

## Adaptation of dysfunctional human islets to obesogenic environment in the mouse (12 weeks)

a Sections of paraffin embedded diabetic human grafts stained with endocrine marker chromogranin A (DAB, brown) b Morphometric analysis for total endocrine volume (chromogranin A) (Diabetic 1: HFD vs control, >100 sections/group; p=0.9 and Diabetic 2: HFD vs control, >80 sections/group; p=0.3) c Morphometric analysis for human beta cells in islets from diabetic donors (% cpeptide/chromogranin A area) d Homa2%B and Homa2%S at 2 and 12 weeks in diabetic 1 and 2 animals plotted on theoretical hyperbolic curve (means were calculated for Diabetic 1 and 2 to simplify the graph) e Homa2%BS in mice implanted 12weeks with diabetic human islets (HFD grafts vs control; p=0.17 [Diabetic 1] and p=0.009 [Diabetic 2]). Diabetic 1: n=5 mice/group, Diabetic 2: n=3 mice/group on control or HFD