Result & Conclusions

Result: The result of the experiment is summarized in the Table. First, by comparing treatment 1 and treatment 2 result on the 248 number of individuals, test one has a -1.19 z score for treatment 1 and -0.97 score for treatment 2, and the adjected difference in means is 0.23. Second, since a higher value in the test indicates a better outcome, treatment 2 has better effect under test 1, 2, 3, which is evidence that treatment 2 is possibly more efficient. Third, test 2 has an adjusted difference of 0.35, which is the largest among the three tests, suggesting a significant effect. Lastly, test 4 collects information on the percentage of optimum level of airflow, where treatment 2 also shows a better result.

Conclusion: Treatment 2 leads to better lung function at 11 to age 14. The three tests are consistent in the result that treatment 2 has a less negative value, and based on either test 1 alone or all tests, treatment 2 is more effective.