015 *	17	Investigated a parent-implemented intervention program for very young children (13 to 23 months). *Some* speech production measures were significantly better at *post* therapy than a control group (Mann-Whitney U tests). However, some speech production measures (e.g., compensatory misarticulations) cannot be informative at such a young age. We were not able to judge whether any individual improved to a clinically relevant degree.
Hardin-Jones & Chapman, 2008	10	Retrospective comparison of children with and without CLP and who had received, or had not received, SLT. Speech production was measured as PCC. Comparing the children with CLP who received SLT *pre*- and *post*-intervention, they produced *on average* slightly more correct speech sounds after therapy. We were not able to judge whether any individual improved to a clinically relevant degree.
Pamplona et al., 2005 *	90	Investigated the efficacy of an intensive summer camp (*n* = 45) vs conventional weekly therapy (*n* = 45). Speech production was measured as severity of compensatory articulation. The authors concluded that both interventions were effective based on a chi-square test (the frequency of different severities of compensatory articulation covaried statistically significant with treatment). We were not able to judge whether any individual improved to a clinically relevant degree.
Pamplona et al., 2012 *	50	Investigated the efficacy of different techniques used in speech therapy. Speech production was measured as severity of compensatory

		articulation. The authors concluded that the intervention was effective based on a chi-square test (the frequency of different severities of compensatory articulation covaried statistically significant with treatment). We were not able to judge whether any improved benefitted to a clinically relevant degree.
Scherer et al., 2020 *	30	Investigated two SLT therapies in an RCT design. Speech production was measured as PCC. The authors concluded both therapies as effective based on statistically significant mean change scores. We were not able to judge whether any individual improved to a clinically relevant degree.
Sell & Grunwell, 1990	11	Investigated the efficacy of speech therapy for a group of adolescents with late cleft palate repair. On *average* speech production was better following therapy than before, especially for controlled speech (as opposed to spontaneous speech). We were not able to judge whether any individual improved to a clinically relevant degree.
Van Demark, 1971	11	Investigated the efficacy of conventional SLT. Speech production was measured as correct articulation on a number of articulation tests. The authors concluded that the intervention was effective based on statistically significant *mean pre-* to *post* improvement on articulation. We were not able to judge whether any individual improved to a clinically relevant degree.
Van Demark, 1974	36	Retrospective comparison of children with CLP who had received, or had not received, SLT. Speech production was measured as PCC on the Danish pressure test. The author concluded that the intervention was effective based on a statistically significant *mean pre-* to *post* change on PCC in the group who had received SLT (but PCC was, after therapy, on *average* not on peer-level). We were not able to judge whether any individual improved to a clinically relevant degree.

* We contacted authors to obtain IPD in these studies but were not able to.

References

Albery, L., & Enderby, P. (1984). Intensive speech therapy for cleft palate children. *British Journal of Disorders of Communication*, *19*(2), 115–124.

Alighieri, C., Bettens, K., Bruneel, L., D'haeseleer, E., Van Gaever, E., & Van Lierde, K. (2020). Effectiveness of speech intervention in patients with a cleft palate: Comparison of motor-phonetic versus linguistic-phonological speech approaches. *Journal of Speech, Language, and Hearing Research*, *63*(12), 3909–3933. https://doi.org/10.1044/2020_JSLHR-20-00129

Alighieri, C., Bettens, K., Bruneel, L., Sseremba, D., Musasizi, D., Ojok, I., & Van Lierde, K. (2020). Comparison of motor-phonetic versus phonetic-phonological speech therapy approaches in patients with a cleft (lip and) palate: A study in Uganda. *International Journal of Pediatric Otorhinolaryngology*, *131*, 109849. https://doi.org/10.1016/j.ijporl.2019.109849

Alighieri, C., Bettens, K., Bruneel, L., Vandormael, C., Musasizi, D., Ojok, I., D'haeseleer, E., & Van Lierde, K. (2019). Intensive speech therapy in Ugandan patients with cleft (lip and) palate: A pilot-study assessing long-term effectiveness. *International Journal of Pediatric Otorhinolaryngology*, *123*, 156–167. https://doi.org/10.1016/j.ijporl.2019.05.007

Chisum, L., Shelton, Jr., R. L., Arndt, Jr., W. B., & Elbert, M. (1969). The relationship between remedial speech instruction activities and articulation change. *Cleft Palate Journal*, *6*, 57–64.

Ha, S. (2015). Effectiveness of a parent-implemented intervention program for young children with cleft palate. *International Journal of Pediatric Otorhinolaryngology*, *79*(5), 707–715. https://doi.org/10.1016/j.ijporl.2015.02.023

Hardin-Jones, M., & Chapman, K. L. (2008). The impact of early intervention on speech and lexical development for toddlers with cleft palate: A retrospective look at outcome. *Language, Speech, and Hearing Services in Schools*, *39*(1), 89–96. https://doi.org/10.1044/0161-1461(2008/009)

Luyten, A., Bettens, K., D'Haeseleer, E., Hodges, A., Galiwango, G., Vermeersch, H., & Van Lierde, K. (2016). Short-term effect of short, intensive speech therapy on articulation and resonance in Ugandan patients with cleft (lip and) palate. *Journal of Communication Disorders*, *61*, 71–82.

Pamplona, C., Ysunza, A., Chavelas, K., Aramburu, E., Patino, C., Marti, F., & Morales, S. (2012). A study of strategies for treating compensatory articulation in patients with cleft palate. *Journal of Maxillofacial & Oral Surgery*, *11*(2), 144–151.

Pamplona, C., Ysunza, A., Patino, C., Ramirez, E., Drucker, M., & Mazon, J. J. (2005). Speech summer camp for treating articulation disorders in cleft palate patients. *International Journal of Pediatric Otorhinolaryngology*, *69*(3), 351–359. https://doi.org/0.1016/j.ijporl.2004.10.012

Scherer, N. J., Kaiser, A. P., Frey, J. R., Lancaster, H. S., Lien, K., & Roberts, M. Y. (2020). Effects of a naturalistic intervention on the speech outcomes of young children with cleft palate. *International Journal of Speech-Language Pathology*, *22*(5), 549–558. https://doi.org/10.1080/17549507.2019.1702719

Sell, D. A., & Grunwell, P. (1990). Speech results following late palatal surgery in previously unoperated Sri Lankan adolescents with cleft palate. *Cleft Palate Journal*, *27*(2), 162–168; discussion 174-165.

Van Demark, D. R. (1971). Articulatory changes in the therapeutic process. *Cleft Palate Journal*, *8*, 159–166.

Van Demark, D. R. (1974). Some results of speech therapy for children with cleft palate. *Cleft Palate Journal*, *11*(1), 41–49.