

## **SPEECH PERCEPTION BENEFITS FOR CHILDREN USING THE SPEAK SPEECH PROCESSING STRATEGY IN QUIET AND NOISE**

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The Speak speech processing strategy, based on the Spectral Maxima Speech Processor (SMSP) developed at the University of Melbourne, has now been implemented in the Spectra 22 speech processor developed by Cochlear Pty Limited, and clinical trials of both patients changing from the previous Multipeak strategy to Speak and patients starting up with Speak have been conducted. Results in adult patients changing to Speak have shown significant improvements in speech perception in quiet and particularly in background noise as compared with Multipeak. Preliminary studies with children changing from Multipeak to Speak strategy, measured over a 10 month period, have also shown significant benefits from use of the Speak scheme in both quiet and noisy test situations. Results of follow up studies of these children after more than one year experience with the Speak processing strategy are presented. Statistical analysis of performance over time suggests that an increase in benefit is observed in children after additional experience with the Speak processing strategy. In addition, results for children who have used only the Speak processing strategy from the time of implantation are also presented. The results confirm that the Speak processing strategy provides significant benefits in quiet, and particularly in the presence of background noise for both groups of patients.

*Group of Presentation: Assessment Procedures and Clinical Results*



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