Group Project - Dataset

AIDS Clinical Trial Group Study

The data for the group project are from a randomized, double-blind, study of AIDS patients with advanced immune suppression, that corresponds to CD4 counts of less than or equal to 50 cells/mm³.

The 1309 patients in this trial were randomized to one of four daily regimens of a medication called Zidovudine.

The categorical variable **treatment** in the dataset contains the treatment type information and is coded as follows:

| Code | Treatment type |
|------|--|
| 1 | zidovudine alternating monthly with 400mg didanosine |
| 2 | zidovudine plus 2.25mg of zalcitabine |
| 3 | zidovudine plus 400mg of didanosine |
| 4 | zidovudine plus $400\mathrm{mg}$ of didanosine plus $400\mathrm{mg}$ of nevirapine |

Caution: the treatment variable is a categorical variable, but it is coded as a numerical variable.

Hint: You need to change it to a factor.

There are other information gathered from the patients that are present in the dataset and are as follows:

| Variable | Description |
|----------|--------------------------------|
| week | time since baseline (in weeks) |
| age | age (in years) |
| gender | male and female |

Lastly, the response variable, log_cd4 , is the log transformed CD4 counts; i.e. log(CD4 counts + 1), which is a **continuous** variable.

The **goal** of your project is to compare the effect of treatment types on the changes in log transformed CD4 counts over time.