**Supplementary Table S1\*.** Absolute eosinophil counts (AEC) in Primary Immunodeficiency Diseases (PID): number of patients reported and references cited.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **PID** | **# of****Patients** | **Genetic Defect** | **AEC** **(x 109/L)** | **Ref** | **PID** | **# of****Patients** | **Genetic Defect** | **AEC** **(x 109/L)** | **Ref** |
| ADA def | 1 | *ADA* | 1-2.8 | [[18](#_ENREF_18)] | HIES | 9 | *STAT3* | 0.7-10.045 | [[148](#_ENREF_149" \o "Zhang, 2013 #152)] |
| 1 | *ADA* | 0.8-4.7 | [[21](#_ENREF_21)] | 4 | *STAT3* | 0.029-0.094 | [[149](#_ENREF_150" \o "Saikia, 2014 #153)] |
| ZAP70 def | 1 | ZAP70 | 9.5 | [[29](#_ENREF_29)] | 1 | *STAT3* | 54.81 | [[150](#_ENREF_151" \o "Lima, 2013 #154)] |
| TCR α def | 2 | *TRAC* | 0.08-2.5 | [[37](#_ENREF_37)] | 1 | *STAT3* | 1.608 | [[151](#_ENREF_152" \o "Prcic, 2011 #155)] |
| OS | 1 | ND\*\* | >5 | [[152](#_ENREF_153" \o "Friedrich, 1985 #156)] | 1 | *STAT3* | 1.0215 | [[153](#_ENREF_154" \o "Xie, 2010 #157)] |
| 1 | ND\*\* | 12.47 | [[154](#_ENREF_155" \o "Harville, 1997 #144)] | 1 | *STAT3* | 1.3 | [[155](#_ENREF_156" \o "Sundin, 2014 #158)] |
| 9 | *RAG1* (2)ND\*\* (7)  | 0.03-12.1 | [[42](#_ENREF_42)] | 13 | AR- HIES | 2.61-17.874 | [[65](#_ENREF_65)] |
| 21 | *DOCK8* | 0.29-37.88 | [[61](#_ENREF_61)] |
| 3 | *RAG 1*  | 1.4-5.2 | [[156](#_ENREF_157" \o "Villa, 1998 #159)] | 11 | *DOCK8* | <0.6 – 33.0 | [[62](#_ENREF_62)] |
| 3 | *RAG1* | 0.1-15.1 | [[157](#_ENREF_158" \o "Zhang, 2011 #160)] | 64 | *DOCK8* | 0.245-37.88 | [[158](#_ENREF_159" \o "Engelhardt, 2015 #161)] |
| 1 | *RAG1* | 7.1 | [[159](#_ENREF_160" \o "Katugampola, 2008 #162)] | 1 | *DOCK8* | 36.0 | [[160](#_ENREF_161" \o "Gates, 2012 #163)] |
| 1 | *RAG1* | 1.3 | [[161](#_ENREF_162" \o "Ohm-Laursen, 2008 #164)] | 1 | *TyK2* | 0.7-0.8 | [[69](#_ENREF_69)] |
| 1 | *RAG1* | 21.8 | [[162](#_ENREF_163" \o "Wada, 2005 #165)] | 1 | *TyK2* | 0.29 | [[163](#_ENREF_164" \o "Kilic, 2012 #166)] |
| 1 | *RAG1* | 21.8 | [[164](#_ENREF_165" \o "Seki, 2010 #143)] | PGM3 def | 9 | *PGM3* | 0.7-2.0 | [[142](#_ENREF_142)] |
| 9 | *RAG1* in 7 *RAG2* in 2 | 0.5-10.7 | [[165](#_ENREF_166" \o "Corneo, 2001 #167)] | 8 | *PGM3* | 0.0-3.6 | [[12](#_ENREF_12)] |
| CD40L def | 1 | *CD40L* | 0.5-1.5 | [[82](#_ENREF_82)] |
| 8 | *RAG2* (6); ND\*\* (2) | 2.8-8.1 | [[166](#_ENREF_167" \o "Tabori, 2004 #168)] | 1 | *CD40L* | 0.88 | [[167](#_ENREF_168" \o "Melo, 2013 #169)] |
| CD40 def | 1 | *CD40* | > 5 | [[86](#_ENREF_86)] |
| 2 | *ADA* | 0.85-1.73 | [[17](#_ENREF_17)] | 2 | *CD40* | 0.8-13.5 | [[87](#_ENREF_87)] |
| 1 | *ARTEMIS* | 7.488 | [[168](#_ENREF_169" \o "Lynch, 2006 #170)] | IPEX | 1 | *FOXP3* | 6.12 | [[92](#_ENREF_92)] |
| 2 | *CHD7* | 1.3-4.1 | [[169](#_ENREF_170" \o "Gennery, 2008 #171)] | 14 | *FOXP3* | 0.498-8.423 | [[96](#_ENREF_96)] |
| 1 | *LIG4* | 2.12 | [[170](#_ENREF_171" \o "Grunebaum, 2008 #172)] | 1 | *FOXP3* | 3.170 | [[171](#_ENREF_172" \o "Peake, 1996 #173)] |
| 1 | *IL7RA* | 6.49 | [[172](#_ENREF_173" \o "Giliani, 2006 #174)] | 4 | *FOXP3* | 0.236-0.9 | [[173](#_ENREF_174" \o "Ferguson, 2000 #175)] |
| 1 | *IL2RG* | 15.56 | [[174](#_ENREF_175" \o "Shibata, 2007 #176)] | 1 | *FOXP3* | 5.4 | [[175](#_ENREF_176" \o "Lucas, 2008 #177)] |
| 5 | 22q11.2 | Max >15 | [[46](#_ENREF_46)] | 10 | *FOXP3* | 0.79-6 | [[176](#_ENREF_177" \o "Halabi-Tawil, 2009 #178)] |
| 2 | 22q11.2 | 1.36-5.22 | [[47](#_ENREF_47)] | ALPS | 1 | *TNFRSF6* | 2.89 | [[102](#_ENREF_102)] |
| WAS | 2 | *WAS* | 1.33-2.78 | [[51](#_ENREF_51)] | 11 | *TNFRSF6* (8); ND\*\* (3);  | 1.33-35.46 | [[104](#_ENREF_104)] |
| 15 | *WAS* | 0-8.32 | [[177](#_ENREF_178" \o "Snover, 1981 #179)] |
| 1 | *WAS* | 0.742 | [[167](#_ENREF_168" \o "Melo, 2013 #169)] | 1 | *TNFRSF6* | 35.1 | [[178](#_ENREF_179" \o "Aspinall, 1999 #180)] |
| NOMID/CINCA | 2 | *CIAS1* | 0.728-1.32 | [[179](#_ENREF_180" \o "Torbiak, 1989 #181)] | CD3γ def. | 5 | *CD3G* | 0.2-0.7 | [[23](#_ENREF_23)] |
| 1 | *CIAS1* | 3.441 | [[180](#_ENREF_181" \o "Stojanov, 2004 #182)] | SCN3 | 2 | ND | 0.285-0.6 | [[181](#_ENREF_182" \o "Baehner, 1972 #183)] |
| PLS | 1 | *CTSC* | 2.156 | [[111](#_ENREF_111)] | 17 | *HAX1 (3);* ND\*\* (14) | 0.09-1.30 | [[182](#_ENREF_183" \o "Rezaei, 2007 #184)] |
| 2 | ND\*\* | 0.96-1.55 | [[113](#_ENREF_113)] |
| CVID | 1 | ND\*\* | 1.425-1.562 | [[78](#_ENREF_78)] | IgA Def | 1 |  | 0.672 | [[183](#_ENREF_184" \o "Takahashi, 2013 #185)] |
| 1 | ND\*\* | 0.385 | [[79](#_ENREF_79)] | CGD | 1 | gp91phox | 0.786 | [[115](#_ENREF_115)] |
| EDA-ID | 1 | *NEMO* | 1.45 | [[124](#_ENREF_124)] | MHC II def | 4 | *RFXANK* | 3-10 | [[31](#_ENREF_31)] |
| STAT1 def  | 1 | *STAT1* | 11.1 | [[118](#_ENREF_118)] | 1 | ND\*\* | 0.5 | [[33](#_ENREF_33)] |

\* Note that this table includes only the conditions with absolute eosinophil count(s) reported in the literature; \*\* Not Determined.