

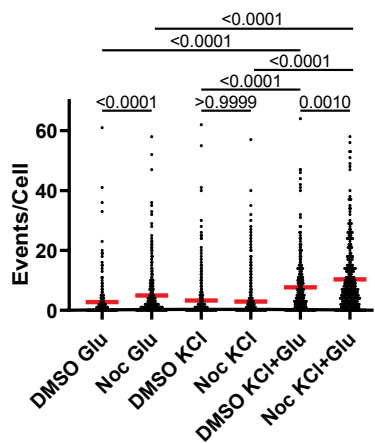
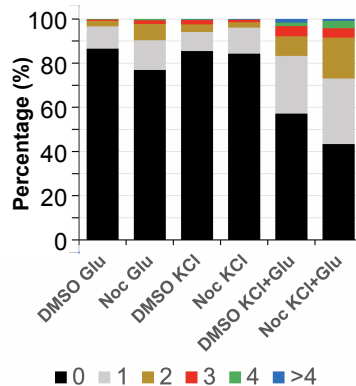
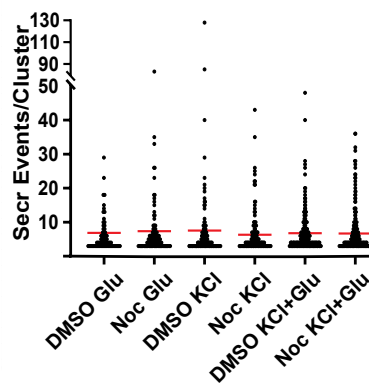
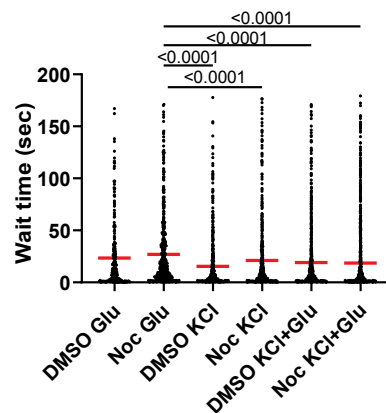
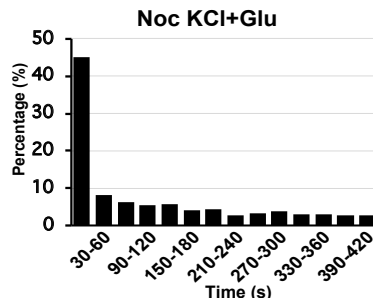
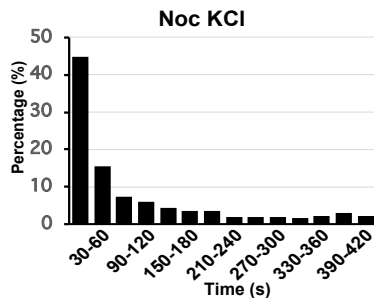
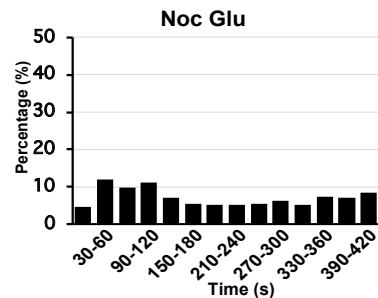
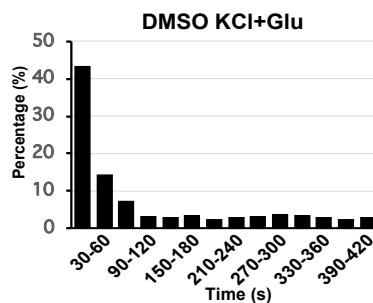
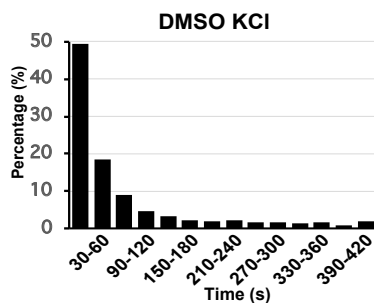
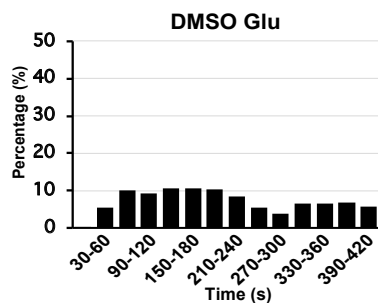
A Events/Cell - All Cells 8m**B** Clusters/Cell 8m**C** Events/Cluster 8m**D** Wait Times in Clusters 8m**E** Events over Time

Figure 8 - Supplemental Figure 1. Rapid secretion induction by KCL as compared to glucose.

A) Graph of glucose, KCl- and KCl+Glucose-stimulated secretion events per cell over 8 minutes in DMSO- and nocodazole pre-treated islets. Red bar, mean. Kruskal-Wallis test non-parametric and multiple comparison tests, p value as indicated, N= 306-708 cells from 13-17 islets.

B) Graph of clusters per cell in the field of view shown as a stacked histogram of the percentage of total cells per condition that had each number of clusters. Secretion over 8 minutes. N= 306-708 cells from 13-17 islets.

C) Number of secretion events per cluster over 8 minutes. Red bar, mean. Kruskal-Wallis test non-parametric and multiple comparison tests, no significant difference, N= 72-342 clusters from 306-708 cells/13-17 islets.

D) Graph of time between successive events in clusters over 8 minutes (Red bar = mean). Kruskal-Wallis test non-parametric and multiple comparison tests, p value as indicated, N= 72-342 clusters from 306-708 cells/13-17 islets.

E) Histogram of secretion events over time (8 minutes). Graphed as percentage of cells within each bin per condition. Time (seconds) after stimulation (20mM glucose, 25mM KCl, or combination of both, as indicated). Bin=30 seconds. N= 13-17 islets.