At the Kobe City Eye Hospital, we have planned the world’s first clinical research to transplant retinal sheets prepared using iPS cells derived from other persons to the subretinal area of patients with retinitis pigmentosa (“Clinical Study on Allogeneic (Human) iPS Cell-derived Retinal Sheet Transplantation for Retinitis Pigmentosa”), and have recently performed the first transplantation surgery for this research. Retinitis pigmentosa is an intractable disease whereby light-sensitive photoreceptor cells degenerate or disappear, narrowing the visual field and causing loss of vision. There are an estimated 40,000 patients in Japan, and there is no established treatment.

This surgery has subsequently attracted interest as regenerative medicine aimed at regenerating the central nervous system, which had been considered difficult to reconstruct.