|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SUPPLEMENTAL TABLE 1: Effect of homozygosity at the three HLA class I loci -A, -B and -C and five HLA class I loci -DRB1, DQA1, DQB1, DPA1, and DPB1 on susceptibility to four NHL subtypes (DLBCL, FL, CLL/SLL, and MZL) stratified by GWAS platform (analyses adjusted for sex, age, and ancestry/principal components).** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|  |  |  |  |  |  | |  | |  | |  |  | |  |  | |  | |  | |  |  | | | |  |  |  |
| **Illumina OmniExpress** |  | **Controls** | | **DLBCL** | | | | | | **FL** | | | | | | **CLL/SLL** | | | | | | | **MZL** | | | | | | |
|  |  | **n** | **%** | **n** | | **%** | | **OR (95% CI)** | | **n** | | | **%** | **OR (95% CI)** | | **n** | | **%** | | **OR (95% CI)** | | | **n** | **%** | | | **OR (95% CI)** | | |
| **Class I locus** |  |  |  |  | |  | |  | |  | | |  |  | |  | |  | |  | | |  | |  | | | | |
| *HLA-A* | Heterozygote | 5244 | 89 | 2076 | | 87 | | 1.00 (ref) | | 1742 | | | 90 | 1.00 (ref) | | 1677 | | 87 | | 1.00 (ref) | | | 649 | 89 | | | 1.00 (ref) | | |
|  | Homozygote | 646 | 11 | 310 | | 13 | | **1.20 (1.00-1.43)** | | 197 | | | 10 | 1.00 (0.82-1.24) | | 242 | | 13 | | 1.20 (0.99-1.44) | | | 78 | 11 | | | 1.06 (0.82-1.38) | | |
| *HLA-B* | Heterozygote | 5576 | 93 | 2201 | | 91 | | 1.00 (ref) | | 1822 | | | 92 | 1.00 (ref) | | 1810 | | 93 | | 1.00 (ref) | | | 675 | 91 | | | 1.00 (ref) | | |
|  | Homozygote | 411 | 7 | 219 | | 9 | | **1.24 (1.00-1.52)** | | 158 | | | 8 | 1.10 (0.87-1.41) | | 142 | | 7 | | 1.01 (0.80-1.28) | | | 66 | 9 | | | **1.34 (1.01-1.78)** | | |
| *HLA-C* | Heterozygote | 5414 | 90 | 2119 | | 88 | | 1.00 (ref) | | 1754 | | | 89 | 1.00 (ref) | | 1754 | | 90 | | 1.00 (ref) | | | 651 | 88 | | | 1.00 (ref) | | |
|  | Homozygote | 577 | 10 | 302 | | 12 | | **1.22 (1.02-1.46)** | | 226 | | | 11 | 1.16 (0.95-1.43) | | 199 | | 10 | | 1.05 (0.86-1.29) | | | 90 | 12 | | | **1.33 (1.04-1.70)** | | |
|  |  |  |  |  | |  | |  | |  | | |  |  | |  | |  | |  | | |  |  | | |  | | |
| Total # of homozygote loci | 0 | 4805 | 80 | 1863 | | 77 | | 1.00 (ref) | | 1590 | | | 80 | 1.00 (ref) | | 1526 | | 78 | | 1.00 (ref) | | | 586 | 79 | | | 1.00 (ref) | | |
|  | 1 | 822 | 14 | 356 | | 15 | | 1.11 (0.94-1.31) | | 241 | | | 12 | 0.93 (0.77-1.13) | | 298 | | 15 | | 1.13 (0.95-1.34) | | | 94 | 13 | | | 0.97 (0.76-1.23) | | |
|  | 2 | 256 | 4 | 128 | | 5 | | 1.28 (0.98-1.68) | | 100 | | | 5 | 1.27 (0.94-1.72) | | 89 | | 5 | | 1.10 (0.82-1.48) | | | 37 | 5 | | | 1.16 (0.80-1.68) | | |
|  | 3 | 108 | 2 | 74 | | 3 | | 1.40 (0.98-2.01) | | 50 | | | 3 | 1.24 (0.81-1.89) | | 40 | | 2 | | 1.12 (0.73-1.73) | | | 24 | 3 | | | **2.13 (1.33-3.42)** | | |
|  | *p-trend* |  |  |  | |  | | ***0.0075*** | |  | | |  | *0.2318* | |  | |  | | *0.1861* | | |  |  | | | ***0.026*** | | |
|  |  |  |  |  | |  | |  | |  | | |  |  | |  | |  | |  | | |  |  | | |  | | |
| **Class II locus** |  |  |  |  | |  | |  | |  | | |  |  | |  | |  | |  | | |  |  | | |  | | |
| *HLA-DRB1* | Heterozygote | 5500 | 92 | 2125 | | 88 | | 1.00 (ref) | | 1725 | | | 87 | 1.00 (ref) | | 1751 | | 90 | | 1.00 (ref) | | | 663 | 89 | | | 1.00 (ref) | | |
|  | Homozygote | 480 | 8 | 292 | | 12 | | 1.55 (1.28-1.87) | | 252 | | | 13 | **1.59 (1.29-1.96)** | | 197 | | 10 | | **1.25 (1.01-1.54)** | | | 78 | 11 | | | **1.45 (1.12-1.89)** | | |
| *HLA-DQB1* | Heterozygote | 5310 | 89 | 2051 | | 85 | | 1.00 (ref) | | 1665 | | | 84 | 1.00 (ref) | | 1692 | | 87 | | 1.00 (ref) | | | 638 | 86 | | | 1.00 (ref) | | |
|  | Homozygote | 681 | 11 | 370 | | 15 | | 1.22 (1.03-1.44) | | 316 | | | 16 | **1.28 (1.07-1.54)** | | 261 | | 13 | | 1.18 (0.98-1.41) | | | 103 | 14 | | | 1.20 (0.95-1.52) | | |
| *HLA-DPB1* | Heterozygote | 4809 | 80 | 1902 | | 79 | | 1.00 (ref) | | 1557 | | | 79 | 1.00 (ref) | | 1577 | | 81 | | 1.00 (ref) | | | 582 | 79 | | | 1.00 (ref) | | |
|  | Homozygote | 1176 | 20 | 517 | | 21 | | 1.06 (0.92-1.22) | | 422 | | | 21 | 1.15 (0.99-1.35) | | 373 | | 19 | | 0.93 (0.80-1.08) | | | 158 | 21 | | | 1.13 (0.93-1.38) | | |
|  |  |  |  |  | |  | |  | |  | | |  |  | |  | |  | |  | | |  |  | | |  | | |
| Total # of homozygote loci | 0 | 4247 | 71 | 1588 | | 66 | | 1.00 (ref) | | 1271 | | | 64 | 1.00 (ref) | | 1353 | | 70 | | 1.00 (ref) | | | 501 | 68 | | | 1.00 (ref) | | |
|  | 1 | 1241 | 21 | 535 | | 22 | | 1.08 (0.94-1.24) | | 470 | | | 24 | **1.24 (1.07-1.45)** | | 400 | | 21 | | 1.00 (0.86-1.16) | | | 159 | 21 | | | 1.08 (0.89-1.31) | | |
|  | 2 | 363 | 6 | 234 | | 10 | | **1.55 (1.25-1.93)** | | 184 | | | 9 | **1.55 (1.22-1.98)** | | 151 | | 8 | | 1.24 (0.98-1.57) | | | 60 | 8 | | | **1.42 (1.05-1.91)** | | |
|  | 3 | 123 | 2 | 58 | | 2 | | 1.16 (0.79-1.70) | | 50 | | | 3 | 1.30 (0.52-1.98) | | 42 | | 2 | | 0.98 (0.64-1.51) | | | 20 | 3 | | | 1.48 (0.89-2.43) | | |
|  | p-trend |  |  |  | |  | | ***0.0009*** | |  | | |  | ***<0.0001*** | |  | |  | | 0.3053 | | |  |  | | | ***0.0124*** | | |

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| **Illumina HumanCNV370-Duo (UCSF1)** |  | **Controls** | | **DLBCL** | | | | | | **FL** | | | | | | | **CLL/SLL** | | | | | | | **MZL** | | | | | |
|  |  | **n** | **%** | **n** | | **%** | | **OR (95% CI)** | | **n** | | **%** | | **OR (95% CI)** | | | **n** | **%** | | | **OR (95% CI)** | | | **n** | **%** | | **OR (95% CI)** | | |
| **Class I locus** |  |  |  |  | |  | |  | |  | |  | |  | | |  |  | | |  | | |  |  | |  | | |
| *HLA-A* | Heterozygote | 660 | 90 | 219 | | 87 | | 1.00 (ref) | | 181 | | 87 | | 1.00 (ref) | | | 180 | 86 | | | 1.00 (ref) | | |  |  | |  | | |
|  | Homozygote | 76 | 10 | 33 | | 13 | | 1.35 (0.87-2.10) | | 28 | | 13 | | 1.40 (0.87-2.23) | | | 29 | 14 | | | 1.46 (0.92-2.32) | | |  |  | |  | | |
| *HLA-B* | Heterozygote | 696 | 93 | 233 | | 92 | | 1.00 (ref) | | 192 | | 91 | | 1.00 (ref) | | | 197 | 92 | | | 1.00 (ref) | | |  |  | |  | | |
|  | Homozygote | 51 | 7 | 20 | | 8 | | 1.24 (0.72-2.14) | | 18 | | 9 | | 1.35 (0.77-2.39) | | | 16 | 8 | | | 1.15 (0.64-2.08) | | |  |  | |  | | |
| *HLA-C* | Heterozygote | 669 | 89 | 226 | | 89 | | 1.00 (ref) | | 188 | | 90 | | 1.00 (ref) | | | 186 | 87 | | | 1.00 (ref) | | |  |  | |  | | |
|  | Homozygote | 80 | 11 | 28 | | 11 | | 1.05 (0.66-1.66) | | 22 | | 10 | | 1.00 (0.61-1.66) | | | 27 | 13 | | | 1.24 (0.78-1.99) | | |  |  | |  | | |
|  |  |  |  |  | |  | |  | |  | |  | |  | | |  |  | | |  | | |  |  | |  | | |
| Total # of homozygote loci | 0 | 610 | 81 | 199 | | 78 | | 1.00 (ref) | | 168 | | 8 | | 1.00 (ref) | | | 166 | 78 | | | 1.00 (ref) | | |  |  | |  | | |
|  | 1 | 87 | 12 | 34 | | 13 | | 1.20 (0.78-1.85) | | 25 | | 1 | | 1.05 (0.65-1.70) | | | 29 | 14 | | | 1.25 (0.79-1.97) | | |  |  | |  | | |
|  | 2 | 35 | 5 | 16 | | 6 | | 1.52 (0.82-2.82) | | 8 | | 0 | | 0.90 (0.41-2.00) | | | 11 | 5 | | | 1.19 (0.59-2.41) | | |  |  | |  | | |
|  | 3 | 17 | 2 | 5 | | 2 | | 0.95 (0.35-2.63) | | 9 | | 0 | | 2.09 (0.90-4.83) | | | 7 | 3 | | | 1.60 (0.64-3.96) | | |  |  | |  | | |
|  | *p-trend* |  |  |  | |  | | 0.2836 | |  | |  | | 0.2618 | | |  |  | | | 0.1978 | | |  |  | |  | | |
| **Class II locus** |  |  |  |  | |  | |  | |  | |  | |  | | |  |  | | |  | | |  |  | |  | | |
| *HLA-DRB1* | Heterozygote | 677 | 91 | 220 | | 88 | | 1.00 (ref) | | 178 | | 87 | | 1.00 (ref) | | | 190 | 90 | | | 1.00 (ref) | | |  |  | |  | | |
|  | Homozygote | 63 | 9 | 29 | | 12 | | 1.47 (0.92-2.35) | | 27 | | 13 | | **1.66 (1.02-2.70)** | | | 20 | 10 | | | 1.15 (0.68-1.97) | | |  |  | |  | | |
| *HLA-DQB1* | Heterozygote | 671 | 90 | 215 | | 85 | | 1.00 (ref) | | 172 | | 82 | | 1.00 (ref) | | | 192 | 90 | | | 1.00 (ref) | | |  |  | |  | | |
|  | Homozygote | 76 | 10 | 38 | | 15 | | 1.57 (1.03-2.39) | | 38 | | 18 | | **1.98 (1.29-3.04)** | | | 21 | 10 | | | 0.98 (0.59-1.65) | | |  |  | |  | | |
| *HLA-DPB1* | Heterozygote | 612 | 82 | 207 | | 81 | | 1.00 (ref) | | 171 | | 81 | | 1.00 (ref) | | | 174 | 82 | | | 1.00 (ref) | | |  |  | |  | | |
|  | Homozygote | 131 | 18 | 47 | | 19 | | 1.11 (0.77-1.61) | | 39 | | 19 | | 1.08 (0.72-1.61) | | | 38 | 18 | | | 1.01 (0.68-1.51) | | |  |  | |  | | |
|  |  |  |  |  | |  | |  | |  | |  | |  | | |  |  | | |  | | |  |  | |  | | |
| Total # of homozygote loci | 0 | 532 | 73 | 171 | | 69 | | 1.00 (ref) | | 142 | | 69 | | 1.00 (ref) | | | 154 | 74 | | | 1.00 (ref) | | |  |  | |  | | |
|  | 1 | 142 | 19 | 49 | | 20 | | 1.08 (0.75-1.57) | | 34 | | 17 | | 0.89 (0.59-1.36) | | | 36 | 17 | | | 0.87 (0.57-1.31) | | |  |  | |  | | |
|  | 2 | 50 | 7 | 23 | | 9 | | 1.51 (0.89-2.56) | | 20 | | 10 | | 1.51 (0.87-2.64) | | | 14 | 7 | | | 1.00 (0.54-1.88) | | |  |  | |  | | |
|  | 3 | 9 | 1 | 6 | | 2 | | 2.22 (0.78-6.36) | | 9 | | 4 | | **3.95 (1.52-10.3)** | | | 5 | 2 | | | 1.88 (0.62-5.73) | | |  |  | |  | | |
|  | *p-trend* |  |  |  | |  | | *0.0563* | |  | |  | | **0.0231** | | |  |  | | | 0.8136 | | |  |  | |  | | |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  | |  | |  | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
| **Illumina HumanHap 660W (IOWA/MAYO SPORE; MAYO CASE-CONTROL)** | | **Controls** | | **DLBCL** | | | | | |  | **FL** | | | | | |  | **CLL/SLL** | | | | | |  | **MZL** | | | | |
|  |  | **n** | **%** | **n** | | **%** | | **OR (95% CI)** | |  | **n** | | **%** | | **OR (95% CI)** | |  | **n** | | **%** | | **OR (95% CI)** | |  | **n** | | **%** | **OR (95% CI)** | |
| **Class I locus** |  |  |  |  | |  | |  | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
| *HLA-A* | Heterozygote | 135 | 78 | 325 | | 83 | | 1.00 (ref) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  | Homozygote | 37 | 22 | 68 | | 17 | | 0.70 (0.43-1.12) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
| *HLA-B* | Heterozygote | 158 | 92 | 355 | | 90 | | 1.00 (ref) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  | Homozygote | 14 | 8 | 38 | | 10 | | 0.95 (0.48-1.87) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
| *HLA-C* | Heterozygote | 155 | 90 | 343 | | 87 | | 1.00 (ref) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  | Homozygote | 17 | 10 | 50 | | 13 | | 1.05 (0.57-1.94) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  |  |  |  |  | |  | |  | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
| Total # of homozygote loci | 0 | 120 | 70 | 295 | | 75 | | 1.00 (ref) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  | 1 | 41 | 24 | 56 | | 14 | | 0.53 (0.33-0.86) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  | 2 | 6 | 3 | 26 | | 7 | | 1.47 (0.57-3.80) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  | 3 | 5 | 3 | 16 | | 4 | | 0.85 (0.29-2.53) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  | *p-trend* |  |  |  | |  | | *0.4346* | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
| **Class II locus** |  |  |  |  | |  | |  | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
| *HLA-DRB1* | Heterozygote | 154 | 90 | 344 | | 88 | | 1.00 (ref) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  | Homozygote | 18 | 10 | 49 | | 12 | | 1.31 (0.71-2.41) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
| *HLA-DQB1* | Heterozygote | 156 | 91 | 335 | | 85 | | 1.00 (ref) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  | Homozygote | 16 | 9 | 58 | | 15 | | 1.65 (0.89-3.07) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
| *HLA-DPB1* | Heterozygote | 123 | 72 | 292 | | 74 | | 1.00 (ref) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  | Homozygote | 49 | 28 | 101 | | 26 | | 0.96 (0.63-1.48) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  |  |  |  |  | |  | |  | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
| Total # of homozygote loci | 0 | 110 | 64 | 247 | | 63 | | 1.00 (ref) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  | 1 | 45 | 26 | 99 | | 25 | | 1.04 (0.66-1.62) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  | 2 | 13 | 8 | 32 | | 8 | | 1.13 (0.54-2.35) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  | 3 | 4 | 2 | 15 | | 4 | | 2.00 (0.61-6.53) | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  | *p-trend* |  |  |  | |  | | 0.3477 | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |
|  |  |  |  |  | |  | |  | |  |  | |  | |  | |  |  | |  | |  | |  |  | |  |  | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  | |  | |  | |  |  | |  | |  | |  | |  | |  |  | | |  |  | |  |
| **Illumina HumanHap 610K (GELA - cases only)** | | **Controls** | | **DLBCL** | | | | | | **FL** | | | | | | | **CLL/SLL** | | | | | | | **MZL** | | | | | | |
|  |  | **n** | **%** | **n** | | **%** | | **OR (95% CI)** | | **n** | | | **%** | | **OR (95% CI)** | | **n** | | **%** | | **OR (95% CI)** | | | **n** | **%** | | | **OR (95% CI)** | | |
| **Class I locus** |  |  |  |  | |  | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
| *HLA-A* | Heterozygote |  |  | 476 | | 87 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  | Homozygote |  |  | 73 | | 13 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
| *HLA-B* | Heterozygote |  |  | 508 | | 93 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  | Homozygote |  |  | 41 | | 7 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
| *HLA-C* | Heterozygote |  |  | 494 | | 90 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  | Homozygote |  |  | 55 | | 10 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  |  |  |  |  | |  | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
| Total # of homozygote loci | 0 |  |  | 435 | | 79 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  | 1 |  |  | 78 | | 14 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  | 2 |  |  | 17 | | 3 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  | 3 |  |  | 19 | | 3 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  | *p-trend* |  |  |  | |  | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
| **Class II locus** |  |  |  |  | |  | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
| *HLA-DRB1* | Heterozygote |  |  | 484 | | 88 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  | Homozygote |  |  | 65 | | 12 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
| *HLA-DQB1* | Heterozygote |  |  | 454 | | 83 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  | Homozygote |  |  | 95 | | 17 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
| *HLA-DPB1* | Heterozygote |  |  | 416 | | 76 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  | Homozygote |  |  | 133 | | 24 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  |  |  |  |  | |  | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
| Total # of homozygote loci | 0 |  |  | 335 | | 61 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  | 1 |  |  | 147 | | 27 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  | 2 |  |  | 55 | | 10 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  | 3 |  |  | 12 | | 2 | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  | *p-trend* |  |  |  | |  | |  | |  | | |  | |  | |  | |  | |  | | |  |  | | |  | | |
|  |  |  |  |  |  | |  | |  | |  |  | |  | |  | |  | |  | |  |  | | |  |  | |  |  | |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | |  |  |  |  | |  | |  |  | |  | |  | |  | |  | |  |  | | |  |  |  | |
| **Illumina HumanHap 317K (SCALE)** |  | **Controls** | | | **DLBCL** | | | | | **FL** | | | | | | | **CLL/SLL** | | | | | | | **MZL** | | | | |
|  |  | **n** | **%** | | **n** | **%** | | **OR (95% CI)** | | **n** | | | **%** | | **OR (95% CI)** | | **n** | | **%** | | **OR (95% CI)** | | | **n** | **%** | **OR (95% CI)** | | |
| **Class I locus** |  |  |  | |  |  | |  | |  | | |  | |  | |  | |  | |  | | |  |  |  | | |
| *HLA-A* | Heterozygote | 645 | 82 | |  |  | |  | | 304 | | | 81 | | 1.00 (ref) | |  | |  | |  | | |  |  |  | | |
|  | Homozygote | 146 | 18 | |  |  | |  | | 72 | | | 19 | | 1.02 (0.73-1.42) | |  | |  | |  | | |  |  |  | | |
| *HLA-B* | Heterozygote | 727 | 92 | |  |  | |  | | 340 | | | 90 | | 1.00 (ref) | |  | |  | |  | | |  |  |  | | |
|  | Homozygote | 64 | 8 | |  |  | |  | | 36 | | | 10 | | 1.19 (0.75-1.89) | |  | |  | |  | | |  |  |  | | |
| *HLA-C* | Heterozygote | 715 | 90 | |  |  | |  | | 335 | | | 89 | | 1.00 (ref) | |  | |  | |  | | |  |  |  | | |
|  | Homozygote | 76 | 10 | |  |  | |  | | 41 | | | 11 | | 1.04 (0.68-1.61) | |  | |  | |  | | |  |  |  | | |
|  |  |  |  | |  |  | |  | |  | | |  | |  | |  | |  | |  | | |  |  |  | | |
| Total # of homozygote loci | 0 | 581 | 73 | |  |  | |  | | 271 | | | 72 | | 1.00 (ref) | |  | |  | |  | | |  |  |  | | |
|  | 1 | 153 | 19 | |  |  | |  | | 72 | | | 19 | | 0.96 (0.69-1.34) | |  | |  | |  | | |  |  |  | | |
|  | 2 | 38 | 5 | |  |  | |  | | 22 | | | 6 | | 1.07 (0.59-1.92) | |  | |  | |  | | |  |  |  | | |
|  | 3 | 19 | 2 | |  |  | |  | | 11 | | | 3 | | 1.33 (0.59-2.98) | |  | |  | |  | | |  |  |  | | |
|  | *p-trend* |  |  | |  |  | |  | |  | | |  | | 0.663 | |  | |  | |  | | |  |  |  | | |
| **Class II locus** |  |  |  | |  |  | |  | |  | | |  | |  | |  | |  | |  | | |  |  |  | | |
| *HLA-DRB1* | Heterozygote | 712 | 90 | |  |  | |  | | 328 | | | 87 | | 1.00 (ref) | |  | |  | |  | | |  |  |  | | |
|  | Homozygote | 79 | 10 | |  |  | |  | | 48 | | | 13 | | 1.34 (0.89-2.02) | |  | |  | |  | | |  |  |  | | |
| *HLA-DQB1* | Heterozygote | 707 | 89 | |  |  | |  | | 315 | | | 84 | | 1.00 (ref) | |  | |  | |  | | |  |  |  | | |
|  | Homozygote | 84 | 11 | |  |  | |  | | 61 | | | 16 | | **1.67 (1.14-2.45)** | |  | |  | |  | | |  |  |  | | |
| *HLA-DPB1* | Heterozygote | 593 | 75 | |  |  | |  | | 251 | | | 67 | | 1.00 (ref) | |  | |  | |  | | |  |  |  | | |
|  | Homozygote | 198 | 25 | |  |  | |  | | 125 | | | 33 | | **1.57 (1.18-2.09)** | |  | |  | |  | | |  |  |  | | |
|  |  |  |  | |  |  | |  | |  | | |  | |  | |  | |  | |  | | |  |  |  | | |
| Total # of homozygote loci | 0 | 521 | 66 | |  |  | |  | | 210 | | | 56 | | 1.00 (ref) | |  | |  | |  | | |  |  |  | | |
|  | 1 | 194 | 25 | |  |  | |  | | 118 | | | 31 | | **1.58 (1.17-2.13)** | |  | |  | |  | | |  |  |  | | |
|  | 2 | 61 | 8 | |  |  | |  | | 28 | | | 7 | | 1.18 (0.71-1.95) | |  | |  | |  | | |  |  |  | | |
|  | 3 | 15 | 2 | |  |  | |  | | 20 | | | 5 | | **3.70 (1.74-7.88)** | |  | |  | |  | | |  |  |  | | |
|  | *p-trend* |  |  | |  |  | |  | |  | | |  | | ***0.0005*** | |  | |  | |  | | |  |  |  | | |
|  |  |  |  | |  |  |  | |  | |  |  | |  | |  | |  | |  | |  |  | | |  |  |  | |  |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  | |  | |  | |  |  | |  | |  | |  | |  | |  |  | | |  |  |  |
| **Affymetrix 6.0 (GEC)** |  | **Controls** | | **DLBCL** | | | | | | **FL** | | | | | | | **CLL/SLL** | | | | | | |  | **MZL** | | | | |
|  |  | **n** | **%** | **N** | | **%** | | **OR (95% CI)** | | **n** | | | **%** | | **OR (95% CI)** | | **n** | | **%** | | **OR (95% CI)** | | |  | **n** | **%** | **OR (95% CI)** | | |
| **Class I locus** |  |  |  |  | |  | |  | |  | | |  | |  | |  | |  | |  | | |  |  |  |  | | |
| *HLA-A* | Heterozygote | 252 | 85% |  | |  | |  | |  | | |  | |  | | 334 | | 85 | | 1.00 (ref) | | |  |  |  |  | | |
|  | Homozygote | 44 | 15% |  | |  | |  | |  | | |  | |  | | 57 | | 15 | | 0.98 (0.94-1.50) | | |  |  |  |  | | |
| *HLA-B* | Heterozygote | 269 | 91% |  | |  | |  | |  | | |  | |  | | 365 | | 93 | | 1.00 (ref) | | |  |  |  |  | | |
|  | Homozygote | 27 | 9% |  | |  | |  | |  | | |  | |  | | 26 | | 7 | | 0.72 (0.41-1.27) | | |  |  |  |  | | |
| *HLA-C* | Heterozygote | 271 | 92% |  | |  | |  | |  | | |  | |  | | 357 | | 92 | | 1.00 (ref) | | |  |  |  |  | | |
|  | Homozygote | 25 | 8% |  | |  | |  | |  | | |  | |  | | 33 | | 8 | | 0.99 (0.57-1.71) | | |  |  |  |  | | |
|  |  |  |  |  | |  | |  | |  | | |  | |  | |  | |  | |  | | |  |  |  |  | | |
| Total # of homozygote loci | 0 | 224 | 76% |  | |  | |  | |  | | |  | |  | | 300 | | 77 | | 1.00 (ref) | | |  |  |  |  | | |
|  | 1 | 52 | 18% |  | |  | |  | |  | | |  | |  | | 72 | | 18 | | 1.03 (0.69-1.53) | | |  |  |  |  | | |
|  | 2 | 16 | 5% |  | |  | |  | |  | | |  | |  | | 13 | | 3 | | 0.64 (0.30-1.36) | | |  |  |  |  | | |
|  | 3 | 4 | 1% |  | |  | |  | |  | | |  | |  | | 6 | | 2 | | 1.05 (0.28-3.89) | | |  |  |  |  | | |
|  | *p-trend* |  |  |  | |  | |  | |  | | |  | |  | |  | |  | | 0.5645 | | |  |  |  |  | | |
| **Class II locus** |  |  |  |  | |  | |  | |  | | |  | |  | |  | |  | |  | | |  |  |  |  | | |
| *HLA-DRB1* | Heterozygote | 270 | 91% |  | |  | |  | |  | | |  | |  | | 357 | | 91 | | 1.00 (ref) | | |  |  |  |  | | |
|  | Homozygote | 26 | 9% |  | |  | |  | |  | | |  | |  | | 34 | | 9 | | 0.96 (0.56-1.65) | | |  |  |  |  | | |
| *HLA-DQB1* | Heterozygote | 269 | 91% |  | |  | |  | |  | | |  | |  | | 340 | | 87 | | 1.00 (ref) | | |  |  |  |  | | |
|  | Homozygote | 27 | 9% |  | |  | |  | |  | | |  | |  | | 51 | | 13 | | 1.50 (0.91-2.47) | | |  |  |  |  | | |
| *HLA-DPB1* | Heterozygote | 218 | 74% |  | |  | |  | |  | | |  | |  | | 295 | | 75 | | 1.00 (ref) | | |  |  |  |  | | |
|  | Homozygote | 78 | 26% |  | |  | |  | |  | | |  | |  | | 96 | | 25 | | 0.90 (0.64-1.28) | | |  |  |  |  | | |
|  |  |  |  |  | |  | |  | |  | | |  | |  | |  | |  | |  | | |  |  |  |  | | |
| Total # of homozygote loci | 0 | 192 | 65% |  | |  | |  | |  | | |  | |  | | 257 | | 66 | | 1.00 (ref) | | |  |  |  |  | | |
|  | 1 | 83 | 28% |  | |  | |  | |  | | |  | |  | | 96 | | 25 | | 0.88 (0.62-1.25) | | |  |  |  |  | | |
|  | 2 | 15 | 5% |  | |  | |  | |  | | |  | |  | | 29 | | 7 | | 1.46 (0.75-2.82) | | |  |  |  |  | | |
|  | 3 | 6 | 2% |  | |  | |  | |  | | |  | |  | | 9 | | 2 | | 1.01 (0.35-2.94) | | |  |  |  |  | | |
|  | *p-trend* |  |  |  | |  | |  | |  | | |  | |  | |  | |  | | 0.7652 | | |  |  |  |  | | |
|  |  |  |  |  |  | |  | |  | |  |  | |  | |  | |  | |  | |  |  | | |  |  |  |  | |
|  |  |  |  |  |  | |  | |  | |  |  | |  | |  | |  | |  | |  |  | | |  |  |  |  | |
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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  | |  | |  | |  | |  | |  | |  | | | | |  |  | | |  | |  | | | | | |  | |  | |  | |  | |
| **Illumina HumanHap 610K (UTAH)** | | **Controls** | | **DLBCL** | | | | | | **FL** | | | | | | | | **CLL/SLL** | | | | | | | | | | | **MZL** | | | | | | | | | |
|  |  | **n** | **%** | **n** | | **%** | | **OR (95% CI)** | | **n** | | **%** | | | **OR (95% CI)** | | | **n** | | | **%** | | | | **OR (95% CI)** | | | | **n** | **%** | | | **OR (95% CI)** | | | | | |
| **Class I locus** |  |  |  |  | |  | |  | |  | |  | | |  | | |  | | |  | | | |  | | | |  |  | | |  | | | | | |
| *HLA-A* | Heterozygote | 348 | 86 |  | |  | |  | |  | |  | | |  | | | 269 | | | 84 | | | | 1.00 (ref) | | | |  |  | | |  | | | | | |
|  | Homozygote | 55 | 14 |  | |  | |  | |  | |  | | |  | | | 50 | | | 16 | | | | 1.19 (0.78-1.80) | | | |  |  | | |  | | | | | |
| *HLA-B* | Heterozygote | 375 | 93 |  | |  | |  | |  | |  | | |  | | | 284 | | | 88 | | | | 1.00 (ref) | | | |  |  | | |  | | | | | |
|  | Homozygote | 30 | 7 |  | |  | |  | |  | |  | | |  | | | 37 | | | 12 | | | | **1.68 (1.01-2.79)** | | | |  |  | | |  | | | | | |
| *HLA-C* | Heterozygote | 365 | 90 |  | |  | |  | |  | |  | | |  | | | 279 | | | 87 | | | | 1.00 (ref) | | | |  |  | | |  | | | | | |
|  | Homozygote | 40 | 10 |  | |  | |  | |  | |  | | |  | | | 42 | | | 13 | | | | 1.42 (0.89-2.26) | | | |  |  | | |  | | | | | |
|  |  |  |  |  | |  | |  | |  | |  | | |  | | |  | | |  | | | |  | | | |  |  | | |  | | | | | |
| Total # of homozygote loci | 0 | 326 | 80 |  | |  | |  | |  | |  | | |  | | | 233 | | | 73 | | | | 1.00 (ref) | | | |  |  | | |  | | | | | |
|  | 1 | 48 | 12 |  | |  | |  | |  | |  | | |  | | | 58 | | | 18 | | | | **1.67 (1.10-2.54)** | | | |  |  | | |  | | | | | |
|  | 2 | 16 | 4 |  | |  | |  | |  | |  | | |  | | | 17 | | | 5 | | | | 1.53 (0.76-3.09) | | | |  |  | | |  | | | | | |
|  | 3 | 15 | 4 |  | |  | |  | |  | |  | | |  | | | 13 | | | 4 | | | | 1.28 (0.60-2.76) | | | |  |  | | |  | | | | | |
|  | *p-trend* |  |  |  | |  | |  | |  | |  | | |  | | |  | | |  | | | | 0.0573 | | | |  |  | | |  | | | | | |
| **Class II locus** |  |  |  |  | |  | |  | |  | |  | | |  | | |  | | |  | | | |  | | | |  |  | | |  | | | | | |
| *HLA-DRB1* | Heterozygote | 363 | 90 |  | |  | |  | |  | |  | | |  | | | 285 | | | 89 | | | | 1.00 (ref) | | | |  |  | | |  | | | | | |
|  | Homozygote | 39 | 10 |  | |  | |  | |  | |  | | |  | | | 35 | | | 11 | | | | 1.20 (0.73-1.95) | | | |  |  | | |  | | | | | |
| *HLA-DQB1* | Heterozygote | 353 | 87 |  | |  | |  | |  | |  | | |  | | | 270 | | | 84 | | | | 1.00 (ref) | | | |  |  | | |  | | | | | |
|  | Homozygote | 52 | 13 |  | |  | |  | |  | |  | | |  | | | 51 | | | 16 | | | | 1.31 (0.86-1.99) | | | |  |  | | |  | | | | | |
| *HLA-DPB1* | Heterozygote | 333 | 83 |  | |  | |  | |  | |  | | |  | | | 274 | | | 85 | | | | 1.00 (ref) | | | |  |  | | |  | | | | | |
|  | Homozygote | 70 | 17 |  | |  | |  | |  | |  | | |  | | | 47 | | | 15 | | | | 0.83 (0.55-1.24) | | | |  |  | | |  | | | | | |
|  |  |  |  |  | |  | |  | |  | |  | | |  | | |  | | |  | | | |  | | | |  |  | | |  | | | | | |
| Total # of homozygote loci | 0 | 284 | 71 |  | |  | |  | |  | |  | | |  | | | 230 | | | 72 | | | | 1.00 (ref) | | | |  |  | | |  | | | | | |
|  | 1 | 77 | 19 |  | |  | |  | |  | |  | | |  | | | 54 | | | 17 | | | | 0.88 (0.59-1.30) | | | |  |  | | |  | | | | | |
|  | 2 | 34 | 9 |  | |  | |  | |  | |  | | |  | | | 30 | | | 9 | | | | 1.10 (0.65-1.86) | | | |  |  | | |  | | | | | |
|  | 3 | 5 | 1 |  | |  | |  | |  | |  | | |  | | | 6 | | | 2 | | | | 1.64 (0.49-5.48) | | | |  |  | | |  | | | | | |
|  | *p-trend* |  |  |  | |  | |  | |  | |  | | |  | | |  | | |  | | | | 0.7158 | | | |  |  | | |  | | | | | |
|  |  |  |  |  | |  | |  | |  |  | | |  | |  | | |  |  | | | |  | | |  | | | |  |  | | |  | |  | | | |