Beta Cell Project: Research on Cell Therapy against Type 1 Diabetes

Dr. Toyoda’s team is conducting research into cell therapy against type 1 diabetes mellitus involving transplants of iPSC-derived pancreatic cells. Their current research aim is to develop new treatments based on islet transplantation, but without the current limitations of such transplantation.

<Progress>
iPSC-derived islet-like cells (iPIC) efficiently normalize blood glucose level in diabetic mouse model

Diabetic mouse (induced by Streptozotocin) Implanted with iPIC

Induction of diabetes

Implantation

Blood glucose (mg/dL)

Weeks after INS cell implantation