

Bimodal Patients Are Thriving

New benchmark study reveals clinic growth opportunity
linked to bimodal hearing solutions



Clinical Evaluation of the Cochlear Nucleus C1532 Cochlear Implants in Adults

Study Synopsis

Participants: 13 Sites, 26 Surgeons, 37 Audiologists, 100 subjects

Purpose: To characterize the performance of the C1532 Cochlear implant in a group of adults and provide a current benchmark in CI hearing performance and recipient satisfaction

Format: Prospective nonrandomized, single subject, repeated-measures study in which each subject serves his/her own control

Primary Objective:

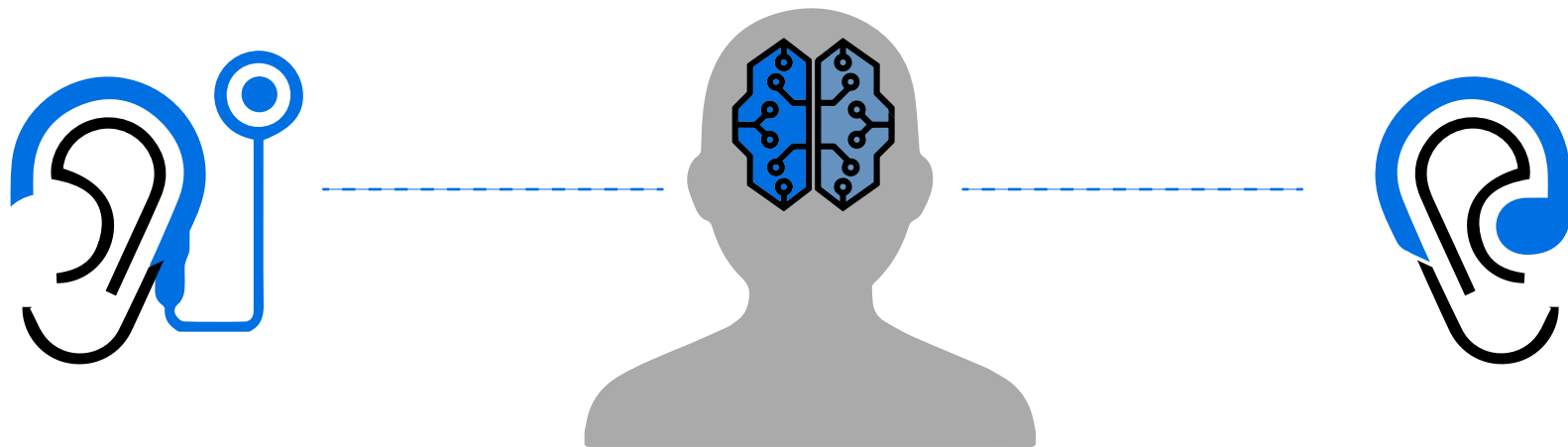
- **Group mean CNC word recognition in quiet** measured at **6 months** post sound processor activation compared to the group mean score in the preoperative, **best unilateral condition**

Secondary Objective:

1. **Group mean AzBio sentences in noise score** measured at **6 months** post sound processor activation compared to the group mean score in the preoperative, **best unilateral condition**
2. **Group mean Health Utility Index score (HUI)** at **6 months** post sound processor activation compared to the score measured preoperatively

Nucleus Smart Bimodal System

Up to 70% of CI users are bimodal¹



What is a Bimodal Solution



The **hearing aid** provides voicing and manner cues available through amplification of adequate acoustic low frequency hearing



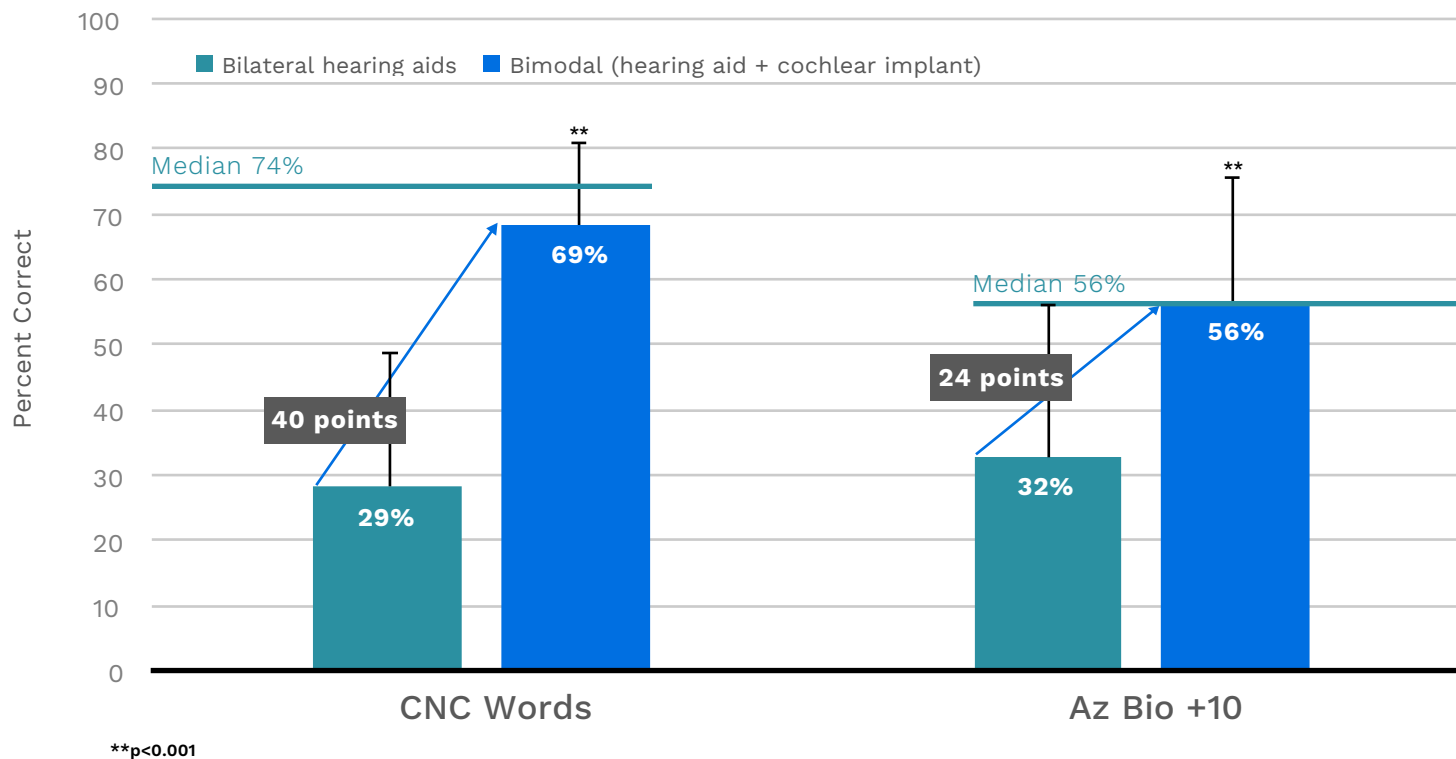
The **cochlear implant** provides enhanced perception of high frequency place cues that are crucial for speech discrimination by restoring hearing

Electric stimulation is critical for maximizing speech understanding

- Improved discrimination
- Complementary to information provided by the hearing aid

Speech Understanding with a hearing aid + cochlear implant

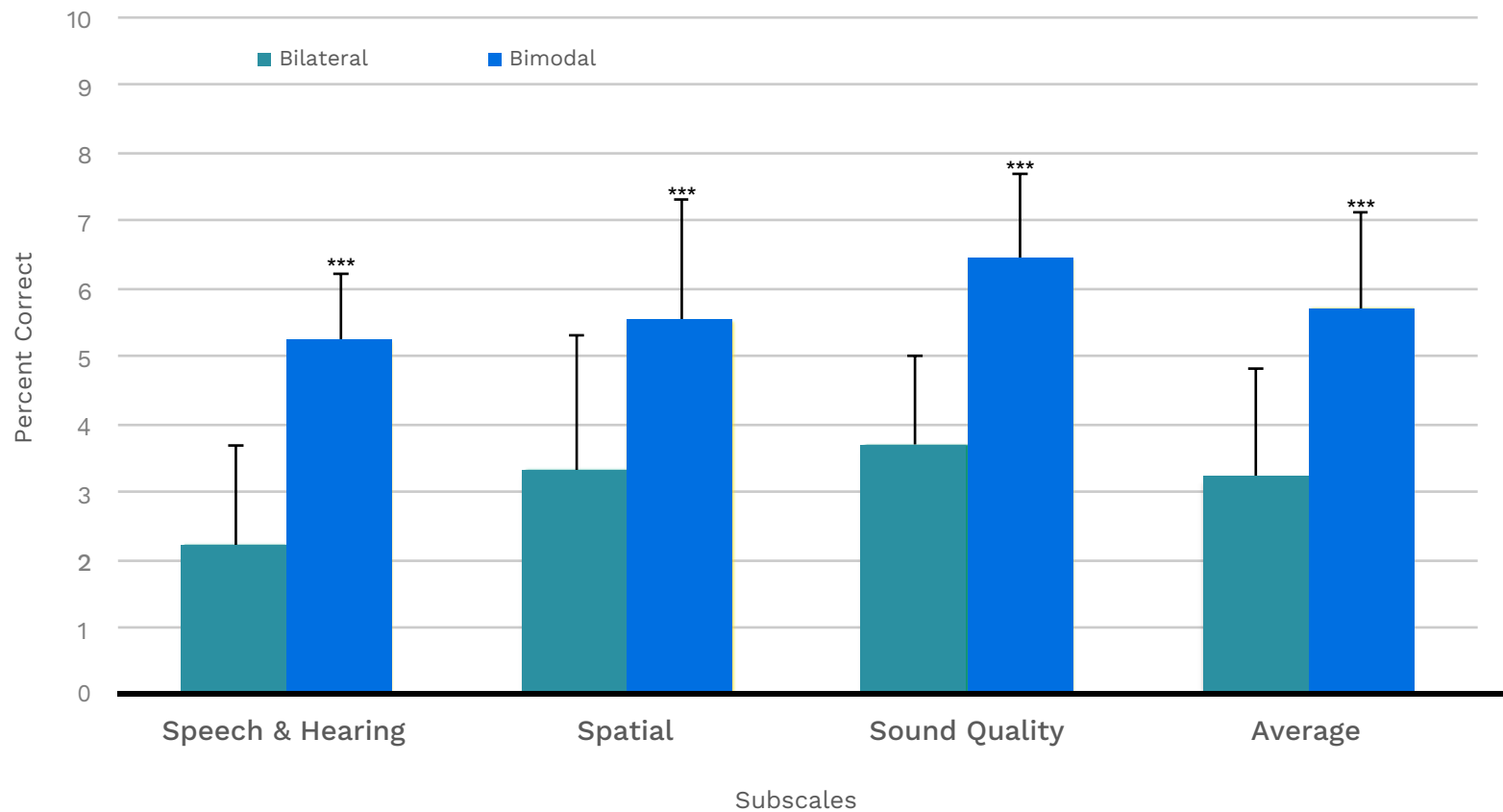
Speech perception significantly improved in both quiet and noise



Speech perception **SIGNIFICANTLY IMPROVED** in both quiet and noise

Patient Reported Hearing Disability

The Speech, Spatial and Qualities of Hearing Scale



**SIGNIFICANT
BENEFIT
ACROSS ALL
SUBSCALES**

95% were satisfied with their bimodal hearing solution when compared to hearing aids alone.¹



HEARING PERFORMANCE

Satisfied or Very Satisfied

Bilateral Hearing Aids
(Appropriately fit HAs)

Smart Bimodal

9%

95%



Ability to understand what is said on TV

13%

76%



Ability to understand conversations in a small group

8%

79%



Hearing performance in background noise

2%

58%



Ability to listen to and appreciate music

13%

68%



Ability to understand people on the phone

6%

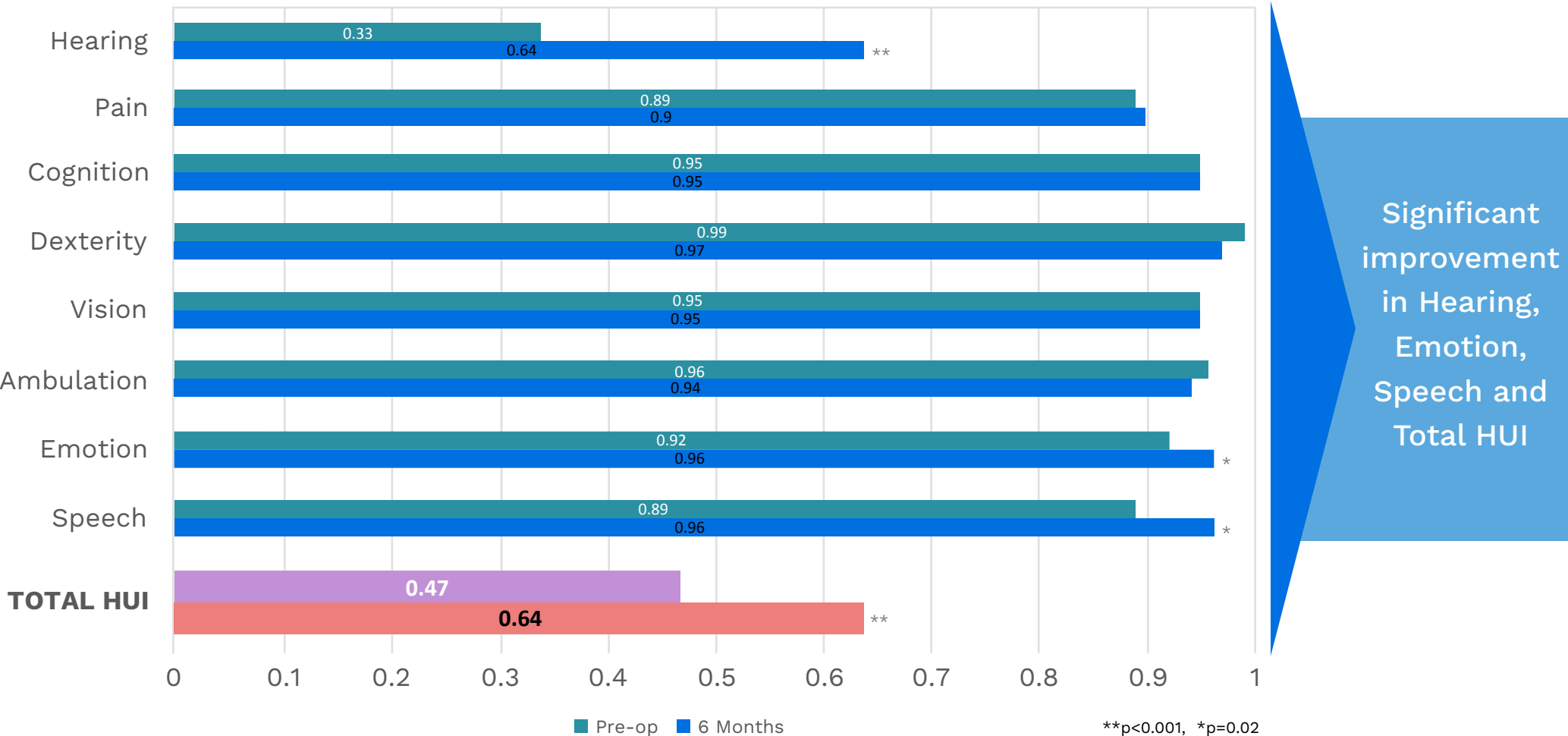
71%

1. Clinical Evaluation of the Cochlear Nucleus CI532 Cochlear Implants in Adults Investigator Meeting, 2019 Apr.

Quality of Life: HUI

The HUI3* is a validated, population-based health utility instrument that evaluates the domains of health as: hearing, vision, speech, emotion, pain, ambulation, dexterity, and cognition.

82% subjects demonstrated a clinically significant improvement from baseline



Summary: Patient Reported Outcomes



Significant improvement in quiet and noise

9 of 10 do significantly better in quiet
7 of 10 do significantly better in noise



Improved Patient Reported Quality of Life

83% improved their Health Utility Index



High Hearing Satisfaction

95% reported being satisfied or very satisfied
with overall hearing performance

Conclusions in adults with Severe to Profound Hearing Loss

1

Patients with PTA > 70dB should be considered candidates for a Bimodal hearing solution

2

Converting from bilateral HAs to Bimodal (CI+HA) results in significant improvements in:

- Satisfaction
- Speech performance
- Self-Perception of abilities

3

In order to better convey the importance of treating hearing loss, a clinical test battery should include SSQ12, QoL, hearing satisfaction and hearing performance metrics

The opportunity to grow:

- The vast majority of cochlear implant recipients want to continue to see their original audiologist
 - 95% of recipients were satisfied with their bimodal hearing solution when compared to bilateral hearing aids
 - 83% reported a statistically significant improvement in quality of life after receiving a cochlear implant
-

Benefits to your practice:

- Patient Retention: Continue to fit and upgrade the patients' hearing aids
- Increased Referrals: Highly satisfied patients refer more friends and family
- Competitive Advantage: Differentiate your practice by supporting the full spectrum of hearing loss

Resource for Candidacy Evaluation



Hearing Loss Continuum:

When to Consider a Cochlear Implant Evaluation for Adults*

Cochlear™ Nucleus® System

Hearing

PTA (0.5, 1, 2 kHz) greater than 70dB¹

Understanding

Aided Speech Discrimination less than 50%

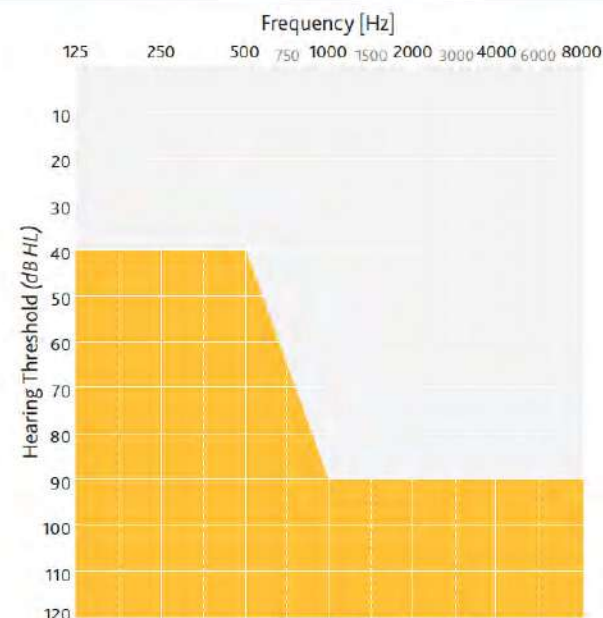
Interacting

Does your patient:

- Struggle on phones with unfamiliar speakers
- Often ask people to repeat themselves
- Withdraw from social events
- Return frequently for hearing aid adjustments

If your patient meets any of the criteria above, consider referring the patient for a full cochlear implant evaluation. Find a local clinic here:

www.Cochlear.com/US/hearingspecialist



©2019 Cochlear Limited. All rights reserved. Trademarks and registered trademarks are the property of Cochlear Limited.

* This provides a recommendation of when an adult may be referred for a cochlear implant evaluation, but does not guarantee candidacy based on indications. (Only for adults)

1. Gates, G. A., & Hoffman, H. (2017, December 20). What the Numbers Mean: An Epidemiological Perspective on Hearing. Retrieved from <https://www.nidcd.nih.gov/health/statistics/what-numbers-mean-epidemiological-perspective-hearing> FUN3498 ISS2 JAN19



Cochlear™

Connect with Cochlear to find out
how you can become a part of
The Cochlear Provider Network
to support The Continuum of Care.

[**Learn More**](#)