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## Pattern of Prostate Specific Antigen Request in a Tertiary Health Institution S' Tumor Marker Laboratory in Nigeria: A Two Year Review

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Abstract: Background: This study is a two year review of requests pattern for Prostate Specific Antigen (PSA), in a Nigerian tertiary health care institution. Prostate specific antigen was first described about 44 years ago but is still in use today for, diagnosis, monitoring, screening and prognosis of prostatic carcinoma though not-very specific as was widely believed. Prostate cancer is an increasingly important public health problem among adult men worldwide. Nigeria, which was formerly regarded as a low-incidence area by several authors is now witnessing a steep rise in the occurrence of this disease. This has been suggested to be due to increasing availability of screening tests and diagnostic facilities and not necessarily because of increased incidence of the diseases. Many notable Nigerians have died due to this dreaded disease. Methods: All plasma samples for PSA from January 2021-December 2022 were analyzed weekly by abbot autoanalyser, chemiluminescence assay method. Bio-data from request form were collated and analyzed. A total of 385 requests were received for the period under review. Result: There was an increase of request from inception to the last year of review. Smoked food, consumption of local herb and alcohol in order of importance, respectively, appears to be prominent factor in patient requested for PSA. The mean age was 67.years; the youngest was 29, while the oldest was 93years. Age 70 has the highest frequency of 8.5% .Mean PSA was 12.9ng/ml. There was a positive correlation between age and PSA (R=0.255, P < 0.05). Significant increase in PSA with age were reported. Men who retired from active jobs constitute the highest request for PSA test. Conclusion: There was an increasing trend in the proportion of requests with values outside the reference interval especially in patients diagnosed of benign prostatic hyperplasia, prostate cancer, while some routine test for PSA were elevated for the first time. This is in line with earlier report of increasing incidence of prostate cancer in Nigeria despite the increasing knowledge of healthy lifestyle.

**Keywords:** pattern, PSA, tertiary institution, Nigeria

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