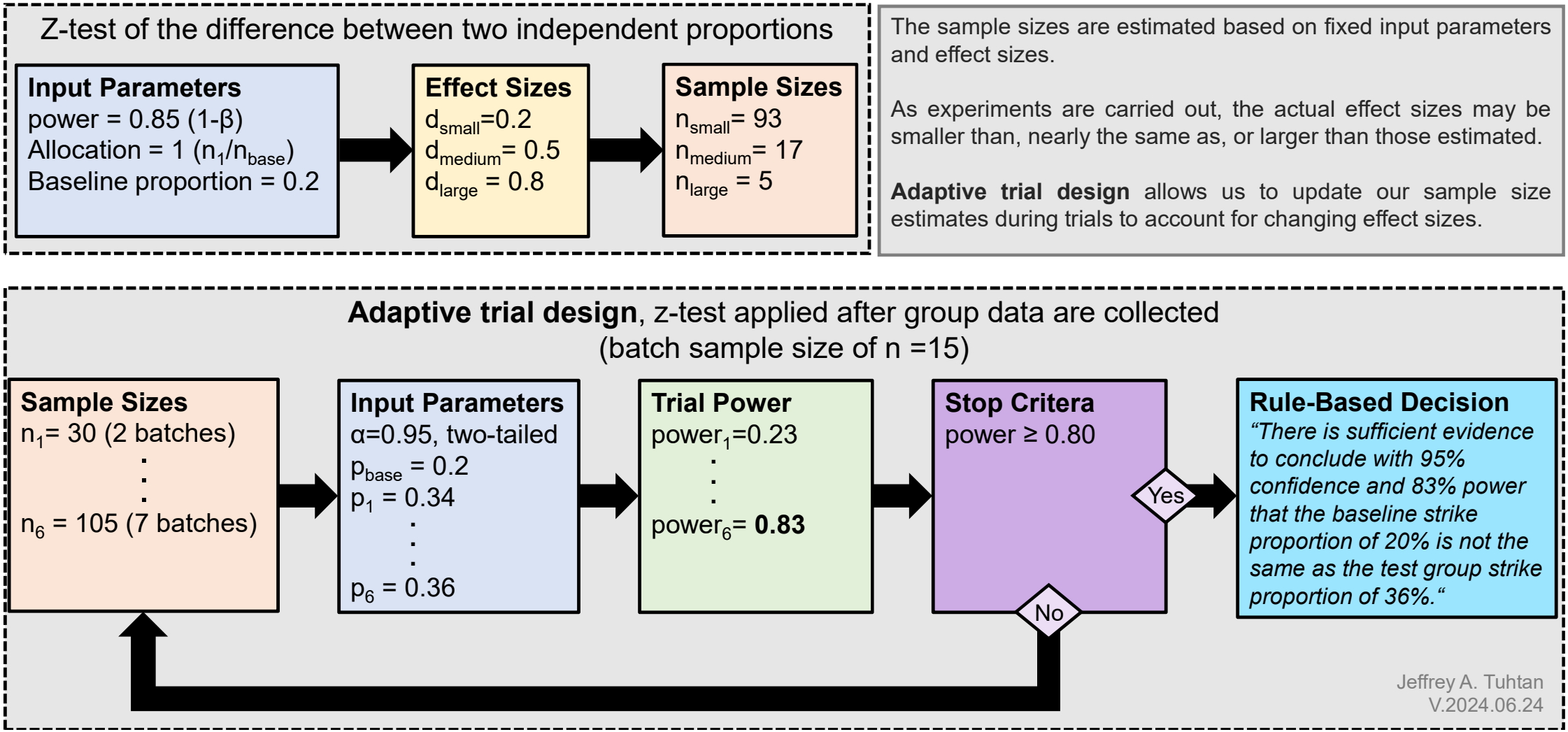
Z-test of the difference between two independent proportions
Input Parameters
power = 0.85 (1-β)
Allocation = 1 (n_1/n_{base})
Baseline proportion = 0.2
Effect Sizes
d_{small}=0.2
d_{medium}= 0.5
d_{large} = 0.8
Sample Sizes
n_{small}= 93
n_{medium}= 17
n_{large} = 5
The sample sizes are estimated based on fixed input parameters and effect sizes.
As experiments are carried out, the actual effect sizes may be smaller than, nearly the same as, or larger than those estimated.
Adaptive trial design allows us to update our sample size estimates during trials to account for changing effect sizes.
Adaptive trial design, z-test applied after group data are collected
(batch sample size of n =15)
Sample Sizes
n_1= 30 (2 batches)
n_6 = 105 (7 batches)
Input Parameters
α=0.95, two-tailed
p_{base} = 0.2
p_1 = 0.34
p_6 = 0.36
Trial Power
$power_1$=0.23
$power_6$= 0.83
Stop Critera
power ≥ 0.80
Yes
No
Rule-Based Decision
"There is sufficient evidence to conclude with 95% confidence and 83% power that the baseline strike proportion of 20% is not the same as the test group strike proportion of 36%."
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