



**Supplementary Figure S2** Calibration plots for the PPCOS-II data. Each panel is one of the four outcomes. Two lines (solid for the PPCOS-I model and dashed for the PPCOS-II model) are the regression fits to the points where the x-axis is the average of the estimated success probabilities and the y-axis the observed success rates based on the counts. The blank diamonds were the five points from PPCOS-I models, and the five points with '+' were based on the PPCOS-II model.