

PRIMUM NON NOCERE » FIRST DO NO HARM

# Advancing Cochlear Implant Surgery Beyond Human Capability

## REFERENCES

01. Kontorinis G, Lenarz T, Stover T, Paasche G. Impact of insertion speed of cochlear implant electrodes on the insertion forces. *Otol Neurotol.* 2011 32:565-570
02. Todt I, Mittmann P, Ernst A. Intracochlear fluid pressure changes related to the insertional speed of a CI electrode. *Biomed Res Int.* 2014;2014:507241
03. Kaufmann CR, Henslee AM, Claussen A, Hansen MR. Evaluation of Insertion Forces and Cochlea Trauma Following Robotics-Assisted Cochlear Implant Electrode Array Insertion. *Otol Neurotol.* 2020;41(5):631-638
04. Claussen AD, Shibata SB, Kaufmann CR, Henslee A, Hansen MR. Comparative Analysis of Robotics-Assisted and Manual Insertions of Cochlear Implant Electrode Arrays. *Otol Neurotol.* 2022;43(10):1155-1161. doi:10.1097/MAO.0000000000003707
05. Greene NT, Mattingly JK, Banakis Hartl RM, Tollin DJ, Cass SP. Intracochlear Pressure Transients During Cochlear Implant Electrode Insertion. *Otol Neurotol.* 2016;37(10):1541-1548.08
06. Banakis Hartl RM, Kaufmann C, Hansen MR, Tollin DJ. Intracochlear Pressure Transients During Cochlear Implant Electrode Insertion: Effect of Micro-mechanical Control on Limiting Pressure Trauma. *Otol Neurotol.* 2019;40(6):736-744. doi:10.1097/MAO.000000000000216409
07. Banakis Hartl, R. M., & Greene, N. T. (2022). Measurement and Mitigation of Intracochlear Pressure Transients During Cochlear Implant Electrode Insertion. *Otology & neurotology* : official publication of the American Otological Society, American Neurotology Society [and] European Academy of Otology and Neurotology, 43(2), 174-182. <https://doi.org/10.1097/MAO.0000000000003401>
08. iotaMotion Data on File

The iotaSOFT Insertion System is intended to aid the surgeon in placement of cochlear implant electrode arrays into a radiographically normal cochlea by controlling the speed of implant insertion. The iotaSOFT Insertion System is intended for use in cochlear implant patients ages 4 years and older during cochlear implant procedures using either a round window or cochleostomy approach.

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## Interested in learning more?

Ask your surgeon or audiologist today.

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hearing, advanced.®

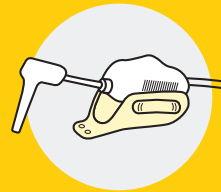
Cochlear Implants  
are Now Possible with  
**Robotic-Assisted  
Technology**

# Meet the iotaSOFT<sup>®</sup> Insertion System

Robotic-assisted technology gives you peace of mind in your cochlear implant surgery.



## Benefits of **Robotic-Assisted Cochlear Implantation**



### **Controlled Insertion**

Gives your surgeon precise control during surgery, beyond what a human hand can achieve.



### **Confidence in Outcomes**

Designed to preserve the delicate structure of your cochlea.



### **Latest Robotic Technology**

First and only robotic-assisted insertion system in the United States for cochlear implant surgery.

Why is a **slow insertion** important during a cochlear implant surgery?



Putting in the electrode array slowly and consistently, with robotic assistance, can help reduce damage to the cochlea.<sup>1-4</sup>



Quick and inconsistent electrode array insertions can expose the cochlea to pressure spikes similar to being exposed to an explosion.<sup>5-7</sup>

iotaSOFT is compatible with:

