

William Demant



Hearing Implants

Jes Olsen

President, Hearing Implants



Jes Olsen

President, Hearing Implants

Curriculum

- Born 1960
- B.Sc. in electronic engineering and electroacoustics
- Employed with the William Demant Group since 1986
- General Manager, Oticon AB, Stockholm 1993-1996
- Various senior management roles in Oticon, including Vice President of R&D, 1997-2008
- President, Hearing Implants since 2008



Agenda

- Hearing implant market
- Our hearing implant journey
- Our strategic ambition
- Technology, innovation and products
- Roadmap principles
- Global distribution
- Q&A

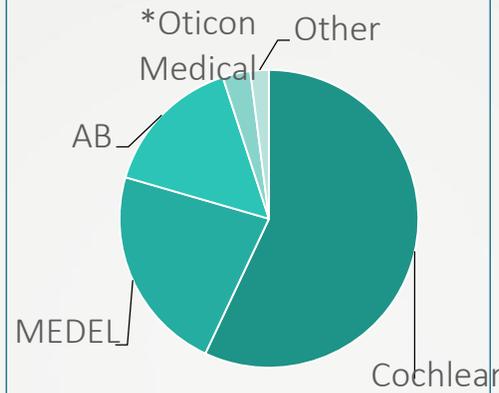
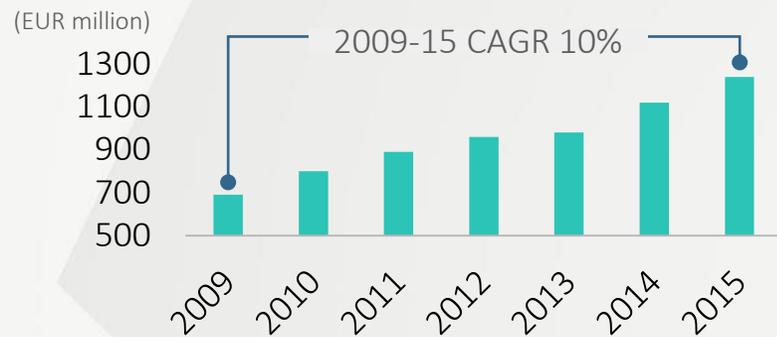


Hearing implant market

Strong fundamental growth drivers



Cochlear implant (CI) market



2.5%

of all aged 75+ have a hearing loss that qualifies them as CI candidates

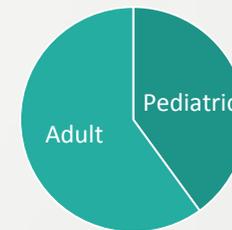


130K+ potential new CI candidates per year with severe/profound hearing loss



Growth drivers

Education, reimbursement, new indications, new markets, innovation, ageing population



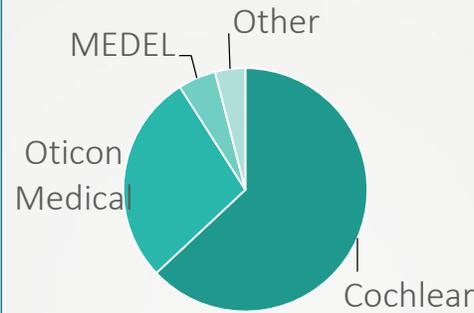
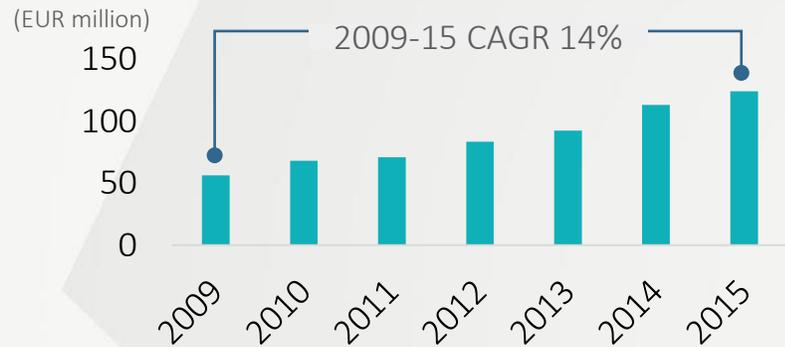
40/60 split between paediatrics/adults in a market of ~55K implantations per year



Total market size of EUR 1.2bn and estimated annual growth rate of 10-12%

*Oticon Medical is present in a limited part of the global CI market and has only recently been approved to sell in several key European markets.

Bone-anchored hearing systems (BAHS) market

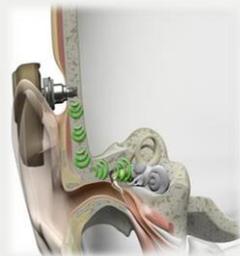


~5%

Penetration rate and only approx. 25K implantations per year

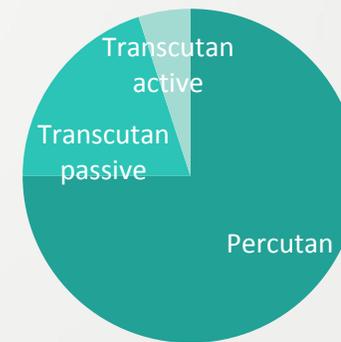


150K+ users across the world and fastest growing hearing implant segment

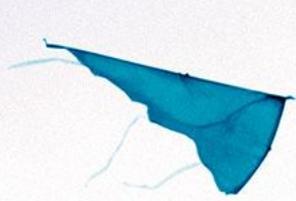


Growth drivers

Education, awareness, reimbursement, innovation, cosmetics



Total market size of EUR 125m and estimated annual growth rate of 10-15%



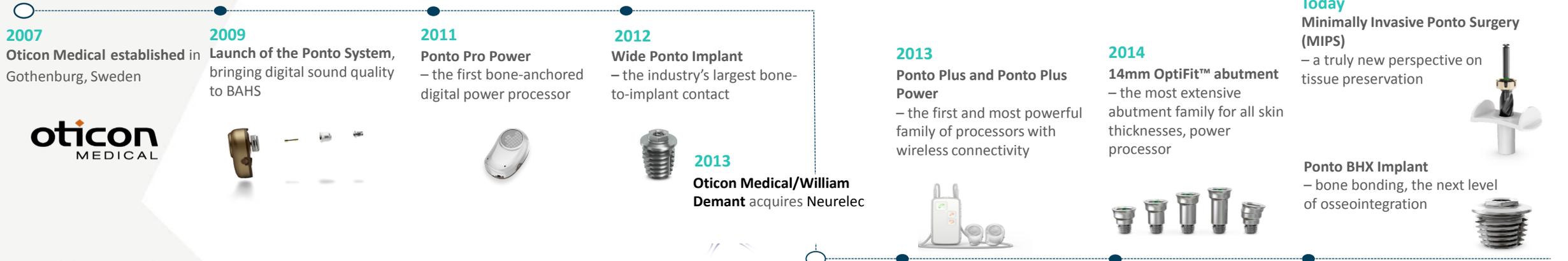
William Demant Hearing Implants

Journey and strategic ambition



William Demant's hearing implant journey

Bone-anchored hearing systems (BAHS)



Cochlear Implant Systems (CI)



Our strong position

Long-term ambition of becoming a leading hearing implant company

William Demant Group synergies

- The power house of hearing
- Research capabilities
- Technological power and clinical support tools
- Financial strength and global distribution
- Patient support

Strong know-how to create new growth

- Century-long history in sound processing and audiology
- Three decades of cochlear implant experience
- Decades of bone-anchored experience in the organisation
- Successful track record and experienced senior management team

William Demant's Hearing Implant organisation

Strong and complementary local competencies

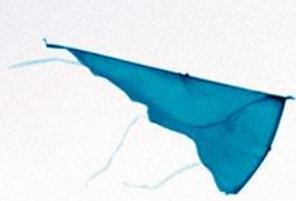
Nice

- Neuro stimulation and CI audiology
- Hearing implant technology
- Class 3 manufacturing and OC
- Audiology and signal processing
- Design of externals and micro mechanics
- Fitting software, firmware and usability
- BAHS implant technology
- BAHS audiology
- Vibrator technology

Copenhagen

Gothenburg





Technology and innovation

Product update and roadmap principles



CI Neuro update

Designed for a future of sound

- 130+ patients in more than 10 countries
- Excellent feedback from surgeons
- Good audiological outcomes – even though it is still early days
- No implant failures after implantation
- No hardware design errors detected in neither implant nor BTE
- New fitting software and firmware with small improvements in fitting flow and usability released end of March
- Takes time because of training, monitoring and new clinics



CI Neuro Zti

The receiver

- Overall Impression
 - Ergonomics: 9.0/10
 - Ease of use: 9.0/10
 - Compactness: 9.0/10
 - Profile/Height: 8.9/10
- General design highly appreciated
- Everybody really appreciated
 - The compactness of the device (small surgical footprint and low height)
 - The general ergonomics of the device
 - The ease to handle and insert under the skin
- The average mark for the ergonomics is currently 9.0/10, equivalent to very good



CI Neuro Zti

Fixation screws

- Evaluation details
 - Stabilisation of the receiver on the skull: 8.9/10
 - Ease of use: 10/10
 - Efficiency: 9.3/10
- Surgeons very much appreciated the screw fixation system
 - Rated as being easy to use, very convenient, easily and efficiently stabilising the receiver on the surface of the skull
- The average mark of the fixation system is currently a 9.39/10, equivalent to very good.



CI Neuro Zti

The EVO electrode array

- Overall impression
 - Lead: 7.9/10
 - Ease of insertion: 6.9/10
 - Softness: 7.2/10
- All surgeries were performed with the EVO electrode, and it is generally very well perceived
- The "lead" being rated as very good
- The softness of atraumatic arrays can sometimes be a challenge, playing on the ease of insertion; experience with the array plays a role
- The average mark for the EVO electrode array is currently a 7.38/10, i.e. equivalent to good



CI end-user stories

Neuro CI user after activation and first experiences



"I'm able to answer my grandchildren's many questions and can keep up with their conversations, even though they tend to go off in all directions."

- Karin Christiansen, Neuro CI, left

"One month after it was fitted, my boyfriend read to me from a book and I listened – just with the cochlear implant – and I could understand it! I remember thinking, why on earth has he chosen that book?"

"The cochlear implant had a huge impact on my mental well-being. I insist on wearing my sound processor all the time."

"I can also focus better on speech, even if there's background noise, as the sounds don't run into each other."

*Video requires internet (link to YouTube)

CI roadmap principles

More competitive, step-by-step



Step #1 Getting the most important right

- A competitive, fully modern implant, Neuro Zti
- Competitive and innovative signal processing based on Oticon technology for highest possible outcomes, Neuro One



Step #2 Getting the important details right

- The world's smallest CI BTE, Neuro Two
- More choices of atraumatic electrodes
- Super user-friendly fitting software, Genie CI 1.0
- All accessories for full paediatric use



Step #3 Increasing the gap

- Velox in CI, the internet-connected CI system, CAP v2, the best CI speech performance and sound quality, full EAS functionality, BrainHearing in CI

Neuro 2 – the best sound ever designed

USB powered



17



IP 58



For all ages and situations

Swim kit
IP 68



Clip

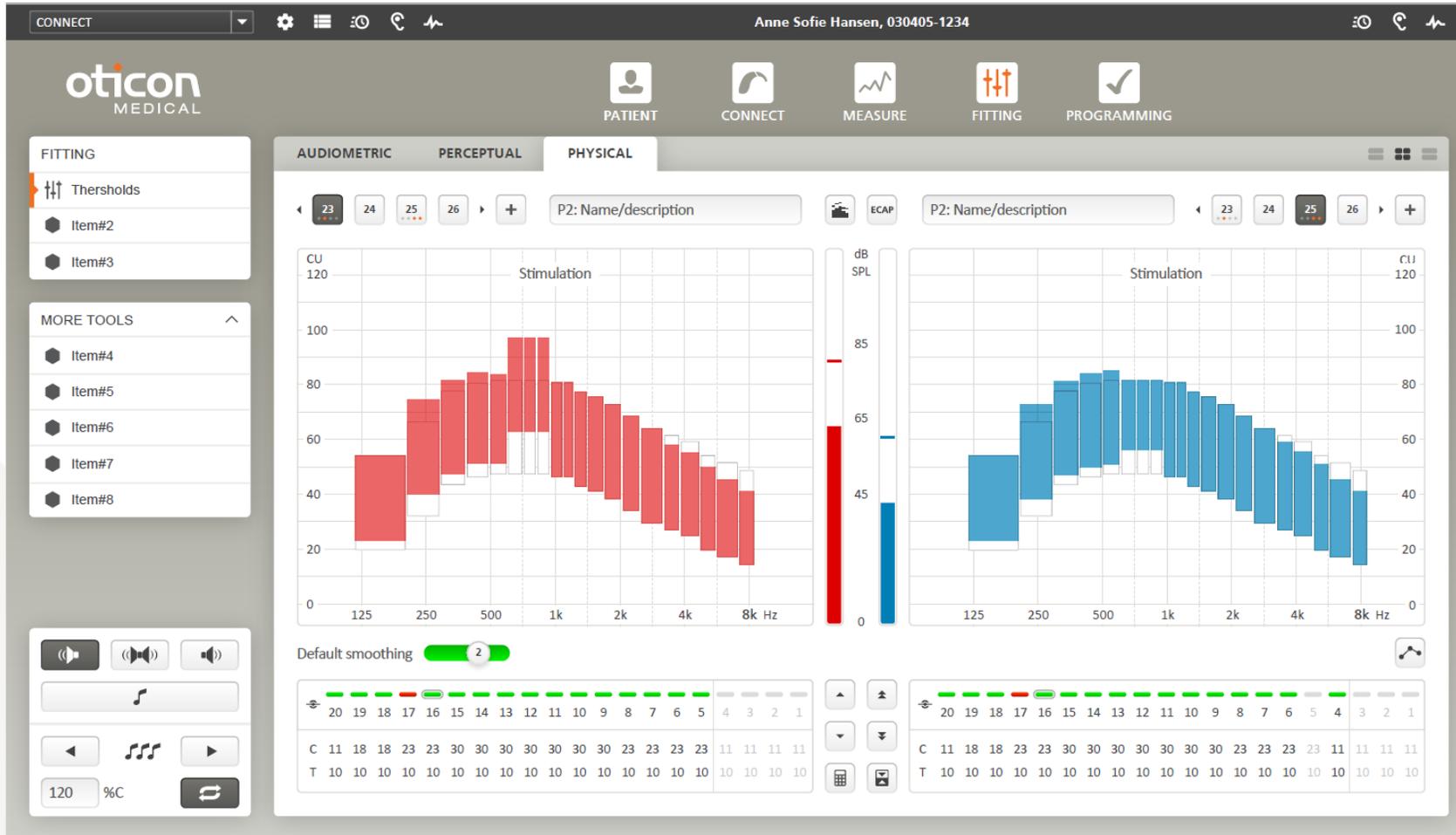


Ear plug retention kit



Safety line

The first Genie Oticon Medical CI



BAHS status

Constant improvements of what is already good

- MIPS
 - A truly new perspective on tissue preservation
 - Has the potential to become the future industry standard surgical method
- Ponto BHX implant
 - Is replacing our classic hearing implant faster than expected
 - Fuels growth because of higher price
 - Several clinical studies under preparation with leading clinics to document benefits in compromised bone and in paediatrics
- Abutment extender
 - Freedom of choice
 - No surgery
 - Seamless fit on existing abutment



BAHS roadmap principles

Three choices for optimum outcome

1

Percutaneous Direct transmission

- Most power and largest flexibility
- Well proven technology with known limitations
- Currently the golden standard of care

2

Active transcutaneous direct transmission

- Best cosmetics and higher patient acceptance
- Higher complexity and price
- Fewer skin complications

3

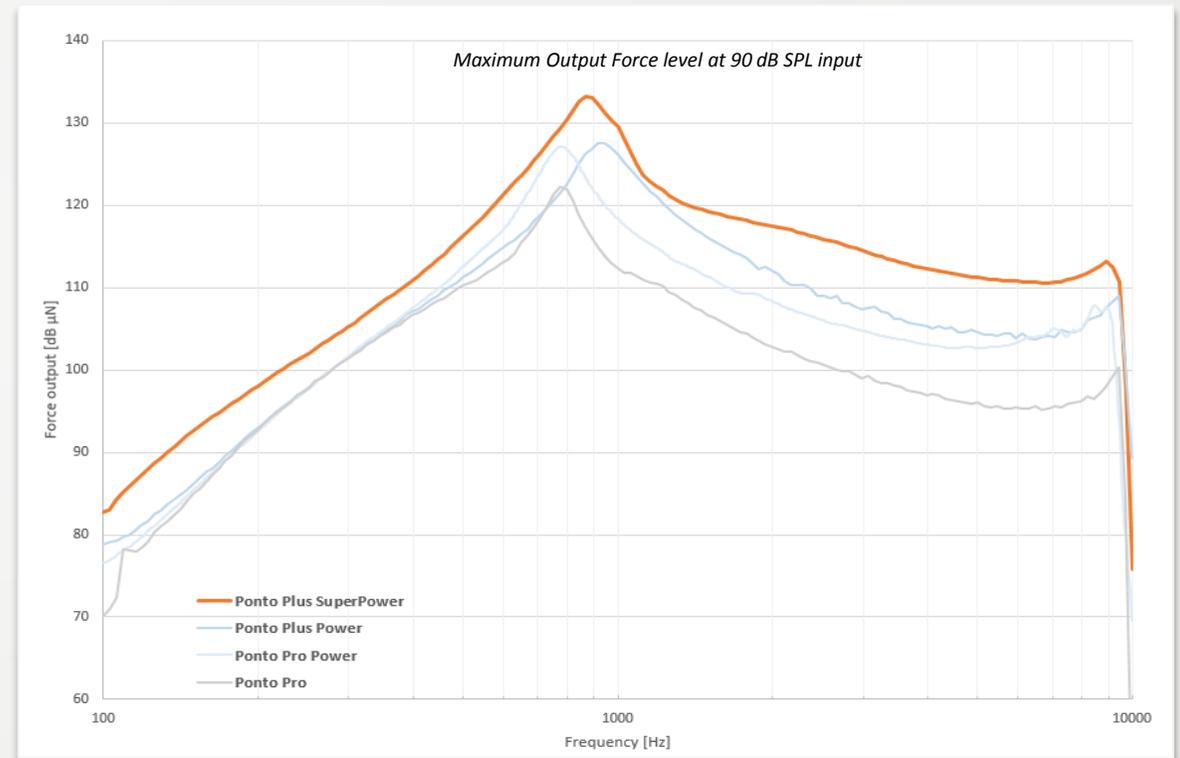
Non-surgical passive skin transmission

- Temporary use or where surgery is not wanted
- Known, but not well understood limitations
- Solely conductive losses

Ponto 3 Super Power

Super Power made beautiful

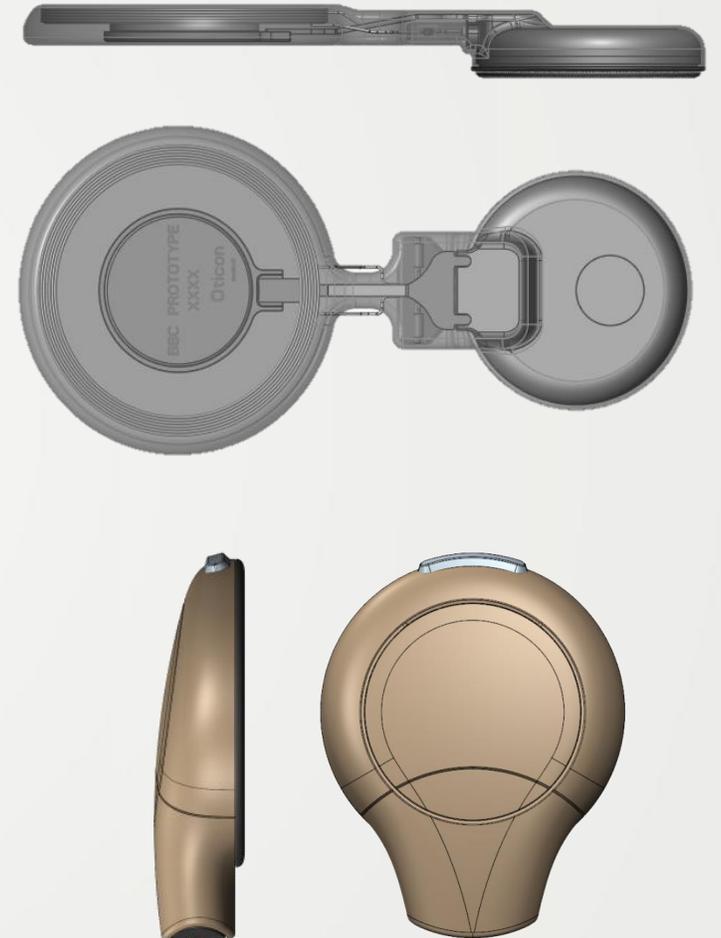
- The world's first abutment level Super Power sound processor
- Fitting range down to 65 dB HL (BC)
- Increased MFO across the entire bandwidth
- No strings attached
- Unique UltraDrive™ technology that boosts the signal to the vibrator
- Updated feedback management system to minimise the risk of feedback

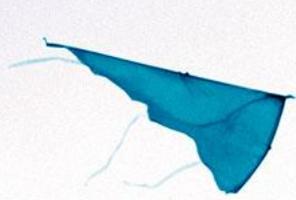


The bone conduction hearing implant

The solution for continuous strong growth of the BAHS Market

- No need for the penetrating abutment – maintains the Ponto sound quality
- Will open up the market for bone conduction solutions
- More invasive surgery
- Training and support
- Higher price





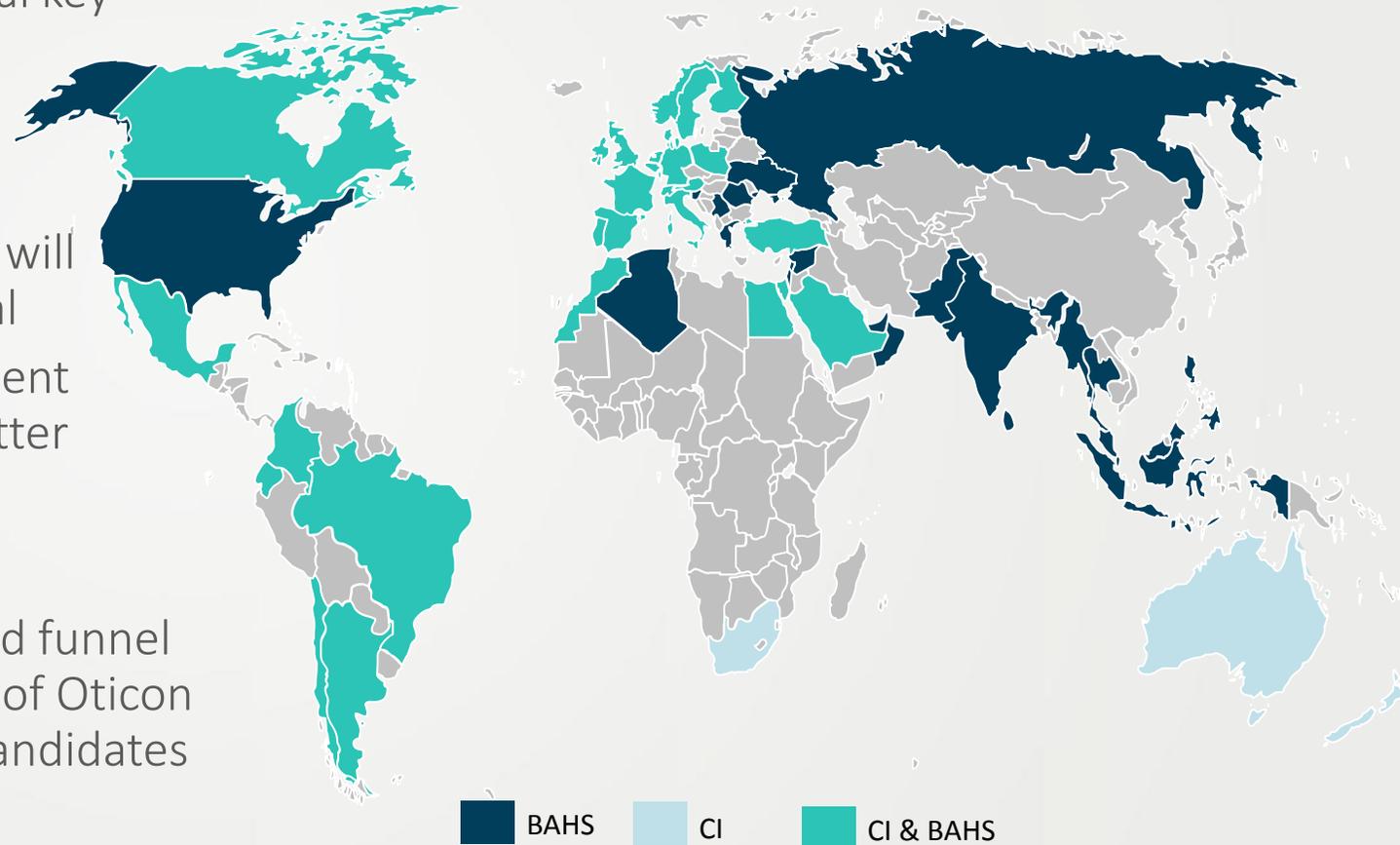
Global distribution

The core of managing a successful hearing implant business



Aiming for global presence

- Only limited global footprint with no access to US and China and just recently approved in several key European markets
- Wholesale
 - All William Demant sales companies and most William Demant distributors will become distributors for Oticon Medical
 - Dedicated experts and sales management provide strong and global coverage better than most competitors
- Retail
 - Identify hearing implant candidates and funnel them to the right experts – thousands of Oticon Super Power BTE users are potential candidates for hearing implants
 - Off load clinics by using retail offices as service centres for users





William Demant

Thank you