Abstract B048: Androgen metabolism and incidence of prostate cancer in Nigeria

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Abstract

The risk of prostate cancer among blacks, especially of Nigerian descent, is higher than other races. This could be attributed to biologic and genetic variability. The role of androgen metabolism in prognosis of prostate cancer has been delineated and reported. One of the enzymes involved in androgen metabolism is CYP3A4, which has not been studied in Nigerian men afflicted with prostate cancer. Racial differences in this functional gene may contribute to variations in incidence of prostate cancer across ethnic divides. Therefore, identifying a diagnostic and prognostic biomarker such as CYP3A4 polymorphism for prostate cancer in black men will improve the treatment and management of the disease. In this study, we investigated the genotypes of CYP3A4 of prostate cancer patients from Nigeria for possible correlation to the high incidence of the disease in Nigerian men. The results obtained showed a preponderance of the GG genotypes, which indicates a possible correlation between this genotype of CYP3A4 and higher risk of prostate cancer among Nigerian men.
