

(Follow YH Chan approach)

A clinical trial was conducted to compare the effectiveness of two anti-depressants, Fluoxetine (Prozac) and Sertraline (Zoloft) for 6 weeks on 71 depressed patients. The effectiveness of both medications was measured using Hamilton Depression Rating Scale (HAM-D), Hamilton Anxiety Rating Scale (HAM-A) & Leeds Depression & Anxiety Scale. The higher the score, the more severe the depression/anxiety.

Please use what dataset that was given to you for this assignment.

The measurements were done at;

- baseline (dXXXXXwk0)
- a week after treatment (dXXXXXwk1)
- two weeks after treatment (dXXXXXwk2)
- four weeks after treatment (dXXXXXwk4)
- six weeks after treatment (dXXXXXwk6)

Copy and paste the appropriate tables/charts into your answer sheet (use Microsoft Word).
Discuss your answers in brief.

- a) Using GLM Repeated Measures, determine whether there is a significant difference of drug dosage increase between Fluoxetine & Sertraline over 6 weeks. Generate the appropriate plot to compare the trend of mean drug dosage over time between the two groups.
- b) Perform the appropriate analysis for repeated measures on your computer using the data given to you and answer the following questions.
 - i. Is there a difference in the overall depression/anxiety score between the two treatment groups?
 - ii. Is there a change of depression/anxiety score over time? Use either the univariate or multivariate test of the GLM Repeated Measures, whichever is appropriate.
 - iii. Is there a group time interaction? Is there a time trend, whether this trend exists for all groups or only certain groups? Use either the univariate or multivariate test of the GLM Repeated Measures, whichever is appropriate.
 - iv. Plot a suitable graphical plot for the above analysis, which will show the trend of the depression/anxiety score for both groups over time.