Quantitative Competitative PCR assay:

The EBV DNA load in whole blood samples of patients and control was quantified through the estimation of linear regression curve between the logarithmic ratio of WT signal/IS signal produced by ELISA using WT and IS probe against the logarithmic values of IS copies added. The quantification of each sample estimated from the linear equation Y = ax + b pre and post therapy. The EBV load in those samples ranged from 0–1.936 × 10^9, while the EBV viral load in healthy controls were ranged from 7–1.9×10^3 there is significant difference between the viral load of patient and controls as shown in table 2 where P is 0.011 .

Cut off value: Healthy controls screened by QC-PCR, it was found that cut off value have EBV copy number ≤1.9× 103 EBV DNA copies/ml.

Follow up samples were available in 18 patients with active HL and NHL. Figure 7 showing the distribution of viral load values in patients from 0-1936421960 (1.936×109) EBV DNA copies/ml of blood and in controls from 7 to 1990 (1.99×103) EBV DNA copies/ml of blood .

Table 2 shows the EBV load in blood of patients at time of diagnosis and after completion of chemotherapy where 66.7% of HL Patients have viral load above cut off value while 44.5% of those patients with NHL have high viral load above cut off value. Regarding HL AND NHL patients response After completion of chemotherapy in table 3, the viral load declined in the group I, where 38.3% have high viral load above cut off value shows decline below cut off value while group II still have viral load above cut off value and elevated viral load above cut off value was detected in Group III.

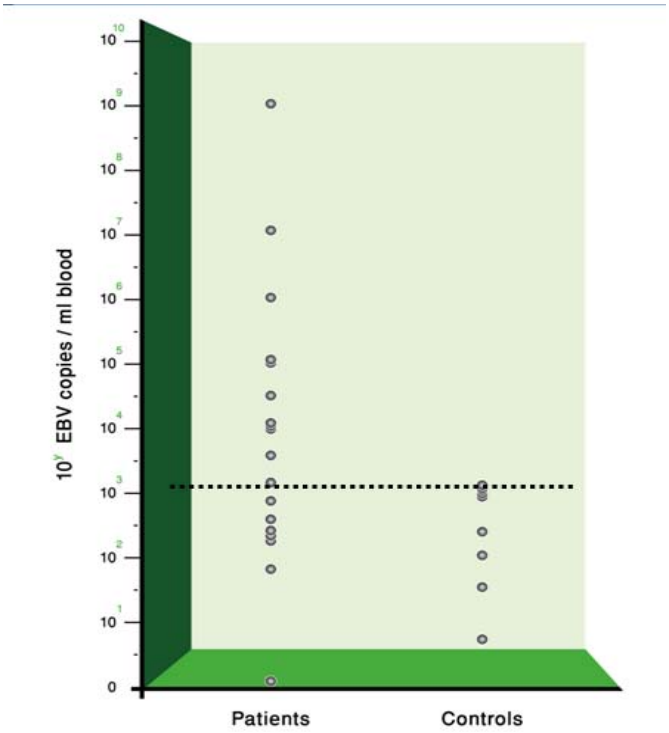

Figure 7: Distribution of EBV load in peripheral whole blood of lymphoma patients and controls.