***Table S…*:** **Primers used in polymerase chain reaction amplification and primer extension for the Agena Bioscience platform.**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **SNP** | **SNP position** | **Alleles** | **Forward primer sequence (5’ to 3’)** | **Reverse primer sequence (5’ to 3’)** | **Extension primer sequence (5’ to 3’)** | **Well** |
| rs1800587 | *IL1A* -889 | G/A | ACGTTGGATGGGCTGGCCACAGGAATTATA | ACGTTGGATGGGAAGGCATGGATTTTTAC | tacTAATAGTAACCAGGCAACA | W1 |
| rs16944 | *IL1B* -511 | A/G | ACGTTGGATGAGAGGCTCCTGCAATTGAC | ACGTTGGATGCTGTCTGTATTGAGGGTGTG | gggaAATTGACAGAGAGCTCC | W1 |
| rs1143634 | *IL1B* +3954 | G/A | ACGTTGGATGCATGTGCTCCACATTTCAG | ACGTTGGATGGTTCAGTGATCGTACAGGTG | caggTCAGAACCTATCTTCTT | W1 |
| rs4251961 | *IL1RN* | T/C | ACGTTGGATGTCATTCATGCTTCCGGTGAG | ACGTTGGATGCCTTCAGACCTCATTTTGAC | AAGATAGGGCAGATAGCA | W1 |
| rs579543 | *IL1RN* | G/A | ACGTTGGATGTCAAACCCTGACAGAACACC | ACGTTGGATGCCTTGGACCACTAAGTCTG | TCTGCTGATGGTGCC | W2 |
| rs315952 | *IL1RN* MspA1 11100 | T/C | ACGTTGGATGTAACATCACTGACCTGAGCG | ACGTTGGATGGCAGACTCAAAACTGGTGG | aCTTCATCCGCTCAGACAG | W1 |
| rs2234650 | *IL1R1* Pst1 1970 | C/T | ACGTTGGATGTGAAGACTAGCGAAGTGGAG | ACGTTGGATGATCACACCTTGGGCTCCTTG | GGGGAAAGCCCGAGGGAG | W2 |
| rs2069762 | *IL2* -330 | A/C | ACGTTGGATGCTTGTCCACCACAATATGC | ACGTTGGATGGGTGGGGATACAAAAGTAAC | accTGTTCAGTGTAGTTTTA | W2 |
| rs2069763 | *IL2* +166 | C/A | ACGTTGGATGAACAGTGCACCTACTTCAAG | ACGTTGGATGTTCCATTCAAAATCATCTG | ccaccACTGGAGCATTTACT | W2 |
| rs2243248 | *IL4* -1098 | T/G | ACGTTGGATGGCCCACTTTTTGAATGGAAC | ACGTTGGATGTGACTAGGAGGGCTGATTTG | TAGGAAAAAGAGCTAC | W2 |
| rs2243250 | *IL4* -590 | C/T | ACGTTGGATGTGATACGACCTGTCCTTCTC | ACGTTGGATGTAACAGGCAGACTCTCCTAC | ggaaaTTGGGAGAACATTGT | W2 |
| rs2070874 | *IL4* -33 | C/T | ACGTTGGATGAGACCCATTAATAGGTGTCG | ACGTTGGATGTGCATCGTTAGCTTCTCCTG | agagTTGCAGTGACAATGTGAG | W1 |
| rs1801275 | *IL4R* +1902 | A/G | ACGTTGGATGACCCTGCTCCACCGCATGTA | ACGTTGGATGATCCTCCGCCGAAATGTCCT | CCGCATGTACAAACTCC | W1 |
| rs1800797 | *IL6* -597 | A/G | ACGTTGGATGGAGACGCCTTGAAGTAACTG | ACGTTGGATGTCTTCTGTGTTCTGGCTCTC | tcACTGCACGAAATTTGAGG | W1 |
| rs1800795 | *IL6* -174 | C/G | ACGTTGGATGAGCCTCAATGACGACCTAAG | ACGTTGGATGGATTGTGCAATGTGACGTCC | CTAGTTGTGTCTTGC | W1 |
| rs2227307 | *CXCL8* (IL-8) | T/G | ACGTTGGATGACCGTGGTTCTCAATAGGAC | ACGTTGGATGGATCAATATAGATATTCTGC | ttcATATATGCATGCTAC | W2 |
| rs4073 | *CXCL8* (IL-8) | A/T | ACGTTGGATGCTGAAGCTCCACAATTTGGT | ACGTTGGATGGTACTATATCTGTCACATGG | ctcccCAATTTGGTGAATTATCAA | W2 |
| rs1800872 | *IL10* -592 | T/G | ACGTTGGATGAGCAGCCCTTCCATTTTAC | ACGTTGGATGAAAGGAGCCTGGAACACATC | ggaaAGAGACTGGCTTCCTACAG | W1 |
| rs1800871 | *IL10* -819 | A/G | ACGTTGGATGGTGTACCCTTGTACAGGTG | ACGTTGGATGATGCTAGTCAGGTAGTGCTC | gtggACCCTTGTACAGGTGATGTAA | W1 |
| rs1800896 | *IL10* -1082 | T/C | ACGTTGGATGATTCCATGGAGGCTGGATAG | ACGTTGGATGGACAACACTACTAAGGCTTC | TATCCCTACTTCCCC | W2 |
| rs3212227 | *IL12* -1188 | T/G | ACGTTGGATGCACAATGATATCTTTGCTG | ACGTTGGATGATGGCAACTTGAGAGCTGG | CTGTATTTGTATAGTT | W2 |
| rs2275913 | *IL17A* | G/A | ACGTTGGATGAAATTTCCGCCCCCAATGAG | ACGTTGGATGAAGAGGACATGGTCTTTAGG | GGTCATAGAAGAATCTCT | W2 |
| rs763780 | *IL17F* | T/C | ACGTTGGATGCTTCAGCTGAGTGGATATGC | ACGTTGGATGAAGGTGCTGGTGACTGTTG | GCACCTCTTACTGCACA | W2 |
| rs1800629 | *TNF* -308 | G/A | ACGTTGGATGCTGATTTGTGTGTAGGACCC | ACGTTGGATGGGAGGCAATAGGTTTTGAGG | tAGGCTGAACCCCGTCC | W1 |
| rs361525 | *TNF* -238 | G/A | ACGTTGGATGCACACAAATCAGTCAGTGGC | ACGTTGGATGAAGCATCAAGGATACCCCTC | cctaCAGAAGACCCCCCTCGGAATC | W1 |
| rs11003125 | *MBL2* -550 | G/C | ACGTTGGATGCTCAACCTTAGTCACCAACC | ACGTTGGATGGAGAAAATGCTTACCCAGGC | CCCCTTGGTGTTTTA | W2 |
| rs1800450 | *MBL2* cd 54 | C/T | ACGTTGGATGTAGCTCTCCAGGCATCAAC | ACGTTGGATGAGAGACAGAACAGCCCAAC | AAGATGGGIGTGATG | W1 |
| rs2430561 | *INFG* +874 | T/A | ACGTTGGATGCAGACATTCACAATTGATT | ACGTTGGATGGATAGTTCCAAACATGTGCG | ttccTACAACACAAAATCAAATC | W1 |

**Table S:**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  | **Controls** | |  |  | **COPD** | |  |
|  |  |  |  | **Controls** | **COPD** |  |  | **BMI ˂27.5** | **BMI ≥27.5** |  |  | **BMI ˂27.5** | **BMI ≥27.5** |  |
|  |  |  |  | N=520 | N=340 |  |  | N=146 | N=309 |  |  | N=165 | N=175 |  |
| **SNP** | **Gene (SNP position)** | **Ref** | **Alt** | **Alt freq.** | **Alt freq.** | **p-value** |  | **Alt freq.** | **Alt freq.** | **p-value** |  | **Alt freq.** | **Alt freq.** | **p-value** |
| **rs1800587** | *IL1A* -889 | G | A | 0.275 | 0.303 | 0.210 |  | 0.264 | 0.294 | 0.337 |  | 0.288 | 0.317 | 0.407 |
| **rs16944** | *IL1B* -511 | A | G | 0.667 | 0.669 | 0.938 |  | 0.682 | 0.657 | 0.464 |  | 0.658 | 0.680 | 0.535 |
| **rs1143634** | *IL1B* +3954 | G | A | 0.223 | 0.254 | 0.134 |  | 0.219 | 0.235 | 0.605 |  | 0.258 | 0.251 | 0.854 |
| **rs4251961** | *IL1RN* | T | C | 0.354 | 0.347 | 0.773 |  | 0.380 | 0.348 | 0.344 |  | 0.342 | 0.351 | 0.805 |
| **rs579543** | *IL1RN* | G | A | 0.256 | 0.271 | 0.494 |  | 0.243 | 0.254 | 0.723 |  | 0.261 | 0.280 | 0.569 |
| **rs315952** | *IL1RN* MspA1 11100 | T | C | 0.356 | 0.347 | 0.690 |  | 0.356 | 0.362 | 0.864 |  | 0.342 | 0.351 | 0.805 |
| **rs2234650** | *IL1R1* Pst1 1970 | C | T | 0.346 | 0.341 | 0.832 |  | 0.349 | 0.358 | 0.807 |  | 0.327 | 0.354 | 0.458 |
| **rs2069762** | *IL2* -330 | A | C | 0.313 | 0.288 | 0.266 |  | 0.267 | 0.328 | 0.062 |  | 0.264 | 0.311 | 0.169 |
| **rs2069763** | *IL2* +166 | C | A | 0.348 | 0.360 | 0.604 |  | 0.380 | 0.348 | 0.344 |  | 0.367 | 0.354 | 0.737 |
| **rs2243248** | *IL4* -1098 | T | G | 0.057 | 0.059 | 0.855 |  | 0.072 | 0.047 | 0.123 |  | 0.070 | 0.049 | 0.242 |
| **rs2243250** | *IL4* -590 | C | T | 0.184 | 0.168 | 0.395 |  | 0.192 | 0.170 | 0.420 |  | 0.158 | 0.177 | 0.495 |
| **rs2070874** | *IL4* -33 | C | T | 0.182 | 0.166 | 0.407 |  | 0.192 | 0.168 | 0.385 |  | 0.155 | 0.177 | 0.429 |
| **rs1801275** | *IL4R* +1902 | A | G | 0.203 | 0.222 | 0.340 |  | 0.223 | 0.196 | 0.349 |  | 0.206 | 0.237 | 0.330 |
| **rs1800797** | *IL6* -597 | A | G | 0.573 | 0.568 | 0.824 |  | 0.596 | 0.566 | 0.400 |  | 0.558 | 0.577 | 0.607 |
| **rs1800795** | *IL6* -174 | C | G | 0.568 | 0.559 | 0.699 |  | 0.592 | 0.560 | 0.354 |  | 0.548 | 0.569 | 0.598 |
| **rs2227307** | *CXCL8* (IL-8) | T | G | 0.445 | 0.448 | 0.912 |  | 0.466 | 0.434 | 0.363 |  | 0.479 | 0.419 | 0.118 |
| **rs4073** | *CXCL8* (IL-8) | A | T | 0.554 | 0.547 | 0.782 |  | 0.534 | 0.565 | 0.388 |  | 0.518 | 0.574 | 0.142 |
| **rs1800872** | *IL10* -592 | T | G | 0.750 | 0.766 | 0.445 |  | 0.740 | 0.749 | 0.759 |  | 0.809 | 0.726 | **0.010** |
| **rs1800871** | *IL10* -819 | A | G | 0.750 | 0.766 | 0.432 |  | 0.740 | 0.748 | 0.780 |  | 0.809 | 0.726 | **0.010** |
| **rs1800896** | *IL10* -1082 | T | C | 0.460 | 0.449 | 0.652 |  | 0.462 | 0.461 | 0.974 |  | 0.473 | 0.426 | 0.218 |
| **rs3212227** | *IL12* -1188 | T | G | 0.208 | 0.215 | 0.727 |  | 0.236 | 0.197 | 0.179 |  | 0.209 | 0.220 | 0.729 |
| **rs2275913** | *IL17A* | G | A | 0.347 | 0.391 | 0.063 |  | 0.370 | 0.345 | 0.458 |  | 0.388 | 0.394 | 0.864 |
| **rs763780** | *IL17F* | T | C | 0.040 | 0.031 | 0.305 |  | 0.031 | 0.045 | 0.302 |  | 0.036 | 0.026 | 0.422 |
| **rs1800629** | *TNF* -308 | G | A | 0.171 | 0.162 | 0.610 |  | 0.147 | 0.180 | 0.224 |  | 0.121 | 0.200 | **0.005** |
| **rs361525** | *TNF* -238 | G | A | 0.030 | 0.049 | **0.045** |  | 0.041 | 0.026 | 0.215 |  | 0.048 | 0.049 | 0.996 |
| **rs11003125** | *MBL2* -550 | G | C | 0.369 | 0.360 | 0.707 |  | 0.370 | 0.367 | 0.941 |  | 0.318 | 0.400 | **0.026** |
| **rs1800450** | *MBL2* cd 54 | C | T | 0.135 | 0.150 | 0.387 |  | 0.130 | 0.141 | 0.650 |  | 0.164 | 0.137 | 0.263 |
| **rs2430561** | *INFG* +874 | T | A | 0.478 | 0.493 | 0.549 |  | 0.521 | 0.458 | 0.078 |  | 0.479 | 0.506 | 0.483 |

**Table…:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SNP | Allele | BMI ˂27.5  N=165  [frequency] | BMI ≥27.5  N=175  [frequency] | Odds ratio  (95% CI) | P-value |
| rs1800629  *TNF*-308 | G  A | 0.879  **0.121** | 0.800  **0.200** | 0.55 (0.36–0.84)  **1.81 (1.19–2.76)** | **0.0053** |
| G allele carriage | 0.970 | 0.971 | 1.06 (0.30–3.74) | 0.9248 |
| **A allele carriage** | **0.212** | **0.371** | **2.19 (1.35–3.56)** | **0.0013** |
| *IL10* haplotype  rs1800872 (-592), rs1800871 (-819),  rs1800896 (-1082) | GGC  GGT  **TAT** | 0.473  0.336  **0.191** | 0.426  0.300  **0.274** | 0.83 (0.61–1.12)  0.85 (0.61–1.17)  **1.60 (1.12–2.30)** | 0.2180  0.3087  **0.0103** |
| GGC carriage | 0.739 | 0.674 | 0.73 (0.46–1.17) | 0.1879 |
| GGT carriage | 0.576 | 0.509 | 0.76 (0.50–1.17) | 0.2140 |
| **TAT carriage** | **0.333** | **0.480** | **1.85 (1.19–2.86)** | **0.0060** |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| SNP | Allele | BMI ˂21.0  N=40  [frequency] | BMI ≥21.0  N=300  [frequency] | Odds ratio  (95% CI) | P-value |
| rs361525  *TNF*-238 | G  A | 0,888  **0.113** | 0.960  **0.040** | 0.33 (0.15–0.74)  **3.04 (1.36–6.80)** | **0.0046** |
| G allele carriage | 1.000 | 1.000 |  |  |
| **A allele carriage** | **0.225** | **0.080** | **3.34 (1.43–7.82)** | **0.0036** |

Abbreviations: CI, confidence interval; N, number of individuals.