**ANSWER the following:**

1. Whether the CD4 cell count differs significantly across the groups 3 and 4 of HAART regimen.
2. Whether there is significant increase in CD4 cell count after 12 months of treatment.

HAART regimen:

1 = "Lamivudine+Nevirapine+Zidovudine"

2 = "Lamivudine+Zidovudine+Efavirenz"

3 = "Lamivudine+Nevirapine+Stavudine"

4 = "Lamivudine+Stavudine+Efavirenz"

Diabetes status:

0.00 = "No"

1.00 = "yes"

Tuberculosis status:

0.00 = "No"

1.00 = "yes"

Hypertension status:

0.00 = "No"

1.00 = "yes"

Base\_CD4 : The CD4 count before initiating the treatment

CD4\_at\_12 : The CD4 count after 12 months of treatment

**About CD4 cell count**

A CD4 count is a lab test that measures the number of CD4 cells in a sample of your blood. It is an important indicator of how well your immune system is working. The CD4 count of a healthy adult/adolescent ranges from 500 cells/mm3 to 1,200 cells/mm3.

A very low CD4 count (less than 200 cells/mm3) is one of the ways to determine whether a person living with HIV has progressed to stage 3 infection (AIDS).

The higher the CD4 count, the better.

After you start ART, your HIV care provider will use your CD4 count as one way to check how well your medication is working to monitor the effectiveness of your HIV regimen. Your HIV care provider will also monitor your CD4 count to determine whether it has fallen to a level at which you might be at risk for certain

The **management of HIV/AIDS** normally includes the use of multiple AntiReTroviral drugs in an attempt to control HIV infection. There are several classes of antiretroviral agents that act on different stages of the HIV life-cycle. The use of multiple drugs that act on different viral targets is known as highly active antiretroviral therapy (HAART). HAART decreases the patient's total burden of HIV, maintains function of the immune system, and prevents opportunistic infections that often lead to death.