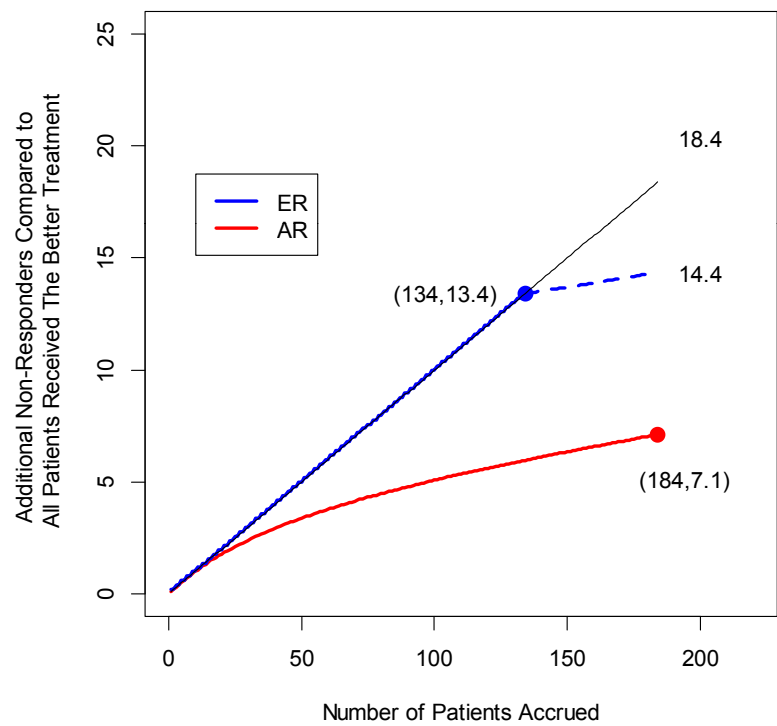


Supplementary Figure 1: Comparison of adaptive randomization (AR) and equal randomization (ER) by plotting the additional number of non-responders versus the number of patients accrued for two-arm trials with binary endpoints. The computations are based on the average of 500,000 trials. The number of additional non-responders is defined as the excess number of non-responders for the respective designs compared to the case that all patients had received the better treatment. For AR, the AR 2 design with the tuning parameter α was applied. Response rates are p_1 and p_2 .

Panel (A): Without early stopping. The sample size of the AR design is 184; that of the ER design is 134 (solid line), which is expanded to 184 after the trial is completed (dashed line). The solid black line shows the result of ER throughout the entire process.

Panel (B): With early stopping. The maximum sample size for the AR 2 design is 274 and for the ER design is 190 (solid line), which is expanded to 274 after the trial is completed (dashed line). The average sample size for the ER and AR 2 designs are 84 and 110, respectively. The solid black line shows the result of ER throughout the entire process.



Supplementary Figure 1A

