Supplementary Table 3 - Summary of single nucleotide polymorphisms analyzed for growth factor genes and quality of life scores (QOL) in men with prostate cancer and in men from the general population

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  | Prostate Cancer Cases | General Population Controls | Model |
| QOL Summary Measure or Scale | Gene | SNP | Alleles | MAF | Statistic*a* | *p*-value | MAF | Statistic*a* | *p*-value | Model |
| Physical Component Summary Measure | VEGF | rs699947 | A>C | 0.49 | 2.15 | 0.032 | 0.49 | -0.95 | 0.342 | D |
|  | VEGF | rs833068 | G>A | 0.32 | 1.97 | 0.049 | 0.31 | 0.00 | 0.996 | D |
|  | VEGF | rs3024994 | C>T | 0.04 | 0.58 | 0.445 | 0.05 | 0.63 | 0.430 | A |
|  | VEGF | rs2146323 | C>A | 0.37 | 0.24 | 0.785 | 0.37 | 0.69 | 0.502 | A |
|  | VEGF | rs3025033 | A>G | 0.14 | 0.29 | 0.747 | 0.14 | 0.26 | 0.772 | A |
|  | VEGF | rs3035035 | C>T | 0.09 | 0.60 | 0.440 | 0.08 | 1.11 | 0.293 | A |
|  | IGF1 | rs2288377 | T>A | 0.01 | 0.00 | 0.968 | 0.01 | 0.00 | 0.967 | A |
|  | IGF1 | rs35767 | C>T | 0.14 | 0.40 | 0.673 | 0.17 | 1.02 | 0.361 | A |
|  | IGF1 | rs35765 | C>A | 0.11 | 0.42 | 0.657 | 0.14 | 1.51 | 0.222 | A |
|  | IGF1 | rs7965399 | T>C | 0.04 | 0.08 | 0.774 | 0.04 | 1.57 | 0.211 | A |
| Mental Component Summary Measure | VEGF | rs699947 | A>C | 0.49 | 0.53 | 0.589 | 0.49 | 0.18 | 0.836 | A |
|  | VEGF | rs833068 | G>A | 0.32 | 0.63 | 0.531 | 0.31 | 0.83 | 0.438 | A |
|  | VEGF | rs3024994 | C>T | 0.04 | 1.92 | 0.167 | 0.05 | 0.38 | 0.539 | A |
|  | VEGF | rs2146323 | C>A | 0.37 | 2.21 | 0.110 | 0.37 | 0.45 | 0.636 | A |
|  | VEGF | rs3025033 | A>G | 0.14 | 0.00 | 0.997 | 0.14 | 1.02 | 0.363 | A |
|  | VEGF | rs3035035 | C>T | 0.09 | 2.75 | 0.097 | 0.08 | 4.82 | 0.029 | A |
|  | IGF1 | rs2288377 | T>A | 0.01 | 0.60 | 0.440 | 0.01 | 0.24 | 0.622 | A |
|  | IGF1 | rs35767 | C>T | 0.14 | 0.16 | 0.850 | 0.17 | 2.53 | 0.081 | A |
|  | IGF1 | rs35765 | C>A | 0.11 | 0.00 | 0.999 | 0.14 | 1.09 | 0.336 | A |
|  | IGF1 | rs7965399 | T>C | 0.04 | 0.12 | 0.734 | 0.04 | 1.15 | 0.284 | A |
| Physical Functioning | VEGF | rs699947 | A>C | 0.49 | 0.70 | 0.497 | 0.49 | 0.78 | 0.457 | A |
|  | VEGF | rs833068 | G>A | 0.32 | 1.66 | 0.192 | 0.31 | 0.06 | 0.939 | A |
|  | VEGF | rs3024994 | C>T | 0.04 | 0.64 | 0.424 | 0.05 | 0.54 | 0.464 | A |
|  | VEGF | rs2146323 | C>A | 0.37 | 0.77 | 0.462 | 0.37 | 0.32 | 0.728 | A |
|  | VEGF | rs3025033 | A>G | 0.14 | 1.37 | 0.255 | 0.14 | 0.98 | 0.377 | A |
|  | VEGF | rs3035035 | C>T | 0.09 | 0.05 | 0.827 | 0.08 | 0.07 | 0.791 | A |
|  | IGF1 | rs2288377 | T>A | 0.01 | 0.16 | 0.688 | 0.01 | 0.27 | 0.606 | A |
|  | IGF1 | rs35767 | C>T | 0.14 | 0.89 | 0.916 | 0.17 | 1.23 | 0.293 | A |
|  | IGF1 | rs35765 | C>A | 0.11 | -0.78 | 0.437 | 0.14 | 1.93 | 0.054 | R |
|  | IGF1 | rs7965399 | T>C | 0.04 | 0.00 | 0.966 | 0.04 | 1.38 | 0.240 | A |
| Role Physical | VEGF | rs699947 | A>C | 0.49 | 1.92 | 0.147 | 0.49 | 0.05 | 0.953 | A |
|  | VEGF | rs833068 | G>A | 0.32 | 2.06 | 0.040 | 0.31 | -0.43 | 0.665 | D |
|  | VEGF | rs3024994 | C>T | 0.04 | 1.65 | 0.199 | 0.05 | 0.06 | 0.804 | A |
|  | VEGF | rs2146323 | C>A | 0.37 | 0.76 | 0.467 | 0.37 | 2.01 | 0.135 | A |
|  | VEGF | rs3025033 | A>G | 0.14 | 0.17 | 0.842 | 0.14 | 0.27 | 0.766 | A |
|  | VEGF | rs3035035 | C>T | 0.09 | 2.08 | 0.150 | 0.08 | 1.04 | 0.307 | A |
|  | IGF1 | rs2288377 | T>A | 0.01 | 0.00 | 0.994 | 0.01 | 0.06 | 0.806 | A |
|  | IGF1 | rs35767 | C>T | 0.14 | -2.06 | 0.040 | 0.17 | -0.16 | 0.869 | R |
|  | IGF1 | rs35765 | C>A | 0.11 | 1.89 | 0.152 | 0.14 | 0.26 | 0.799 | A |
|  | IGF1 | rs7965399 | T>C | 0.04 | 0.01 | 0.930 | 0.04 | 1.52 | 0.218 | A |
| Bodily Pain | VEGF | rs699947 | A>C | 0.49 | 0.86 | 0.424 | 0.49 | 1.59 | 0.205 | A |
|  | VEGF | rs833068 | G>A | 0.32 | 1.52 | 0.219 | 0.31 | 0.09 | 0.911 | A |
|  | VEGF | rs3024994 | C>T | 0.04 | 2.10 | 0.148 | 0.05 | 0.79 | 0.374 | A |
|  | VEGF | rs2146323 | C>A | 0.37 | 0.49 | 0.612 | 0.37 | 1.38 | 0.251 | A |
|  | VEGF | rs3025033 | A>G | 0.14 | 0.03 | 0.974 | 0.14 | 0.27 | 0.765 | A |
|  | VEGF | rs3035035 | C>T | 0.09 | 1.76 | 0.186 | 0.08 | 0.22 | 0.642 | A |
|  | IGF1 | rs2288377 | T>A | 0.01 | 0.85 | 0.357 | 0.01 | 2.21 | 0.138 | A |
|  | IGF1 | rs35767 | C>T | 0.14 | 0.27 | 0.763 | 0.17 | 0.31 | 0.733 | A |
|  | IGF1 | rs35765 | C>A | 0.11 | 0.14 | 0.867 | 0.14 | 0.72 | 0.486 | A |
|  | IGF1 | rs7965399 | T>C | 0.04 | -0.28 | 0.778 | 0.04 | -2.45 | 0.015 | D |
| General Health | VEGF | rs699947 | A>C | 0.49 | 1.45 | 0.236 | 0.49 | 0.74 | 0.477 | A |
|  | VEGF | rs833068 | G>A | 0.32 | 0.63 | 0.532 | 0.31 | 0.00 | 0.997 | A |
|  | VEGF | rs3024994 | C>T | 0.04 | 0.03 | 0.852 | 0.05 | 1.50 | 0.221 | A |
|  | VEGF | rs2146323 | C>A | 0.37 | 1.49 | 0.225 | 0.37 | 0.21 | 0.812 | A |
|  | VEGF | rs3025033 | A>G | 0.14 | 0.01 | 0.990 | 0.14 | 0.30 | 0.740 | A |
|  | VEGF | rs3035035 | C>T | 0.09 | 0.55 | 0.460 | 0.08 | 0.03 | 0.868 | A |
|  | IGF1 | rs2288377 | T>A | 0.01 | 0.25 | 0.620 | 0.01 | 0.05 | 0.822 | A |
|  | IGF1 | rs35767 | C>T | 0.14 | 0.03 | 0.975 | 0.17 | 0.40 | 0.668 | A |
|  | IGF1 | rs35765 | C>A | 0.11 | 0.06 | 0.940 | 0.14 | 0.66 | 0.517 | A |
|  | IGF1 | rs7965399 | T>C | 0.04 | 0.13 | 0.722 | 0.04 | 0.94 | 0.334 | A |
| Vitality | VEGF | rs699947 | A>C | 0.49 | 0.71 | 0.494 | 0.49 | 2.22 | 0.110 | A |
|  | VEGF | rs833068 | G>A | 0.32 | 1.36 | 0.257 | 0.31 | 0.98 | 0.376 | A |
|  | VEGF | rs3024994 | C>T | 0.04 | 1.14 | 0.285 | 0.05 | 2.17 | 0.141 | A |
|  | VEGF | rs2146323 | C>A | 0.37 | 2.13 | 0.120 | 0.37 | 0.87 | 0.419 | A |
|  | VEGF | rs3025033 | A>G | 0.14 | 0.28 | 0.759 | 0.14 | 0.13 | 0.877 | A |
|  | VEGF | rs3035035 | C>T | 0.09 | 1.05 | 0.307 | 0.08 | 2.04 | 0.154 | A |
|  | IGF1 | rs2288377 | T>A | 0.01 | 0.11 | 0.741 | 0.01 | 0.08 | 0.773 | A |
|  | IGF1 | rs35767 | C>T | 0.14 | 0.34 | 0.712 | 0.17 | 0.74 | 0.480 | A |
|  | IGF1 | rs35765 | C>A | 0.11 | 0.40 | 0.674 | 0.14 | 0.86 | 0.413 | A |
|  | IGF1 | rs7965399 | T>C | 0.04 | 0.25 | 0.615 | 0.04 | 2.19 | 0.139 | A |
| Social Functioning | VEGF | rs699947 | A>C | 0.49 | 0.46 | 0.630 | 0.49 | 0.09 | 0.918 | A |
|  | VEGF | rs833068 | G>A | 0.32 | 0.59 | 0.552 | 0.31 | 0.15 | 0.858 | A |
|  | VEGF | rs3024994 | C>T | 0.04 | 1.64 | 0.201 | 0.05 | 0.57 | 0.450 | A |
|  | VEGF | rs2146323 | C>A | 0.37 | 0.26 | 0.768 | 0.37 | 0.47 | 0.624 | A |
|  | VEGF | rs3025033 | A>G | 0.14 | 0.03 | 0.971 | 0.14 | 1.07 | 0.345 | A |
|  | VEGF | rs3035035 | C>T | 0.09 | 2.54 | 0.111 | 0.08 | 1.79 | 0.182 | A |
|  | IGF1 | rs2288377 | T>A | 0.01 | 0.01 | 0.912 | 0.01 | 0.96 | 0.328 | A |
|  | IGF1 | rs35767 | C>T | 0.14 | 1.31 | 0.270 | 0.17 | 1.56 | 0.211 | A |
|  | IGF1 | rs35765 | C>A | 0.11 | 0.94 | 0.390 | 0.14 | 0.35 | 0.706 | A |
|  | IGF1 | rs7965399 | T>C | 0.04 | 0.09 | 0.768 | 0.04 | 3.32 | 0.069 | A |
| Role Emotional | VEGF | rs699947 | A>C | 0.49 | 0.32 | 0.727 | 0.49 | 0.16 | 0.850 | A |
|  | VEGF | rs833068 | G>A | 0.32 | 1.25 | 0.287 | 0.31 | 1.20 | 0.301 | A |
|  | VEGF | rs3024994 | C>T | 0.04 | 3.79 | 0.052 | 0.05 | 0.08 | 0.779 | A |
|  | VEGF | rs2146323 | C>A | 0.37 | -2.04 | 0.042 | 0.37 | 1.02 | 0.307 | D |
|  |  |  |  |  | 0.00 | 0.997 |  | 2.54 | 0.011 | R |
|  | VEGF | rs3025033 | A>G | 0.14 | 0.51 | 0.601 | 0.14 | 1.30 | 0.273 | A |
|  | VEGF | rs3035035 | C>T | 0.09 | 2.85 | 0.004 | 0.08 | 1.91 | 0.057 | D |
|  | IGF1 | rs2288377 | T>A | 0.01 | 0.67 | 0.413 | 0.01 | 0.01 | 0.913 | A |
|  | IGF1 | rs35767 | C>T | 0.14 | 0.48 | 0.621 | 0.17 | 1.63 | 0.197 | A |
|  | IGF1 | rs35765 | C>A | 0.11 | 0.28 | 0.753 | 0.14 | 0.49 | 0.613 | A |
|  | IGF1 | rs7965399 | T>C | 0.04 | 0.13 | 0.723 | 0.04 | 0.58 | 0.447 | A |
| Mental Health | VEGF | rs699947 | A>C | 0.49 | 1.62 | 0.198 | 0.49 | 1.22 | 0.295 | A |
|  | VEGF | rs833068 | G>A | 0.32 | 1.04 | 0.354 | 0.31 | 0.80 | 0.452 | A |
|  | VEGF | rs3024994 | C>T | 0.04 | 0.37 | 0.546 | 0.05 | 1.82 | 0.177 | A |
|  | VEGF | rs2146323 | C>A | 0.37 | 2.32 | 0.099 | 0.37 | 0.72 | 0.489 | A |
|  | VEGF | rs3025033 | A>G | 0.14 | 0.02 | 0.981 | 0.14 | 0.42 | 0.656 | A |
|  | VEGF | rs3035035 | C>T | 0.09 | 0.00 | 0.993 | 0.08 | 3.20 | 0.074 | A |
|  | IGF1 | rs2288377 | T>A | 0.01 | 1.31 | 0.252 | 0.01 | 1.08 | 0.298 | A |
|  | IGF1 | rs35767 | C>T | 0.14 | 0.20 | 0.817 | 0.17 | 0.70 | 0.499 | A |
|  | IGF1 | rs35765 | C>A | 0.11 | 0.26 | 0.775 | 0.14 | 0.07 | 0.929 | A |
|  | IGF1 | rs7965399 | T>C | 0.04 | 0.14 | 0.711 | 0.04 | 2.59 | 0.108 | A |

*a*Analysis of variance (ANOVA) was used to test for additive models; *t-*tests were used to test for dominant and recessive models

Abbreviations: A = additive model, D = dominant model, IGF1 = insulin-like growth factor 1, MAF = minor allele frequency, QOL = quality of life, R = recessive model, SNP = single nucleotide polymorphism, VEGF = vascular endothelial growth factor