Perspectives of the ASHA Special Interest Groups
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**EVIDENCE-BASED PRACTICE**

It is the position of the American Speech-Language-Hearing Association that audiologists and speech-language pathologists incorporate the principles of evidence-based practice in clinical decision making to provide high quality clinical care. The term *evidence-based practice* refers to an approach in which current, high-quality research evidence is integrated with practitioner expertise and client preferences and values into the process of making clinical decisions.

Participants are encouraged to actively seek and critically evaluate the evidence basis for clinical procedures presented in this and other educational programs.

_Adopted by the Scientific and Professional Education Board, April 2006_
INTRODUCTION

This Perspectives highlighted research on assessments of cochlear hair cells and middle ear function. We examined measurement techniques used to separate the transient-evoked otoacoustic emission (TEOAE) response from the stimulus, and discussed how the nonlinear differential and the double-source, double-evoked techniques affect TEOAE characteristics. The significance of measuring the short latency component of the TEOAE was discussed. We explored the effects of oxaliplatin, cisplatin, and carboplatin on objective and subjective high-frequency auditory measures in adults. We shared how distortion-product otoacoustic emission (DPOAEs) and ultra-high frequency, pure-tone audiometry can be used to obtain a more comprehensive hearing profile and treatment plan for adults receiving platinum chemotherapies. Finally, we reviewed standard single- and multi-frequency tympanometry measures and wideband acoustic immittance (WAI) measurements, including wideband energy reflectance and wideband absorbance tympanometry. Normative and pathological findings WAI findings were shared. More detailed middle-ear assessments can be used as a screening and a diagnostic tool for middle ear disorders and for newborn hearing screening. Audiologists should include otoacoustic emission testing and multifrequency and wideband tympanometry in their clinical “toolkits.”

LEARNING OUTCOMES

You will be able to:

- describe factors that contribute to the latency of transient-evoked otoacoustic emissions (TEOAEs)
- summarize the effects of oxaliplatin, cisplatin, and carboplatin on objective and subjective high-frequency auditory measures in adults
- explain how wideband acoustic immittance measurements are performed