

Official Title: Comparison Between Subacromial Ultrasound Guided and Systemic Steroid Injection for Frozen Shoulder: a Randomized Double Blind Study

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Statistical Analysis Plan:

The descriptive statistical analysis is plan to perform after the final data from participant are collected. The statistical method is used to compare between two experiment groups. Firstly, the Shapiro–Wilk test is a test of normality for quantitative data. After then, the Student’s t-test, Welch’s t-test or Mann–Whitney U test are used to test whether the differences were statistically significant. For qualitative data, the chi-square test is applied. A p-value less than 0.05 (typically ≤ 0.05) is statistically significant.

Besides, the difference between the change of primary or secondary outcome are plan to test using two-factor analysis of variance or General linear model (GLM). The $P < 0.05$ between groups are defined as statistical significance.

We plan to use interim analysis in this trial. After half data of the patients collected in formal trials, we plan to performed the interim analysis. If the p-value is lower than 0.05 between groups, we will stop the trial and report our result. If the p-value is not lower than 0.05 between groups, we will continue the trial until we reach the anticipated patient’s number. In that case, we plan to use multi-factor analysis of variance or GLM to calculate the p-value of outcomes.