

Supplemental Figure 3 related to Figure 5. Further evidence of growth arrest in islets of 4 and 10 wk PX animals. A. Whereas DNA damage marker nuclear p53BP1(green) was rarely seen in Sham islets, it was present in insulin-expressing beta (red) cells in both 4 and 10 wk PX islets, here shown in a 10wk PX animal that had mean blood glucose of 156 mg/dl. Cytoplasmic p53BP1, which does not indicate DNA damage, was seen in the beta cells in all groups. B. Whereas cytoplasmic cyclin B (green) can be seen as faint staining in some beta (red) cells of Sham islets, it has more intense staining in some beta cells in both 4 and 10 wk PX, seen here in an islet cluster from 4 wk PX (mean blood glucose:142 mg/dl) and an islet in 10 wk PX (mean blood glucose:159 mg/dl) (Sham: 93 mg/dl). Such cytoplasmic expression is seen in growth arrest. Arrow in 4 wk PX shows nuclear localization marking a beta cell in mitosis. C. Heat maps of genes of related to G1 and G2 arrest; data are from Table S4. Magnification bar = 50 mm.