Notations

In the following, we will use these notations:

p_1, p_2	the success of probabilities for two samples
θ	binomial proportion
$\hat{\theta}$	estimation of the binomial proportion
υ	random stopping time
$X_1, X_2, \ldots X_n$	first sample of Bernoulli experiments
$Y_1, Y_2, \ldots Y_n$	second sample of Bernoulli experiments
$\overline{X}_n$	sample mean of the first sample
$\overline{Y}_n$	sample mean of the second sample
T	the number of success
n	sample size for the first sample
m	sample size for the second sample
$Z_{\alpha/2}$	the quantile of standard normal distribution
$\varphi(t)$	characteristic function
σ^2	true variance
λ_t	characteristic function of negative binomial distribution
α	significant level
$1-\alpha$	confidence level
$Nb(m.p)$	Negative binomial distribution with parameters m, p
$B(n, p)$	Binomial distribution with parameters n, p