

Fig. S1 (related to Fig. 1): Glycemia after enucleation and longitudinal body weight measurements in liraglutide-compared to saline-treated recipient mice. (a) Glycemia values after survival double enucleation (i.e., removal of both eyes which were transplanted with human islets) in a liraglutide-treated and another saline-treated mouse. Enucleation was performed ≥ 230 days post-transplant/treatment initiation. These results further confirmed glycemic control by the intraocular human islets throughout the studies. (b) Longitudinal record of body weight (shown as means \pm SD) in liraglutide and saline-treated counterparts during the extended follow up of ≥ 250 days post-transplantation/treatment initiation. (c) Ratio of alpha and beta cells in immunostained cross-sections of the native pancreas from the STZ-treated recipient mice. Ratios (shown as means \pm SD) were acquired by dividing the total glucagon or insulin-positive area (including nuclei) by the total area of the corresponding islet(s) in immunostained pancreatic sections obtained at the conclusion of the studies ≥ 250 days after transplantation/treatment initiation. Images of immunostained sections were acquired using an automated digital imaging fluorescence microscopy system (MetaSystems GmbH, Altussheim, Germany) connected to an automated slide exchanger (SlideFeeder for Metafer) and equipped with a Zeiss Imager Z.2 microscope (Carl Zeiss MicroImaging, Inc.). Image acquisition of tissue sections was performed with a Zeiss Plan APOCHROMAT 10x/0.45 objective lens and 1280 x 1024 images were acquired. Images underwent visual quality control and, if necessary, a manual islet outline correction.

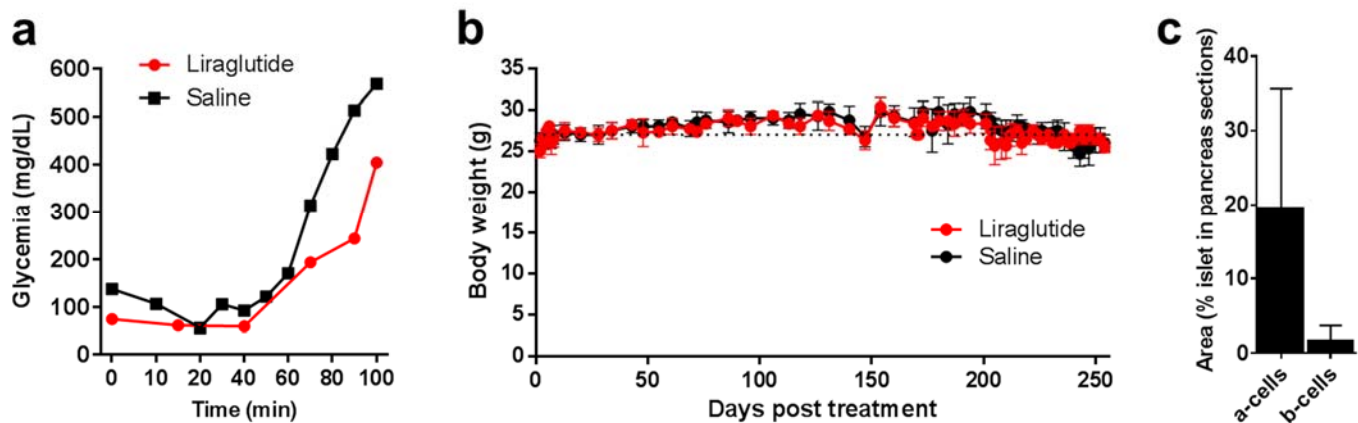


Fig. S2 (related to Fig. 2): Fasting glycemia during IPGTTs (intraperitoneal glucose tolerance test). (a) Glycemia values after ~17h of fasting in liraglutide vs. saline-treated controls at the start of high glucose challenge tests performed on days 64, 96, 134, and 200 after transplantation/treatment initiation. Data shown as means \pm SD (asterisk indicate significance; $p=0.407$ for POD64, $p=0.368$ for POD96, $p=0.12$ for POD134, $p=0.0017$ for POD200).

