

Supplemental Table 2. Details of Group Items by Cluster in VOSviewer

| id | label | weight<Occurrences > | weight<Co-occurrences > | cluster | score<Avg. pub. year> |
|----|--------------------|-------------------------|----------------------------|---------|--------------------------|
| 1 | accumulation | 41 | 847 | 1 | 2008.293 |
| 2 | administration | 93 | 2211 | 1 | 2006.333 |
| 3 | adoptive transfer | 84 | 1967 | 1 | 2008.048 |
| 4 | adult | 44 | 1170 | 2 | 2010.614 |
| 5 | aim | 53 | 1472 | 2 | 2010.283 |
| 6 | alpha | 123 | 2855 | 1 | 2006.26 |
| 7 | alpha galcer | 31 | 612 | 1 | 2005.871 |
| 8 | alteration | 54 | 1181 | 2 | 2010.093 |
| 9 | animal | 77 | 1669 | 1 | 2006.325 |
| 10 | antigen | 344 | 8448 | 3 | 2006.363 |
| 11 | apc | 58 | 1517 | 1 | 2007.517 |
| 12 | assay | 125 | 3397 | 3 | 2008.336 |
| 13 | association | 96 | 2153 | 2 | 2008.167 |
| 14 | autoantibody | 131 | 3384 | 3 | 2007.458 |
| 15 | autoantigen | 213 | 5271 | 3 | 2005.061 |
| 16 | autoimmune diabete | 304 | 6306 | 1 | 2006.023 |
| 17 | b cell | 129 | 2886 | 1 | 2006.938 |
| 18 | b lymphocyte | 26 | 670 | 1 | 2003.462 |
| 19 | bdc | 50 | 1032 | 1 | 2009.32 |
| 20 | beta cell antigen | 36 | 737 | 3 | 2004.639 |
| 21 | beta cell function | 35 | 821 | 2 | 2008.771 |
| 22 | binding | 46 | 1150 | 3 | 2006 |
| 23 | c57bl | 56 | 1369 | 1 | 2006.304 |
| 24 | case | 49 | 1255 | 2 | 2009.327 |
| 25 | cd127 | 27 | 823 | 2 | 2012.037 |
| 26 | cd25 | 40 | 922 | 2 | 2008.175 |
| 27 | cd3 | 62 | 1530 | 2 | 2008.968 |
| 28 | cd45ra | 29 | 640 | 2 | 2008.241 |
| 29 | cd62l | 31 | 649 | 1 | 2005.807 |
| 30 | cd8 | 170 | 3877 | 1 | 2007.882 |
| 31 | cell death | 55 | 926 | 1 | 2006.436 |
| 32 | cfa | 21 | 603 | 1 | 2007.048 |
| 33 | chain | 96 | 2409 | 1 | 2006.104 |
| 34 | change | 95 | 2079 | 2 | 2010.084 |
| 35 | child | 205 | 5125 | 2 | 2009.259 |
| 36 | chromosome | 37 | 701 | 1 | 2005.946 |
| 37 | class | 75 | 1870 | 3 | 2006.707 |
| 38 | clinical trial | 36 | 663 | 2 | 2011.306 |
| 39 | clone | 79 | 1859 | 3 | 2003.886 |
| 40 | comparison | 38 | 966 | 2 | 2009.579 |
| 41 | concentration | 62 | 1511 | 2 | 2009.452 |
| 42 | conclusion | 154 | 4097 | 2 | 2009.825 |
| 43 | control | 276 | 6558 | 2 | 2009.044 |

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|----|-----------------------------|-----|------|---|----------|
| 44 | control group | 38 | 1031 | 2 | 2011.553 |
| 45 | control subject | 72 | 1930 | 3 | 2006.292 |
| 46 | ctl | 65 | 1370 | 1 | 2007 |
| 47 | ctla | 107 | 2411 | 2 | 2007.271 |
| 48 | cytotoxic t lymphocyte | 42 | 858 | 1 | 2006.191 |
| 49 | cytotoxicity | 35 | 846 | 3 | 2005 |
| 50 | day | 126 | 3529 | 2 | 2008.405 |
| 51 | dcs | 113 | 2387 | 1 | 2009.327 |
| 52 | decrease | 63 | 1440 | 2 | 2010.064 |
| 53 | deficiency | 86 | 1687 | 1 | 2007.279 |
| 54 | deletion | 62 | 1370 | 1 | 2008.484 |
| 55 | dendritic cell | 120 | 2628 | 1 | 2008.392 |
| 56 | depletion | 66 | 1509 | 1 | 2009.121 |
| 57 | detection | 29 | 699 | 3 | 2005.897 |
| 58 | diabetes development | 87 | 2003 | 1 | 2006.333 |
| 59 | diabetes mellitus | 158 | 3448 | 2 | 2010.595 |
| 60 | diabetes patient | 50 | 1212 | 2 | 2008.3 |
| 61 | diabetic mouse | 140 | 2674 | 1 | 2009.457 |
| 62 | diabetic nod mouse | 65 | 1407 | 1 | 2008.139 |
| 63 | diabetic patient | 196 | 4747 | 3 | 2006.321 |
| 64 | diabetic subject | 33 | 677 | 2 | 2007.97 |
| 65 | diabetogenic | 59 | 1286 | 1 | 2006.729 |
| 66 | diabetogenic t cell | 117 | 2404 | 1 | 2005.231 |
| 67 | diagnosis | 51 | 1265 | 2 | 2008.824 |
| 68 | difference | 80 | 2172 | 2 | 2007.638 |
| 69 | dn t cell | 37 | 778 | 1 | 2011.622 |
| 70 | dose | 107 | 2859 | 2 | 2010.794 |
| 71 | dr4 | 41 | 937 | 3 | 2006.146 |
| 72 | effector t cell | 69 | 1423 | 2 | 2009.522 |
| 73 | efficacy | 54 | 1151 | 2 | 2011.019 |
| 74 | epitope | 217 | 5302 | 3 | 2007.23 |
| 75 | event | 66 | 1586 | 2 | 2007.788 |
| 76 | fas | 26 | 485 | 1 | 2005.423 |
| 77 | flow cytometry | 58 | 1451 | 2 | 2010.672 |
| 78 | foxp3 | 163 | 3660 | 2 | 2009.951 |
| 79 | frequency | 328 | 7972 | 2 | 2010.25 |
| 80 | fulminant type | 25 | 519 | 2 | 2008.52 |
| 81 | gad | 119 | 3610 | 3 | 2003.361 |
| 82 | gad65 | 56 | 1545 | 3 | 2004.536 |
| 83 | gal | 25 | 745 | 2 | 2010.8 |
| 84 | gamma delta t cell | 27 | 381 | 1 | 2010.444 |
| 85 | glutamic acid decarboxylase | 89 | 2588 | 3 | 2003.753 |
| 86 | group | 236 | 6300 | 2 | 2010.343 |
| 87 | healthy control | 83 | 1955 | 2 | 2009.94 |
| 88 | healthy control subject | 28 | 682 | 2 | 2007.821 |
| 89 | healthy subject | 30 | 819 | 2 | 2008.767 |
| 90 | high | 55 | 1392 | 2 | 2010.691 |
| 91 | hla | 98 | 2402 | 3 | 2007.388 |
| 92 | human type | 58 | 1335 | 3 | 2007.966 |

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|-----|---|------|-------|---|----------|
| 93 | hyperglycemia | 65 | 1265 | 1 | 2010.339 |
| 94 | iddm | 139 | 3649 | 3 | 1999.698 |
| 95 | iddm patient | 26 | 774 | 3 | 1999.923 |
| 96 | identification | 48 | 1130 | 3 | 2006.708 |
| 97 | ifn | 33 | 823 | 2 | 2011.303 |
| 98 | igrp | 79 | 1742 | 1 | 2010.304 |
| 99 | immunization | 40 | 1001 | 1 | 2005.1 |
| 100 | importance | 33 | 790 | 1 | 2008.242 |
| 101 | incidence | 68 | 1534 | 1 | 2007.529 |
| 102 | individual | 121 | 2584 | 2 | 2009.058 |
| 103 | inhibition | 86 | 1638 | 1 | 2008.837 |
| 104 | initiation | 47 | 1056 | 1 | 2005.404 |
| 105 | injection | 74 | 1770 | 1 | 2008.284 |
| 106 | inkt cell | 64 | 1117 | 1 | 2009.672 |
| 107 | insulin dependent diabete insulin dependent diabetes | 53 | 1215 | 3 | 2001.453 |
| 108 | mellitus | 40 | 1006 | 3 | 2000.1 |
| 109 | insulin resistance | 28 | 583 | 2 | 2010.179 |
| 110 | insulitis | 232 | 4775 | 1 | 2005.668 |
| 111 | interaction | 80 | 1472 | 1 | 2007.8 |
| 112 | islet cell | 37 | 819 | 1 | 2002.919 |
| 113 | islet transplantation | 27 | 530 | 3 | 2009.852 |
| 114 | lada | 32 | 835 | 2 | 2011.438 |
| 115 | lada patient | 25 | 548 | 2 | 2010.8 |
| 116 | line | 57 | 1647 | 3 | 2003.105 |
| 117 | lymph node | 70 | 1582 | 1 | 2006.671 |
| 118 | mab | 31 | 690 | 1 | 2004.968 |
| 119 | macrophage | 87 | 1772 | 1 | 2006.241 |
| 120 | maintenance major histocompatibility | 44 | 951 | 2 | 2008.205 |
| 121 | complex | 34 | 895 | 1 | 2005.824 |
| 122 | majority | 35 | 827 | 3 | 2006.543 |
| 123 | marker | 119 | 2653 | 2 | 2008.723 |
| 124 | method | 130 | 3314 | 2 | 2010.162 |
| 125 | mhc | 71 | 1753 | 1 | 2006.775 |
| 126 | mhc class | 58 | 1420 | 1 | 2005.448 |
| 127 | mice | 55 | 1270 | 1 | 2010.055 |
| 128 | migration | 60 | 1027 | 1 | 2007.683 |
| 129 | modulation | 55 | 1103 | 1 | 2008.109 |
| 130 | molecule | 213 | 5319 | 3 | 2005.845 |
| 131 | month | 65 | 1726 | 2 | 2009.292 |
| 132 | mouse | 1242 | 25700 | 1 | 2006.878 |
| 133 | nk cell | 35 | 767 | 2 | 2011.171 |
| 134 | nk t cell | 30 | 717 | 1 | 2001.333 |
| 135 | nod | 417 | 9418 | 1 | 2005.875 |
| 136 | nod mouse | 798 | 17064 | 1 | 2006.668 |
| 137 | nod mouse model | 27 | 512 | 1 | 2009.444 |
| 138 | non obese diabetic | 93 | 2070 | 1 | 2007.226 |
| 139 | nonobese diabetic | 160 | 3532 | 1 | 2004.219 |

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|-----|-------------------------------|-----|-------|---|----------|
| 140 | nonobese diabetic mice | 24 | 456 | 1 | 2012.083 |
| 141 | nonobese diabetic mouse | 107 | 2321 | 1 | 2003.374 |
| 142 | ntreg | 30 | 589 | 2 | 2011.433 |
| 143 | null | 61 | 1698 | 1 | 2007.918 |
| 144 | obesity | 27 | 464 | 2 | 2014 |
| 145 | objective | 26 | 782 | 2 | 2011.269 |
| 146 | pancreatic lymph node | 95 | 2253 | 1 | 2007.737 |
| 147 | panel | 30 | 744 | 3 | 2005.833 |
| 148 | participant | 33 | 1179 | 2 | 2013.424 |
| 149 | pathogenic t cell | 30 | 556 | 3 | 2006.8 |
| 150 | pathway | 123 | 2377 | 1 | 2007.504 |
| 151 | patient | 795 | 18016 | 2 | 2009.176 |
| 152 | pbmc | 62 | 1808 | 3 | 2008.274 |
| 153 | peptide | 503 | 12946 | 3 | 2006.137 |
| 154 | percentage | 110 | 2828 | 2 | 2011.164 |
| 155 | perforin | 21 | 531 | 1 | 2007.191 |
| 156 | peripheral blood | 106 | 2802 | 2 | 2008.708 |
| | peripheral blood mononuclear | | | | |
| 157 | cell | 61 | 1723 | 3 | 2007.443 |
| 158 | peripheral tolerance | 46 | 939 | 1 | 2007.261 |
| | phosphatase catalytic subunit | | | | |
| 159 | related protein | 21 | 517 | 1 | 2009.81 |
| 160 | placebo | 29 | 907 | 2 | 2011.241 |
| 161 | pln | 27 | 695 | 1 | 2009.556 |
| 162 | polymorphism | 86 | 1886 | 2 | 2009.314 |
| 163 | presentation | 65 | 1701 | 1 | 2006.154 |
| 164 | prevention | 75 | 1708 | 1 | 2006.653 |
| 165 | proinsulin | 62 | 1843 | 3 | 2006.726 |
| 166 | protection | 169 | 3945 | 1 | 2006.219 |
| 167 | protective effect | 38 | 841 | 1 | 2007.447 |
| 168 | protein | 184 | 4257 | 3 | 2005.929 |
| 169 | rapamycin | 21 | 395 | 2 | 2009.048 |
| 170 | rat | 172 | 2883 | 1 | 2005.424 |
| 171 | reactivity | 53 | 1539 | 3 | 2004.509 |
| 172 | recent onset | 20 | 539 | 2 | 2007.9 |
| 173 | recent onset type | 24 | 660 | 2 | 2009.167 |
| 174 | recipient | 147 | 3413 | 1 | 2005.993 |
| 175 | recognition | 65 | 1532 | 3 | 2006.2 |
| 176 | recruitment | 58 | 1039 | 1 | 2006.655 |
| 177 | reg | 33 | 652 | 2 | 2008.485 |
| 178 | region | 125 | 3345 | 3 | 2007.008 |
| 179 | regulatory cell | 27 | 628 | 1 | 2005.704 |
| 180 | regulatory t | 24 | 478 | 2 | 2010.75 |
| 181 | regulatory t cells | 36 | 910 | 2 | 2012.306 |
| 182 | residue | 40 | 1142 | 3 | 2005.1 |
| 183 | resistance | 61 | 1472 | 1 | 2005.049 |
| 184 | response | 674 | 16086 | 3 | 2007.068 |
| 185 | risk | 111 | 2395 | 2 | 2008.748 |
| 186 | selection | 80 | 1809 | 1 | 2005.788 |

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|-----|------------------------|-----|------|---|----------|
| 187 | self tolerance | 40 | 693 | 2 | 2009.85 |
| 188 | sensitivity | 40 | 944 | 2 | 2009.3 |
| 189 | sequence | 57 | 1670 | 3 | 2004.368 |
| 190 | significant difference | 31 | 891 | 2 | 2007.226 |
| 191 | specific cd4 | 51 | 1222 | 3 | 2008.353 |
| 192 | specific t cell | 86 | 2063 | 3 | 2007.535 |
| 193 | specificity | 92 | 2190 | 3 | 2006.641 |
| 194 | spleen | 30 | 777 | 1 | 2005.8 |
| 195 | splenocyte | 84 | 2001 | 1 | 2006.5 |
| 196 | strain | 113 | 2528 | 1 | 2007.115 |
| 197 | streptozotocin | 44 | 934 | 1 | 2009.182 |
| 198 | stz | 53 | 1192 | 1 | 2008.359 |
| 199 | subject | 174 | 3927 | 2 | 2008.397 |
| 200 | suppression | 102 | 2078 | 2 | 2008.99 |
| 201 | suppressive function | 25 | 670 | 2 | 2010.84 |
| 202 | survival | 76 | 1629 | 1 | 2009.474 |
| 203 | susceptibility | 131 | 3149 | 1 | 2007.076 |
| 204 | t cell clone | 164 | 3753 | 3 | 2003.933 |
| 205 | t cell epitope | 45 | 1099 | 3 | 2005 |
| 206 | t cell line | 59 | 1531 | 3 | 2002.017 |
| 207 | t cell reactivity | 57 | 1627 | 3 | 2006.193 |
| 208 | t cell receptor | 81 | 1894 | 1 | 2005.889 |
| 209 | t cell response | 257 | 6316 | 3 | 2006.751 |
| 210 | t cell tolerance | 29 | 602 | 1 | 2006.828 |
| 211 | t reg | 76 | 1493 | 2 | 2010.053 |
| 212 | t reg cell | 57 | 1138 | 2 | 2010.947 |
| 213 | t regulatory cell | 62 | 1408 | 2 | 2010.823 |
| 214 | t1d development | 22 | 409 | 1 | 2009.818 |
| 215 | t1d patient | 71 | 1644 | 2 | 2011.718 |
| 216 | t1d subject | 30 | 706 | 2 | 2010.133 |
| 217 | t1dm | 83 | 1824 | 2 | 2010.699 |
| 218 | t2d | 38 | 698 | 2 | 2014.579 |
| 219 | t2dm | 56 | 1508 | 2 | 2014.732 |
| 220 | t2dm patient | 29 | 829 | 2 | 2014.138 |
| 221 | target | 113 | 2688 | 3 | 2008.54 |
| 222 | tcr | 172 | 3662 | 1 | 2005.645 |
| 223 | teff | 50 | 1030 | 2 | 2012.58 |
| 224 | tetramer | 53 | 1250 | 3 | 2008.019 |
| 225 | tgf beta | 89 | 2197 | 2 | 2009.371 |
| 226 | thymocyte | 66 | 1407 | 1 | 2004.652 |
| 227 | thymus | 60 | 1308 | 1 | 2006.4 |
| 228 | tid | 29 | 597 | 1 | 2007.759 |
| 229 | tim | 26 | 597 | 2 | 2014.615 |
| 230 | tnf | 44 | 714 | 1 | 2006.296 |
| 231 | tnf alpha | 68 | 1523 | 1 | 2007.015 |
| 232 | tolerance | 214 | 4320 | 1 | 2008.836 |
| 233 | total | 21 | 614 | 2 | 2012.571 |
| 234 | transfer | 110 | 2432 | 1 | 2006.9 |
| 235 | transgenic mouse | 79 | 2004 | 1 | 2005.443 |

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|-----|-----------------|-----|------|---|----------|
| 236 | transplantation | 52 | 1051 | 1 | 2008.654 |
| 237 | treg | 389 | 8722 | 2 | 2011.144 |
| 238 | treg cell | 115 | 2491 | 2 | 2012.017 |
| 239 | treg function | 23 | 553 | 2 | 2010.957 |
| 240 | tregs | 252 | 5886 | 2 | 2011.544 |
| 241 | use | 67 | 1536 | 2 | 2008.776 |
| 242 | v alpha | 56 | 1508 | 1 | 1999.411 |
| 243 | v beta | 47 | 992 | 3 | 2007.319 |
| 244 | vivo | 95 | 1831 | 1 | 2007.716 |
| 245 | year | 80 | 2005 | 2 | 2010.5 |
