|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **HLA**  **(2388 controls; 4776 alleles)** | **HLA**  **(174 patients; 348 alleles)** | **Controls**  **vs**  **Patients** | **HLA**  **(174 donors;**  **348 alleles)** |  | **Donors**  **vs**  **Patients** |
|  | **n (%)** | **n (%)** | **P value** | **n (%)** |  | **P value** |
| **HLA-A allele frequencies** | | | | | | |
| -A\*01 | 363 (7.6) | 26 (7.5) | 1 | 24 (6.9) |  | 0.883 |
| -A\*02 | 1256 (26.3) | 100 (28.7) | 0.315 | 104 (29.9) |  | 0.803 |
| -A\*03 | 282 (5.9) | 21 (6.0) | 0.906 | 20 (5.7) |  | 1 |
| -A\*11 | 397 (8.3) | 29 (8.3) | 1 | 28 (8.0) |  | 1 |
| -A\*23 | 82 (1.7) | 1 (0.3) | 0.044 | 0 (0) |  | 1 |
| -A\*24 | 444 (9.3) | 34 (9.8) | 0.774 | 34 (9.8) |  | 1 |
| -A\*26 | 134 (2.8) | 13 (3.7) | 0.316 | 16 (4.6) |  | 0.705 |
| -A\*29 | 93 (1.9) | 3 (0.9) | 0.215 | 2 (0.6) |  | 1 |
| -A\*30 | 851 (17.8) | 55 (15.8) | 0.382 | 52 (14.9) |  | 0.834 |
| -A\*31 | 66 (1.4) | 3 (0.9) | 0.627 | 4 (1.1) |  | 1 |
| -A\*32 | 419 (8.8) | 34 (9.8) | 0.495 | 34 (9.8) |  | 1 |
| -A\*33 | 193 (4.0) | 20 (5.7) | 0.126 | 20 (5.7) |  | 1 |
| -A\*68 | 96 (2.0) | 5 (1.4) | 0.687 | 4 (1.1) |  | 1 |
| -A\*69 | 51 (1.1) | 0 (0) | 0.048 | 0 (0) |  | 1 |
| -A- | 49 (1.0) | 4 (1.1) | 0.781 | 6 (1.7) |  | 0.752 |
| **HLA-C allele frequencies** | | | | | | |
| -Cw\*01 | 161 (3.4) | 15 (4.3) | 0.358 | 16 (4.6) |  | 1 |
| -Cw\*02 | 299 (6.3) | 22 (6.3) | 0.909 | 20 (5.7) |  | 0.874 |
| -Cw\*03 | 266 (5.6) | 20 (5.7) | 0.904 | 20 (5.7) |  | 1 |
| -Cw\*04 | 633 (13.3) | 53 (15.2) | 0.290 | 56 (16.1) |  | 0.835 |
| -Cw\*05 | 838 (17.5) | 68 (19.5) | 0.344 | 70 (20.1) |  | 0.924 |
| -Cw\*06 | 320 (6.7) | 28 (8.0) | 0.321 | 28 (8.0) |  | 1 |
| -Cw\*07 | 1095 (22.9) | 81 (23.3) | 0.895 | 80 (23.0) |  | 1 |
| -Cw\*08 | 360 (7.5) | 26 (7.5) | 1 | 24 (6.9) |  | 0.883 |
| -Cw\*12 | 364 (7.6) | 23 (6.6) | 0.599 | 24 (6.9) |  | 1 |
| -Cw\*14 | 66 (1.4) | 0 (0) | 0.022 | 0 (0) |  | 1 |
| -Cw\*15 | 221 (4.6) | 12 (3.4) | 0.353 | 10 (2.9) |  | 0.829 |
| -Cw\*16 | 102 (2.1) | 0 (0) | 0.001 | 0 (0) |  | 1 |
| -Cw\*17 | 51 (1.1) | 0 (0) | 0.048 | 0 (0) |  | 1 |
| **HLA-B allele frequencies** | | | | | | |
| -B\*07 | 132 (2.8) | 4 (1.1) | 0.082 | 4 (1.1) |  | 1 |
| -B\*08 | 92 (1.9) | 7 (2.0) | 0.840 | 6 (1.7) |  | 1 |
| -B\*13 | 109 (2.3) | 9 (2.6) | 0.710 | 8 (2.3) |  | 1 |
| -B\*14 | 369 (7.7) | 27 (7.8) | 1 | 28 (8.0) |  | 1 |
| -B\*15 | 88 (1.8) | 0 (0) | 0.004 | 0 (0) |  | 1 |
| -B\*18 | 1066 (22.3) | 82 (23.6) | 0.594 | 82 (23.6) |  | 1 |
| -B\*27 | 113 (2.4) | 6 (1.7) | 0.580 | 6 (1.7) |  | 1 |
| -B\*35 | 661 (13.8) | 58 (16.7) | 0.150 | 60 (17.2) |  | 0.920 |
| -B\*37 | 65 (1.4) | 7 (2.0) | 0.338 | 8 (2.3) |  | 1 |
| -B\*38 | 80 (1.7) | 10 (2.9) | 0.133 | 12 (3.4) |  | 0.829 |
| -B\*39 | 103 (2.2) | 13 (3.7) | 0.062 | 14 (4.0) |  | 1 |
| -B\*40 | 77 (1.6) | 0 (0) | 0.010 | 0 (0) |  | 1 |
| -B\*41 | 53 (1.1) | 3 (0.9) | 1 | 2 (0.6) |  | 1 |
| -B\*44 | 221 (4.6) | 12 (3.4) | 0.353 | 12 (3.4) |  | 1 |
| -B\*45 | 54 (1.1) | 4 (1.1) | 1 | 2 (0.6) |  | 0.686 |
| -B\*49 | 217 (4.5) | 16 (4.6) | 0.894 | 14 (4.0) |  | 0.852 |
| -B\*50 | 59 (1.2) | 8 (2.3) | 0.134 | 8 (2.3) |  | 1 |
| -B\*51 | 343 (7.2) | 18 (5.2) | 0.192 | 18 (5.2) |  | 1 |
| -B\*52 | 83 (1.7) | 4 (1.1) | 0.523 | 6 (1.7) |  | 0.752 |
| -B\*55 | 178 (3.7) | 10 (2.9) | 0.553 | 10 (2.9) |  | 1 |
| -B\*57 | 43 (0.9) | 1 (0.3) | 0.365 | 0 (0) |  | 1 |
| -B\*58 | 436 (9.1) | 30 (8.6) | 0.847 | 28 (7.8) |  | 0.891 |
| -B- | 134 (2.8) | 19 (5.5) | 0.009 | 20 (5.7) |  | 1 |

SGF = stable graft function, CR = chronic rejection