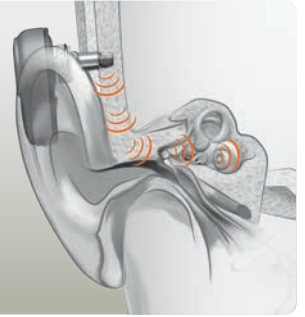


## Conductive or mixed hearing loss

### How bone conduction hearing works

The Ponto System uses the body's natural ability to transmit sound through bone to send auditory input directly to the cochlea, bypassing the outer and middle ear.



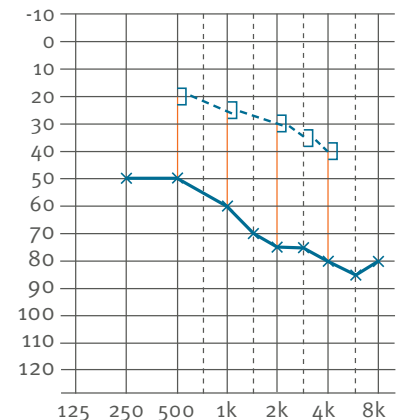
### Audiological indications

Studies suggest that candidates with an average air-bone gap larger than 30 dB experience significant advantages using a bone anchored solution compared to using an air conduction hearing aid.<sup>1</sup>

An average pure tone bone conduction threshold of the indicated ear that is better than or equal to 65 dB HL (measured at 0.5, 1, 2, and 3 kHz).

### Possible diagnoses:

- Chronic Otitis Media • Aural atresia and/or microtia • Cholesteatoma
- Congenital syndromes, such as Treacher-Collins and Goldenhar
- Ossicular disease • Traumatic injury to middle ear structures



### Ponto treatment benefits

- The sound signal bypasses the conductive component of the hearing loss, meaning that less amplification is needed compared to conventional hearing aids. This has a positive effect on the sound quality, and decreases the possibility of feedback.
- The ear canal remains completely open, providing better conditions for a dry ear.
- Ponto can be evaluated by the patient before surgery.
- The surgical procedure is simple, reversible and does not expose the patient to any risk of additional hearing impairment.

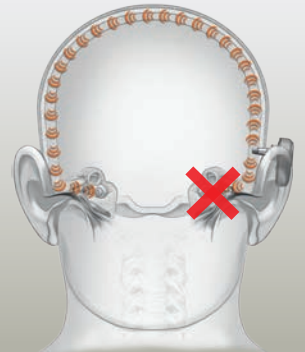
<sup>1</sup> De Wolf MJ et al. Better performance with bone-anchored hearing aid than acoustic devices in patients with severe air-bone gap. *The Laryngoscope* 2011; 121:613-16.

The information in this quick guide does not intend to replace the full Candidacy Guide. Please refer to the Candidacy Guide for more information, including contraindications and precautions.

## Single-sided deafness (SSD), profound unilateral sensorineural hearing loss

### How bone conduction hearing works

The Ponto System uses the body's natural ability to transmit sound through bone to allow sound received on the poorer side to be heard by the working cochlea on the opposite side.



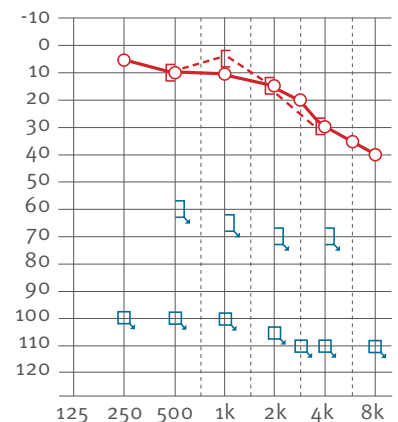
### Audiological indications

The hearing in the patient's better ear should be better than or equal to 20 dB HL (measured at 0.5, 1, 2, and 3 kHz).

Patients are considered SSD once it has been determined that their affected ear will no longer benefit from the amplification provided by a traditional hearing aid.

### Possible diagnoses:

- Acoustic neuroma tumor • Congenital unilateral sensorineural deafness
- Sudden unilateral deafness • Meniere's disease • Ototoxic drugs
- Surgical interventions resulting in unilateral deafness



### Ponto treatment benefits

- Fitting a bone anchored sound processor reduces the patient's head shadow effect, and improves speech intelligibility in noise.<sup>2</sup>
- No cables are needed for transmitting sound to the hearing cochlea, and only one device is needed, rather than two units as required for an air-conduction CROS system.
- The surgical procedure is simple, reversible and does not expose the patient to any risk of additional hearing impairment.

<sup>2)</sup> Wazen JJ, Spitzer JB, Ghossaini SN, Fayad JN, Niparko JK, et al. Transcranial contralateral cochlear stimulation in unilateral deafness. *Otolaryngology-Head & Neck Surgery* 2003; 129(3):248-54.