**Table 5:** Haplotype frequencies were calculated using the SNP Stats (https://www.snpstats.net/start.htm) based on the expectation maximization algorithm

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| rs1800629 | rs361525 | Frequency in Prostate cancer  | Frequency inBPH | Frequency in control | Prostate cancer vs Controls | BPH vs Controls | Prostate cancer vs BPH |
| OR (95%CI) | P value | OR (95%CI) | P value | OR (95%CI) | P value |
| G | G | 0.8763 | 0.8955 | 0.9136 | 1.00 | - | 1 | - | 1 | - |
| A | G | 0.0737 | 0.0727 | 0.0636 | 1.24 (0.56 – 2.76) | 0.59 | 1.2 (0.55-2.6) | 0.65 | 1.05 (0.48-2.29) | 0.9 |
| G | A | 0.0437 | 0.0318 | 0.0227 | 2.08 (0.66 – 6.57) | 0.22 | 1.46 (0.45-4.79) | 0.53 | 1.44 (0.5-4.14) | 0.5 |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| UGT2B28 | UGT2B17 | UGT2B15 | Frequency in Prostate cancer  | Frequency inBPH | Frequency in control | Prostate cancer vs Controls | **BPH vs Controls** | Prostate cancer vs BPH |
| OR (95%CI) | P value | OR (95%CI) | P value | OR (95%CI) | P value |
| Ins | Ins | T | 0.4778 | 0.4133 | 0.4897 | 1.00 | - | 1 | - | 1 | - |
| Ins | Del | G | 0.2515 | 0.296 | 0.1827 | 1.41 (0.82-2.44) | 0.22 | 2.02 (1.18-3.47) | 0.011 | 0.72 (0.44-1.19) | 0.2 |
| Ins | Ins | G | 0.0863 | 0.1012 | 0.1475 | 0.66 (0.35 – 1.24) | 0.2 | 0.94 (0.5-1.76) | 0.84 | 0.75 (0.38-1.49) | 0.41 |
| Del | Ins | T | 0.1154 | 0.0654 | 0.117 | 1.07 (0.59 – 1.95) | 0.83 | 0.68 (0.3-1.56) | 0.37 | 1.85 (0.79-4.31) | 0.16 |
| Ins | Del | T | 0.0469 | 0.0353 | 0.026 | 2.02 (0.62 – 6.56) | 0.24 | 1.48 (0.41-5.29) | 0.55 | 1.25 (0.4-3.86) | 0.7 |
| Del | Del | G | \*0 | 0.0701 | 0.0323 | \*- | - | 2.97 (0.94-9.37) | 0.065 | - | - |

Given that the p value is not less than 0.05 in any of the cases, so in terms of frequency, each haplotype of any of the five polymorphisms, shows a similar distribution in cancer and BPH groups compared to the control group. If a particular haplotype, for example, was seen with higher or lower frequently in the BHP samples, it would be possible to discuss it by presenting p value and odds ratio, but none of them showed a significant difference.

\*0: This haplotype (Del Del G) was not present in PCa individuals.

\*dash: When there is no haplotype, it is not possible to compare this group with the reference group