

Figure 1 is a log-log plot showing the relationship between the Type I error rate (x-axis) and the Type II error rate (y-axis) for various values of the Quantile Threshold (QTN). The x-axis ranges from 0.001 to 0.100, and the y-axis ranges from 0.001 to 0.100. The legend indicates the following QTN values and corresponding markers:

- QTN=0.3: Green line with square markers
- QTN=0.2: Cyan line with downward-pointing triangle markers
- QTN=0.1: Orange line with diamond markers
- QTN=0.05: Brown line with 'x' markers
- QTN=0.02: Blue line with plus markers
- QTN=0.01: Red line with upward-pointing triangle markers
- QTN=0: Black line with circle markers

The plot demonstrates that as the QTN value increases, the Type II error rate increases for a given Type I error rate. The curves for QTN=0.3 and QTN=0.2 show the steepest slopes, indicating the highest Type II error rates for a given Type I error rate. The curves for QTN=0.01 and QTN=0 show the shallowest slopes, indicating the lowest Type II error rates for a given Type I error rate.

