Test Plan

Question
Does the label '-50% discount' on the page 'Subscribe to Premium' attract more premium subscribers?

Null Hypothesis
The conversion rate of Group A is the same as Group B for which label '-50% discount' is shown.

Alternative Hypothesis
If we add the label '-50% discount' on the page 'Subscribe to Premium' then we will raise conversion. We expect that conversion rate might increase up to 5%.

Confidence and Statistical Power
Confidence: 5%
Statistical power: 80%

Audience
Random Sampling
Each group should have 380 people randomly selected.
Calculated using https://www.evanmiller.org/ab-testing/sample-size.html

Duration
2 days duration

Success Metric:
- Conversion rate. The main goal of the product team at the current stage is to raise the conversion rate.

Secondary Metrics:
- Repeated subscriptions rate weekly (% of users who renewed subscription on second week). We need to measure loyalty because we are interested in keeping customer retention on a high level.
- The subscription cancellation rate on the payment page. We need to measure cancellation rate in order to investigate potential issues and improve customer success.

The Count Baseline conversion is:
2000 * 0.34 = 680 number of people daily who reach the page of subscription
17 % from 680 = 116 number of people who subscribe
Conversion rate daily: 116/2000*100 = 5.8%

Based on Calculator, the number of people in one group is 380
https://www.evanmiller.org/ab-testing/sample-size.html

A/B Test Results:

We performed A/B Testing of the new page 'Subscribe to Premium' with label '-50% discount'. The purpose of the test was to verify If the conversion of Premium users would rise when they see the label '-50% discount' on the onboarding page.
The alternative hypothesis is that the new page design with the label '-50% discount' can attract more subscribers.

The experiment lasted 22 days. The users were randomly selected for Group B.

As a result of the experiment we observed the conversion rate of the test Group B has increased 45.9%.

The following metrics are observed:
Number of users in Group A: 10013, in Group B: 9985
Number of conversions in Group A: 611, in Group B: 889
Conversion rate in Group A: 0.061, in Group B: 0.089

For test analysis we used T-test and Chi-squared test.
Both tests Reject the null hypothesis. There is a significant difference between conversion rates of Group A and Group B.

Having the above analysis of the test result I suggest implementing the new page 'Subscribe to Premium' with label '-50% discount'.