|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Table S3:** Operating Characteristics of the Biomarker Strategy Design with Approximately 90% Power to Detect Clinical Utility | | | | | | | | | | | | | | | |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Median (T|M=1,X=B) | PC agree | Events | Accrued | Duration (months) | LR power | LR T1E | HR power | HR coverage | HR T1E | SD power | SD coverage | SD T1E | RMST power | RMST coverage | RMST T1E |
| 9 | .25 | 3000 | 3205 | 320.3 | .87 | .051 | .87 | .95 | .052 | .49 | .95 | .044 | .87 | .95 | .049 |
| 12 | .25 | 1000 | 1178 | 117.7 | .91 | .044 | .91 | .90 | .044 | .66 | .95 | .056 | .89 | .95 | .045 |
| 12 | .50 | 2000 | 2204 | 220.1 | .84 | .055 | .84 | .79 | .055 | .62 | .94 | .047 | .83 | .96 | .054 |
| 21 | .25 | 500 | 698 | 69.5 | .99 | .043 | .99 | .88 | .043 | .90 | .93 | .041 | .99 | .94 | .043 |
| 21 | .50 | 750 | 973 | 97.1 | .94 | .045 | .93 | .78 | .045 | .76 | .93 | .048 | .92 | .93 | .049 |
| 21 | .75 | 3000 | 3286 | 328.4 | .90 | .049 | .90 | .44 | .049 | .70 | .95 | .048 | .86 | .95 | .048 |
| The first column is the median survival in biomarker positive patients who received treatment B. The median survival in positive patients who received treatment A, negative patients who received treatment B, and negative patients who received treatment A is 9, 9 , and 12, respectively (except in calculation of type 1 error). PC agree is the proportional of physician's choice of treatment that agrees with the biomarker-directed treatment strategy. Events is the number of deaths observed during the trial. Accrued is the total patients accrued into the trial and Duration is the total trial duration in months. T1E denotes the type 1 error rate for each of the estimands and coverage denotes the proportion of 95\% confidence intervals contained the true parameter. | | | | | | | | | | | | | | | |