

## First blind patients in the UK has retina implant

May 3 2012

Retina Implant AG, the developer of subretinal implants for patients blinded by retinitis pigmentosa (RP), announced that the first UK patients participating in the Company's multi-centre trial have been successfully implanted. The UK trial is set to include 12 patients in total and is being led in London by Mr. Tim Jackson, a consultant retinal surgeon at King's College Hospital and Senior Clinical Lecturer at King's College London, and in Oxford by Professor Robert MacLaren, professor of Ophthalmology at the University of Oxford and a consultant retinal surgeon at the Oxford Eye Hospital.

Since receiving the wireless device in mid-April, the first patients in the UK trial are now beginning to experience restoration of 'useful vision' in daily life. The patients were able to detect light immediately after the microchip was activated. Further testing has shown that both patients are able to locate white objects on a dark background. Over the coming months, the patients will undergo further testing as they come to adjust to the microchip.

Mr. Tim Jackson and Professor Robert MacLaren commented: "We are excited to be involved in this pioneering subretinal implant technology and to announce the first patients implanted in the UK were successful. The visual results of these patients exceeded our expectations. This technology represents a genuinely exciting development and is an important step forward in our attempts to offer people with RP a better quality of life."



One of the first patients to be implanted, Robin Millar, a 60-year-old music producer from London, said: "Since switching on the device I am able to detect light and distinguish the outlines of certain objects. I have even dreamt in very vivid colour for the first time in 25 years, so a part of my brain which had gone to sleep has woken up! I feel this is incredibly promising for future research and I'm happy to be contributing to this legacy."

Retina Implant's subretinal implant technology has been in clinical trials for more than six years. Patients involved in Retina Implant's clinical trials have received a 3x3 mm(2) microchip with 1,500 electrodes implanted below the retina. Results from the Company's first human clinical trial published in Proceedings of the Royal Society B in November 2010 showed placement of the implant below the retina, in the macular region, provided optimum visual results allowing patients to recognise foreign objects and to read letters to form words. The second human clinical trial began in May 2010, in which patients were implanted with Retina Implant's new wireless device in Germany, indicated even better visual acuity. The multi-centre phase of this trial was expanded in late 2011 and now includes two additional sites in Germany, and the UK, as well as a site in China. In fact, Retina Implant announced today the first of three patients to be implanted at the University of Hong Kong Eye Institute has regained useful sight after receiving Retina Implant's microchip. Sites in Italy, Hungary and the U.S. are also under agreement to participate.

Data from the first nine patients implanted in Germany in this current trial indicate the best visual acuity to-date, with the majority of patients experiencing restoration of useful vision in daily life. The vast majority of patients are experiencing visual perception indoors and outdoors in both dim and bright environments. Additionally, patients have reported the ability to see objects 30 feet away and to read numbers on a pair of dice.



"The UK implants represent a significant milestone in Retina Implant's mission to restore vision to retinitis pigmentosa patients around the world," said Dr. Walter-G Wrobel, CEO of Retina Implant AG. "The Oxford Eye Hospital and King's College Hospital teams have done an excellent job and achieved exciting results. We look forward to continuing the momentum achieved in the trial thus far and to submitting for commercial approval when this phase of research is completed."

David Head, CEO of RP Fighting Blindness, added: "The completion of the first two <u>implants</u> in the UK is exciting and significant, and we congratulate Retina Implant AG and the two lead researchers on their progress. The success they've had in restoring functional vision brings hope to people who have lost all their sight as a result of RP. We very much look forward to hearing details from Professor MacLaren at our conference in June, and then to more results from across Europe in the coming months."

## Provided by Retina Implant AG

Citation: First blind patients in the UK has retina implant (2012, May 3) retrieved 25 April 2024 from <a href="https://medicalxpress.com/news/2012-05-patients-uk-retina-implant.html">https://medicalxpress.com/news/2012-05-patients-uk-retina-implant.html</a>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.