The “symposium on cell based therapy in Ophthalmology” was organized on Saturday 11 January 2014, with various speakers discussing the opportunities and limitations of initiating such therapy in the Netherlands.
The speakers have been so kind to allow us to show their presentations on the CORR website.

With prof. Arnold Vulto as a chairman, Prof Caroline Klaver discussed which hereditary retinal dystrophies might be most amendable to gene-therapy.

Prof. Jan van Meurs presented some patients with exudative age-related macular degeneration, with long-term preserved macular function after autologous (tissue from the same patient) retinal pigment epithelium transplantation, as a proof of principle that transplanted tissue can be of benefit and as a rationale to try and produce better tissue.

Prof. Christine Mummery presented a overview of the possibilities of stem cells from other fields (also cardiology), but pointed out that setting up such a program for ophthalmology from scratch was extremely expensive, and certification and authorization are real hurdles. It would be more worthwhile to try and co-operate with an established program abroad. As an example Prof Mummery mentioned a project in New York, where doctors are isolating retinal progenitor cells from cadaver eyes.

Prof Gerard Wagemakers showed the possibilities of stem cell therapy in combination with gene therapy, where hematopoietic stem cells are infected with the missing gene for several orphan diseases, that currently have an extremely expensive treatment.

Dr. Rene de Coo, discussed his planned trial where patients with Leber’s optico neuropathy are treated with gene therapy.

Dr. Rob Collin discussed a new development in gene therapy in which the transcription of the defective gene is selectively blocked.

Mr. Mandeep Singh showed beautifully illustrated data that, in mice, cells taken from a neonate are capable of regenerating rod photoreceptor cells in diseased mice that connect functionally to the visual cortex.

Prof Bergen reported experiments in which embryonic stem cells were successfully educated to differentiated retinal pigment epithelial cells.

Dr. de Haan showed his lab’s closed system to isolate mesenchymal stem cells to be used as hematopoietic stem cells, possibly after gene transfer using a novel short RNA vector.

Prof Vulto concluded the session by reminding the audience that so far few protocols had been approved by the national central review board (CCMO).

We invite you to visit the presentations for further details.

Prof. Dr. J.C. van Meurs