```
$Single.Stage.Equal.Alpha.Allocation.Design
$Single.Stage.Equal.Alpha.Allocation.Design$design.parameters
$Single.Stage.Equal.Alpha.Allocation.Design$design.parameters$cumulative.sample.sizes.and.c
alendar.time.per.stage
  Stage C1 C2 A1 A2 Analysis.Time.In.Years
1
      1 292 438 292 438
                                           3.65
$Single.Stage.Equal.Alpha.Allocation.Design$design.parameters$alpha.allocation
  Stage Subpop.1 Subpop.2
           0.025
      1
                    0.025
$Single.Stage.Equal.Alpha.Allocation.Design$design.parameters$futility.boundaries
  Stage Subpop.1 Subpop.2
1
      1
              NA
                       NA
$Single.Stage.Equal.Alpha.Allocation.Design$design.performance
$Single.Stage.Equal.Alpha.Allocation.Design$design.performance$Power
  Scenario Power.H01 Power.H02 Prob.Reject.All.False.Null.Hypotheses
1
         1
              0.8649
                        0.9401
                                                               0.8241
2
         2
              0.7987
                                                               0.7987
                            NA
3
         3
                  NA
                            NA
                                                                    NA
$Single.Stage.Equal.Alpha.Allocation.Design$design.performance$Type.1.Error
  Scenario Type.I.Error.H01 Type.I.Error.H02 Familywise.Type.I.Error
         1
                         NA
                                           NA
1
                                                                    NA
         2
2
                         NA
                                       0.0477
                                                               0.0477
         3
3
                     0.0256
                                       0.0279
                                                               0.0511
$Single.Stage.Equal.Alpha.Allocation.Design$design.performance$Expected.Sample.Size
                             Scenario expected.sample.size
                                                       1460
1
                                     1
                                     2
                                                       1460
2
3
                                     3
                                                       1460
4 Weighted.Combination.Over.Scenarios
                                                       1460
$Single.Stage.Equal.Alpha.Allocation.Design$design.performance$Expected.Duration
                             Scenario expected.duration
                                                    3.65
1
                                     1
                                     2
2
                                                    3.65
3
                                     3
                                                    3.65
4 Weighted.Combination.Over.Scenarios
                                                    3.65
$Single.Stage.Equal.Alpha.Allocation.Design$design.performance$Distribution.of.sample.size.
and.duration.per.scenario
  scenario C1 C2 A1 A2 sample.size duration frequency proportion
         1
           1 1 1 1
                                                 10000
                                                                1
1
                              1460
                                        3.65
         2
                                                 10000
                                                                1
2
           1
              1
                  1
                    1
                              1460
                                        3.65
         3 1 1 1 1
                              1460
                                        3.65
                                                 10000
                                                                1
3
```

\$Single.Stage.Optimized.Alpha.Allocation.Design \$Single.Stage.Optimized.Alpha.Allocation.Design\$design.parameters \$Single.Stage.Optimized.Alpha.Allocation.Design\$design.parameters\$cumulative.sample.sizes.a nd.calendar.time.per.stage

```
Stage C1 C2 A1 A2 Analysis.Time.In.Years
      1 272 408 272 408
$Single.Stage.Optimized.Alpha.Allocation.Design$design.parameters$alpha.allocation
  Stage Subpop.1 Subpop.2
      1
          0.0343
                   0.0157
$Single.Stage.Optimized.Alpha.Allocation.Design$design.parameters$futility.boundaries
  Stage Subpop.1 Subpop.2
      1
              NA
                       NA
$Single.Stage.Optimized.Alpha.Allocation.Design$design.performance
$Single.Stage.Optimized.Alpha.Allocation.Design$design.performance$Power
  Scenario Power.H01 Power.H02 Prob.Reject.All.False.Null.Hypotheses
1
                        0.9172
         1
              0.8463
                                                               0.7928
2
         2
              0.8063
                            NA
                                                               0.8063
         3
3
                  NA
                            NA
                                                                   NA
$Single.Stage.Optimized.Alpha.Allocation.Design$design.performance$Type.1.Error
  Scenario Type.I.Error.H01 Type.I.Error.H02 Familywise.Type.I.Error
1
         1
                         NA
                                          NA
                                                                   NA
2
         2
                         NA
                                      0.0424
                                                               0.0424
3
         3
                     0.0376
                                      0.0164
                                                               0.0517
$Single.Stage.Optimized.Alpha.Allocation.Design$design.performance$Expected.Sample.Size
                             Scenario expected.sample.size
1
                                                       1360
                                     1
2
                                     2
                                                       1360
3
                                     3
                                                       1360
4 Weighted.Combination.Over.Scenarios
                                                       1360
$Single.Stage.Optimized.Alpha.Allocation.Design$design.performance$Expected.Duration
                             Scenario expected.duration
1
                                     1
                                                     3.4
2
                                     2
                                                     3.4
                                                     3.4
3
                                     3
                                                     3.4
4 Weighted.Combination.Over.Scenarios
$Single.Stage.Optimized.Alpha.Allocation.Design$design.performance$Distribution.of.sample.s
ize.and.duration.per.scenario
  scenario C1 C2 A1 A2 sample.size duration frequency proportion
1
         1 1 1 1 1
                              1360
                                         3.4
                                                 10000
                                                                1
                              1360
                                                 10000
                                                                1
2
         2
            1
              1
                  1
                    1
                                         3.4
3
         3
           1 1 1 1
                              1360
                                         3.4
                                                 10000
                                                                1
$Two.Stage.Group.Sequential.Design
$Two.Stage.Group.Sequential.Design$design.parameters
$Two.Stage.Group.Sequential.Design$design.parameters$cumulative.sample.sizes.and.calendar.t
ime.per.stage
  Stage C1 C2 A1 A2 Analysis.Time.In.Years
      1 248 373 248 373
                                         3.1095
1
      2 276 414 276 414
                                         3.4550
2
```

```
Stage Subpop.1 Subpop.2
      1
          0.0199
                    0.0096
1
2
      2
          0.0140
                    0.0066
$Two.Stage.Group.Sequential.Design$design.parameters$futility.boundaries
  Stage Subpop.1 Subpop.2
1
      1
          0.1361
                   -1.5897
      2
2
              NA
                        NA
$Two.Stage.Group.Sequential.Design$design.performance
$Two.Stage.Group.Sequential.Design$design.performance$Power
  Scenario Power.H01 Power.H02 Prob.Reject.All.False.Null.Hypotheses
                         0.9248
1
         1
              0.8415
                                                                  0.7951
         2
2
              0.8058
                                                                  0.8058
                             NA
3
         3
                             NA
                   NA
                                                                      NA
$Two.Stage.Group.Sequential.Design$design.performance$Type.1.Error
  Scenario Type.I.Error.H01 Type.I.Error.H02 Familywise.Type.I.Error
1
         1
                          NA
                                            NA
                                                                      NA
2
         2
                          NA
                                        0.0462
                                                                  0.0462
3
         3
                      0.0333
                                        0.0169
                                                                  0.0485
$Two.Stage.Group.Sequential.Design$design.performance$Expected.Sample.Size
                               Scenario expected.sample.size
1
                                      1
                                                         1308
2
                                      2
                                                         1374
3
                                                         1375
4 Weighted.Combination.Over.Scenarios
                                                         1352
$Two.Stage.Group.Sequential.Design$design.performance$Expected.Duration
                               Scenario expected.duration
1
                                      1
                                                      3.27
2
                                      2
                                                      3.44
3
                                      3
                                                      3.45
                                                      3.39
4 Weighted.Combination.Over.Scenarios
$Two.Stage.Group.Sequential.Design$design.performance$Distribution.of.sample.size.and.durat
ion.per.scenario
   scenario C1 C2 A1 A2 sample.size duration frequency proportion
1
                 1
                    1
                       1
                                 1242 3.108333
                                                     5244
                                                               0.5244
2
          1
             1
                 2
                    1
                                 1324 3.450000
                                                       NA
                                                                   NA
3
          1
             2
                 1
                    2
                                 1298 3.458333
                                                       NA
                                                                   NA
4
          1
             2
                2
                    2
                       2
                                 1380 3.458333
                                                     4756
                                                              0.4756
5
          2
             1
                 1
                    1
                       1
                                 1242 3.108333
                                                      454
                                                               0.0454
6
          2
             1
                 2
                    1
                       2
                                 1324 3.450000
                                                       NA
                                                                   NA
          2
             2
                    2
7
                 1
                       1
                                 1298 3.458333
                                                       NA
                                                                   NA
          2
             2
                 2
                    2
                       2
                                                     9546
8
                                 1380 3.458333
                                                              0.9546
9
          3
                 1
                    1
                                                      365
                                                               0.0365
             1
                       1
                                 1242 3.108333
10
          3
             1
                 2
                    1
                       2
                                 1324 3.450000
                                                       NA
                                                                   NA
11
          3
             2
                 1
                    2
                                 1298 3.458333
                                                       NA
                                                                   NA
```

1380 3.458333

9635

0.9635

2 2 2

12

\$Two.Stage.Group.Sequential.Design\$design.parameters\$alpha.allocation

```
$Two.Stage.Equal.Alpha.Allocation.Design
$Two.Stage.Equal.Alpha.Allocation.Design$design.parameters
$Two.Stage.Equal.Alpha.Allocation.Design$design.parameters$cumulative.sample.sizes.and.cale
ndar.time.per.stage
  Stage C1 C2 A1 A2 Analysis.Time.In.Years
1
      1 156 234 156 234
                                          1.9525
                                          3.9050
      2 312 468 312 468
$Two.Stage.Equal.Alpha.Allocation.Design$design.parameters$alpha.allocation
  Stage Subpop.1 Subpop.2
      1
          0.0125
                   0.0125
1
2
      2
          0.0125
                   0.0125
$Two.Stage.Equal.Alpha.Allocation.Design$design.parameters$futility.boundaries
  Stage Subpop.1 Subpop.2
      1
              -3
                        -3
1
2
      2
              NA
                        NA
$Two.Stage.Equal.Alpha.Allocation.Design$design.performance
$Two.Stage.Equal.Alpha.Allocation.Design$design.performance$Power
  Scenario Power.H01 Power.H02 Prob.Reject.All.False.Null.Hypotheses
1
         1
              0.8784
                         0.9463
                                                                 0.8449
         2
              0.7932
                                                                 0.7932
2
                             NA
3
         3
                             NA
                  NA
                                                                     NA
$Two.Stage.Equal.Alpha.Allocation.Design$design.performance$Type.1.Error
  Scenario Type.I.Error.H01 Type.I.Error.H02 Familywise.Type.I.Error
1
         1
                          NA
                                            NA
                                                                     NA
         2
2
                          NA
                                       0.0428
                                                                 0.0428
3
         3
                     0.0254
                                       0.0244
                                                                 0.0478
$Two.Stage.Equal.Alpha.Allocation.Design$design.performance$Expected.Sample.Size
                              Scenario expected.sample.size
1
                                                        1163
                                     1
2
                                     2
                                                        1422
3
                                     3
                                                        1549
4 Weighted.Combination.Over.Scenarios
                                                        1380
$Two.Stage.Equal.Alpha.Allocation.Design$design.performance$Expected.Duration
                              Scenario expected.duration
1
                                     1
                                                     3.43
2
                                     2
                                                     3.89
                                     3
                                                     3.90
4 Weighted.Combination.Over.Scenarios
                                                     3.74
$Two.Stage.Equal.Alpha.Allocation.Design$design.performance$Distribution.of.sample.size.and
.duration.per.scenario
   scenario C1 C2 A1 A2 sample.size duration frequency proportion
                                 780
                                          1.95
                                                    2422
1
                1
                   1
                      1
                                                             0.2422
2
                2
                   1
                                1248
                                          3.90
                                                    1847
                                                             0.1847
3
             2
                1
                   2
                       1
                                1092
                                          3.90
                                                    3221
                                                             0.3221
             2
                2
                   2
                       2
                                1560
                                         3.90
                                                             0.2510
4
          1
                                                    2510
          2
                                 780
                                                             0.0053
5
             1
                1
                   1
                       1
                                         1.95
                                                      53
6
          2
                2
                       2
                                1248
                                         3.90
                                                    4196
                                                             0.4196
             1
                   1
7
          2
             2
                1
                   2
                       1
                                1092
                                         3.90
                                                      72
                                                             0.0072
```

8	2 2	2 2	2	1560	3.90	5679	0.5679	
9	3 1	1 1	1	780	1.95	NA	NA	
10	3 1	2 1	2	1248	3.90	135	0.0135	
11	3 2	1 2	2 1			140	0.0140	
12	3 2	2 2	2 2			9725	0.9725	
				pha.Allocati	_			
	•			pha.Allocati	•	• .		
	• .			•	on.Design\$de	esign.para	meters\$cumulative.sample.sizes.and.	
	r.time.p		_					
_				Analysis.Ti				
	247 370				3.0915			
2 2	274 412	274	412		3.4350			
AT 0.1	0 1 .				D : 41			
				•	on.Design\$de	esign.para	meters\$alpha.allocation	
_	Subpop.							
1 1			00.0					
2 2	0.019	4 C	00.0	43				
\$Two Sta	age Onti	mizec	Ι Δ1	nha Allocati	on Design\$de	esion nara	meters\$futility.boundaries	
	Subpop.			•	on Beergn was	o i giri par a	me ter our attricy isouridar 100	
1 1).82					
2 2				NA				
2 2	147			IVA				
\$Two St	0-+-			nha 111000+i				
ΨIWO.GL	age.upti	mizec	I.Al	pna.Allocati	on.Design\$de	esign.perf	ormance	
				•	_		ormance ormance\$Power	
\$Two.Sta	age.Opti	mizec	l.Al	pha.Allocati	on.Design\$de	esign.perf		
\$Two.Sta	age.Opti rio Powe	mizec	l.Al Po	pha.Allocati	on.Design\$de	esign.perf	ormance\$Power	
\$Two.Sta Scena	age.Option of the contract of	mized r.HO1	I.Al Po	pha.Allocati wer.HO2 Prob	on.Design\$de	esign.perf	ormance\$Power l.Hypotheses	
\$Two.Sta Scenai	age.Options age.Option age.Op	mizec r.H01 .8505	I.Al Po	pha.Allocati wer.HO2 Prob 0.913	on.Design\$de	esign.perf	ormance\$Power 1.Hypotheses 0.7993	
\$Two.Sta Scenar 1 2 3	age.Option rio Powe 1 0 2 0 3	mizeo r.H01 .8505 .8318	I.Al Po	pha.Allocati wer.HO2 Prob 0.913 NA NA	on.Design\$de .Reject.All.	esign.perf False.Nul	ormance\$Power 1.Hypotheses 0.7993 0.8318 NA	
\$Two.Sta Scenar 1 2 3 \$Two.Sta	age.Option rio Powe 1 0 2 0 3 age.Option	mizec r.H01 .8505 .8318 NA	I.Al Po S	pha.Allocati wer.HO2 Prob 0.913 NA NA	on.Design\$de .Reject.All.	esign.perf False.Nul	ormance\$Power 1.Hypotheses 0.7993 0.8318 NA ormance\$Type.1.Error	
\$Two.Sta Scenar 1 2 3 \$Two.Sta	age.Option rio Powe 1 0 2 0 3 age.Option	mizec r.H01 .8505 .8318 NA	I.Al Po S	pha.Allocati wer.HO2 Prob 0.913 NA NA	on.Design\$de .Reject.All. on.Design\$de Error.HO2 Fa	esign.perf False.Nul	ormance\$Power 1.Hypotheses 0.7993 0.8318 NA	
\$Two.Sta Scenar 1 2 3 \$Two.Sta	age.Option rio Powe 1 0 2 0 3 age.Option	mizec r.H01 .8505 .8318 NA	I.Al Po S	pha.Allocati wer.HO2 Prob 0.913 NA NA	on.Design\$de .Reject.All.	esign.perf False.Nul	ormance\$Power 1.Hypotheses 0.7993 0.8318 NA ormance\$Type.1.Error Type.I.Error	
\$Two.Sta Scenar 1 2 3 \$Two.Sta Scenar	age.Option rio Powe 1 0 2 0 3 age.Option rio Type	mizec r.H01 .8505 .8318 NA	I.Al Po S	pha.Allocati wer.HO2 Prob 0.913 NA NA NA pha.Allocati	on.Design\$de .Reject.All. on.Design\$de Error.HO2 Fa	esign.perf False.Nul	ormance\$Power 1.Hypotheses 0.7993 0.8318 NA ormance\$Type.1.Error Type.I.Error	
\$Two.Sta Scenar 1 2 3 \$Two.Sta Scenar 1	age.Option rio Powe 1 0 2 0 3 age.Option rio Type 1	mizec r.H01 .8505 .8318 NA	I.Al Po B N I.Al	pha.Allocati wer.HO2 Prob 0.913 NA NA NA pha.Allocati .HO1 Type.I.	on.Design\$de .Reject.All. on.Design\$de Error.HO2 Fa NA	esign.perf False.Nul	ormance\$Power 1.Hypotheses 0.7993 0.8318 NA ormance\$Type.1.Error Type.I.Error	
\$Two.Sta Scenar 1 2 3 \$Two.Sta Scenar 1 2 3	age.Option rio Powe 1 0 2 0 3 age.Option rio Type 1 2 3	mizec r.HO1 .8505 .8318 NA mizec	I.Al Po B N.Al Pror	pha.Allocati wer.HO2 Prob 0.913 NA NA pha.Allocati .HO1 Type.I. NA NA	on.Design\$de .Reject.All. on.Design\$de Error.H02 Fa NA 0.0423 0.0096	esign.perf False.Nul esign.perf	ormance\$Power 1.Hypotheses 0.7993 0.8318 NA ormance\$Type.1.Error Type.I.Error NA 0.0423 0.0452	
\$Two.Sta Scenar 1 2 3 \$Two.Sta Scenar 1 2 3	age.Option rio Powe 1 0 2 0 3 age.Option rio Type 1 2 3	mizec r.HO1 .8505 .8318 NA mizec	I.Al Po B N.Al Pror	pha.Allocati wer.HO2 Prob 0.913 NA NA pha.Allocati .HO1 Type.I. NA NA 0371 pha.Allocati	on.Design\$de .Reject.All. on.Design\$de Error.H02 Fa NA 0.0423 0.0096 on.Design\$de	esign.perf False.Nul esign.perf amilywise.	ormance\$Power 1.Hypotheses 0.7993 0.8318 NA ormance\$Type.1.Error Type.I.Error NA 0.0423 0.0452 ormance\$Expected.Sample.Size	
\$Two.Sta Scenar 1 2 3 \$Two.Sta Scenar 1 2 3	age.Option rio Powe 1 0 2 0 3 age.Option rio Type 1 2 3	mizec r.HO1 .8505 .8318 NA mizec	I.Al Po B N.Al Pror	pha.Allocati wer.HO2 Prob 0.913 NA NA pha.Allocati .HO1 Type.I. NA NA 0371 pha.Allocati	on.Design\$de .Reject.All. on.Design\$de Error.H02 Fa	esign.perf False.Nul esign.perf amilywise.	ormance\$Power 1.Hypotheses	
\$Two.Sta Scenar 1 2 3 \$Two.Sta Scenar 1 2 3 \$Two.Sta	age.Option rio Powe 1 0 2 0 3 age.Option rio Type 1 2 3	mizec r.HO1 .8505 .8318 NA mizec	I.Al Po B N.Al Pror	pha.Allocati wer.HO2 Prob 0.913 NA NA pha.Allocati .HO1 Type.I. NA NA 0371 pha.Allocati	on.Design\$de .Reject.All. on.Design\$de Error.H02 Fa NA 0.0423 0.0096 on.Design\$de io expected.	esign.perf False.Nul esign.perf amilywise. esign.perf sample.si	ormance\$Power 1.Hypotheses 0.7993 0.8318 NA ormance\$Type.1.Error Type.I.Error NA 0.0423 0.0452 ormance\$Expected.Sample.Size ze 76	
\$Two.Sta Scenar 1 2 3 \$Two.Sta Scenar 1 2 3 \$Two.Sta 1 2	age.Option rio Powe 1 0 2 0 3 age.Option rio Type 1 2 3	mizec r.HO1 .8505 .8318 NA mizec	I.Al Po B N.Al Pror	pha.Allocati wer.HO2 Prob 0.913 NA NA pha.Allocati .HO1 Type.I. NA NA 0371 pha.Allocati	on.Design\$de .Reject.All. on.Design\$de Error.H02 Fa NA 0.0423 0.0096 on.Design\$de io expected.	esign.perf False.Nul esign.perf amilywise. esign.perf sample.si 12	ormance\$Power 1.Hypotheses 0.7993 0.8318 NA ormance\$Type.1.Error Type.I.Error NA 0.0423 0.0452 ormance\$Expected.Sample.Size ze 76 67	
\$Two.Sta Scenar 1 2 3 \$Two.Sta Scenar 1 2 3 \$Two.Sta 1 2 3	age.Option rio Powe 1 0 2 0 3 age.Option rio Type 1 2 3 age.Option age.Option	mizec r.H01 .8505 .8318 NA mizec .I.Er	I.Al Po B B I.Al Pror	pha.Allocati wer.HO2 Prob 0.913 NA NA pha.Allocati .HO1 Type.I. NA NA 0371 pha.Allocati Scenar	on.Design\$de .Reject.All. on.Design\$de Error.H02 Fa	esign.perf False.Nul esign.perf amilywise. esign.perf sample.si 12	ormance\$Power 1.Hypotheses	
\$Two.Sta Scenar 1 2 3 \$Two.Sta Scenar 1 2 3 \$Two.Sta 1 2 3	age.Option rio Powe 1 0 2 0 3 age.Option rio Type 1 2 3 age.Option age.Option	mizec r.H01 .8505 .8318 NA mizec .I.Er	I.Al Po B B I.Al Pror	pha.Allocati wer.HO2 Prob 0.913 NA NA pha.Allocati .HO1 Type.I. NA NA 0371 pha.Allocati	on.Design\$de .Reject.All. on.Design\$de Error.H02 Fa	esign.perf False.Nul esign.perf amilywise. esign.perf sample.si 12	ormance\$Power 1.Hypotheses	
\$Two.Sta Scenar 1 2 3 \$Two.Sta Scenar 1 2 3 \$Two.Sta 1 2 3 4 Weight	age.Option rio Powe 1 0 2 0 3 age.Option rio Type 1 2 3 age.Option ted.Comb	mizec r.H01 .8505 .8318 NA mizec .I.Er	I.Al Po i B i I.Al Pror O. I.Al	pha.Allocati wer.H02 Prob 0.913 NA NA pha.Allocati .H01 Type.I. NA NA 0371 pha.Allocati Scenar	on.Design\$de .Reject.All. on.Design\$de Error.H02 Fa	esign.perf False.Nul esign.perf amilywise. esign.perf sample.si 12 12 13	ormance\$Power 1.Hypotheses	
\$Two.Sta Scenar 1 2 3 \$Two.Sta Scenar 1 2 3 \$Two.Sta 1 2 3 4 Weight	age.Option rio Powe 1 0 2 0 3 age.Option rio Type 1 2 3 age.Option ted.Comb	mizec r.H01 .8505 .8318 NA mizec .I.Er	I.Al Po i B i I.Al Pror O. I.Al	pha.Allocati wer.H02 Prob 0.913 NA NA pha.Allocati .H01 Type.I. NA NA 0371 pha.Allocati Scenar Over.Scenari	on.Design\$de .Reject.All. on.Design\$de Error.H02 Fa NA 0.0423 0.0096 on.Design\$de io expected 1 2 3 os on.Design\$de	esign.perf False.Nul esign.perf amilywise. esign.perf 12 13 12 esign.perf	ormance\$Power 1.Hypotheses	
\$Two.Sta Scenar 1 2 3 \$Two.Sta Scenar 1 2 3 \$Two.Sta 1 2 3 4 Weight	age.Option rio Powe 1 0 2 0 3 age.Option rio Type 1 2 3 age.Option ted.Comb	mizec r.H01 .8505 .8318 NA mizec .I.Er	I.Al Po i B i I.Al Pror O. I.Al	pha.Allocati wer.H02 Prob 0.913 NA NA pha.Allocati .H01 Type.I. NA NA 0371 pha.Allocati Scenar Over.Scenari	on.Design\$de .Reject.All. on.Design\$de Error.H02 Fa	esign.perf False.Nul esign.perf amilywise. 12 13 12 esign.perf duration	ormance\$Power 1.Hypotheses	
\$Two.Sta Scenar 1 2 3 \$Two.Sta Scenar 1 2 3 \$Two.Sta 1 2 3 4 Weight	age.Option rio Powe 1 0 2 0 3 age.Option rio Type 1 2 3 age.Option ted.Comb	mizec r.H01 .8505 .8318 NA mizec .I.Er	I.Al Po i B i I.Al Pror O. I.Al	pha.Allocati wer.H02 Prob 0.913 NA NA pha.Allocati .H01 Type.I. NA NA 0371 pha.Allocati Scenar Over.Scenari	on.Design\$de .Reject.All. on.Design\$de Error.H02 Fa	esign.performation esign.performation amilywise. esign.performation 3.27	ormance\$Power 1.Hypotheses	
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 $\verb§Two.Stage.Optimized.Alpha.Allocation.Design\$design.performance\$Distribution.of.sample.size.and.duration.per.scenario$

	scenario	C1	C2	Α1	A2	sample.size	duration	frequency	proportion
1	1	1	1	1	1	1234	3.0875	4829	0.4829
2	1	1	2	1	2	1318	3.4375	2208	0.2208
3	1	2	1	2	1	1288	3.4250	2103	0.2103
4	1	2	2	2	2	1372	3.4375	860	0.0860
5	2	1	1	1	1	1234	3.0875	5668	0.5668
6	2	1	2	1	2	1318	3.4375	1387	0.1387
7	2	2	1	2	1	1288	3.4250	2352	0.2352
8	2	2	2	2	2	1372	3.4375	593	0.0593
9	3	1	1	1	1	1234	3.0875	150	0.0150
10	3	1	2	1	2	1318	3.4375	40	0.0040
11	3	2	1	2	1	1288	3.4250	7920	0.7920
12	3	2	2	2	2	1372	3.4375	1890	0.1890

Minimum power difference (obtained - desired) for each Design

		Minimum difference in power
Design	Scenario	(obtained - desired)
Single.Stage.Equal.Alpha.Allocation.Design	2	0013
Single.Stage.Optimized.Alpha.Allocation.Design	1	0072
Two.Stage.Group.Sequential.Design	1	0049
Two.Stage.Equal.Alpha.Allocation.Design	2	0068
Two.Stage.Optimized.Alpha.Allocation.Design	1	0007