

|       | Disease                                    | r            | pval        | location_name | sex_name |
|-------|--|--------------|-------------|---------------|----------|
| cor   | Inflammatory bowel disease                 | 0.98263111   | 5.01E-22    | Mexico        | Both     |
| cor1  | Multiple sclerosis                         | 0.92220514   | 4.50E-13    | Mexico        | Both     |
| cor2  | Diabetes mellitus                          | 0.960938643  | 3.71E-17    | Mexico        | Both     |
| cor3  | Rheumatic heart disease                    | -0.778644034 | 4.04E-07    | Mexico        | Both     |
| cor4  | Ischemic heart disease                     | 0.977244464  | 2.13E-20    | Mexico        | Both     |
| cor5  | Hypertensive heart disease                 | 0.973171422  | 2.08E-19    | Mexico        | Both     |
| cor6  | Cardiomyopathy and myocarditis             | 0.94106645   | 1.04E-14    | Mexico        | Both     |
| cor7  | Maternal disorders                         | -0.866779596 | 5.90E-10    | Mexico        | Both     |
| cor8  | Non-melanoma skin cancer                   | 0.939520684  | 1.48E-14    | Mexico        | Both     |
| cor9  | Rheumatoid arthritis                       | 0.98154461   | 1.16E-21    | Mexico        | Both     |
| cor10 | Non-rheumatic valvular heart disease       | 0.97865526   | 8.76E-21    | Mexico        | Both     |
| cor11 | Chronic obstructive pulmonary disease      | 0.941372243  | 9.68E-15    | Mexico        | Both     |
| cor12 | Asthma                                     | -0.775295246 | 4.88E-07    | Mexico        | Both     |
| cor13 | Cirrhosis and other chronic liver diseases | 0.833046855  | 1.12E-08    | Mexico        | Both     |
| cor14 | Hodgkin lymphoma                           | -0.188495668 | 0.318501128 | Mexico        | Both     |
| cor15 | Non-Hodgkin lymphoma                       | 0.907684066  | 4.51E-12    | Mexico        | Both     |
| cor16 | Multiple myeloma                           | 0.938525412  | 1.85E-14    | Mexico        | Both     |
| cor17 | Leukemia                                   | 0.785724943  | 2.69E-07    | Mexico        | Both     |
| cor18 | Inflammatory bowel disease                 | 0.981702724  | 1.03E-21    | Mexico        | Female   |
| cor19 | Multiple sclerosis                         | 0.919007695  | 7.76E-13    | Mexico        | Female   |
| cor20 | Diabetes mellitus                          | 0.965097594  | 7.87E-18    | Mexico        | Female   |
| cor21 | Rheumatic heart disease                    | -0.799726786 | 1.15E-07    | Mexico        | Female   |

|       |  |              |             |        |        |
|-------|--|--------------|-------------|--------|--------|
| cor22 | Ischemic heart disease                     | 0.976008364  | 4.43E-20    | Mexico | Female |
| cor23 | Hypertensive heart disease                 | 0.964008646  | 1.20E-17    | Mexico | Female |
| cor24 | Cardiomyopathy and myocarditis             | 0.936607372  | 2.81E-14    | Mexico | Female |
| cor25 | Maternal disorders                         | -0.870253772 | 4.17E-10    | Mexico | Female |
| cor26 | Non-melanoma skin cancer                   | 0.93383316   | 5.02E-14    | Mexico | Female |
| cor27 | Rheumatoid arthritis                       | 0.977382216  | 1.96E-20    | Mexico | Female |
| cor28 | Non-rheumatic valvular heart disease       | 0.986772361  | 1.13E-23    | Mexico | Female |
| cor29 | Chronic obstructive pulmonary disease      | 0.962526609  | 2.10E-17    | Mexico | Female |
| cor30 | Asthma                                     | -0.78737644  | 2.44E-07    | Mexico | Female |
| cor31 | Cirrhosis and other chronic liver diseases | 0.939781459  | 1.39E-14    | Mexico | Female |
| cor32 | Hodgkin lymphoma                           | -0.139875211 | 0.460994637 | Mexico | Female |
| cor33 | Non-Hodgkin lymphoma                       | 0.914989507  | 1.49E-12    | Mexico | Female |
| cor34 | Multiple myeloma                           | 0.946288378  | 2.93E-15    | Mexico | Female |
| cor35 | Leukemia                                   | 0.767772515  | 7.35E-07    | Mexico | Female |
| cor36 | Inflammatory bowel disease                 | 0.9794851    | 5.05E-21    | Mexico | Male   |
| cor37 | Multiple sclerosis                         | 0.916955818  | 1.09E-12    | Mexico | Male   |
| cor38 | Diabetes mellitus                          | 0.946264402  | 2.95E-15    | Mexico | Male   |
| cor39 | Rheumatic heart disease                    | -0.726389346 | 5.51E-06    | Mexico | Male   |

|       |  |              |             |           |      |
|-------|--|--------------|-------------|-----------|------|
| cor40 | Ischemic heart disease                     | 0.972320133  | 3.20E-19    | Mexico    | Male |
| cor41 | Hypertensive heart disease                 | 0.976868505  | 2.67E-20    | Mexico    | Male |
| cor42 | Cardiomyopathy and myocarditis             | 0.934188282  | 4.67E-14    | Mexico    | Male |
| 1     | Maternal disorders                         | 0            | 1           | Mexico    | Male |
| cor43 | Non-melanoma skin cancer                   | 0.933770834  | 5.09E-14    | Mexico    | Male |
| cor44 | Rheumatoid arthritis                       | 0.913291504  | 1.94E-12    | Mexico    | Male |
| cor45 | Non-rheumatic valvular heart disease       | 0.966286693  | 4.88E-18    | Mexico    | Male |
| cor46 | Chronic obstructive pulmonary disease      | 0.905838064  | 5.89E-12    | Mexico    | Male |
| cor47 | Asthma                                     | -0.75262731  | 1.61E-06    | Mexico    | Male |
| cor48 | Cirrhosis and other chronic liver diseases | 0.748345741  | 1.98E-06    | Mexico    | Male |
| cor49 | Hodgkin lymphoma                           | -0.188977612 | 0.317242617 | Mexico    | Male |
| cor50 | Non-Hodgkin lymphoma                       | 0.891140225  | 4.08E-11    | Mexico    | Male |
| cor51 | Multiple myeloma                           | 0.921504192  | 5.08E-13    | Mexico    | Male |
| cor52 | Leukemia                                   | 0.759287083  | 1.15E-06    | Mexico    | Male |
| cor53 | Inflammatory bowel disease                 | -0.791774529 | 1.88E-07    | Argentina | Both |
| cor54 | Multiple sclerosis                         | 0.255500934  | 0.17297203  | Argentina | Both |
| cor55 | Diabetes mellitus                          | -0.231918664 | 0.217503697 | Argentina | Both |
| cor56 | Rheumatic heart disease                    | 0.827058343  | 1.76E-08    | Argentina | Both |

|       |  |              |             |           |        |
|-------|--|--------------|-------------|-----------|--------|
| cor57 | Ischemic heart disease                     | 0.932272114  | 6.89E-14    | Argentina | Both   |
| cor58 | Hypertensive heart disease                 | -0.765347628 | 8.37E-07    | Argentina | Both   |
| cor59 | Cardiomyopathy and myocarditis             | 0.197137029  | 0.296404858 | Argentina | Both   |
| cor60 | Maternal disorders                         | 0.63217623   | 0.000178522 | Argentina | Both   |
| cor61 | Non-melanoma skin cancer                   | -0.825950752 | 1.91E-08    | Argentina | Both   |
| cor62 | Rheumatoid arthritis                       | 0.539215042  | 0.002106746 | Argentina | Both   |
| cor63 | Non-rheumatic valvular heart disease       | -0.824248671 | 2.17E-08    | Argentina | Both   |
| cor64 | Chronic obstructive pulmonary disease      | -0.982785132 | 4.43E-22    | Argentina | Both   |
| cor65 | Asthma                                     | 0.698096016  | 1.79E-05    | Argentina | Both   |
| cor66 | Cirrhosis and other chronic liver diseases | -0.081075203 | 0.670180415 | Argentina | Both   |
| cor67 | Hodgkin lymphoma                           | 0.874563968  | 2.67E-10    | Argentina | Both   |
| cor68 | Non-Hodgkin lymphoma                       | -0.679878383 | 3.59E-05    | Argentina | Both   |
| cor69 | Multiple myeloma                           | -0.961993769 | 2.55E-17    | Argentina | Both   |
| cor70 | Leukemia                                   | 0.011895162  | 0.950255346 | Argentina | Both   |
| cor71 | Inflammatory bowel disease                 | -0.892921095 | 3.28E-11    | Argentina | Female |
| cor72 | Multiple sclerosis                         | 0.109723773  | 0.563809423 | Argentina | Female |
| cor73 | Diabetes mellitus                          | 0.207609465  | 0.270960087 | Argentina | Female |
| cor74 | Rheumatic heart disease                    | 0.876137975  | 2.26E-10    | Argentina | Female |

|       |  |              |             |           |        |
|-------|--|--------------|-------------|-----------|--------|
| cor75 | Ischemic heart disease                     | 0.960641413  | 4.12E-17    | Argentina | Female |
| cor76 | Hypertensive heart disease                 | -0.915450969 | 1.38E-12    | Argentina | Female |
| cor77 | Cardiomyopathy and myocarditis             | -0.415854141 | 0.022279414 | Argentina | Female |
| cor78 | Maternal disorders                         | 0.764134711  | 8.92E-07    | Argentina | Female |
| cor79 | Non-melanoma skin cancer                   | -0.903068447 | 8.68E-12    | Argentina | Female |
| cor80 | Rheumatoid arthritis                       | -0.448093401 | 0.013018118 | Argentina | Female |
| cor81 | Non-rheumatic valvular heart disease       | -0.96213842  | 2.42E-17    | Argentina | Female |
| cor82 | Chronic obstructive pulmonary disease      | -0.986507795 | 1.49E-23    | Argentina | Female |
| cor83 | Asthma                                     | 0.806037241  | 7.64E-08    | Argentina | Female |
| cor84 | Cirrhosis and other chronic liver diseases | -0.295806666 | 0.112488277 | Argentina | Female |
| cor85 | Hodgkin lymphoma                           | 0.942768451  | 6.97E-15    | Argentina | Female |
| cor86 | Non-Hodgkin lymphoma                       | -0.508622587 | 0.004104279 | Argentina | Female |
| cor87 | Multiple myeloma                           | -0.924234925 | 3.15E-13    | Argentina | Female |
| cor88 | Leukemia                                   | 0.063547458  | 0.738672797 | Argentina | Female |
| cor89 | Inflammatory bowel disease                 | -0.290692478 | 0.119137415 | Argentina | Male   |
| cor90 | Multiple sclerosis                         | 0.186231167  | 0.324455759 | Argentina | Male   |
| cor91 | Diabetes mellitus                          | -0.674028598 | 4.44E-05    | Argentina | Male   |
| cor92 | Rheumatic heart disease                    | 0.647867276  | 0.000108538 | Argentina | Male   |

|        |  |              |             |           |      |
|--------|--|--------------|-------------|-----------|------|
| cor93  | Ischemic heart disease                     | 0.745280769  | 2.30E-06    | Argentina | Male |
| cor94  | Hypertensive heart disease                 | -0.279131642 | 0.135234059 | Argentina | Male |
| cor95  | Cardiomyopathy and myocarditis             | 0.158274246  | 0.403519592 | Argentina | Male |
| 11     | Maternal disorders                         | 0            | 1           | Argentina | Male |
| cor96  | Non-melanoma skin cancer                   | -0.605746671 | 0.00038927  | Argentina | Male |
| cor97  | Rheumatoid arthritis                       | 0.96330232   | 1.57E-17    | Argentina | Male |
| cor98  | Non-rheumatic valvular heart disease       | -0.386298735 | 0.034981358 | Argentina | Male |
| cor99  | Chronic obstructive pulmonary disease      | -0.968425247 | 1.98E-18    | Argentina | Male |
| cor100 | Asthma                                     | 0.432925945  | 0.016865897 | Argentina | Male |
| cor101 | Cirrhosis and other chronic liver diseases | 0.269370345  | 0.150016104 | Argentina | Male |
| cor102 | Hodgkin lymphoma                           | 0.724184572  | 6.07E-06    | Argentina | Male |
| cor103 | Non-Hodgkin lymphoma                       | -0.855712572 | 1.68E-09    | Argentina | Male |
| cor104 | Multiple myeloma                           | -0.682482786 | 3.26E-05    | Argentina | Male |
| cor105 | Leukemia                                   | -0.234378021 | 0.212527337 | Argentina | Male |
| cor106 | Inflammatory bowel disease                 | -0.987127363 | 7.77E-24    | Global    | Both |
| cor107 | Multiple sclerosis                         | -0.973529454 | 1.73E-19    | Global    | Both |
| cor108 | Diabetes mellitus                          | -0.994137519 | 1.34E-28    | Global    | Both |
| cor109 | Rheumatic heart disease                    | 0.984094704  | 1.47E-22    | Global    | Both |

|        |  |              |             |        |        |
|--------|--|--------------|-------------|--------|--------|
| cor110 | Ischemic heart disease                     | -0.836391875 | 8.61E-09    | Global | Both   |
| cor111 | Hypertensive heart disease                 | -0.779114889 | 3.94E-07    | Global | Both   |
| cor112 | Cardiomyopathy and myocarditis             | 0.240008475  | 0.201428706 | Global | Both   |
| cor113 | Maternal disorders                         | 0.997834903  | 1.20E-34    | Global | Both   |
| cor114 | Non-melanoma skin cancer                   | -0.989468582 | 4.74E-25    | Global | Both   |
| cor115 | Rheumatoid arthritis                       | -0.970197371 | 8.90E-19    | Global | Both   |
| cor116 | Non-rheumatic valvular heart disease       | -0.966199173 | 5.06E-18    | Global | Both   |
| cor117 | Chronic obstructive pulmonary disease      | 0.935440861  | 3.60E-14    | Global | Both   |
| cor118 | Asthma                                     | 0.977498084  | 1.82E-20    | Global | Both   |
| cor119 | Cirrhosis and other chronic liver diseases | 0.233102388  | 0.215098711 | Global | Both   |
| cor120 | Hodgkin lymphoma                           | 0.961438811  | 3.11E-17    | Global | Both   |
| cor121 | Non-Hodgkin lymphoma                       | -0.981919395 | 8.75E-22    | Global | Both   |
| cor122 | Multiple myeloma                           | -0.99411872  | 1.40E-28    | Global | Both   |
| cor123 | Leukemia                                   | 0.93459109   | 4.29E-14    | Global | Both   |
| cor124 | Inflammatory bowel disease                 | -0.962750068 | 1.93E-17    | Global | Female |
| cor125 | Multiple sclerosis                         | -0.972430276 | 3.03E-19    | Global | Female |
| cor126 | Diabetes mellitus                          | -0.987877176 | 3.37E-24    | Global | Female |
| cor127 | Rheumatic heart disease                    | 0.98326206   | 3.00E-22    | Global | Female |

|        |  |              |             |        |        |
|--------|--|--------------|-------------|--------|--------|
| cor128 | Ischemic heart disease                     | -0.457659418 | 0.010991658 | Global | Female |
| cor129 | Hypertensive heart disease                 | -0.791040549 | 1.96E-07    | Global | Female |
| cor130 | Cardiomyopathy and myocarditis             | 0.901011241  | 1.15E-11    | Global | Female |
| cor131 | Maternal disorders                         | 0.998582673  | 3.20E-37    | Global | Female |
| cor132 | Non-melanoma skin cancer                   | -0.989322578 | 5.74E-25    | Global | Female |
| cor133 | Rheumatoid arthritis                       | -0.953742144 | 3.79E-16    | Global | Female |
| cor134 | Non-rheumatic valvular heart disease       | -0.979580426 | 4.74E-21    | Global | Female |
| cor135 | Chronic obstructive pulmonary disease      | 0.936310167  | 2.99E-14    | Global | Female |
| cor136 | Asthma                                     | 0.972059975  | 3.65E-19    | Global | Female |
| cor137 | Cirrhosis and other chronic liver diseases | 0.707974155  | 1.21E-05    | Global | Female |
| cor138 | Hodgkin lymphoma                           | 0.957984064  | 1.01E-16    | Global | Female |
| cor139 | Non-Hodgkin lymphoma                       | -0.952994013 | 4.72E-16    | Global | Female |
| cor140 | Multiple myeloma                           | -0.987407172 | 5.72E-24    | Global | Female |
| cor141 | Leukemia                                   | 0.953026233  | 4.68E-16    | Global | Female |
| cor142 | Inflammatory bowel disease                 | -0.965051327 | 8.02E-18    | Global | Male   |
| cor143 | Multiple sclerosis                         | -0.965828512 | 5.88E-18    | Global | Male   |
| cor144 | Diabetes mellitus                          | -0.996994716 | 1.18E-32    | Global | Male   |
| cor145 | Rheumatic heart disease                    | 0.98360937   | 2.24E-22    | Global | Male   |



|        |  |              |             |        |      |
|--------|--|--------------|-------------|--------|------|
| cor146 | Ischemic heart disease                     | -0.938131735 | 2.01E-14    | Global | Male |
| cor147 | Hypertensive heart disease                 | -0.763763256 | 9.09E-07    | Global | Male |
| cor148 | Cardiomyopathy and myocarditis             | -0.234108071 | 0.213069734 | Global | Male |
| 12     | Maternal disorders                         | 0            | 1           | Global | Male |
| cor149 | Non-melanoma skin cancer                   | -0.988968637 | 9.05E-25    | Global | Male |
| cor150 | Rheumatoid arthritis                       | -0.975290845 | 6.66E-20    | Global | Male |
| cor151 | Non-rheumatic valvular heart disease       | -0.938803661 | 1.74E-14    | Global | Male |
| cor152 | Chronic obstructive pulmonary disease      | 0.925909896  | 2.33E-13    | Global | Male |
| cor153 | Asthma                                     | 0.977451099  | 1.87E-20    | Global | Male |
| cor154 | Cirrhosis and other chronic liver diseases | -0.065011706 | 0.732866757 | Global | Male |
| cor155 | Hodgkin lymphoma                           | 0.958752182  | 7.85E-17    | Global | Male |
| cor156 | Non-Hodgkin lymphoma                       | -0.983092741 | 3.45E-22    | Global | Male |
| cor157 | Multiple myeloma                           | -0.996558778 | 7.83E-32    | Global | Male |
| cor158 | Leukemia                                   | 0.874684647  | 2.64E-10    | Global | Male |
| cor159 | Inflammatory bowel disease                 | -0.898950221 | 1.51E-11    | France | Both |
| cor160 | Multiple sclerosis                         | -0.474524612 | 0.008062386 | France | Both |
| cor161 | Diabetes mellitus                          | -0.251646354 | 0.179770369 | France | Both |
| cor162 | Rheumatic heart disease                    | 0.400470258  | 0.028309662 | France | Both |

|        |  |              |             |        |        |
|--------|--|--------------|-------------|--------|--------|
| cor163 | Ischemic heart disease                     | 0.670381498  | 5.05E-05    | France | Both   |
| cor164 | Hypertensive heart disease                 | -0.862357038 | 9.07E-10    | France | Both   |
| cor165 | Cardiomyopathy and myocarditis             | 0.570972337  | 0.000983653 | France | Both   |
| cor166 | Maternal disorders                         | 0.730313886  | 4.62E-06    | France | Both   |
| cor167 | Non-melanoma skin cancer                   | -0.715887737 | 8.68E-06    | France | Both   |
| cor168 | Rheumatoid arthritis                       | 0.573198887  | 0.000929808 | France | Both   |
| cor169 | Non-rheumatic valvular heart disease       | -0.735731409 | 3.61E-06    | France | Both   |
| cor170 | Chronic obstructive pulmonary disease      | 0.292312898  | 0.11699991  | France | Both   |
| cor171 | Asthma                                     | 0.700513847  | 1.63E-05    | France | Both   |
| cor172 | Cirrhosis and other chronic liver diseases | 0.800842713  | 1.07E-07    | France | Both   |
| cor173 | Hodgkin lymphoma                           | 0.683976527  | 3.08E-05    | France | Both   |
| cor174 | Non-Hodgkin lymphoma                       | -0.462369353 | 0.010095591 | France | Both   |
| cor175 | Multiple myeloma                           | -0.659835915 | 7.28E-05    | France | Both   |
| cor176 | Leukemia                                   | -0.868936604 | 4.76E-10    | France | Both   |
| cor177 | Inflammatory bowel disease                 | -0.925691134 | 2.42E-13    | France | Female |
| cor178 | Multiple sclerosis                         | -0.59253916  | 0.00056045  | France | Female |
| cor179 | Diabetes mellitus                          | -0.129261392 | 0.496014029 | France | Female |
| cor180 | Rheumatic heart disease                    | 0.469991722  | 0.008775834 | France | Female |

|        |  |              |             |        |        |
|--------|--|--------------|-------------|--------|--------|
| cor181 | Ischemic heart disease                     | 0.674313101  | 4.39E-05    | France | Female |
| cor182 | Hypertensive heart disease                 | -0.899774468 | 1.36E-11    | France | Female |
| cor183 | Cardiomyopathy and myocarditis             | 0.543634389  | 0.001903302 | France | Female |
| cor184 | Maternal disorders                         | 0.78923605   | 2.18E-07    | France | Female |
| cor185 | Non-melanoma skin cancer                   | -0.919397808 | 7.27E-13    | France | Female |
| cor186 | Rheumatoid arthritis                       | 0.71197785   | 1.02E-05    | France | Female |
| cor187 | Non-rheumatic valvular heart disease       | -0.683920605 | 3.09E-05    | France | Female |
| cor188 | Chronic obstructive pulmonary disease      | 0.235629848  | 0.210024429 | France | Female |
| cor189 | Asthma                                     | 0.765164034  | 8.45E-07    | France | Female |
| cor190 | Cirrhosis and other chronic liver diseases | 0.821356887  | 2.67E-08    | France | Female |
| cor191 | Hodgkin lymphoma                           | 0.808086768  | 6.67E-08    | France | Female |
| cor192 | Non-Hodgkin lymphoma                       | -0.150322545 | 0.427844313 | France | Female |
| cor193 | Multiple myeloma                           | -0.734849711 | 3.76E-06    | France | Female |
| cor194 | Leukemia                                   | -0.901484466 | 1.08E-11    | France | Female |
| cor195 | Inflammatory bowel disease                 | -0.785410606 | 2.74E-07    | France | Male   |
| cor196 | Multiple sclerosis                         | -0.220855818 | 0.240864799 | France | Male   |
| cor197 | Diabetes mellitus                          | -0.187812026 | 0.320291627 | France | Male   |
| cor198 | Rheumatic heart disease                    | 0.257625533  | 0.169303519 | France | Male   |

|        |  |              |             |                |      |
|--------|--|--------------|-------------|----------------|------|
| cor199 | Ischemic heart disease                     | 0.593563218  | 0.00054514  | France         | Male |
| cor200 | Hypertensive heart disease                 | -0.758649405 | 1.19E-06    | France         | Male |
| cor201 | Cardiomyopathy and myocarditis             | 0.581486617  | 0.000751366 | France         | Male |
| 13     | Maternal disorders                         | 0            | 1           | France         | Male |
| cor202 | Non-melanoma skin cancer                   | -0.428615654 | 0.018117138 | France         | Male |
| cor203 | Rheumatoid arthritis                       | -0.698029183 | 1.80E-05    | France         | Male |
| cor204 | Non-rheumatic valvular heart disease       | -0.686594679 | 2.80E-05    | France         | Male |
| cor205 | Chronic obstructive pulmonary disease      | 0.219499496  | 0.24383954  | France         | Male |
| cor206 | Asthma                                     | 0.521877658  | 0.003097548 | France         | Male |
| cor207 | Cirrhosis and other chronic liver diseases | 0.674930432  | 4.29E-05    | France         | Male |
| cor208 | Hodgkin lymphoma                           | 0.448226593  | 0.012987897 | France         | Male |
| cor209 | Non-Hodgkin lymphoma                       | -0.485079511 | 0.006588866 | France         | Male |
| cor210 | Multiple myeloma                           | -0.469219018 | 0.008902615 | France         | Male |
| cor211 | Leukemia                                   | -0.717621984 | 8.06E-06    | France         | Male |
| cor212 | Inflammatory bowel disease                 | -0.858495197 | 1.30E-09    | United Kingdom | Both |
| cor213 | Multiple sclerosis                         | -0.93998145  | 1.33E-14    | United Kingdom | Both |
| cor214 | Diabetes mellitus                          | 0.912607428  | 2.16E-12    | United Kingdom | Both |
| cor215 | Rheumatic heart disease                    | 0.923746461  | 3.44E-13    | United Kingdom | Both |

|        |  |              |             |                |        |
|--------|--|--------------|-------------|----------------|--------|
| cor216 | Ischemic heart disease                     | 0.928168699  | 1.53E-13    | United Kingdom | Both   |
| cor217 | Hypertensive heart disease                 | -0.938509208 | 1.85E-14    | United Kingdom | Both   |
| cor218 | Cardiomyopathy and myocarditis             | -0.232186212 | 0.216958525 | United Kingdom | Both   |
| cor219 | Maternal disorders                         | 0.933714253  | 5.15E-14    | United Kingdom | Both   |
| cor220 | Non-melanoma skin cancer                   | -0.913536231 | 1.87E-12    | United Kingdom | Both   |
| cor221 | Rheumatoid arthritis                       | 0.705326722  | 1.34E-05    | United Kingdom | Both   |
| cor222 | Non-rheumatic valvular heart disease       | -0.973515509 | 1.74E-19    | United Kingdom | Both   |
| cor223 | Chronic obstructive pulmonary disease      | -0.93080859  | 9.22E-14    | United Kingdom | Both   |
| cor224 | Asthma                                     | 0.843109708  | 5.00E-09    | United Kingdom | Both   |
| cor225 | Cirrhosis and other chronic liver diseases | -0.827645434 | 1.69E-08    | United Kingdom | Both   |
| cor226 | Hodgkin lymphoma                           | 0.832465806  | 1.17E-08    | United Kingdom | Both   |
| cor227 | Non-Hodgkin lymphoma                       | -0.253823529 | 0.17590779  | United Kingdom | Both   |
| cor228 | Multiple myeloma                           | -0.964656153 | 9.36E-18    | United Kingdom | Both   |
| cor229 | Leukemia                                   | -0.533811294 | 0.002380881 | United Kingdom | Both   |
| cor230 | Inflammatory bowel disease                 | -0.814824404 | 4.23E-08    | United Kingdom | Female |
| cor231 | Multiple sclerosis                         | -0.963769311 | 1.32E-17    | United Kingdom | Female |
| cor232 | Diabetes mellitus                          | 0.911026436  | 2.75E-12    | United Kingdom | Female |

|        |  |              |             |                |        |
|--------|--|--------------|-------------|----------------|--------|
| cor233 | Rheumatic heart disease                    | 0.922381895  | 4.37E-13    | United Kingdom | Female |
| cor234 | Ischemic heart disease                     | 0.933550802  | 5.32E-14    | United Kingdom | Female |
| cor235 | Hypertensive heart disease                 | -0.953087492 | 4.59E-16    | United Kingdom | Female |
| cor236 | Cardiomyopathy and myocarditis             | -0.261024435 | 0.163549957 | United Kingdom | Female |
| cor237 | Maternal disorders                         | 0.928760372  | 1.37E-13    | United Kingdom | Female |
| cor238 | Non-melanoma skin cancer                   | -0.920655982 | 5.88E-13    | United Kingdom | Female |
| cor239 | Rheumatoid arthritis                       | 0.7392152    | 3.07E-06    | United Kingdom | Female |
| cor240 | Non-rheumatic valvular heart disease       | -0.97669766  | 2.96E-20    | United Kingdom | Female |
| cor241 | Chronic obstructive pulmonary disease      | -0.900358097 | 1.25E-11    | United Kingdom | Female |
| cor242 | Asthma                                     | 0.774718199  | 5.04E-07    | United Kingdom | Female |
| cor243 | Cirrhosis and other chronic liver diseases | -0.823906482 | 2.22E-08    | United Kingdom | Female |
| cor244 | Hodgkin lymphoma                           | 0.813991163  | 4.48E-08    | United Kingdom | Female |
| cor245 | Non-Hodgkin lymphoma                       | 0.069254554  | 0.71612544  | United Kingdom | Female |
| cor246 | Multiple myeloma                           | -0.918059522 | 9.08E-13    | United Kingdom | Female |
| cor247 | Leukemia                                   | 0.821574779  | 2.63E-08    | United Kingdom | Female |
| cor248 | Inflammatory bowel disease                 | -0.918644674 | 8.24E-13    | United Kingdom | Male   |
| cor249 | Multiple sclerosis                         | -0.892528523 | 3.44E-11    | United Kingdom | Male   |

|        |  |              |             |                |      |
|--------|--|--------------|-------------|----------------|------|
| cor250 | Diabetes mellitus                          | 0.886597291  | 7.03E-11    | United Kingdom | Male |
| cor251 | Rheumatic heart disease                    | 0.916482418  | 1.17E-12    | United Kingdom | Male |
| cor252 | Ischemic heart disease                     | 0.923955641  | 3.31E-13    | United Kingdom | Male |
| cor253 | Hypertensive heart disease                 | -0.911550673 | 2.54E-12    | United Kingdom | Male |
| cor254 | Cardiomyopathy and myocarditis             | -0.046860664 | 0.80576338  | United Kingdom | Male |
| 14     | Maternal disorders                         | 0            | 1           | United Kingdom | Male |
| cor255 | Non-melanoma skin cancer                   | -0.896624068 | 2.05E-11    | United Kingdom | Male |
| cor256 | Rheumatoid arthritis                       | 0.105560681  | 0.5787805   | United Kingdom | Male |
| cor257 | Non-rheumatic valvular heart disease       | -0.937665698 | 2.23E-14    | United Kingdom | Male |
| cor258 | Chronic obstructive pulmonary disease      | 0.538456358  | 0.002143503 | United Kingdom | Male |
| cor259 | Asthma                                     | 0.887384059  | 6.41E-11    | United Kingdom | Male |
| cor260 | Cirrhosis and other chronic liver diseases | -0.837902044 | 7.63E-09    | United Kingdom | Male |
| cor261 | Hodgkin lymphoma                           | 0.853855542  | 1.99E-09    | United Kingdom | Male |
| cor262 | Non-Hodgkin lymphoma                       | -0.521113242 | 0.003149191 | United Kingdom | Male |
| cor263 | Multiple myeloma                           | -0.967672151 | 2.74E-18    | United Kingdom | Male |
| cor264 | Leukemia                                   | -0.949396893 | 1.30E-15    | United Kingdom | Male |
| cor265 | Inflammatory bowel disease                 | 0.585668827  | 0.000673303 | Japan          | Both |

|        |  |              |             |       |        |
|--------|--|--------------|-------------|-------|--------|
| cor266 | Multiple sclerosis                         | 0.988489835  | 1.64E-24    | Japan | Both   |
| cor267 | Diabetes mellitus                          | -0.613128627 | 0.000315294 | Japan | Both   |
| cor268 | Rheumatic heart disease                    | 0.95365697   | 3.88E-16    | Japan | Both   |
| cor269 | Ischemic heart disease                     | 0.731489049  | 4.38E-06    | Japan | Both   |
| cor270 | Hypertensive heart disease                 | 0.372561103  | 0.04260645  | Japan | Both   |
| cor271 | Cardiomyopathy and myocarditis             | 0.48813106   | 0.006208141 | Japan | Both   |
| cor272 | Maternal disorders                         | -0.980251364 | 2.98E-21    | Japan | Both   |
| cor273 | Non-melanoma skin cancer                   | 0.951168289  | 7.96E-16    | Japan | Both   |
| cor274 | Rheumatoid arthritis                       | -0.300831192 | 0.106228917 | Japan | Both   |
| cor275 | Non-rheumatic valvular heart disease       | 0.865780742  | 6.51E-10    | Japan | Both   |
| cor276 | Chronic obstructive pulmonary disease      | 0.929392086  | 1.21E-13    | Japan | Both   |
| cor277 | Asthma                                     | -0.987233233 | 6.92E-24    | Japan | Both   |
| cor278 | Cirrhosis and other chronic liver diseases | 0.045220437  | 0.812440123 | Japan | Both   |
| cor279 | Hodgkin lymphoma                           | 0.965522867  | 6.65E-18    | Japan | Both   |
| cor280 | Non-Hodgkin lymphoma                       | 0.974356791  | 1.11E-19    | Japan | Both   |
| cor281 | Multiple myeloma                           | 0.987778155  | 3.77E-24    | Japan | Both   |
| cor282 | Leukemia                                   | 0.960295901  | 4.65E-17    | Japan | Both   |
| cor283 | Inflammatory bowel disease                 | -0.124157091 | 0.513319778 | Japan | Female |



|        |  |              |             |       |        |
|--------|--|--------------|-------------|-------|--------|
| cor284 | Multiple sclerosis                         | 0.912973785  | 2.04E-12    | Japan | Female |
| cor285 | Diabetes mellitus                          | -0.737600139 | 3.31E-06    | Japan | Female |
| cor286 | Rheumatic heart disease                    | 0.907510078  | 4.63E-12    | Japan | Female |
| cor287 | Ischemic heart disease                     | 0.505975364  | 0.004335828 | Japan | Female |
| cor288 | Hypertensive heart disease                 | 0.367637786  | 0.04564209  | Japan | Female |
| cor289 | Cardiomyopathy and myocarditis             | 0.36263593   | 0.048900022 | Japan | Female |
| cor290 | Maternal disorders                         | -0.963980298 | 1.22E-17    | Japan | Female |
| cor291 | Non-melanoma skin cancer                   | 0.870410874  | 4.11E-10    | Japan | Female |
| cor292 | Rheumatoid arthritis                       | -0.854588234 | 1.86E-09    | Japan | Female |
| cor293 | Non-rheumatic valvular heart disease       | 0.7924913    | 1.80E-07    | Japan | Female |
| cor294 | Chronic obstructive pulmonary disease      | 0.854906965  | 1.81E-09    | Japan | Female |
| cor295 | Asthma                                     | -0.976876409 | 2.66E-20    | Japan | Female |
| cor296 | Cirrhosis and other chronic liver diseases | 0.673697713  | 4.49E-05    | Japan | Female |
| cor297 | Hodgkin lymphoma                           | 0.842567985  | 5.23E-09    | Japan | Female |
| cor298 | Non-Hodgkin lymphoma                       | 0.929592799  | 1.17E-13    | Japan | Female |
| cor299 | Multiple myeloma                           | 0.954398743  | 3.11E-16    | Japan | Female |
| cor300 | Leukemia                                   | 0.900705296  | 1.20E-11    | Japan | Female |
| cor301 | Inflammatory bowel disease                 | 0.885413007  | 8.07E-11    | Japan | Male   |

|        |  |              |             |              |      |
|--------|--|--------------|-------------|--------------|------|
| cor302 | Multiple sclerosis                         | 0.977732014  | 1.58E-20    | Japan        | Male |
| cor303 | Diabetes mellitus                          | -0.532719118 | 0.002439884 | Japan        | Male |
| cor304 | Rheumatic heart disease                    | 0.92272084   | 4.12E-13    | Japan        | Male |
| cor305 | Ischemic heart disease                     | 0.847362926  | 3.50E-09    | Japan        | Male |
| cor306 | Hypertensive heart disease                 | -0.009408166 | 0.960646742 | Japan        | Male |
| cor307 | Cardiomyopathy and myocarditis             | 0.479917543  | 0.007278052 | Japan        | Male |
| 15     | Maternal disorders                         | 0            | 1           | Japan        | Male |
| cor308 | Non-melanoma skin cancer                   | 0.975463089  | 6.04E-20    | Japan        | Male |
| cor309 | Rheumatoid arthritis                       | 0.84601063   | 3.92E-09    | Japan        | Male |
| cor310 | Non-rheumatic valvular heart disease       | 0.834648007  | 9.87E-09    | Japan        | Male |
| cor311 | Chronic obstructive pulmonary disease      | 0.951105799  | 8.10E-16    | Japan        | Male |
| cor312 | Asthma                                     | -0.985799565 | 3.05E-23    | Japan        | Male |
| cor313 | Cirrhosis and other chronic liver diseases | -0.849964393 | 2.80E-09    | Japan        | Male |
| cor314 | Hodgkin lymphoma                           | 0.983301725  | 2.90E-22    | Japan        | Male |
| cor315 | Non-Hodgkin lymphoma                       | 0.983213614  | 3.12E-22    | Japan        | Male |
| cor316 | Multiple myeloma                           | 0.992547208  | 3.82E-27    | Japan        | Male |
| cor317 | Leukemia                                   | 0.975733754  | 5.18E-20    | Japan        | Male |
| cor318 | Inflammatory bowel disease                 | -0.221941891 | 0.238500272 | South Africa | Both |

|        |  |              |             |              |      |
|--------|--|--------------|-------------|--------------|------|
| cor319 | Multiple sclerosis                         | -0.554770981 | 0.001464427 | South Africa | Both |
| cor320 | Diabetes mellitus                          | -0.544700647 | 0.00185685  | South Africa | Both |
| cor321 | Rheumatic heart disease                    | 0.23365819   | 0.213975753 | South Africa | Both |
| cor322 | Ischemic heart disease                     | -0.607281935 | 0.000372734 | South Africa | Both |
| cor323 | Hypertensive heart disease                 | -0.64982862  | 0.000101793 | South Africa | Both |
| cor324 | Cardiomyopathy and myocarditis             | -0.469658765 | 0.008830276 | South Africa | Both |
| cor325 | Maternal disorders                         | 0.351448403  | 0.05685486  | South Africa | Both |
| cor326 | Non-melanoma skin cancer                   | -0.3523057   | 0.056211426 | South Africa | Both |
| cor327 | Rheumatoid arthritis                       | -0.070521729 | 0.711149964 | South Africa | Both |
| cor328 | Non-rheumatic valvular heart disease       | -0.148967112 | 0.432069563 | South Africa | Both |
| cor329 | Chronic obstructive pulmonary disease      | -0.419602646 | 0.020982606 | South Africa | Both |
| cor330 | Asthma                                     | 0.0479798    | 0.801215439 | South Africa | Both |
| cor331 | Cirrhosis and other chronic liver diseases | 0.050801238  | 0.789778234 | South Africa | Both |
| cor332 | Hodgkin lymphoma                           | -0.040803869 | 0.830481249 | South Africa | Both |
| cor333 | Non-Hodgkin lymphoma                       | -0.391299321 | 0.032495861 | South Africa | Both |
| cor334 | Multiple myeloma                           | -0.496060998 | 0.005305134 | South Africa | Both |
| cor335 | Leukemia                                   | -0.396795099 | 0.029931138 | South Africa | Both |

|        |  |              |             |              |        |
|--------|--|--------------|-------------|--------------|--------|
| cor336 | Inflammatory bowel disease                 | -0.16181606  | 0.392942493 | South Africa | Female |
| cor337 | Multiple sclerosis                         | -0.609604866 | 0.000348893 | South Africa | Female |
| cor338 | Diabetes mellitus                          | -0.622996651 | 0.00023591  | South Africa | Female |
| cor339 | Rheumatic heart disease                    | 0.479334726  | 0.00735957  | South Africa | Female |
| cor340 | Ischemic heart disease                     | -0.632449838 | 0.00017702  | South Africa | Female |
| cor341 | Hypertensive heart disease                 | -0.66008897  | 7.22E-05    | South Africa | Female |
| cor342 | Cardiomyopathy and myocarditis             | -0.333083207 | 0.072080883 | South Africa | Female |
| cor343 | Maternal disorders                         | 0.551006719  | 0.001601718 | South Africa | Female |
| cor344 | Non-melanoma skin cancer                   | -0.547081082 | 0.001756679 | South Africa | Female |
| cor345 | Rheumatoid arthritis                       | 0.037238768  | 0.84510656  | South Africa | Female |
| cor346 | Non-rheumatic valvular heart disease       | 0.092684858  | 0.626162223 | South Africa | Female |
| cor347 | Chronic obstructive pulmonary disease      | -0.494167326 | 0.005509891 | South Africa | Female |
| cor348 | Asthma                                     | 0.326145506  | 0.078590598 | South Africa | Female |
| cor349 | Cirrhosis and other chronic liver diseases | 0.285438317  | 0.1262672   | South Africa | Female |
| cor350 | Hodgkin lymphoma                           | 0.007887709  | 0.967002877 | South Africa | Female |
| cor351 | Non-Hodgkin lymphoma                       | -0.288051781 | 0.122682542 | South Africa | Female |
| cor352 | Multiple myeloma                           | -0.642925388 | 0.000127333 | South Africa | Female |

|        |  |              |             |              |        |
|--------|--|--------------|-------------|--------------|--------|
| cor353 | Leukemia                                   | -0.216897829 | 0.249613628 | South Africa | Female |
| cor354 | Inflammatory bowel disease                 | -0.438138794 | 0.015449234 | South Africa | Male   |
| cor355 | Multiple sclerosis                         | -0.304998698 | 0.10123829  | South Africa | Male   |
| cor356 | Diabetes mellitus                          | -0.188366772 | 0.318838238 | South Africa | Male   |
| cor357 | Rheumatic heart disease                    | -0.304070422 | 0.102334325 | South Africa | Male   |
| cor358 | Ischemic heart disease                     | -0.561939814 | 0.001231055 | South Africa | Male   |
| cor359 | Hypertensive heart disease                 | -0.553071188 | 0.001525099 | South Africa | Male   |
| cor360 | Cardiomyopathy and myocarditis             | -0.476907786 | 0.007707394 | South Africa | Male   |
| 16     | Maternal disorders                         | 0            | 1           | South Africa | Male   |
| cor361 | Non-melanoma skin cancer                   | 0.128073814  | 0.500013968 | South Africa | Male   |
| cor362 | Rheumatoid arthritis                       | -0.393142144 | 0.031616769 | South Africa | Male   |
| cor363 | Non-rheumatic valvular heart disease       | -0.226477017 | 0.228794341 | South Africa | Male   |
| cor364 | Chronic obstructive pulmonary disease      | -0.514380515 | 0.003636975 | South Africa | Male   |
| cor365 | Asthma                                     | -0.471101363 | 0.008596437 | South Africa | Male   |
| cor366 | Cirrhosis and other chronic liver diseases | -0.395105629 | 0.030701424 | South Africa | Male   |
| cor367 | Hodgkin lymphoma                           | -0.40513227  | 0.026356422 | South Africa | Male   |
| cor368 | Non-Hodgkin lymphoma                       | -0.172899424 | 0.360886669 | South Africa | Male   |

|        |  |              |             |              |      |
|--------|--|--------------|-------------|--------------|------|
| cor369 | Multiple myeloma                           | -0.086048931 | 0.651180417 | South Africa | Male |
| cor370 | Leukemia                                   | -0.474071764 | 0.008131381 | South Africa | Male |
| cor371 | Inflammatory bowel disease                 | -0.804253853 | 8.58E-08    | India        | Both |
| cor372 | Multiple sclerosis                         | 0.841719371  | 5.61E-09    | India        | Both |
| cor373 | Diabetes mellitus                          | 0.909294035  | 3.56E-12    | India        | Both |
| cor374 | Rheumatic heart disease                    | -0.906991049 | 4.99E-12    | India        | Both |
| cor375 | Ischemic heart disease                     | 0.811234733  | 5.40E-08    | India        | Both |
| cor376 | Hypertensive heart disease                 | 0.610246204  | 0.000342552 | India        | Both |
| cor377 | Cardiomyopathy and myocarditis             | 0.774023951  | 5.23E-07    | India        | Both |
| cor378 | Maternal disorders                         | -0.949083575 | 1.41E-15    | India        | Both |
| cor379 | Non-melanoma skin cancer                   | 0.842540066  | 5.24E-09    | India        | Both |
| cor380 | Rheumatoid arthritis                       | 0.85103983   | 2.55E-09    | India        | Both |
| cor381 | Non-rheumatic valvular heart disease       | 0.79199648   | 1.85E-07    | India        | Both |
| cor382 | Chronic obstructive pulmonary disease      | 0.772348705  | 5.74E-07    | India        | Both |
| cor383 | Asthma                                     | -0.939704261 | 1.42E-14    | India        | Both |
| cor384 | Cirrhosis and other chronic liver diseases | 0.912124248  | 2.33E-12    | India        | Both |
| cor385 | Hodgkin lymphoma                           | -0.962375153 | 2.22E-17    | India        | Both |
| cor386 | Non-Hodgkin lymphoma                       | 0.883480399  | 1.01E-10    | India        | Both |

|        |  |              |             |       |        |
|--------|--|--------------|-------------|-------|--------|
| cor387 | Multiple myeloma                           | 0.868869601  | 4.80E-10    | India | Both   |
| cor388 | Leukemia                                   | -0.910884315 | 2.81E-12    | India | Both   |
| cor389 | Inflammatory bowel disease                 | -0.502431201 | 0.004663278 | India | Female |
| cor390 | Multiple sclerosis                         | 0.808786937  | 6.37E-08    | India | Female |
| cor391 | Diabetes mellitus                          | 0.897751436  | 1.77E-11    | India | Female |
| cor392 | Rheumatic heart disease                    | -0.854571425 | 1.86E-09    | India | Female |
| cor393 | Ischemic heart disease                     | 0.777929966  | 4.21E-07    | India | Female |
| cor394 | Hypertensive heart disease                 | 0.588757829  | 0.000620308 | India | Female |
| cor395 | Cardiomyopathy and myocarditis             | 0.714013441  | 9.39E-06    | India | Female |
| cor396 | Maternal disorders                         | -0.949724873 | 1.19E-15    | India | Female |
| cor397 | Non-melanoma skin cancer                   | 0.830313548  | 1.38E-08    | India | Female |
| cor398 | Rheumatoid arthritis                       | 0.844451136  | 4.47E-09    | India | Female |
| cor399 | Non-rheumatic valvular heart disease       | 0.778946614  | 3.97E-07    | India | Female |
| cor400 | Chronic obstructive pulmonary disease      | 0.779975014  | 3.75E-07    | India | Female |
| cor401 | Asthma                                     | -0.861117488 | 1.02E-09    | India | Female |
| cor402 | Cirrhosis and other chronic liver diseases | 0.59828479   | 0.000479206 | India | Female |
| cor403 | Hodgkin lymphoma                           | -0.95404648  | 3.46E-16    | India | Female |
| cor404 | Non-Hodgkin lymphoma                       | 0.857563266  | 1.42E-09    | India | Female |

|        |  |              |             |       |        |
|--------|--|--------------|-------------|-------|--------|
| cor405 | Multiple myeloma                           | 0.860816854  | 1.05E-09    | India | Female |
| cor406 | Leukemia                                   | -0.910642283 | 2.91E-12    | India | Female |
| cor407 | Inflammatory bowel disease                 | -0.854916125 | 1.81E-09    | India | Male   |
| cor408 | Multiple sclerosis                         | 0.872272325  | 3.39E-10    | India | Male   |
| cor409 | Diabetes mellitus                          | 0.916510858  | 1.17E-12    | India | Male   |
| cor410 | Rheumatic heart disease                    | -0.910042593 | 3.19E-12    | India | Male   |
| cor411 | Ischemic heart disease                     | 0.827814861  | 1.66E-08    | India | Male   |
| cor412 | Hypertensive heart disease                 | 0.621063895  | 0.000249892 | India | Male   |
| cor413 | Cardiomyopathy and myocarditis             | 0.79960033   | 1.16E-07    | India | Male   |
| 17     | Maternal disorders                         | 0            | 1           | India | Male   |
| cor414 | Non-melanoma skin cancer                   | 0.846736541  | 3.69E-09    | India | Male   |
| cor415 | Rheumatoid arthritis                       | 0.863243147  | 8.33E-10    | India | Male   |
| cor416 | Non-rheumatic valvular heart disease       | 0.80319596   | 9.19E-08    | India | Male   |
| cor417 | Chronic obstructive pulmonary disease      | 0.744343599  | 2.41E-06    | India | Male   |
| cor418 | Asthma                                     | -0.953341161 | 4.26E-16    | India | Male   |
| cor419 | Cirrhosis and other chronic liver diseases | 0.911173563  | 2.69E-12    | India | Male   |
| cor420 | Hodgkin lymphoma                           | -0.960906535 | 3.75E-17    | India | Male   |
| cor421 | Non-Hodgkin lymphoma                       | 0.899523067  | 1.40E-11    | India | Male   |



|        |  |              |             |        |      |
|--------|--|--------------|-------------|--------|------|
| cor422 | Multiple myeloma                           | 0.871766717  | 3.57E-10    | India  | Male |
| cor423 | Leukemia                                   | -0.885753076 | 7.76E-11    | India  | Male |
| cor424 | Inflammatory bowel disease                 | -0.150674791 | 0.426750003 | Canada | Both |
| cor425 | Multiple sclerosis                         | -0.537696121 | 0.00218089  | Canada | Both |
| cor426 | Diabetes mellitus                          | -0.25262891  | 0.178019884 | Canada | Both |
| cor427 | Rheumatic heart disease                    | 0.816920147  | 3.66E-08    | Canada | Both |
| cor428 | Ischemic heart disease                     | 0.660657706  | 7.08E-05    | Canada | Both |
| cor429 | Hypertensive heart disease                 | -0.242169285 | 0.19727745  | Canada | Both |
| cor430 | Cardiomyopathy and myocarditis             | 0.714972537  | 9.02E-06    | Canada | Both |
| cor431 | Maternal disorders                         | -0.251118953 | 0.180714938 | Canada | Both |
| cor432 | Non-melanoma skin cancer                   | -0.377157097 | 0.039920333 | Canada | Both |
| cor433 | Rheumatoid arthritis                       | -0.021980378 | 0.908215611 | Canada | Both |
| cor434 | Non-rheumatic valvular heart disease       | -0.300279742 | 0.106902851 | Canada | Both |
| cor435 | Chronic obstructive pulmonary disease      | -0.246974047 | 0.188259838 | Canada | Both |
| cor436 | Asthma                                     | 0.667205865  | 5.65E-05    | Canada | Both |
| cor437 | Cirrhosis and other chronic liver diseases | -0.266372718 | 0.154780819 | Canada | Both |
| cor438 | Hodgkin lymphoma                           | 0.681178882  | 3.42E-05    | Canada | Both |
| cor439 | Non-Hodgkin lymphoma                       | -0.147819386 | 0.435665127 | Canada | Both |

|        |  |              |             |        |        |
|--------|--|--------------|-------------|--------|--------|
| cor440 | Multiple myeloma                           | -0.319328827 | 0.085418059 | Canada | Both   |
| cor441 | Leukemia                                   | -0.193406178 | 0.305822819 | Canada | Both   |
| cor442 | Inflammatory bowel disease                 | 0.084185795  | 0.658273459 | Canada | Female |
| cor443 | Multiple sclerosis                         | -0.951574915 | 7.09E-16    | Canada | Female |
| cor444 | Diabetes mellitus                          | -0.000720444 | 0.996985316 | Canada | Female |
| cor445 | Rheumatic heart disease                    | 0.954620581  | 2.91E-16    | Canada | Female |
| cor446 | Ischemic heart disease                     | 0.929079541  | 1.29E-13    | Canada | Female |
| cor447 | Hypertensive heart disease                 | -0.777549932 | 4.30E-07    | Canada | Female |
| cor448 | Cardiomyopathy and myocarditis             | 0.209307646  | 0.266971704 | Canada | Female |
| cor449 | Maternal disorders                         | -0.021841559 | 0.908792881 | Canada | Female |
| cor450 | Non-melanoma skin cancer                   | -0.859200706 | 1.22E-09    | Canada | Female |
| cor451 | Rheumatoid arthritis                       | -0.038245456 | 0.840971435 | Canada | Female |
| cor452 | Non-rheumatic valvular heart disease       | -0.834813779 | 9.74E-09    | Canada | Female |
| cor453 | Chronic obstructive pulmonary disease      | -0.947543241 | 2.12E-15    | Canada | Female |
| cor454 | Asthma                                     | 0.973779457  | 1.51E-19    | Canada | Female |
| cor455 | Cirrhosis and other chronic liver diseases | -0.855745421 | 1.68E-09    | Canada | Female |
| cor456 | Hodgkin lymphoma                           | 0.979807007  | 4.06E-21    | Canada | Female |
| cor457 | Non-Hodgkin lymphoma                       | -0.385523667 | 0.035379968 | Canada | Female |

|        |  |              |             |        |        |
|--------|--|--------------|-------------|--------|--------|
| cor458 | Multiple myeloma                           | -0.876504689 | 2.18E-10    | Canada | Female |
| cor459 | Leukemia                                   | -0.609923906 | 0.000345726 | Canada | Female |
| cor460 | Inflammatory bowel disease                 | 0.302300206  | 0.104449159 | Canada | Male   |
| cor461 | Multiple sclerosis                         | 0.965677057  | 6.25E-18    | Canada | Male   |
| cor462 | Diabetes mellitus                          | 0.413497107  | 0.023128039 | Canada | Male   |
| cor463 | Rheumatic heart disease                    | -0.049239961 | 0.796102025 | Canada | Male   |
| cor464 | Ischemic heart disease                     | -0.873248952 | 3.07E-10    | Canada | Male   |
| cor465 | Hypertensive heart disease                 | 0.875401819  | 2.45E-10    | Canada | Male   |
| cor466 | Cardiomyopathy and myocarditis             | -0.399602236 | 0.028686028 | Canada | Male   |
| 18     | Maternal disorders                         | 0            | 1           | Canada | Male   |
| cor467 | Non-melanoma skin cancer                   | 0.898931527  | 1.52E-11    | Canada | Male   |
| cor468 | Rheumatoid arthritis                       | 0.904387992  | 7.22E-12    | Canada | Male   |
| cor469 | Non-rheumatic valvular heart disease       | 0.856731828  | 1.53E-09    | Canada | Male   |
| cor470 | Chronic obstructive pulmonary disease      | 0.190441523  | 0.313438811 | Canada | Male   |
| cor471 | Asthma                                     | -0.918505279 | 8.43E-13    | Canada | Male   |
| cor472 | Cirrhosis and other chronic liver diseases | 0.887469167  | 6.35E-11    | Canada | Male   |
| cor473 | Hodgkin lymphoma                           | -0.890416727 | 4.46E-11    | Canada | Male   |
| cor474 | Non-Hodgkin lymphoma                       | 0.767250162  | 7.56E-07    | Canada | Male   |

|        |  |              |             |                   |      |
|--------|--|--------------|-------------|-------------------|------|
| cor475 | Multiple myeloma                           | 0.948749648  | 1.54E-15    | Canada            | Male |
| cor476 | Leukemia                                   | 0.845774327  | 4.00E-09    | Canada            | Male |
| cor477 | Inflammatory bowel disease                 | -0.878035963 | 1.84E-10    | Republic of Korea | Both |
| cor478 | Multiple sclerosis                         | 0.945824656  | 3.29E-15    | Republic of Korea | Both |
| cor479 | Diabetes mellitus                          | 0.34972263   | 0.058167672 | Republic of Korea | Both |
| cor480 | Rheumatic heart disease                    | -0.554266635 | 0.001482206 | Republic of Korea | Both |
| cor481 | Ischemic heart disease                     | -0.218737287 | 0.245521905 | Republic of Korea | Both |
| cor482 | Hypertensive heart disease                 | 0.584346724  | 0.000697173 | Republic of Korea | Both |
| cor483 | Cardiomyopathy and myocarditis             | 0.946928957  | 2.49E-15    | Republic of Korea | Both |
| cor484 | Maternal disorders                         | -0.843824027 | 4.71E-09    | Republic of Korea | Both |
| cor485 | Non-melanoma skin cancer                   | 0.620845588  | 0.000251516 | Republic of Korea | Both |
| cor486 | Rheumatoid arthritis                       | -0.280493595 | 0.133259364 | Republic of Korea | Both |
| cor487 | Non-rheumatic valvular heart disease       | 0.997979468  | 4.57E-35    | Republic of Korea | Both |
| cor488 | Chronic obstructive pulmonary disease      | 0.825491665  | 1.98E-08    | Republic of Korea | Both |
| cor489 | Asthma                                     | -0.900339611 | 1.26E-11    | Republic of Korea | Both |
| cor490 | Cirrhosis and other chronic liver diseases | -0.850471789 | 2.68E-09    | Republic of Korea | Both |
| cor491 | Hodgkin lymphoma                           | 0.965870574  | 5.78E-18    | Republic of Korea | Both |
| cor492 | Non-Hodgkin lymphoma                       | 0.939549912  | 1.47E-14    | Republic of Korea | Both |

|        |  |              |             |                   |        |
|--------|--|--------------|-------------|-------------------|--------|
| cor493 | Multiple myeloma                           | 0.984736321  | 8.31E-23    | Republic of Korea | Both   |
| cor494 | Leukemia                                   | -0.007646305 | 0.968012237 | Republic of Korea | Both   |
| cor495 | Inflammatory bowel disease                 | -0.829686925 | 1.45E-08    | Republic of Korea | Female |
| cor496 | Multiple sclerosis                         | 0.84371669   | 4.75E-09    | Republic of Korea | Female |
| cor497 | Diabetes mellitus                          | 0.096575455  | 0.611678924 | Republic of Korea | Female |
| cor498 | Rheumatic heart disease                    | -0.43985832  | 0.015004218 | Republic of Korea | Female |
| cor499 | Ischemic heart disease                     | 0.05002941   | 0.792902836 | Republic of Korea | Female |
| cor500 | Hypertensive heart disease                 | 0.583861988  | 0.000706109 | Republic of Korea | Female |
| cor501 | Cardiomyopathy and myocarditis             | 0.966137101  | 5.19E-18    | Republic of Korea | Female |
| cor502 | Maternal disorders                         | -0.686727435 | 2.78E-05    | Republic of Korea | Female |
| cor503 | Non-melanoma skin cancer                   | 0.534442187  | 0.002347363 | Republic of Korea | Female |
| cor504 | Rheumatoid arthritis                       | -0.158454393 | 0.402977754 | Republic of Korea | Female |
| cor505 | Non-rheumatic valvular heart disease       | 0.950294785  | 1.01E-15    | Republic of Korea | Female |
| cor506 | Chronic obstructive pulmonary disease      | 0.556236671  | 0.001413809 | Republic of Korea | Female |
| cor507 | Asthma                                     | -0.778723783 | 4.02E-07    | Republic of Korea | Female |
| cor508 | Cirrhosis and other chronic liver diseases | -0.587873402 | 0.000635094 | Republic of Korea | Female |
| cor509 | Hodgkin lymphoma                           | 0.916179948  | 1.23E-12    | Republic of Korea | Female |

|        |  |              |             |                   |        |
|--------|--|--------------|-------------|-------------------|--------|
| cor510 | Non-Hodgkin lymphoma                       | 0.858916257  | 1.25E-09    | Republic of Korea | Female |
| cor511 | Multiple myeloma                           | 0.914693498  | 1.56E-12    | Republic of Korea | Female |
| cor512 | Leukemia                                   | 0.061272008  | 0.747723329 | Republic of Korea | Female |
| cor513 | Inflammatory bowel disease                 | -0.847228135 | 3.54E-09    | Republic of Korea | Male   |
| cor514 | Multiple sclerosis                         | 0.964168032  | 1.13E-17    | Republic of Korea | Male   |
| cor515 | Diabetes mellitus                          | 0.446388927  | 0.013410074 | Republic of Korea | Male   |
| cor516 | Rheumatic heart disease                    | -0.755588746 | 1.39E-06    | Republic of Korea | Male   |
| cor517 | Ischemic heart disease                     | -0.330895232 | 0.074087128 | Republic of Korea | Male   |
| cor518 | Hypertensive heart disease                 | -0.419225025 | 0.021110363 | Republic of Korea | Male   |
| cor519 | Cardiomyopathy and myocarditis             | 0.963343437  | 1.55E-17    | Republic of Korea | Male   |
| 19     | Maternal disorders                         | 0            | 1           | Republic of Korea | Male   |
| cor520 | Non-melanoma skin cancer                   | 0.407295715  | 0.02548815  | Republic of Korea | Male   |
| cor521 | Rheumatoid arthritis                       | -0.836724963 | 8.38E-09    | Republic of Korea | Male   |
| cor522 | Non-rheumatic valvular heart disease       | 0.993571878  | 4.84E-28    | Republic of Korea | Male   |
| cor523 | Chronic obstructive pulmonary disease      | 0.891105232  | 4.10E-11    | Republic of Korea | Male   |
| cor524 | Asthma                                     | -0.933670358 | 5.19E-14    | Republic of Korea | Male   |
| cor525 | Cirrhosis and other chronic liver diseases | -0.905746884 | 5.96E-12    | Republic of Korea | Male   |

|        |  |              |             |                   |      |
|--------|--|--------------|-------------|-------------------|------|
| cor526 | Hodgkin lymphoma                           | 0.961999157  | 2.54E-17    | Republic of Korea | Male |
| cor527 | Non-Hodgkin lymphoma                       | 0.951107593  | 8.09E-16    | Republic of Korea | Male |
| cor528 | Multiple myeloma                           | 0.994220559  | 1.10E-28    | Republic of Korea | Male |
| cor529 | Leukemia                                   | 0.096948017  | 0.610299393 | Republic of Korea | Male |
| cor530 | Inflammatory bowel disease                 | 0.344573573  | 0.062226424 | Germany           | Both |
| cor531 | Multiple sclerosis                         | 0.342185214  | 0.064182655 | Germany           | Both |
| cor532 | Diabetes mellitus                          | -0.251158455 | 0.180644069 | Germany           | Both |
| cor533 | Rheumatic heart disease                    | 0.07437355   | 0.69609807  | Germany           | Both |
| cor534 | Ischemic heart disease                     | -0.340942433 | 0.065219381 | Germany           | Both |
| cor535 | Hypertensive heart disease                 | 0.309101528  | 0.096499561 | Germany           | Both |
| cor536 | Cardiomyopathy and myocarditis             | -0.312047242 | 0.093202113 | Germany           | Both |
| cor537 | Maternal disorders                         | -0.333757675 | 0.071470991 | Germany           | Both |
| cor538 | Non-melanoma skin cancer                   | 0.24418596   | 0.193456845 | Germany           | Both |
| cor539 | Rheumatoid arthritis                       | -0.228902408 | 0.223714261 | Germany           | Both |
| cor540 | Non-rheumatic valvular heart disease       | 0.305543211  | 0.100599496 | Germany           | Both |
| cor541 | Chronic obstructive pulmonary disease      | 0.200821404  | 0.287286288 | Germany           | Both |
| cor542 | Asthma                                     | -0.329115517 | 0.075750607 | Germany           | Both |
| cor543 | Cirrhosis and other chronic liver diseases | -0.281332739 | 0.132053238 | Germany           | Both |

|        |  |              |             |         |        |
|--------|--|--------------|-------------|---------|--------|
| cor544 | Hodgkin lymphoma                           | -0.298596795 | 0.108979397 | Germany | Both   |
| cor545 | Non-Hodgkin lymphoma                       | 0.328576668  | 0.0762599   | Germany | Both   |
| cor546 | Multiple myeloma                           | 0.327579988  | 0.077208863 | Germany | Both   |
| cor547 | Leukemia                                   | 0.317375444  | 0.087455676 | Germany | Both   |
| cor548 | Inflammatory bowel disease                 | -0.123750914 | 0.514709532 | Germany | Female |
| cor549 | Multiple sclerosis                         | -0.060253917 | 0.751783501 | Germany | Female |
| cor550 | Diabetes mellitus                          | 0.172219354  | 0.362807668 | Germany | Female |
| cor551 | Rheumatic heart disease                    | 0.219627742  | 0.243557226 | Germany | Female |
| cor552 | Ischemic heart disease                     | 0.196479178  | 0.298052031 | Germany | Female |
| cor553 | Hypertensive heart disease                 | -0.163505211 | 0.387954583 | Germany | Female |
| cor554 | Cardiomyopathy and myocarditis             | 0.175868348  | 0.352571186 | Germany | Female |
| cor555 | Maternal disorders                         | 0.185367365  | 0.326745103 | Germany | Female |
| cor556 | Non-melanoma skin cancer                   | -0.065731359 | 0.730018454 | Germany | Female |
| cor557 | Rheumatoid arthritis                       | 0.202144129  | 0.284056784 | Germany | Female |
| cor558 | Non-rheumatic valvular heart disease       | -0.137178856 | 0.469765097 | Germany | Female |
| cor559 | Chronic obstructive pulmonary disease      | -0.102858643 | 0.588590841 | Germany | Female |
| cor560 | Asthma                                     | 0.21146043   | 0.261970766 | Germany | Female |
| cor561 | Cirrhosis and other chronic liver diseases | 0.187013596  | 0.322390622 | Germany | Female |



|        |  |              |             |         |        |
|--------|--|--------------|-------------|---------|--------|
| cor562 | Hodgkin lymphoma                           | 0.222963217  | 0.23629088  | Germany | Female |
| cor563 | Non-Hodgkin lymphoma                       | -0.176779155 | 0.350043327 | Germany | Female |
| cor564 | Multiple myeloma                           | -0.211947395 | 0.260848087 | Germany | Female |
| cor565 | Leukemia                                   | -0.008339369 | 0.965114527 | Germany | Female |
| cor566 | Inflammatory bowel disease                 | 0.568148336  | 0.001055853 | Germany | Male   |
| cor567 | Multiple sclerosis                         | 0.489129519  | 0.006087704 | Germany | Male   |
| cor568 | Diabetes mellitus                          | 0.378295575  | 0.039276393 | Germany | Male   |
| cor569 | Rheumatic heart disease                    | 0.148347538  | 0.434008526 | Germany | Male   |
| cor570 | Ischemic heart disease                     | -0.619371914 | 0.000262729 | Germany | Male   |
| cor571 | Hypertensive heart disease                 | 0.462246607  | 0.010118139 | Germany | Male   |
| cor572 | Cardiomyopathy and myocarditis             | -0.316159532 | 0.088742605 | Germany | Male   |
| 110    | Maternal disorders                         | 0            | 1           | Germany | Male   |
| cor573 | Non-melanoma skin cancer                   | 0.478615867  | 0.00746118  | Germany | Male   |
| cor574 | Rheumatoid arthritis                       | -0.029034775 | 0.878946837 | Germany | Male   |
| cor575 | Non-rheumatic valvular heart disease       | 0.500047833  | 0.00489518  | Germany | Male   |
| cor576 | Chronic obstructive pulmonary disease      | 0.074240423  | 0.696616451 | Germany | Male   |
| cor577 | Asthma                                     | -0.625891039 | 0.000216266 | Germany | Male   |
| cor578 | Cirrhosis and other chronic liver diseases | -0.523260784 | 0.003005957 | Germany | Male   |

|        |  |              |             |         |      |
|--------|--|--------------|-------------|---------|------|
| cor579 | Hodgkin lymphoma                           | -0.58302476  | 0.00072178  | Germany | Male |
| cor580 | Non-Hodgkin lymphoma                       | 0.555044098  | 0.001454877 | Germany | Male |
| cor581 | Multiple myeloma                           | 0.61653143   | 0.000285596 | Germany | Male |
| cor582 | Leukemia                                   | 0.554721799  | 0.001466153 | Germany | Male |
| cor583 | Inflammatory bowel disease                 | -0.535973991 | 0.002267674 | China   | Both |
| cor584 | Multiple sclerosis                         | 0.271737633  | 0.146328727 | China   | Both |
| cor585 | Diabetes mellitus                          | 0.68016872   | 3.55E-05    | China   | Both |
| cor586 | Rheumatic heart disease                    | -0.688382745 | 2.61E-05    | China   | Both |
| cor587 | Ischemic heart disease                     | 0.606350597  | 0.00038269  | China   | Both |
| cor588 | Hypertensive heart disease                 | -0.499114508 | 0.004988641 | China   | Both |
| cor589 | Cardiomyopathy and myocarditis             | 0.737353782  | 3.35E-06    | China   | Both |
| cor590 | Maternal disorders                         | -0.772355466 | 5.74E-07    | China   | Both |
| cor591 | Non-melanoma skin cancer                   | 0.628073709  | 0.000202426 | China   | Both |
| cor592 | Rheumatoid arthritis                       | 0.740874404  | 2.84E-06    | China   | Both |
| cor593 | Non-rheumatic valvular heart disease       | 0.65184224   | 9.53E-05    | China   | Both |
| cor594 | Chronic obstructive pulmonary disease      | -0.653741464 | 8.94E-05    | China   | Both |
| cor595 | Asthma                                     | -0.699450448 | 1.70E-05    | China   | Both |
| cor596 | Cirrhosis and other chronic liver diseases | -0.418267464 | 0.021437197 | China   | Both |

|        |  |              |             |       |        |
|--------|--|--------------|-------------|-------|--------|
| cor597 | Hodgkin lymphoma                           | -0.827528022 | 1.70E-08    | China | Both   |
| cor598 | Non-Hodgkin lymphoma                       | 0.506493997  | 0.004289603 | China | Both   |
| cor599 | Multiple myeloma                           | 0.494453225  | 0.005478553 | China | Both   |
| cor600 | Leukemia                                   | -0.796908073 | 1.37E-07    | China | Both   |
| cor601 | Inflammatory bowel disease                 | 0.865627364  | 6.61E-10    | China | Female |
| cor602 | Multiple sclerosis                         | 0.15112329   | 0.4253589   | China | Female |
| cor603 | Diabetes mellitus                          | -0.682538165 | 3.25E-05    | China | Female |
| cor604 | Rheumatic heart disease                    | 0.749820179  | 1.85E-06    | China | Female |
| cor605 | Ischemic heart disease                     | -0.836813572 | 8.32E-09    | China | Female |
| cor606 | Hypertensive heart disease                 | -0.56216294  | 0.001224344 | China | Female |
| cor607 | Cardiomyopathy and myocarditis             | -0.647160078 | 0.000111067 | China | Female |
| cor608 | Maternal disorders                         | 0.692565797  | 2.23E-05    | China | Female |
| cor609 | Non-melanoma skin cancer                   | -0.823977931 | 2.21E-08    | China | Female |
| cor610 | Rheumatoid arthritis                       | -0.712897781 | 9.84E-06    | China | Female |
| cor611 | Non-rheumatic valvular heart disease       | 0.635919929  | 0.00015893  | China | Female |
| cor612 | Chronic obstructive pulmonary disease      | 0.792745359  | 1.77E-07    | China | Female |
| cor613 | Asthma                                     | 0.783920091  | 2.99E-07    | China | Female |
| cor614 | Cirrhosis and other chronic liver diseases | 0.822287856  | 2.50E-08    | China | Female |

|        |  |              |             |       |        |
|--------|--|--------------|-------------|-------|--------|
| cor615 | Hodgkin lymphoma                           | 0.620054828  | 0.000257479 | China | Female |
| cor616 | Non-Hodgkin lymphoma                       | -0.965072837 | 7.95E-18    | China | Female |
| cor617 | Multiple myeloma                           | -0.919950465 | 6.63E-13    | China | Female |
| cor618 | Leukemia                                   | 0.673656023  | 4.50E-05    | China | Female |
| cor619 | Inflammatory bowel disease                 | -0.857055073 | 1.49E-09    | China | Male   |
| cor620 | Multiple sclerosis                         | 0.894418467  | 2.72E-11    | China | Male   |
| cor621 | Diabetes mellitus                          | 0.926579852  | 2.06E-13    | China | Male   |
| cor622 | Rheumatic heart disease                    | -0.874521037 | 2.68E-10    | China | Male   |
| cor623 | Ischemic heart disease                     | 0.914033456  | 1.73E-12    | China | Male   |
| cor624 | Hypertensive heart disease                 | 0.070103668  | 0.712790179 | China | Male   |
| cor625 | Cardiomyopathy and myocarditis             | 0.951112463  | 8.08E-16    | China | Male   |
| 111    | Maternal disorders                         | 0            | 1           | China | Male   |
| cor626 | Non-melanoma skin cancer                   | 0.922826339  | 4.04E-13    | China | Male   |
| cor627 | Rheumatoid arthritis                       | 0.965171629  | 7.65E-18    | China | Male   |
| cor628 | Non-rheumatic valvular heart disease       | 0.943198484  | 6.29E-15    | China | Male   |
| cor629 | Chronic obstructive pulmonary disease      | -0.907110203 | 4.90E-12    | China | Male   |
| cor630 | Asthma                                     | -0.957920596 | 1.03E-16    | China | Male   |
| cor631 | Cirrhosis and other chronic liver diseases | -0.613911344 | 0.000308231 | China | Male   |

|        |  |              |             |       |      |
|--------|--|--------------|-------------|-------|------|
| cor632 | Hodgkin lymphoma                           | -0.979563699 | 4.79E-21    | China | Male |
| cor633 | Non-Hodgkin lymphoma                       | 0.884955367  | 8.51E-11    | China | Male |
| cor634 | Multiple myeloma                           | 0.871013954  | 3.86E-10    | China | Male |
| cor635 | Leukemia                                   | -0.944345213 | 4.76E-15    | China | Male |
| cor636 | Inflammatory bowel disease                 | 0.641776939  | 0.000132095 | Italy | Both |
| cor637 | Multiple sclerosis                         | 0.409225514  | 0.024733514 | Italy | Both |
| cor638 | Diabetes mellitus                          | 0.168997389  | 0.371990745 | Italy | Both |
| cor639 | Rheumatic heart disease                    | -0.738495962 | 3.18E-06    | Italy | Both |
| cor640 | Ischemic heart disease                     | -0.621781118 | 0.00024462  | Italy | Both |
| cor641 | Hypertensive heart disease                 | 0.539749023  | 0.002081205 | Italy | Both |
| cor642 | Cardiomyopathy and myocarditis             | -0.753490163 | 1.54E-06    | Italy | Both |
| cor643 | Maternal disorders                         | -0.563023739 | 0.001198755 | Italy | Both |
| cor644 | Non-melanoma skin cancer                   | 0.285848538  | 0.125699496 | Italy | Both |
| cor645 | Rheumatoid arthritis                       | 0.511837609  | 0.003837389 | Italy | Both |
| cor646 | Non-rheumatic valvular heart disease       | 0.568671392  | 0.001042141 | Italy | Both |
| cor647 | Chronic obstructive pulmonary disease      | 0.489023117  | 0.006100443 | Italy | Both |
| cor648 | Asthma                                     | -0.785135686 | 2.78E-07    | Italy | Both |
| cor649 | Cirrhosis and other chronic liver diseases | -0.671314118 | 4.89E-05    | Italy | Both |

|        |  |              |             |       |        |
|--------|--|--------------|-------------|-------|--------|
| cor650 | Hodgkin lymphoma                           | -0.837192513 | 8.08E-09    | Italy | Both   |
| cor651 | Non-Hodgkin lymphoma                       | 0.771821238  | 5.91E-07    | Italy | Both   |
| cor652 | Multiple myeloma                           | 0.648148401  | 0.000107548 | Italy | Both   |
| cor653 | Leukemia                                   | 0.651853689  | 9.52E-05    | Italy | Both   |
| cor654 | Inflammatory bowel disease                 | 0.40336696   | 0.027082666 | Italy | Female |
| cor655 | Multiple sclerosis                         | 0.109508076  | 0.564580748 | Italy | Female |
| cor656 | Diabetes mellitus                          | -0.722205576 | 6.62E-06    | Italy | Female |
| cor657 | Rheumatic heart disease                    | -0.529206411 | 0.002638305 | Italy | Female |
| cor658 | Ischemic heart disease                     | -0.239567296 | 0.202283626 | Italy | Female |
| cor659 | Hypertensive heart disease                 | 0.241635354  | 0.198297665 | Italy | Female |
| cor660 | Cardiomyopathy and myocarditis             | -0.497873261 | 0.005115293 | Italy | Female |
| cor661 | Maternal disorders                         | -0.341700802 | 0.064585211 | Italy | Female |
| cor662 | Non-melanoma skin cancer                   | -0.052256115 | 0.78389716  | Italy | Female |
| cor663 | Rheumatoid arthritis                       | 0.316654631  | 0.08821686  | Italy | Female |
| cor664 | Non-rheumatic valvular heart disease       | 0.294533981  | 0.114116478 | Italy | Female |
| cor665 | Chronic obstructive pulmonary disease      | 0.271246107  | 0.147088901 | Italy | Female |
| cor666 | Asthma                                     | -0.503924867 | 0.004522786 | Italy | Female |
| cor667 | Cirrhosis and other chronic liver diseases | -0.257705756 | 0.169166089 | Italy | Female |

|        |  |              |             |       |        |
|--------|--|--------------|-------------|-------|--------|
| cor668 | Hodgkin lymphoma                           | -0.665118337 | 6.08E-05    | Italy | Female |
| cor669 | Non-Hodgkin lymphoma                       | 0.754943014  | 1.43E-06    | Italy | Female |
| cor670 | Multiple myeloma                           | 0.422262596  | 0.020100611 | Italy | Female |
| cor671 | Leukemia                                   | 0.439065027  | 0.015208179 | Italy | Female |
| cor672 | Inflammatory bowel disease                 | 0.77751413   | 4.31E-07    | Italy | Male   |
| cor673 | Multiple sclerosis                         | 0.592314303  | 0.000563862 | Italy | Male   |
| cor674 | Diabetes mellitus                          | 0.716423562  | 8.48E-06    | Italy | Male   |
| cor675 | Rheumatic heart disease                    | -0.854739754 | 1.83E-09    | Italy | Male   |
| cor676 | Ischemic heart disease                     | -0.830496271 | 1.36E-08    | Italy | Male   |
| cor677 | Hypertensive heart disease                 | 0.726406912  | 5.50E-06    | Italy | Male   |
| cor678 | Cardiomyopathy and myocarditis             | -0.89330554  | 3.13E-11    | Italy | Male   |
| 112    | Maternal disorders                         | 0            | 1           | Italy | Male   |
| cor679 | Non-melanoma skin cancer                   | 0.529270184  | 0.002634582 | Italy | Male   |
| cor680 | Rheumatoid arthritis                       | 0.636485536  | 0.000156143 | Italy | Male   |
| cor681 | Non-rheumatic valvular heart disease       | 0.720883947  | 7.01E-06    | Italy | Male   |
| cor682 | Chronic obstructive pulmonary disease      | 0.393240884  | 0.031570216 | Italy | Male   |
| cor683 | Asthma                                     | -0.916383195 | 1.19E-12    | Italy | Male   |
| cor684 | Cirrhosis and other chronic liver diseases | -0.862511293 | 8.93E-10    | Italy | Male   |

|        |  |              |             |                    |      |
|--------|--|--------------|-------------|--------------------|------|
| cor685 | Hodgkin lymphoma                           | -0.881426378 | 1.27E-10    | Italy              | Male |
| cor686 | Non-Hodgkin lymphoma                       | 0.789398014  | 2.16E-07    | Italy              | Male |
| cor687 | Multiple myeloma                           | 0.789300147  | 2.18E-07    | Italy              | Male |
| cor688 | Leukemia                                   | 0.793468257  | 1.69E-07    | Italy              | Male |
| cor689 | Inflammatory bowel disease                 | -0.700175069 | 1.65E-05    | Russian Federation | Both |
| cor690 | Multiple sclerosis                         | 0.781931123  | 3.35E-07    | Russian Federation | Both |
| cor691 | Diabetes mellitus                          | -0.820398698 | 2.86E-08    | Russian Federation | Both |
| cor692 | Rheumatic heart disease                    | 0.815675979  | 3.99E-08    | Russian Federation | Both |
| cor693 | Ischemic heart disease                     | 0.284786196  | 0.127173551 | Russian Federation | Both |
| cor694 | Hypertensive heart disease                 | -0.45513453  | 0.011498889 | Russian Federation | Both |
| cor695 | Cardiomyopathy and myocarditis             | -0.109292344 | 0.565352678 | Russian Federation | Both |
| cor696 | Maternal disorders                         | 0.814030172  | 4.47E-08    | Russian Federation | Both |
| cor697 | Non-melanoma skin cancer                   | -0.718935145 | 7.62E-06    | Russian Federation | Both |
| cor698 | Rheumatoid arthritis                       | 0.46402591   | 0.00979541  | Russian Federation | Both |
| cor699 | Non-rheumatic valvular heart disease       | -0.839587642 | 6.67E-09    | Russian Federation | Both |
| cor700 | Chronic obstructive pulmonary disease      | 0.686734323  | 2.78E-05    | Russian Federation | Both |
| cor701 | Asthma                                     | 0.774021429  | 5.23E-07    | Russian Federation | Both |
| cor702 | Cirrhosis and other chronic liver diseases | -0.484172781 | 0.006705745 | Russian Federation | Both |



|        |                                       |              |             |                    |        |
|--------|---------------------------------------|--------------|-------------|--------------------|--------|
| cor703 | Hodgkin lymphoma                      | 0.847083299  | 3.58E-09    | Russian Federation | Both   |
| cor704 | Non-Hodgkin lymphoma                  | -0.574570542 | 0.000897937 | Russian Federation | Both   |
| cor705 | Multiple myeloma                      | -0.851849885 | 2.37E-09    | Russian Federation | Both   |
| cor706 | Leukemia                              | 0.498062075  | 0.005095852 | Russian Federation | Both   |
| cor707 | Inflammatory bowel disease            | -0.832893294 | 1.13E-08    | Russian Federation | Female |
| cor708 | Multiple sclerosis                    | 0.779603381  | 3.83E-07    | Russian Federation | Female |
| cor709 | Diabetes mellitus                     | -0.797799776 | 1.29E-07    | Russian Federation | Female |
| cor710 | Rheumatic heart disease               | 0.870381714  | 4.12E-10    | Russian Federation | Female |
| cor711 | Ischemic heart disease                | 0.126559774  | 0.505136829 | Russian Federation | Female |
| cor712 | Hypertensive heart disease            | -0.613019858 | 0.000316287 | Russian Federation | Female |
| cor713 | Cardiomyopathy and myocarditis        | -0.340448069 | 0.065635388 | Russian Federation | Female |
| cor714 | Maternal disorders                    | 0.8995406    | 1.40E-11    | Russian Federation | Female |
| cor715 | Non-melanoma skin cancer              | -0.841143135 | 5.88E-09    | Russian Federation | Female |
| cor716 | Rheumatoid arthritis                  | 0.573060664  | 0.000933074 | Russian Federation | Female |
| cor717 | Non-rheumatic valvular heart disease  | -0.906430909 | 5.41E-12    | Russian Federation | Female |
| cor718 | Chronic obstructive pulmonary disease | 0.696741298  | 1.89E-05    | Russian Federation | Female |
| cor719 | Asthma                                | 0.847421688  | 3.48E-09    | Russian Federation | Female |

|        |  |              |             |                    |        |
|--------|--|--------------|-------------|--------------------|--------|
| cor720 | Cirrhosis and other chronic liver diseases | -0.626315337 | 0.000213512 | Russian Federation | Female |
| cor721 | Hodgkin lymphoma                           | 0.850817406  | 2.60E-09    | Russian Federation | Female |
| cor722 | Non-Hodgkin lymphoma                       | -0.750609631 | 1.78E-06    | Russian Federation | Female |
| cor723 | Multiple myeloma                           | -0.912807477 | 2.10E-12    | Russian Federation | Female |
| cor724 | Leukemia                                   | 0.313403053  | 0.091713443 | Russian Federation | Female |
| cor725 | Inflammatory bowel disease                 | -0.236951605 | 0.207403669 | Russian Federation | Male   |
| cor726 | Multiple sclerosis                         | 0.762756306  | 9.59E-07    | Russian Federation | Male   |
| cor727 | Diabetes mellitus                          | -0.665578227 | 5.98E-05    | Russian Federation | Male   |
| cor728 | Rheumatic heart disease                    | 0.583956383  | 0.000704361 | Russian Federation | Male   |
| cor729 | Ischemic heart disease                     | 0.636574613  | 0.000155708 | Russian Federation | Male   |
| cor730 | Hypertensive heart disease                 | -0.002489885 | 0.989581387 | Russian Federation | Male   |
| cor731 | Cardiomyopathy and myocarditis             | 0.326775833  | 0.077981126 | Russian Federation | Male   |
| 113    | Maternal disorders                         | 0            | 1           | Russian Federation | Male   |
| cor732 | Non-melanoma skin cancer                   | -0.292670835 | 0.116531614 | Russian Federation | Male   |
| cor733 | Rheumatoid arthritis                       | -0.052144865 | 0.784346459 | Russian Federation | Male   |
| cor734 | Non-rheumatic valvular heart disease       | -0.410559268 | 0.02422272  | Russian Federation | Male   |
| cor735 | Chronic obstructive pulmonary disease      | 0.54815374   | 0.001713096 | Russian Federation | Male   |

|        |  |              |             |                          |      |
|--------|--|--------------|-------------|--------------------------|------|
| cor736 | Asthma                                     | 0.500210062  | 0.004879089 | Russian Federation       | Male |
| cor737 | Cirrhosis and other chronic liver diseases | -0.066253469 | 0.727954203 | Russian Federation       | Male |
| cor738 | Hodgkin lymphoma                           | 0.711283153  | 1.05E-05    | Russian Federation       | Male |
| cor739 | Non-Hodgkin lymphoma                       | -0.10590578  | 0.577532792 | Russian Federation       | Male |
| cor740 | Multiple myeloma                           | -0.567373982 | 0.001076442 | Russian Federation       | Male |
| cor741 | Leukemia                                   | 0.712002511  | 1.02E-05    | Russian Federation       | Male |
| cor742 | Inflammatory bowel disease                 | -0.943653686 | 5.63E-15    | United States of America | Both |
| cor743 | Multiple sclerosis                         | -0.899631378 | 1.38E-11    | United States of America | Both |
| cor744 | Diabetes mellitus                          | -0.057441531 | 0.76303287  | United States of America | Both |
| cor745 | Rheumatic heart disease                    | 0.872551752  | 3.30E-10    | United States of America | Both |
| cor746 | Ischemic heart disease                     | 0.971368516  | 5.11E-19    | United States of America | Both |
| cor747 | Hypertensive heart disease                 | -0.865766084 | 6.52E-10    | United States of America | Both |
| cor748 | Cardiomyopathy and myocarditis             | 0.931478941  | 8.07E-14    | United States of America | Both |
| cor749 | Maternal disorders                         | -0.973542461 | 1.72E-19    | United States of America | Both |
| cor750 | Non-melanoma skin cancer                   | -0.774699487 | 5.04E-07    | United States of America | Both |
| cor751 | Rheumatoid arthritis                       | -0.583232025 | 0.000717872 | United States of America | Both |

|        |  |              |             |                          |        |
|--------|--|--------------|-------------|--------------------------|--------|
| cor752 | Non-rheumatic valvular heart disease       | -0.517449509 | 0.003407127 | United States of America | Both   |
| cor753 | Chronic obstructive pulmonary disease      | -0.842377329 | 5.31E-09    | United States of America | Both   |
| cor754 | Asthma                                     | 0.982223223  | 6.92E-22    | United States of America | Both   |
| cor755 | Cirrhosis and other chronic liver diseases | -0.863268952 | 8.31E-10    | United States of America | Both   |
| cor756 | Hodgkin lymphoma                           | 0.877481279  | 1.96E-10    | United States of America | Both   |
| cor757 | Non-Hodgkin lymphoma                       | 0.869421475  | 4.54E-10    | United States of America | Both   |
| cor758 | Multiple myeloma                           | -0.618224718 | 0.000271762 | United States of America | Both   |
| cor759 | Leukemia                                   | -0.432679572 | 0.016935432 | United States of America | Both   |
| cor760 | Inflammatory bowel disease                 | -0.966806329 | 3.94E-18    | United States of America | Female |
| cor761 | Multiple sclerosis                         | -0.924290064 | 3.12E-13    | United States of America | Female |
| cor762 | Diabetes mellitus                          | 0.409096225  | 0.024783493 | United States of America | Female |
| cor763 | Rheumatic heart disease                    | 0.915210011  | 1.44E-12    | United States of America | Female |
| cor764 | Ischemic heart disease                     | 0.972736315  | 2.60E-19    | United States of America | Female |
| cor765 | Hypertensive heart disease                 | -0.887809113 | 6.10E-11    | United States of America | Female |
| cor766 | Cardiomyopathy and myocarditis             | 0.855534504  | 1.71E-09    | United States of America | Female |

|        |  |              |             |                          |        |
|--------|--|--------------|-------------|--------------------------|--------|
| cor767 | Maternal disorders                         | -0.97148102  | 4.84E-19    | United States of America | Female |
| cor768 | Non-melanoma skin cancer                   | -0.846039361 | 3.91E-09    | United States of America | Female |
| cor769 | Rheumatoid arthritis                       | -0.571568714 | 0.00096897  | United States of America | Female |
| cor770 | Non-rheumatic valvular heart disease       | -0.617276211 | 0.000279436 | United States of America | Female |
| cor771 | Chronic obstructive pulmonary disease      | -0.892771301 | 3.34E-11    | United States of America | Female |
| cor772 | Asthma                                     | 0.99131372   | 3.23E-26    | United States of America | Female |
| cor773 | Cirrhosis and other chronic liver diseases | -0.871750099 | 3.58E-10    | United States of America | Female |
| cor774 | Hodgkin lymphoma                           | 0.91921495   | 7.50E-13    | United States of America | Female |
| cor775 | Non-Hodgkin lymphoma                       | 0.885650011  | 7.85E-11    | United States of America | Female |
| cor776 | Multiple myeloma                           | -0.522439156 | 0.00306008  | United States of America | Female |
| cor777 | Leukemia                                   | 0.372284684  | 0.042772495 | United States of America | Female |
| cor778 | Inflammatory bowel disease                 | -0.894417715 | 2.72E-11    | United States of America | Male   |
| cor779 | Multiple sclerosis                         | -0.854289165 | 1.91E-09    | United States of America | Male   |
| cor780 | Diabetes mellitus                          | -0.521352735 | 0.003132932 | United States of America | Male   |
| cor781 | Rheumatic heart disease                    | 0.739899379  | 2.97E-06    | United States of America | Male   |

|        |  |              |             |                          |      |
|--------|--|--------------|-------------|--------------------------|------|
| cor782 | Ischemic heart disease                     | 0.932828042  | 6.16E-14    | United States of America | Male |
| cor783 | Hypertensive heart disease                 | -0.835077833 | 9.54E-09    | United States of America | Male |
| cor784 | Cardiomyopathy and myocarditis             | 0.943493944  | 5.85E-15    | United States of America | Male |
| 114    | Maternal disorders                         | 0            | 1           | United States of America | Male |
| cor785 | Non-melanoma skin cancer                   | -0.731657224 | 4.35E-06    | United States of America | Male |
| cor786 | Rheumatoid arthritis                       | -0.611266059 | 0.000332679 | United States of America | Male |
| cor787 | Non-rheumatic valvular heart disease       | -0.344088285 | 0.062620087 | United States of America | Male |
| cor788 | Chronic obstructive pulmonary disease      | -0.706435118 | 1.29E-05    | United States of America | Male |
| cor789 | Asthma                                     | 0.94992931   | 1.12E-15    | United States of America | Male |
| cor790 | Cirrhosis and other chronic liver diseases | -0.844900239 | 4.31E-09    | United States of America | Male |
| cor791 | Hodgkin lymphoma                           | 0.829350757  | 1.48E-08    | United States of America | Male |
| cor792 | Non-Hodgkin lymphoma                       | 0.766972099  | 7.67E-07    | United States of America | Male |
| cor793 | Multiple myeloma                           | -0.63224405  | 0.000178148 | United States of America | Male |
| cor794 | Leukemia                                   | -0.517825895 | 0.003379818 | United States of America | Male |
| cor795 | Inflammatory bowel disease                 | 0.959443368  | 6.22E-17    | Brazil                   | Both |

|        |  |              |             |        |        |
|--------|--|--------------|-------------|--------|--------|
| cor796 | Multiple sclerosis                         | 0.9704923    | 7.76E-19    | Brazil | Both   |
| cor797 | Diabetes mellitus                          | 0.990024911  | 2.23E-25    | Brazil | Both   |
| cor798 | Rheumatic heart disease                    | -0.989992192 | 2.33E-25    | Brazil | Both   |
| cor799 | Ischemic heart disease                     | 0.248557818  | 0.185351432 | Brazil | Both   |
| cor800 | Hypertensive heart disease                 | 0.978492199  | 9.73E-21    | Brazil | Both   |
| cor801 | Cardiomyopathy and myocarditis             | -0.432383875 | 0.017019202 | Brazil | Both   |
| cor802 | Maternal disorders                         | -0.855527288 | 1.71E-09    | Brazil | Both   |
| cor803 | Non-melanoma skin cancer                   | 0.994302709  | 8.98E-29    | Brazil | Both   |
| cor804 | Rheumatoid arthritis                       | 0.980479557  | 2.54E-21    | Brazil | Both   |
| cor805 | Non-rheumatic valvular heart disease       | 0.951630421  | 6.98E-16    | Brazil | Both   |
| cor806 | Chronic obstructive pulmonary disease      | 0.720384672  | 7.16E-06    | Brazil | Both   |
| cor807 | Asthma                                     | -0.983686165 | 2.10E-22    | Brazil | Both   |
| cor808 | Cirrhosis and other chronic liver diseases | 0.888812497  | 5.41E-11    | Brazil | Both   |
| cor809 | Hodgkin lymphoma                           | -0.934273562 | 4.59E-14    | Brazil | Both   |
| cor810 | Non-Hodgkin lymphoma                       | 0.989952141  | 2.46E-25    | Brazil | Both   |
| cor811 | Multiple myeloma                           | 0.995501933  | 3.31E-30    | Brazil | Both   |
| cor812 | Leukemia                                   | 0.917487147  | 9.97E-13    | Brazil | Both   |
| cor813 | Inflammatory bowel disease                 | 0.954759217  | 2.79E-16    | Brazil | Female |

|        |  |              |             |        |        |
|--------|--|--------------|-------------|--------|--------|
| cor814 | Multiple sclerosis                         | 0.979172204  | 6.23E-21    | Brazil | Female |
| cor815 | Diabetes mellitus                          | 0.985555259  | 3.86E-23    | Brazil | Female |
| cor816 | Rheumatic heart disease                    | -0.988280578 | 2.10E-24    | Brazil | Female |
| cor817 | Ischemic heart disease                     | 0.159126591  | 0.400959584 | Brazil | Female |
| cor818 | Hypertensive heart disease                 | 0.970028151  | 9.62E-19    | Brazil | Female |
| cor819 | Cardiomyopathy and myocarditis             | -0.604949242 | 0.000398111 | Brazil | Female |
| cor820 | Maternal disorders                         | -0.870197694 | 4.19E-10    | Brazil | Female |
| cor821 | Non-melanoma skin cancer                   | 0.987120222  | 7.83E-24    | Brazil | Female |
| cor822 | Rheumatoid arthritis                       | 0.97279322   | 2.53E-19    | Brazil | Female |
| cor823 | Non-rheumatic valvular heart disease       | 0.965117244  | 7.81E-18    | Brazil | Female |
| cor824 | Chronic obstructive pulmonary disease      | 0.907581664  | 4.58E-12    | Brazil | Female |
| cor825 | Asthma                                     | -0.949675057 | 1.20E-15    | Brazil | Female |
| cor826 | Cirrhosis and other chronic liver diseases | 0.559132479  | 0.001318262 | Brazil | Female |
| cor827 | Hodgkin lymphoma                           | -0.932800409 | 6.20E-14    | Brazil | Female |
| cor828 | Non-Hodgkin lymphoma                       | 0.984979009  | 6.65E-23    | Brazil | Female |
| cor829 | Multiple myeloma                           | 0.994604637  | 4.20E-29    | Brazil | Female |
| cor830 | Leukemia                                   | 0.880686358  | 1.38E-10    | Brazil | Female |
| cor831 | Inflammatory bowel disease                 | 0.958839585  | 7.62E-17    | Brazil | Male   |



|        |  |              |             |              |      |
|--------|--|--------------|-------------|--------------|------|
| cor832 | Multiple sclerosis                         | 0.953960021  | 3.55E-16    | Brazil       | Male |
| cor833 | Diabetes mellitus                          | 0.99354323   | 5.15E-28    | Brazil       | Male |
| cor834 | Rheumatic heart disease                    | -0.986947944 | 9.42E-24    | Brazil       | Male |
| cor835 | Ischemic heart disease                     | 0.340129882  | 0.065904234 | Brazil       | Male |
| cor836 | Hypertensive heart disease                 | 0.973952805  | 1.38E-19    | Brazil       | Male |
| cor837 | Cardiomyopathy and myocarditis             | -0.189798138 | 0.315107066 | Brazil       | Male |
| 115    | Maternal disorders                         | 0            | 1           | Brazil       | Male |
| cor838 | Non-melanoma skin cancer                   | 0.997268063  | 3.11E-33    | Brazil       | Male |
| cor839 | Rheumatoid arthritis                       | 0.983220021  | 3.10E-22    | Brazil       | Male |
| cor840 | Non-rheumatic valvular heart disease       | 0.922720327  | 4.12E-13    | Brazil       | Male |
| cor841 | Chronic obstructive pulmonary disease      | 0.208840655  | 0.268064663 | Brazil       | Male |
| cor842 | Asthma                                     | -0.991865709 | 1.29E-26    | Brazil       | Male |
| cor843 | Cirrhosis and other chronic liver diseases | 0.927702892  | 1.67E-13    | Brazil       | Male |
| cor844 | Hodgkin lymphoma                           | -0.922617924 | 4.19E-13    | Brazil       | Male |
| cor845 | Non-Hodgkin lymphoma                       | 0.99337505   | 7.38E-28    | Brazil       | Male |
| cor846 | Multiple myeloma                           | 0.995907398  | 8.83E-31    | Brazil       | Male |
| cor847 | Leukemia                                   | 0.935091886  | 3.87E-14    | Brazil       | Male |
| cor848 | Inflammatory bowel disease                 | 0.072140438  | 0.704811124 | Saudi Arabia | Both |

|        |  |              |             |              |      |
|--------|--|--------------|-------------|--------------|------|
| cor849 | Multiple sclerosis                         | -0.849067108 | 3.02E-09    | Saudi Arabia | Both |
| cor850 | Diabetes mellitus                          | 0.39910284   | 0.0289044   | Saudi Arabia | Both |
| cor851 | Rheumatic heart disease                    | 0.887418288  | 6.39E-11    | Saudi Arabia | Both |
| cor852 | Ischemic heart disease                     | -0.702489161 | 1.51E-05    | Saudi Arabia | Both |
| cor853 | Hypertensive heart disease                 | -0.508062203 | 0.00415239  | Saudi Arabia | Both |
| cor854 | Cardiomyopathy and myocarditis             | 0.870337468  | 4.14E-10    | Saudi Arabia | Both |
| cor855 | Maternal disorders                         | 0.95841575   | 8.78E-17    | Saudi Arabia | Both |
| cor856 | Non-melanoma skin cancer                   | -0.660825696 | 7.04E-05    | Saudi Arabia | Both |
| cor857 | Rheumatoid arthritis                       | -0.434347599 | 0.016469267 | Saudi Arabia | Both |
| cor858 | Non-rheumatic valvular heart disease       | -0.791513994 | 1.91E-07    | Saudi Arabia | Both |
| cor859 | Chronic obstructive pulmonary disease      | 0.824002126  | 2.20E-08    | Saudi Arabia | Both |
| cor860 | Asthma                                     | 0.914264227  | 1.67E-12    | Saudi Arabia | Both |
| cor861 | Cirrhosis and other chronic liver diseases | 0.867764958  | 5.36E-10    | Saudi Arabia | Both |
| cor862 | Hodgkin lymphoma                           | 0.293735783  | 0.115146556 | Saudi Arabia | Both |
| cor863 | Non-Hodgkin lymphoma                       | -0.256684344 | 0.170921789 | Saudi Arabia | Both |
| cor864 | Multiple myeloma                           | -0.840633997 | 6.13E-09    | Saudi Arabia | Both |
| cor865 | Leukemia                                   | 0.38372501   | 0.03631912  | Saudi Arabia | Both |

|        |  |              |             |              |        |
|--------|--|--------------|-------------|--------------|--------|
| cor866 | Inflammatory bowel disease                 | 0.346208527  | 0.060914384 | Saudi Arabia | Female |
| cor867 | Multiple sclerosis                         | -0.790820422 | 1.99E-07    | Saudi Arabia | Female |
| cor868 | Diabetes mellitus                          | 0.509165118  | 0.004058157 | Saudi Arabia | Female |
| cor869 | Rheumatic heart disease                    | 0.866820131  | 5.88E-10    | Saudi Arabia | Female |
| cor870 | Ischemic heart disease                     | -0.036035241 | 0.850055525 | Saudi Arabia | Female |
| cor871 | Hypertensive heart disease                 | 0.05322549   | 0.77998508  | Saudi Arabia | Female |
| cor872 | Cardiomyopathy and myocarditis             | 0.904153748  | 7.46E-12    | Saudi Arabia | Female |
| cor873 | Maternal disorders                         | 0.959481149  | 6.14E-17    | Saudi Arabia | Female |
| cor874 | Non-melanoma skin cancer                   | 0.56890928   | 0.001035957 | Saudi Arabia | Female |
| cor875 | Rheumatoid arthritis                       | 0.736780962  | 3.44E-06    | Saudi Arabia | Female |
| cor876 | Non-rheumatic valvular heart disease       | -0.743972367 | 2.45E-06    | Saudi Arabia | Female |
| cor877 | Chronic obstructive pulmonary disease      | 0.865654951  | 6.59E-10    | Saudi Arabia | Female |
| cor878 | Asthma                                     | 0.923780777  | 3.42E-13    | Saudi Arabia | Female |
| cor879 | Cirrhosis and other chronic liver diseases | 0.910744011  | 2.87E-12    | Saudi Arabia | Female |
| cor880 | Hodgkin lymphoma                           | 0.956137176  | 1.83E-16    | Saudi Arabia | Female |
| cor881 | Non-Hodgkin lymphoma                       | 0.032582473  | 0.864283873 | Saudi Arabia | Female |
| cor882 | Multiple myeloma                           | -0.503983994 | 0.0045173   | Saudi Arabia | Female |

|        |  |              |             |              |        |
|--------|--|--------------|-------------|--------------|--------|
| cor883 | Leukemia                                   | 0.508983964  | 0.004073508 | Saudi Arabia | Female |
| cor884 | Inflammatory bowel disease                 | -0.322030861 | 0.082659537 | Saudi Arabia | Male   |
| cor885 | Multiple sclerosis                         | -0.873863374 | 2.88E-10    | Saudi Arabia | Male   |
| cor886 | Diabetes mellitus                          | 0.234285488  | 0.212713153 | Saudi Arabia | Male   |
| cor887 | Rheumatic heart disease                    | 0.91299755   | 2.04E-12    | Saudi Arabia | Male   |
| cor888 | Ischemic heart disease                     | -0.845776071 | 4.00E-09    | Saudi Arabia | Male   |
| cor889 | Hypertensive heart disease                 | -0.879908756 | 1.50E-10    | Saudi Arabia | Male   |
| cor890 | Cardiomyopathy and myocarditis             | 0.618308989  | 0.000271089 | Saudi Arabia | Male   |
| 116    | Maternal disorders                         | 0            | 1           | Saudi Arabia | Male   |
| cor891 | Non-melanoma skin cancer                   | -0.907347983 | 4.74E-12    | Saudi Arabia | Male   |
| cor892 | Rheumatoid arthritis                       | -0.798296486 | 1.25E-07    | Saudi Arabia | Male   |
| cor893 | Non-rheumatic valvular heart disease       | -0.807177178 | 7.08E-08    | Saudi Arabia | Male   |
| cor894 | Chronic obstructive pulmonary disease      | 0.777909294  | 4.21E-07    | Saudi Arabia | Male   |
| cor895 | Asthma                                     | 0.898059733  | 1.70E-11    | Saudi Arabia | Male   |
| cor896 | Cirrhosis and other chronic liver diseases | 0.825790835  | 1.93E-08    | Saudi Arabia | Male   |
| cor897 | Hodgkin lymphoma                           | -0.29161663  | 0.117914846 | Saudi Arabia | Male   |
| cor898 | Non-Hodgkin lymphoma                       | -0.597374469 | 0.000491342 | Saudi Arabia | Male   |

|        |  |              |             |              |      |
|--------|--|--------------|-------------|--------------|------|
| cor899 | Multiple myeloma                           | -0.893163166 | 3.18E-11    | Saudi Arabia | Male |
| cor900 | Leukemia                                   | 0.226249455  | 0.22927493  | Saudi Arabia | Male |
| cor901 | Inflammatory bowel disease                 | -0.240853095 | 0.19979895  | Australia    | Both |
| cor902 | Multiple sclerosis                         | -0.285012622 | 0.126858313 | Australia    | Both |
| cor903 | Diabetes mellitus                          | 0.287390676  | 0.123582138 | Australia    | Both |
| cor904 | Rheumatic heart disease                    | -0.387263664 | 0.034490175 | Australia    | Both |
| cor905 | Ischemic heart disease                     | 0.147604187  | 0.436341105 | Australia    | Both |
| cor906 | Hypertensive heart disease                 | -0.632756301 | 0.000175352 | Australia    | Both |
| cor907 | Cardiomyopathy and myocarditis             | -0.216346839 | 0.250847973 | Australia    | Both |
| cor908 | Maternal disorders                         | 0.305073214  | 0.101150692 | Australia    | Both |
| cor909 | Non-melanoma skin cancer                   | -0.397524665 | 0.029603394 | Australia    | Both |
| cor910 | Rheumatoid arthritis                       | -0.53591487  | 0.002270706 | Australia    | Both |
| cor911 | Non-rheumatic valvular heart disease       | -0.597371799 | 0.000491378 | Australia    | Both |
| cor912 | Chronic obstructive pulmonary disease      | -0.729173343 | 4.87E-06    | Australia    | Both |
| cor913 | Asthma                                     | -0.117118954 | 0.537659418 | Australia    | Both |
| cor914 | Cirrhosis and other chronic liver diseases | -0.652695997 | 9.26E-05    | Australia    | Both |
| cor915 | Hodgkin lymphoma                           | -0.289702233 | 0.120457812 | Australia    | Both |
| cor916 | Non-Hodgkin lymphoma                       | 0.279908559  | 0.134105008 | Australia    | Both |

|        |  |              |             |           |        |
|--------|--|--------------|-------------|-----------|--------|
| cor917 | Multiple myeloma                           | -0.300710297 | 0.106376392 | Australia | Both   |
| cor918 | Leukemia                                   | -0.752326712 | 1.63E-06    | Australia | Both   |
| cor919 | Inflammatory bowel disease                 | -0.3562722   | 0.053308642 | Australia | Female |
| cor920 | Multiple sclerosis                         | -0.376889328 | 0.04007301  | Australia | Female |
| cor921 | Diabetes mellitus                          | 0.278431161  | 0.136257966 | Australia | Female |
| cor922 | Rheumatic heart disease                    | -0.179270735 | 0.343183911 | Australia | Female |
| cor923 | Ischemic heart disease                     | 0.320816594  | 0.083890621 | Australia | Female |
| cor924 | Hypertensive heart disease                 | -0.67003049  | 5.11E-05    | Australia | Female |
| cor925 | Cardiomyopathy and myocarditis             | 0.026598068  | 0.889041057 | Australia | Female |
| cor926 | Maternal disorders                         | 0.398628549  | 0.029113044 | Australia | Female |
| cor927 | Non-melanoma skin cancer                   | -0.406007716 | 0.026002209 | Australia | Female |
| cor928 | Rheumatoid arthritis                       | -0.263446463 | 0.159535934 | Australia | Female |
| cor929 | Non-rheumatic valvular heart disease       | -0.591534391 | 0.000575838 | Australia | Female |
| cor930 | Chronic obstructive pulmonary disease      | -0.460567399 | 0.010430869 | Australia | Female |
| cor931 | Asthma                                     | -0.00598739  | 0.974949734 | Australia | Female |
| cor932 | Cirrhosis and other chronic liver diseases | -0.696618692 | 1.90E-05    | Australia | Female |
| cor933 | Hodgkin lymphoma                           | -0.169991372 | 0.369143333 | Australia | Female |
| cor934 | Non-Hodgkin lymphoma                       | 0.514024982  | 0.003664443 | Australia | Female |

|        |  |              |             |           |        |
|--------|--|--------------|-------------|-----------|--------|
| cor935 | Multiple myeloma                           | -0.409951412 | 0.024454431 | Australia | Female |
| cor936 | Leukemia                                   | -0.843718467 | 4.75E-09    | Australia | Female |
| cor937 | Inflammatory bowel disease                 | -0.108073905 | 0.569721452 | Australia | Male   |
| cor938 | Multiple sclerosis                         | -0.204591711 | 0.278142387 | Australia | Male   |
| cor939 | Diabetes mellitus                          | 0.334543191  | 0.070765731 | Australia | Male   |
| cor940 | Rheumatic heart disease                    | -0.654942928 | 8.59E-05    | Australia | Male   |
| cor941 | Ischemic heart disease                     | -0.041179886 | 0.828941837 | Australia | Male   |
| cor942 | Hypertensive heart disease                 | -0.607454457 | 0.000370915 | Australia | Male   |
| cor943 | Cardiomyopathy and myocarditis             | -0.493359198 | 0.005599301 | Australia | Male   |
| 117    | Maternal disorders                         | 0            | 1           | Australia | Male   |
| cor944 | Non-melanoma skin cancer                   | -0.322029375 | 0.082661034 | Australia | Male   |
| cor945 | Rheumatoid arthritis                       | -0.859852042 | 1.15E-09    | Australia | Male   |
| cor946 | Non-rheumatic valvular heart disease       | -0.574180885 | 0.000906892 | Australia | Male   |
| cor947 | Chronic obstructive pulmonary disease      | -0.511931666 | 0.003829811 | Australia | Male   |
| cor948 | Asthma                                     | -0.240813884 | 0.199874409 | Australia | Male   |
| cor949 | Cirrhosis and other chronic liver diseases | -0.564742751 | 0.001149046 | Australia | Male   |
| cor950 | Hodgkin lymphoma                           | -0.413588322 | 0.023094712 | Australia | Male   |
| cor951 | Non-Hodgkin lymphoma                       | -0.145599734 | 0.442664836 | Australia | Male   |

|        |  |              |             |           |      |
|--------|--|--------------|-------------|-----------|------|
| cor952 | Multiple myeloma                           | -0.165247715 | 0.382847549 | Australia | Male |
| cor953 | Leukemia                                   | -0.549307657 | 0.001667263 | Australia | Male |
| cor954 | Inflammatory bowel disease                 | -0.745393063 | 2.29E-06    | Indonesia | Both |
| cor955 | Multiple sclerosis                         | 0.954341769  | 3.17E-16    | Indonesia | Both |
| cor956 | Diabetes mellitus                          | 0.967607665  | 2.81E-18    | Indonesia | Both |
| cor957 | Rheumatic heart disease                    | -0.945681603 | 3.41E-15    | Indonesia | Both |
| cor958 | Ischemic heart disease                     | 0.95803151   | 9.96E-17    | Indonesia | Both |
| cor959 | Hypertensive heart disease                 | 0.958647809  | 8.13E-17    | Indonesia | Both |
| cor960 | Cardiomyopathy and myocarditis             | 0.969697543  | 1.12E-18    | Indonesia | Both |
| cor961 | Maternal disorders                         | -0.943823675 | 5.40E-15    | Indonesia | Both |
| cor962 | Non-melanoma skin cancer                   | 0.965540092  | 6.60E-18    | Indonesia | Both |
| cor963 | Rheumatoid arthritis                       | 0.958213231  | 9.38E-17    | Indonesia | Both |
| cor964 | Non-rheumatic valvular heart disease       | 0.971449807  | 4.92E-19    | Indonesia | Both |
| cor965 | Chronic obstructive pulmonary disease      | 0.839147015  | 6.91E-09    | Indonesia | Both |
| cor966 | Asthma                                     | -0.948933459 | 1.47E-15    | Indonesia | Both |
| cor967 | Cirrhosis and other chronic liver diseases | 0.66982271   | 5.15E-05    | Indonesia | Both |
| cor968 | Hodgkin lymphoma                           | -0.940216955 | 1.26E-14    | Indonesia | Both |
| cor969 | Non-Hodgkin lymphoma                       | 0.971677472  | 4.40E-19    | Indonesia | Both |



|        |  |              |            |           |        |
|--------|--|--------------|------------|-----------|--------|
| cor970 | Multiple myeloma                           | 0.968924788  | 1.59E-18   | Indonesia | Both   |
| cor971 | Leukemia                                   | -0.847090066 | 3.58E-09   | Indonesia | Both   |
| cor972 | Inflammatory bowel disease                 | -0.867632824 | 5.43E-10   | Indonesia | Female |
| cor973 | Multiple sclerosis                         | 0.906464275  | 5.38E-12   | Indonesia | Female |
| cor974 | Diabetes mellitus                          | 0.926207151  | 2.21E-13   | Indonesia | Female |
| cor975 | Rheumatic heart disease                    | -0.933870523 | 4.98E-14   | Indonesia | Female |
| cor976 | Ischemic heart disease                     | 0.944969826  | 4.08E-15   | Indonesia | Female |
| cor977 | Hypertensive heart disease                 | 0.951257062  | 7.76E-16   | Indonesia | Female |
| cor978 | Cardiomyopathy and myocarditis             | 0.952466411  | 5.50E-16   | Indonesia | Female |
| cor979 | Maternal disorders                         | -0.945419203 | 3.65E-15   | Indonesia | Female |
| cor980 | Non-melanoma skin cancer                   | 0.947313958  | 2.25E-15   | Indonesia | Female |
| cor981 | Rheumatoid arthritis                       | 0.956503895  | 1.63E-16   | Indonesia | Female |
| cor982 | Non-rheumatic valvular heart disease       | 0.887783508  | 6.12E-11   | Indonesia | Female |
| cor983 | Chronic obstructive pulmonary disease      | 0.562143081  | 0.00122494 | Indonesia | Female |
| cor984 | Asthma                                     | -0.903437727 | 8.25E-12   | Indonesia | Female |
| cor985 | Cirrhosis and other chronic liver diseases | 0.791645383  | 1.89E-07   | Indonesia | Female |
| cor986 | Hodgkin lymphoma                           | -0.90216052  | 9.83E-12   | Indonesia | Female |
| cor987 | Non-Hodgkin lymphoma                       | 0.939051882  | 1.64E-14   | Indonesia | Female |
| cor988 | Multiple myeloma                           | 0.949773179  | 1.17E-15   | Indonesia | Female |
| cor989 | Leukemia                                   | -0.883796268 | 9.72E-11   | Indonesia | Female |

|         |  |              |             |           |      |
|---------|--|--------------|-------------|-----------|------|
| cor990  | Inflammatory bowel disease                 | 0.257169107  | 0.170086931 | Indonesia | Male |
| cor991  | Multiple sclerosis                         | 0.948019971  | 1.87E-15    | Indonesia | Male |
| cor992  | Diabetes mellitus                          | 0.964675166  | 9.29E-18    | Indonesia | Male |
| cor993  | Rheumatic heart disease                    | -0.930944952 | 8.97E-14    | Indonesia | Male |
| cor994  | Ischemic heart disease                     | 0.943338835  | 6.08E-15    | Indonesia | Male |
| cor995  | Hypertensive heart disease                 | 0.937829199  | 2.15E-14    | Indonesia | Male |
| cor996  | Cardiomyopathy and myocarditis             | 0.956210131  | 1.78E-16    | Indonesia | Male |
| 118     | Maternal disorders                         | 0            | 1           | Indonesia | Male |
| cor997  | Non-melanoma skin cancer                   | 0.957438134  | 1.21E-16    | Indonesia | Male |
| cor998  | Rheumatoid arthritis                       | 0.928936434  | 1.32E-13    | Indonesia | Male |
| cor999  | Non-rheumatic valvular heart disease       | 0.972763083  | 2.56E-19    | Indonesia | Male |
| cor1000 | Chronic obstructive pulmonary disease      | 0.856082116  | 1.62E-09    | Indonesia | Male |
| cor100  | Asthma                                     | -0.898777381 | 1.55E-11    | Indonesia | Male |
| cor1002 | Cirrhosis and other chronic liver diseases | 0.53497995   | 0.002319115 | Indonesia | Male |
| cor1003 | Hodgkin lymphoma                           | -0.888116171 | 5.88E-11    | Indonesia | Male |
| cor1004 | Non-Hodgkin lymphoma                       | 0.958024763  | 9.98E-17    | Indonesia | Male |
| cor1005 | Multiple myeloma                           | 0.959659051  | 5.78E-17    | Indonesia | Male |
| cor100  | Leukemia                                   | -0.297835698 | 0.109928333 | Indonesia | Male |

|             |  |              |             |        |      |
|-------------|--|--------------|-------------|--------|------|
| cor100<br>7 | Inflammatory bowel disease                 | 0.522839648  | 0.003033594 | Turkey | Both |
| cor100<br>8 | Multiple sclerosis                         | -0.342250541 | 0.064128517 | Turkey | Both |
| cor100<br>9 | Diabetes mellitus                          | -0.148442165 | 0.433712082 | Turkey | Both |
| cor101<br>0 | Rheumatic heart disease                    | 0.929243743  | 1.25E-13    | Turkey | Both |
| cor101<br>1 | Ischemic heart disease                     | 0.53524663   | 0.002305217 | Turkey | Both |
| cor101<br>2 | Hypertensive heart disease                 | -0.3067782   | 0.099161929 | Turkey | Both |
| cor101<br>3 | Cardiomyopathy and myocarditis             | 0.771793121  | 5.92E-07    | Turkey | Both |
| cor101<br>4 | Maternal disorders                         | 0.901826883  | 1.03E-11    | Turkey | Both |
| cor101<br>5 | Non-melanoma skin cancer                   | -0.842317306 | 5.34E-09    | Turkey | Both |
| cor101<br>6 | Rheumatoid arthritis                       | -0.577740271 | 0.000827918 | Turkey | Both |
| cor101<br>7 | Non-rheumatic valvular heart disease       | 0.60369393   | 0.000412389 | Turkey | Both |
| cor101<br>8 | Chronic obstructive pulmonary disease      | -0.576607128 | 0.000852379 | Turkey | Both |
| cor101      | Asthma                                     | 0.98138825   | 1.31E-21    | Turkey | Both |
| cor102<br>0 | Cirrhosis and other chronic liver diseases | -0.332294841 | 0.072798864 | Turkey | Both |
| cor102<br>1 | Hodgkin lymphoma                           | 0.849649116  | 2.87E-09    | Turkey | Both |
| cor102<br>2 | Non-Hodgkin lymphoma                       | -0.430663288 | 0.017513477 | Turkey | Both |
| cor102<br>3 | Multiple myeloma                           | -0.672036963 | 4.76E-05    | Turkey | Both |
| cor102      | Leukemia                                   | 0.911077945  | 2.73E-12    | Turkey | Both |

|             |  |              |             |        |        |
|-------------|--|--------------|-------------|--------|--------|
| cor102<br>5 | Inflammatory bowel disease                 | -0.02864785  | 0.880548499 | Turkey | Female |
| cor102<br>6 | Multiple sclerosis                         | 0.045479854  | 0.811383262 | Turkey | Female |
| cor102<br>7 | Diabetes mellitus                          | -0.074078694 | 0.697246386 | Turkey | Female |
| cor102<br>8 | Rheumatic heart disease                    | 0.906217793  | 5.58E-12    | Turkey | Female |
| cor102<br>9 | Ischemic heart disease                     | -0.194653795 | 0.302652762 | Turkey | Female |
| cor103<br>0 | Hypertensive heart disease                 | -0.421891874 | 0.020221671 | Turkey | Female |
| cor103<br>1 | Cardiomyopathy and myocarditis             | 0.956398815  | 1.68E-16    | Turkey | Female |
| cor103<br>2 | Maternal disorders                         | 0.941922825  | 8.51E-15    | Turkey | Female |
| cor103<br>3 | Non-melanoma skin cancer                   | -0.739301158 | 3.06E-06    | Turkey | Female |
| cor103<br>4 | Rheumatoid arthritis                       | -0.730700448 | 4.54E-06    | Turkey | Female |
| cor103<br>5 | Non-rheumatic valvular heart disease       | 0.497112114  | 0.005194307 | Turkey | Female |
| cor103<br>6 | Chronic obstructive pulmonary disease      | -0.650813452 | 9.85E-05    | Turkey | Female |
| cor103      | Asthma                                     | 0.87903962   | 1.65E-10    | Turkey | Female |
| cor103<br>8 | Cirrhosis and other chronic liver diseases | -0.351167693 | 0.057066797 | Turkey | Female |
| cor103<br>9 | Hodgkin lymphoma                           | 0.929216766  | 1.25E-13    | Turkey | Female |
| cor104<br>0 | Non-Hodgkin lymphoma                       | -0.671946809 | 4.78E-05    | Turkey | Female |
| cor104<br>1 | Multiple myeloma                           | -0.740458784 | 2.90E-06    | Turkey | Female |
| cor104      | Leukemia                                   | 0.935825009  | 3.32E-14    | Turkey | Female |

|             |  |              |             |        |      |
|-------------|--|--------------|-------------|--------|------|
| cor104<br>3 | Inflammatory bowel disease                 | -0.028516871 | 0.881090786 | Turkey | Male |
| cor104<br>4 | Multiple sclerosis                         | -0.1933163   | 0.306051989 | Turkey | Male |
| cor104<br>5 | Diabetes mellitus                          | -0.082718165 | 0.663881379 | Turkey | Male |
| cor104<br>6 | Rheumatic heart disease                    | 0.635284335  | 0.000162115 | Turkey | Male |
| cor104<br>7 | Ischemic heart disease                     | 0.470834181  | 0.008639347 | Turkey | Male |
| cor104<br>8 | Hypertensive heart disease                 | -0.058994374 | 0.756815583 | Turkey | Male |
| cor104<br>9 | Cardiomyopathy and myocarditis             | 0.251429924  | 0.180157572 | Turkey | Male |
| 119         | Maternal disorders                         | 0            | 1           | Turkey | Male |
| cor105<br>0 | Non-melanoma skin cancer                   | -0.748229112 | 2.00E-06    | Turkey | Male |
| cor105<br>1 | Rheumatoid arthritis                       | 0.0378226    | 0.842707884 | Turkey | Male |
| cor105<br>2 | Non-rheumatic valvular heart disease       | 0.075431903  | 0.691981766 | Turkey | Male |
| cor105<br>3 | Chronic obstructive pulmonary disease      | -0.161509369 | 0.393852045 | Turkey | Male |
| cor105      | Asthma                                     | 0.717454891  | 8.12E-06    | Turkey | Male |
| cor105<br>5 | Cirrhosis and other chronic liver diseases | -0.173635546 | 0.358814148 | Turkey | Male |
| cor105<br>6 | Hodgkin lymphoma                           | 0.530244909  | 0.002578244 | Turkey | Male |
| cor105<br>7 | Non-Hodgkin lymphoma                       | 0.159940929  | 0.398522363 | Turkey | Male |
| cor105<br>8 | Multiple myeloma                           | -0.2593981   | 0.166285334 | Turkey | Male |
| cor105      | Leukemia                                   | 0.565977823  | 0.001114451 | Turkey | Male |