

Program Name: **bi1st**

Language: SAS

Objective: Determining the critical constants and the power of the UMP test for equivalence of a single binomial proportion to a fixed reference value

Input:

ALPHA      significance level  
N            sample size  
P1           lower limit of the equivalence range  
P2           upper " " " " " " " " " "

Output:

ALPHA      value read from input file  
N            " " " " " " "  
P1           " " " " " " "  
P2           " " " " " " "  
C1           left-hand limit of the optimal critical interval  
C2           right-hand " " " " " " " " " "  
GAM1       probability of a randomized decision in favour of equivalence at C1  
GAM2       " C2  
POWNONRD   power of the nonrandomized version of the test against the alternative  
               $P0=(P1+P2)/2$   
POW         power of the UMP test against  $P0=(P1+P2)/2$