

SUPPLEMENTAL MATERIAL

Supplementary Table 1. Prevalence of Polymorphic Variants of FcγRIIIa, FcγRIIa, and FcγRIIb, Based on Available Literature.

| References and Number of Patients (n) | Subject Characteristics | FcγRIIIa-158 (CD16A-158) | | | | | |
|---|--------------------------------------|--------------------------|--------------------|------|---------------------|-------------------|---------------------|
| | | VV (high affinity) | | VF | | FF (low affinity) | |
| | | n | % | n | % | n | % |
| Morgan, <i>Rheumatology</i> , 2003 (n=581) ³⁸ | Healthy | 57 | 10 | 249 | 43 | 275 | 47 |
| Milicic, <i>Ann Rheum Dis</i> , 2002 (n=420) ³⁷ | Healthy | 35 | 8 | 213 | 51 | 172 | 41 |
| Lehrnbecher, <i>Blood</i> , 1999 (n=333) ³⁴ | Healthy | 31 | 9 | 147 | 44 | 155 | 47 |
| Wu, <i>J Clin Invest</i> , 1997 (n=113) ⁴⁹ | Healthy | 15 | 13 | 69 | 61 | 29 | 26 |
| Tanaka, <i>Nephrol Dial Transplant</i> , 2005 (n=100) ⁴⁵ | Healthy | 11 | 11 | 35 | 35 | 54 | 54 |
| Koene, <i>Blood</i> , 1997 (n=87) ³² | Healthy | 15 | 17 | 44 | 51 | 28 | 32 |
| Mahaweni, <i>Sci Reports</i> , 2018 (n=76) ³⁶ | Healthy | 5 | 7 | 42 | 55 | 29 | 38 |
| Kyogoku, <i>Arthritis Rheum</i> , 2002 (n=303) ³³ | Healthy | 26 | 9 | 132 | 44 | 145 | 48 |
| Norton, <i>Cancer Immunol Res</i> , 2014 (n=1325) ⁴¹ | BC | 168 | 13 | 603 | 46 | 554 | 42 |
| Hurvitz, <i>Clin Cancer Res</i> , 2012 (n=1189) ³¹ | BC | 169 | 14 | 471 | 40 | 549 | 46 |
| Gavin, <i>JAMA Oncol</i> , 2017 (n=1164) ³⁰ | BC | 139 | 12 | 484 | 42 | 541 | 46 |
| Rugo, <i>JAMA Oncol</i> , 2021 (n=506) ⁴³ | BC | 69 | 14 | 245 | 48 | 192 | 38 |
| Musolino, <i>Pharmacogenomics J</i> , 2016 (n=73) ⁴⁰ | BC | 10 | 14 | 37 | 51 | 26 | 36 |
| Musolino, <i>J Clin Oncol</i> , 2008 (n=54) ³⁹ | BC | 11 | 20 | 26 | 48 | 17 | 32 |
| Tamura, <i>Ann Oncol</i> , 2011 (n=50) ⁴⁴ | BC | 5 | 10 | 23 | 46 | 22 | 44 |
| Persky, <i>Haematologica</i> , 2012 (n=120) ⁴² | F NHL | 12 | 10 | 60 | 50 | 48 | 40 |
| Tout, <i>Clin Pharmacokinet</i> , 2017 (n=118) ⁴⁶ | CLL | 13 | 11 | 61 | 52 | 44 | 37 |
| Wang, <i>Onco Targets Ther</i> , 2017 (n=110) ⁴⁷ | GC | 19 | 17 | 51 | 46 | 40 | 36 |
| Magnes, <i>Pharmacogenomics J</i> , 2018 (n=103) ³⁵ | H&N | 13 | 13 | 56 | 54 | 34 | 33 |
| Weng, <i>J Clin Oncol</i> , 2003 (n=87) ⁴⁸ | F NHL | 13 | 15 | 40 | 46 | 34 | 39 |
| Cartron, <i>Blood</i> , 2002 (n=49) ²⁹ | F NHL | 10 | 20 | 22 | 45 | 17 | 35 |
| Total number of subjects in the 21 above studies (N=6961) | Healthy subjects and cancer patients | 846 | 12% range: 7-20 | 3110 | 45% range: 35-61 | 3005 | 43% range: 26-54 |
| References and Number of Patients (n) | Subject Characteristics | FcγRIIa-131 (CD32A-131) | | | | | |
| | | HH (high affinity) | | HR | | RR (low affinity) | |
| | | n | % | n | % | n | % |
| Lehrnbecher, <i>Blood</i> , 1999 (n=170) ³⁴ | Healthy (African Americans) | 44 | 26 | 73 | 43 | 53 | 31 |
| Lehrnbecher, <i>Blood</i> , 1999 (n=220) ³⁴ | Healthy (Caucasians) | 69 | 31 | 97 | 44 | 54 | 25 |

| | | | | | | | |
|--|---|-------------------------|--------------|-----|--------------|----------------------|--------------|
| Arnold, <i>Am J Transplant</i> , 2018 (n=213) ⁵⁰ | Healthy (Caucasians) | 61 | 29 | 105 | 49 | 47 | 22 |
| Pavkovic, <i>Hematology</i> , 2018 (n=120) ⁵² | Healthy (Caucasians) | 55 | 46 | 50 | 42 | 15 | 13 |
| Norton, <i>Cancer Immunol Res</i> , 2014 (n=1325) ⁴¹ | BC (88% Caucasians) | 329 | 25 | 674 | 51 | 322 | 24 |
| Gavin, <i>JAMA Oncol</i> , 2017 (n=1004) ³⁰ | BC (Caucasians) | 253 | 25 | 505 | 50 | 246 | 25 |
| Gavin, <i>JAMA Oncol</i> , 2017 (n=104) ³⁰ | BC (Black) | 22 | 21 | 44 | 42 | 38 | 37 |
| Rugo, <i>JAMA Oncol</i> , 2021 (n=506) ⁴³ | BC (80% Caucasian) | 137 | 27 | 247 | 49 | 122 | 24 |
| Musolino, <i>Pharmacogenomics J</i> , 2016 (n=73) ⁴⁰ | BC (Caucasians) | 25 | 34 | 35 | 48 | 13 | 18 |
| Musolino, <i>J Clin Oncol</i> , 2008 (n=54) ³⁹ | BC (Caucasian) | 10 | 19 | 34 | 63 | 10 | 19 |
| Ghesquières, <i>Hematol Oncol</i> , 2017 (n=554) ⁵¹ | DLBCL (Caucasian) | 154 | 28 | 269 | 49 | 131 | 24 |
| Magnes, <i>Pharmacogenomics J</i> , 2018 (n=103) ³⁵ | H&N (Caucasians) | 27 | 26 | 55 | 53 | 21 | 20 |
| Cartron, <i>Blood</i> , 2002 (n=45) ²⁹ | F NHL (Caucasians) | 13 | 29 | 23 | 51 | 9 | 20 |
| Total number of subjects in the 11 above studies (N=4491) | Caucasian and Black subjects/patients | 1199 | 27% | 634 | 14% | 1081 | 24% |
| | | | range: 19-46 | | range: 42-63 | | range: 13-37 |
| Kyogoku, <i>Arthritis Rheum</i> , 2002 (n=303) ³³ | Healthy (Asians) | 197 | 65 | 95 | 31 | 11 | 4 |
| Wang, <i>Onco Targets Ther</i> , 2017 (n=110) ⁴⁷ | GC (Asian) | 56 | 51 | 40 | 36 | 14 | 13 |
| Tanaka, <i>Nephrol Dial Transplant</i> , 2005 (n=100) ⁴⁵ | Healthy (Asians) | 62 | 62 | 35 | 35 | 3 | 3 |
| Tamura, <i>Ann Oncol</i> , 2011 (n=50) ⁴⁴ | BC (Asian) | 22 | 44 | 24 | 48 | 4 | 8 |
| Total number of subjects in the 4 above studies (N=563) | Asian subjects/patients | 337 | 60% | 194 | 35% | 32 | 6% |
| | | | range: 44-65 | | range: 31-48 | | range: 3-13 |
| References and Number of Patients (n) | Subject Characteristics | FcγRIIb-232 (CD32B-232) | | | | | |
| | | II (functional allele) | | TI | | TT (impaired allele) | |
| | | n | % | n | % | n | % |
| Willcocks, <i>Proc Natl Acad Sci U S A</i> , 2010 (n=1296) ⁵⁵ | Healthy (Caucasian) | 1051 | 81 | 232 | 18 | 13 | 1 |
| Magnusson, <i>Arthritis Rheum</i> , 2004 (n=228) ⁵⁴ | Healthy (Caucasian) | 171 | 75 | 53 | 23 | 4 | 2 |
| Li, <i>Arthritis Rheum</i> , 2003 (n=137) ⁵³ | Healthy (Caucasian) | 106 | 77 | 27 | 20 | 4 | 3 |
| Norton, <i>Cancer Immunol Res</i> , 2014 (n=1169) ⁴¹ | BC (Caucasian) | 914 | 78 | 234 | 20 | 21 | 2 |
| Rugo, <i>JAMA Oncol</i> , 2021 (n=506) ⁴³ | BC (80% Caucasian) | 380 | 75 | 117 | 23 | 9 | 2 |
| Musolino, <i>J Clin Oncol</i> , 2008 (n=54) ³⁹ | BC (Caucasian) | 44 | 82 | 6 | 11 | 4 | 7 |
| Total number of subjects in the 6 above studies (N=3390) | Caucasian subjects/patients | 2666 | 79% | 669 | 20% | 55 | 2% |
| | | | range: 75-82 | | range: 11-23 | | range: 1-7 |
| Willcocks, <i>Proc Natl Acad Sci U S A</i> , 2010 (n=1296) ⁵⁵ | Healthy (Asian) | 565 | 55 | 404 | 39 | 57 | 6 |
| Chen, <i>Arthritis Rheum</i> , 2006 (n=372) ⁵⁶ | Healthy (Asian) | 206 | 55 | 144 | 39 | 22 | 6 |
| Norton, <i>Cancer Immunol Res</i> , 2014 (n=153) ⁴¹ | BC (Black or African American, and Asian) | 110 | 72 | 34 | 22 | 9 | 6 |
| Kyogoku, <i>Arthritis Rheum</i> , 2002 (n=303) ³³ | Healthy (Asian) | 183 | 60 | 104 | 34 | 16 | 5 |
| Koga, <i>J Hum Genet</i> , 2011 (n=222) ⁵⁷ | Healthy (Asian) | 128 | 58 | 85 | 38 | 9 | 4 |
| Zidan, <i>Mol Biol Rep</i> , 2014 (n=90) ⁵⁸ | Healthy (African) | 29 | 32 | 44 | 49 | 17 | 19 |
| Li, <i>Arthritis Rheum</i> , 2003 (n=137) ⁵³ | Healthy (African-American) | 79 | 53 | 53 | 36 | 17 | 11 |
| Total number of subjects in the 7 above studies (N=2315) | | 1300 | 56% | 868 | 38% | 147 | 6% |

| | | | | | | | |
|--|---|--|---------------------|--|---------------------|--|--------------------|
| | Asian, African, and African-American subjects/patients | | range: 32-72 | | range: 22-49 | | range: 4-19 |
|--|---|--|---------------------|--|---------------------|--|--------------------|

BC, breast cancer; CLL, chronic lymphocytic leukemia; DLBCL, diffuse large B-cell lymphoma; F NHL, follicular non-Hodgkin lymphoma; GC, gastric cancer; H&N, head and neck cancer.