

PRESS RELEASE

Bio artificial cornea regeneration research may bring light to the blind

June 21, 2010, Leiden, the Netherlands: Aeon Astron Europe BV (AAE), enters an agreement with the Department of *Ophthalmology of the Leids Universitair Medisch Centrum (LUMC)* to develop an artificial biocornea to restore sight for corneal blindness.

In Taiwan, a fishscale-derived collagen scaffold has been developed by Julio Lin and his team as an alternative material for corneal regeneration. It has all the features demanded to be a good biocornea. AAE gained an innovation grant by the AgentschapNL. As a result of this innovation grant, AAE entered into a close collaboration with the LUMC to conduct further research to finalize the specification of the artificial biocornea under supervision of Dr. J. Martine Jager, M.D., PhD., former ARVO President, and Prof. Dr. G.P.M. Luyten, Head of the Ophthalmology Department of the LUMC.

According to WHO, millions of people worldwide suffer from corneal blindness. Although corneal transplantation has a high success rate, the shortage of donor corneas remains a key issue. In the developed countries, the waiting time to obtain a cornea normally takes around 3 to 4 months with high costs. Only 100,000 corneal transplants can be performed each year in these countries primarily due to a lack of access to donor tissue and expensive clinical management. In less developed countries, obtaining corneal grafts is often impossible. For over 100 years, scientists have tried to develop a suitable artificial cornea; however none is as yet successful. The development of this biodegradable artificial cornea is a promising alternative to obtain tissue replacements for corneal regeneration.

The aim of this research is to construct the material for an artificial cornea, making a construct with physical properties (mechanical strength and micro-patterned structure) similar to the ones of natural corneas, and making the material biocompatible, biodegradable, and eliciting minimal inflammation.

AAE will transfer the technology and knowledge of this biodegradable biocornea to the LUMC. Michael Lai, CEO, says that AAE has experience in coordinating with the ophthalmologist opinion leaders worldwide and this bio-artificial cornea is the second ophthalmic product AAE is working on.

The LUMC team will do the efficacy evaluation in animal models of corneal regeneration, and will test the biocompatibility with living cornea cells. This project is to finalize the specification of biocornea through further *in vitro* and *in vivo* studies. The sequential of this project completion is to enter a human pilot study. Although this is only a two-year project with a total input of 1.5 million Euro, Aeon Astron Europe BV and the LUMC are looking forward to a continuous and fruitful relationship enabling a bridge to bring light to the blind.

Background information:

Aeon Astron Europe BV (AAE), located at the Bioscience Park Leiden, is developing a biocornea, using a patent licensed from its sister company Body Organ Biomedical Corporation (BOBC), a Taiwanese company. AAE is specialized in ophthalmology and has developed the new ologen® Collagen Matrix for eye tissue repair. Ologen® is an implant that modulates wound healing. The porous scaffold helps to prevent scar formation in glaucoma surgery, strabismus surgery and so on.

For more information on the biocornea, please see the publication in the European Cells and Materials <http://www.ecmjournal.org/journal/papers/vol019/vol019a06.php>

For publications on the Collagen Matrix for eye tissue repair, please see the mediacenter at www.ologen.com

For any other company information or investment opportunities, please contact Ingrid Vodegel, COO, at +31 71 3322280 or Michael Lai, CEO Aeon Astron Europe B.V.

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