Cochlear™ Baha® 4 Systems Overview
More possibilities for a lifetime of better hearing
Cochlear™ Baha® 4 Systems

More possibilities for a lifetime of better hearing

- Mini Microphone
- Phone Clip
- Remote Control
- TV Streamer
- Fitting Software 4.0

Baha 4 Sound Processor
Smarter hearing – wireless freedom

Baha 4 Attract System
Invisible link to better hearing

Baha 4 Connect System with DermaLock
Proven hearing performance with soft tissue preservation

Baha BI300 Implant
Strong foundation
Cochlear™ Baha® BIA400 DermaLock Implant and Abutment

Proven hearing performance with soft tissue preservation
It’s all in the surface

DermaLock™

TiOblast™
**Cochlear™ Baha® BIA400 Series implants**

- **Wider diameter designed for increased primary stability.**
- **3 mm implant with conical shaped TiOblast™ surface technology for stronger and faster osseointegration.**
- **Small sized threads at the implant neck for optimal load distribution at the marginal bone level where peak stresses occur.**
- **Tight connection between implant and abutment to reduce soft tissue reactions.**

**TiOblast™ surface technology** for stronger and faster osseointegration.
2010
The Cochlear™ Baha® 3 System set new standards for implant stability and loading time.

2012
Cochlear™ Baha® DermaLock™ Abutment (BA400) is specifically designed and approved for soft tissue preservation.
DermaLock - 80% reduction in pocket depth

The pre clinical study concludes that the hydroxyapatite coated abutment can be used to stabilise soft tissue when performing surgery with soft tissue preservation.¹

DermaLock - Unique ability to integrate with soft tissue

Conventional titanium abutment

DermaLock™ Abutment
DermaLock - Good clinical outcomes

- More than 1,500 patients worldwide successfully treated
- Clinical experiences reported by several teams at Osseo in Newcastle:
  - Study on 190 subjects in the US reported Holgers 0-1 in 94% of patients
  - Good outcomes were reported using straight incision offset to implant site as well as alternative incisions including punch only techniques
  - Good cosmetic results, shorter surgery times, faster healing, less post-operative problems and less clinic visits reported from several studies

4. Wróbel M, Gawęcki, Borucki L, Pastusiak T, Szyfter W. Clinical evaluation of a new concept of the percutaneous bone conduction system with respect to surgical technique and design of the abutment. Poster presentation at Osseo 2013, Newcastle, UK.
Benefits of Baha® DermaLock™ Technology

The only abutment specifically designed and approved for soft tissue preservation.

- Unique DermaLock technology
- Concave shape
- TiOblast™ surface for rapid osseointegration
- Better Cosmetics
- Faster Healing
- Up to 50% reduction in surgery time
- 2 weeks fitting
Cochlear™ Baha® 4 Attract System

Invisible link to better hearing
Sets new standards for transcutaneous solutions

No skin penetration

A leap in hearing performance*

Wearing comfort and reliable retention

Straightforward surgical procedure

*compared to a conventional transcutaneous system
Invisible link to better hearing

Cochlear™ Baha® 4 Attract System

Strong foundation with the BI300 Implant.

The BIM400 Implant Magnet for an invisible link to better hearing.

SP Magnets with the unique Baha SoftWear™ Pad ** for comfort and reliable retention.

Advanced sound processors portfolio.
The Baha Attract 4 System gives up to 24 dB better sound transmission than the conventional transcutaneous system.¹

Our powerful and advanced sound processor technology increase transmission of sound with approximately 9 dB (blue) compared to the conventional transcutaneous systems.¹

The single-point sound transmission through the osseointegrated BI300 Implant and a large contact area between the SP magnet and skin increases the efficiency even further. It adds approximately 15 dB (yellow).

¹. Pair wise Comparison of Passive TBaha with Softband, Sophono’s system and TBaha with Sophono’s magnet on cadaver heads, March 8 2013
Good hearing performance

- Significantly improved **speech recognition in noise** compared to the unaided situation and compared to the sound processor on a Softband.

Design for optimal wearing comfort

Rigid sound processor magnet

Baha Attract System with Baha SoftWear™ Pad

Uneven load distribution\(^1\) with a rigid sound processor plate can cause soft tissue discomfort and complications.

Optimal load distribution\(^1\) with unique Baha SoftWear™ Pad enables better wearing comfort and less risk of skin irritations.

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Wearing comfort

- All patients are successful wearers of the device after 3 months

- The patients used the device on average 7 hours per day \((SD \ 3 \ h/day, \ range \ 3-14 \ h/day)\)

- Overall good pain scores

- Post-operative numbness reduces over time

<table>
<thead>
<tr>
<th>Wound healing</th>
<th>Week 4 Loading</th>
<th>Week 6</th>
<th>Week 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>No numbness</td>
<td>10</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Numbness within 2 cm</td>
<td>9</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>Numbness within and beyond 2 cm</td>
<td>8</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Smarter hearing – wireless freedom
Cochlear™ Baha® 4 Systems

Ardium™ — our new, intelligent platform

- New chip: three times faster, and with eight times more on-board memory
- PureSound iQ signal processing
- 2.4 GHz wireless connectivity
Cochlear™ Baha® 4 Systems

Baha PureSound™ iQ - Superior sound quality

- Dual Track Feedback Manager
- Natural Sound Resolution
- Scene Classifier
- Active Balanced Directionality
- Noise Manager II
- Data logging
- Outdoor program with WindShield
In blind patient testing, 90% of patients preferred the Baha® 4 Sound Processor compared to the previous generation Baha® 3 Sound Processor (BP100).¹

Cochlear™ Baha® 4 Systems

True wireless — no strings attached

Easy to use
Discreet and easy to use accessories without the burden of a neck-worn device.

Robust connections
Clear and secure audio directly to the sound processor through Cochlear 2.4 GHz technology.

Clean, crisp sound
Outstanding sound quality with minimal latency for perfect lip sync.
Patient test – improved hearing in noise

Summary

• The Baha 4 Sound Processor gives the patient access to our most advanced signal processing benefits and a truly wireless connection

• The DermaLock technology facilitates soft tissue preservation and several studies show good clinical outcomes

• The Baha Attract System will provide a transcutaneous solution providing a leap in hearing performance

• The Baha 4 Systems provides more possibilities to connect patients to hearing as well as a migration path for the future, all based on the same proven implant
Hear now. And always
Ardium™—our new, intelligent platform

- New chip: three times faster, and with eight times more on-board memory
- 2.4 GHz wireless connectivity
- PureSound iQ signal processing

Cochlear™ Baha® 4 Systems