MEDIA RELEASE

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Cochlear announces next phase in development of totally implantable cochlear implant technology

Sydney, 10 October 2018 (ASX:COH): Cochlear Limited today announced the next phase in its long-term research and development program towards a totally implantable cochlear implant, with the start of a further clinical feasibility study. The development of totally implantable cochlear implant technology is complex, and a commercially available product is not expected for years; however, it remains a long-term development goal for Cochlear.

For this next phase of research and development, a further clinical feasibility study has been initiated to evaluate the totally implantable cochlear implant technology. The single-site 11 patient study, will collect data associated with the performance and safety of totally implantable cochlear implant technology which can be used with and without an externally-worn sound processor to provide people with 24 hour hearing.[1] The objective of the study is to obtain preliminary evidence of the efficacy of the treatment and to collect additional safety data and compare clinical outcomes before and after an intervention.

The totally implantable cochlear implant technology used in the clinical feasibility study differs from existing Cochlear devices available today. The new technology being studied includes an implanted microphone, an implanted rechargeable battery, and an implanted sound processor. This means that the patients can choose between using an external sound processor, or taking it off and relying on the implanted microphone and internal sound processor, while still maintaining hearing function.

The study is being conducted in Australia and will be led by Principal Investigators Associate Professor Robert Briggs, The Royal Victorian Eye and Ear Hospital (surgical), and Professor Robert Cowan, The HEARing CRC (non-surgical).[1] This clinical feasibility study is expected to build on the initial clinical research conducted in 2005 with the first-generation investigational device, and will inform further technology development.

“A long-term goal of research in this area is to provide totally implantable cochlear implant technology that will enable people to hear with and without any externally worn components, helping them to have useful hearing 24 hours a day,” said A/Prof Briggs.

To date, Cochlear has been the only company that has reported studies of totally implantable cochlear implant technology.[2] Following an acquisition of implantable microphone technology in 2012, Cochlear has been able to further develop the investigational technology.

“Cochlear leads the industry in investing in research and development to innovate and transform the lives of those living with hearing loss. We have a history of collaborating with researchers, surgeons and audiologists to innovate and bring to market new hearing solutions,” said Jan Janssen, Chief Technology Officer at Cochlear. “Totally implantable cochlear implant technology is an exciting area of product development for Cochlear. However, we remain in the very early stages, and given the

remaining technical, clinical and regulatory requirements, the technology is not expected to be commercially available for years."

Currently available Cochlear products, such as the world's first made for iPhone cochlear implant sound processor – the Nucleus® 7 Sound Processor – and the off-the-ear Nucleus Kanso® Sound Processor, paired with the industry's most reliable implants,[3] continue to be market-leading, high-quality, and available to eligible people living with disabling hearing loss.

"Cochlear implants provide significant benefit for people with severe to profound hearing loss. Anyone with hearing loss who is considering a cochlear implant today should not delay accessing treatment now," said A/Prof Briggs. "Diagnosing and treating hearing loss is important. In adults, hearing loss is linked with greater unemployment, increased risk of poor health, depression and increased risk of other conditions including dementia."

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About Cochlear Limited (ASX: COH)
Cochlear is the global leader in implantable hearing solutions. The company has a global workforce of more than 3,500 people and invests more than AUD$160 million a year in research and development. Products include hearing systems for cochlear implants, bone conduction implants and acoustic implants, which are designed to treat a range of moderate to profound types of hearing loss.

Since 1981, Cochlear has provided more than 550,000 implantable devices, helping recipients of all ages, in more than 100 countries, to hear. www.cochlear.com

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