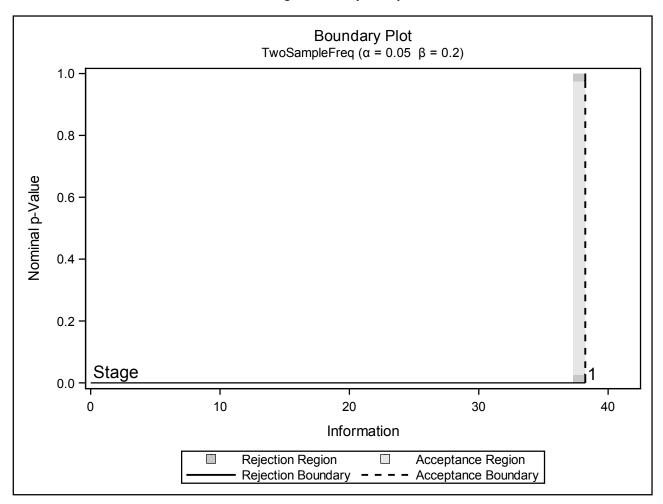
### The SEQDESIGN Procedure Design: TwoSampleFreq

Statistic DistributionNormalBoundary Scalep-ValueAlternative HypothesisTwo-SidedAlternative Reference-0.45308Number of Stages1Alpha0.05Beta0.2Power0.8Max Information (Percent of Fixed Sample)100Max Information38.23484Null Ref ASN (Percent of Fixed Sample)100	Design Information					
Alternative Hypothesis  Alternative Reference  Outside Alternative Reference  Number of Stages  Alpha  Outside Course Cou	Statistic Distribution	Normal				
Alternative Reference -0.45308  Number of Stages 1  Alpha 0.05  Beta 0.2  Power 0.8  Max Information (Percent of Fixed Sample) 100  Max Information 38.23484	Boundary Scale	p-Value				
Number of Stages1Alpha0.05Beta0.2Power0.8Max Information (Percent of Fixed Sample)100Max Information38.23484	Alternative Hypothesis	Two-Sided				
Alpha 0.05  Beta 0.2  Power 0.8  Max Information (Percent of Fixed Sample) 100  Max Information 38.23484	Alternative Reference	-0.45308				
Beta 0.2 Power 0.8 Max Information (Percent of Fixed Sample) 100 Max Information 38.23484	Number of Stages	1				
Power0.8Max Information (Percent of Fixed Sample)100Max Information38.23484	Alpha	0.05				
Max Information (Percent of Fixed Sample)100Max Information38.23484	Beta	0.2				
Max Information 38.23484	Power	0.8				
	Max Information (Percent of Fixed Sample)	100				
Null Ref ASN (Percent of Fixed Sample) 100	Max Information	38.23484				
	Null Ref ASN (Percent of Fixed Sample)	100				
Alt Ref ASN (Percent of Fixed Sample) 100	Alt Ref ASN (Percent of Fixed Sample)	100				

Method Information							
Boundary	Alpha	Beta	Alternative Reference	Drift			
Upper Alpha	0.02500	0.20000	0.453079	2.801585			
Lower Alpha	0.02500	0.20000	-0.45308	-2.80159			

Boundary Information (p-Value Scale) Null Reference = 0							
		Altern	ative	Boundary Values			
	Information Level			Refer	ence	Lower	Upper
_Stage_	Proportion Actual N		Lower	Upper	Alpha	Alpha	
1	1.0000	38.23484	1997.764	-2.80159	2.80159	0.02500	0.97500

### The SEQDESIGN Procedure Design: TwoSampleFreq



Sample Size Summary				
Test	Two-Sample Proportions			
Null Proportion	0.105			
Proportion (Group A)	0.0694			
Test Statistic	Log Odds Ratio			
Reference Proportions	Alt Ref			
Max Sample Size	1997.764			
Expected Sample Size (Null Ref)	1997.764			
Expected Sample Size (Alt Ref)	1997.764			

	Sample Sizes (N) Two-Sample Log Odds Ratio Test for Proportion Difference							
Fractional N							eiling N	
_Stage_	N	N(Grp 1)	N(Grp 2)	Information	N	N(Grp 1)	N(Grp 2)	Information
1	1997.76	998.88	998.88	38.2348	1998	999	999	38.2393

### The SEQDESIGN Procedure Design: TwoSidedOBrienFleming

Design Information					
Statistic Distribution	Normal				
Boundary Scale	p-Value				
Alternative Hypothesis	Two-Sided				
Early Stop	Accept(Nonbinding)/Reject Null				
Method	Error Spending				
Boundary Key	Both				
Alternative Reference	-0.45308				
Number of Stages	3				
Alpha (Binding Beta Boundary)	0.04382				
Alpha (Nonbinding Beta Boundary)	0.05				
Beta	0.2				
Power	0.8				
Max Information (Percent of Fixed Sample)	111.295				
Max Information	42.55357				
Null Ref ASN (Percent of Fixed Sample)	73.76837				
Alt Ref ASN (Percent of Fixed Sample)	85.07868				

#### Method Information

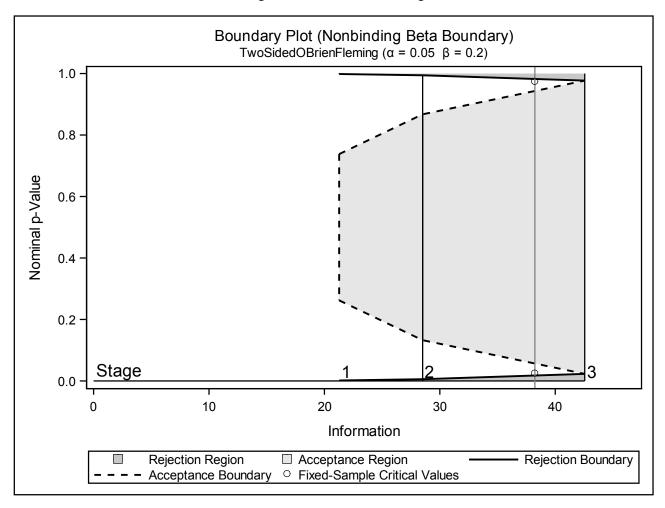
# Error Spending

Boundary	Method	Alpha	Beta	Function	Alternative Reference	Drift
Upper Alpha	Error Spending	0.02500		Approx O'Brien-Fleming	0.453079	2.955577
Upper Beta	Error Spending		0.20000	Approx O'Brien-Fleming	0.453079	2.955577
Lower Beta	Error Spending		0.20000	Approx O'Brien-Fleming	-0.45308	-2.95558
Lower Alpha	Error Spending	0.02500	-	Approx O'Brien-Fleming	-0.45308	-2.95558

# Boundary Information (p-Value Scale) Nonbinding Beta Boundary, Null Reference = 0

				Alternative			Boundar	y Values	
Information Level			Refer	ence	Lo	wer	Up	per	
_Stage_	Proportion	Actual	N	Lower	Upper	Alpha	Beta	Beta	Alpha
1	0.5000	21.27679	1111.709	-2.08991	2.08991	0.00153	0.26207	0.73793	0.99847
2	0.6700	28.51089	1489.69	-2.41924	2.41924	0.00570	0.13255	0.86745	0.99430
3	1.0000	42.55357	2223.418	-2.95558	2.95558	0.02301	0.02301	0.97699	0.97699

# The SEQDESIGN Procedure Design: TwoSidedOBrienFleming



# Error Spending Information (Nonbinding Beta Boundary) Cumulative Error Spending

	Information Level	Lo	Lower		per
_Stage_	Proportion	Alpha	Beta	Beta	Alpha
1	0.5000	0.00153	0.06993	0.06993	0.00153
2	0.6700	0.00617	0.11743	0.11743	0.00617
3	1.0000	0.02500	0.20000	0.20000	0.02500

Sample Size Summary					
Test	Two-Sample Proportions				
Null Proportion	0.105				
Proportion (Group A)	0.0694				
Test Statistic	Log Odds Ratio				
Reference Proportions	Alt Ref				
Max Sample Size	2223.418				
Expected Sample Size (Null Ref)	1473.722				
Expected Sample Size (Alt Ref)	1699.676				

### The SEQDESIGN Procedure Design: TwoSidedOBrienFleming

# Sample Sizes (N) Two-Sample Log Odds Ratio Test for Proportion Difference

Fractional N Ceiling N \_Stage\_ N N(Grp 1) N(Grp 2) N N(Grp 1) N(Grp 2) Information Information 1 1111.71 555.85 555.85 21.2768 1112 556 556 21.2824 2 1489.69 744.84 744.84 28.5109 1490 745 745 28.5168 3 2223.42 2224 42.5647 1111.71 1111.71 42.5536 1112 1112

