Logit Regression Results

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Dep. Variable: has\_disease No. Observations: 277720

Model: Logit Df Residuals: 277352

Method: MLE Df Model: 367

Date: Wed, 06 Apr 2022 Pseudo R-squ.: 0.02040

Time: 16:58:23 Log-Likelihood: -68554.

converged: False LL-Null: -69981.

LLR p-value: 0.000

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coef std err z P |z| [0.025 0.975]

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const -2.6843 0.094 -28.616 0.000 -2.868 -2.500

MIN -0.4098 0.016 -25.465 0.000 -0.441 -0.378

Age\_BMI 0.1719 0.007 25.011 0.000 0.158 0.185

Birth\_year -0.0835 0.008 -10.302 0.000 -0.099 -0.068

dapar\_3gr 0.0538 0.008 7.003 0.000 0.039 0.069

Educ\_GE11YN 0.0262 0.008 3.410 0.001 0.011 0.041

Eshkol\_3gr 0.1284 0.008 16.766 0.000 0.113 0.143

Israeli 0.2637 0.027 9.898 0.000 0.211 0.316

DQB1\*03:01 0.0075 0.039 0.190 0.849 -0.070 0.085

DQB1\*03:01\_inter\_BMI 0.0301 0.082 0.368 0.713 -0.130 0.191

DQB1\*02:01 -0.0270 0.053 -0.513 0.608 -0.130 0.076

DQB1\*02:01\_inter\_BMI -0.1064 0.110 -0.968 0.333 -0.322 0.109

C\*04:01 -0.0616 0.044 -1.391 0.164 -0.148 0.025

C\*04:01\_inter\_BMI 0.1552 0.094 1.649 0.099 -0.029 0.340

DRB1\*11:04 0.1119 0.047 2.375 0.018 0.020 0.204

DRB1\*11:04\_inter\_BMI -0.0491 0.096 -0.513 0.608 -0.236 0.138

DRB1\*07:01 0.1612 0.058 2.771 0.006 0.047 0.275

DRB1\*07:01\_inter\_BMI 0.0213 0.120 0.177 0.860 -0.214 0.257

A\*01:01 0.0270 0.036 0.743 0.457 -0.044 0.098

A\*01:01\_inter\_BMI -0.0034 0.072 -0.047 0.963 -0.145 0.139

C\*12:03 -0.0434 0.050 -0.869 0.385 -0.141 0.054

C\*12:03\_inter\_BMI 0.1235 0.106 1.168 0.243 -0.084 0.331

DQB1\*03:02 0.0812 0.055 1.476 0.140 -0.027 0.189

DQB1\*03:02\_inter\_BMI -0.1514 0.114 -1.327 0.185 -0.375 0.072

A\*02:01 -0.0086 0.037 -0.236 0.814 -0.080 0.063

A\*02:01\_inter\_BMI 0.0574 0.073 0.789 0.430 -0.085 0.200

C\*07:01 0.0063 0.046 0.136 0.892 -0.084 0.096

C\*07:01\_inter\_BMI 0.0875 0.097 0.899 0.369 -0.103 0.278

C\*06:02 0.0157 0.053 0.296 0.767 -0.088 0.120

C\*06:02\_inter\_BMI 0.1207 0.111 1.086 0.277 -0.097 0.339

DQB1\*05:01 -0.0397 0.078 -0.508 0.611 -0.193 0.113

DQB1\*05:01\_inter\_BMI 0.0389 0.162 0.241 0.810 -0.278 0.356

A\*24:02 0.0360 0.037 0.979 0.328 -0.036 0.108

A\*24:02\_inter\_BMI 0.0036 0.074 0.048 0.961 -0.141 0.148

B\*38:01 0.1753 0.060 2.909 0.004 0.057 0.293

B\*38:01\_inter\_BMI -0.0033 0.124 -0.026 0.979 -0.246 0.240

A\*26:01 0.0145 0.040 0.363 0.716 -0.064 0.093

A\*26:01\_inter\_BMI 0.0178 0.082 0.217 0.829 -0.143 0.178

DRB1\*04:02 0.0607 0.064 0.949 0.343 -0.065 0.186

DRB1\*04:02\_inter\_BMI 0.1171 0.131 0.894 0.371 -0.140 0.374

DRB1\*03:01 0.2452 0.061 4.026 0.000 0.126 0.365

DRB1\*03:01\_inter\_BMI 0.0736 0.125 0.587 0.557 -0.172 0.319

C\*08:02 0.1103 0.185 0.595 0.552 -0.253 0.474

C\*08:02\_inter\_BMI 0.6816 0.433 1.572 0.116 -0.168 1.531

B\*14:02 0.0182 0.187 0.097 0.923 -0.349 0.386

B\*14:02\_inter\_BMI -0.5659 0.437 -1.296 0.195 -1.422 0.290

DRB1\*13:02 -0.1073 0.111 -0.964 0.335 -0.326 0.111

DRB1\*13:02\_inter\_BMI 0.5354 0.204 2.629 0.009 0.136 0.934

DRB1\*01:02 0.0548 0.086 0.634 0.526 -0.115 0.224

DRB1\*01:02\_inter\_BMI -0.0513 0.179 -0.286 0.775 -0.403 0.301

B\*18:01 0.0151 0.055 0.275 0.783 -0.093 0.123

B\*18:01\_inter\_BMI -0.0079 0.113 -0.070 0.944 -0.229 0.213

C\*12:02 -0.0590 0.080 -0.737 0.461 -0.216 0.098

C\*12:02\_inter\_BMI 0.1567 0.172 0.910 0.363 -0.181 0.494

A\*03:02 0.0189 0.041 0.465 0.642 -0.061 0.099

A\*03:02\_inter\_BMI 0.0614 0.082 0.749 0.454 -0.099 0.222

A\*11:01 0.0345 0.041 0.842 0.400 -0.046 0.115

A\*11:01\_inter\_BMI 0.0484 0.083 0.584 0.559 -0.114 0.211

B\*35:08 0.0159 0.057 0.281 0.779 -0.095 0.127

B\*35:08\_inter\_BMI 0.0435 0.115 0.379 0.705 -0.181 0.268

B\*52:01 0.0712 0.091 0.785 0.433 -0.107 0.249

B\*52:01\_inter\_BMI -0.1629 0.192 -0.849 0.396 -0.539 0.213

DRB1\*11:01 0.2280 0.048 4.701 0.000 0.133 0.323

DRB1\*11:01\_inter\_BMI -0.0976 0.099 -0.983 0.326 -0.292 0.097

A\*03:01 0.0654 0.042 1.567 0.117 -0.016 0.147

A\*03:01\_inter\_BMI 0.0913 0.083 1.098 0.272 -0.072 0.254

B\*44:03 0.2368 0.055 4.274 0.000 0.128 0.345

B\*44:03\_inter\_BMI -0.0774 0.114 -0.681 0.496 -0.300 0.145

C\*17:01 0.0531 0.085 0.627 0.530 -0.113 0.219

C\*17:01\_inter\_BMI 0.2042 0.187 1.092 0.275 -0.162 0.570

B\*35:02 0.0882 0.058 1.522 0.128 -0.025 0.202

B\*35:02\_inter\_BMI -0.0002 0.118 -0.001 0.999 -0.232 0.231

DQB1\*06:03 -0.0237 0.062 -0.385 0.700 -0.145 0.097

DQB1\*06:03\_inter\_BMI 0.1733 0.125 1.388 0.165 -0.071 0.418

B\*13:02 0.0892 0.066 1.347 0.178 -0.041 0.219

B\*13:02\_inter\_BMI -0.0130 0.134 -0.097 0.923 -0.276 0.250

C\*07:02 -0.0391 0.060 -0.652 0.515 -0.157 0.078

C\*07:02\_inter\_BMI 0.2257 0.123 1.835 0.067 -0.015 0.467

B\*35:01 0.0863 0.057 1.504 0.132 -0.026 0.199

B\*35:01\_inter\_BMI -0.0248 0.117 -0.212 0.832 -0.254 0.204

DQB1\*06:01 -0.0183 0.129 -0.142 0.887 -0.271 0.234

DQB1\*06:01\_inter\_BMI 0.0571 0.259 0.220 0.826 -0.451 0.565

DQB1\*06:04 0.1127 0.113 0.997 0.319 -0.109 0.334

DQB1\*06:04\_inter\_BMI -0.5266 0.209 -2.520 0.012 -0.936 -0.117

DRB1\*15:02 -0.0613 0.134 -0.457 0.648 -0.324 0.202

DRB1\*15:02\_inter\_BMI 0.1592 0.270 0.588 0.556 -0.371 0.689

DQB1\*05:03 -0.0374 0.112 -0.334 0.739 -0.257 0.182

DQB1\*05:03\_inter\_BMI 0.2591 0.231 1.123 0.261 -0.193 0.711

B\*08:01 0.0839 0.064 1.314 0.189 -0.041 0.209

B\*08:01\_inter\_BMI 0.1009 0.129 0.779 0.436 -0.153 0.355

DRB1\*04:03 -0.0401 0.066 -0.605 0.545 -0.170 0.090

DRB1\*04:03\_inter\_BMI 0.0276 0.137 0.201 0.841 -0.242 0.297

A\*32:01 0.1078 0.044 2.429 0.015 0.021 0.195

A\*32:01\_inter\_BMI -0.0500 0.091 -0.549 0.583 -0.228 0.129

DRB1\*14:01 -0.0269 0.113 -0.237 0.813 -0.249 0.195

DRB1\*14:01\_inter\_BMI -0.3396 0.235 -1.444 0.149 -0.800 0.121

B\*51:01 0.0424 0.069 0.616 0.538 -0.092 0.177

B\*51:01\_inter\_BMI -0.0373 0.141 -0.264 0.792 -0.314 0.239

B\*41:01 0.0893 0.085 1.046 0.296 -0.078 0.256

B\*41:01\_inter\_BMI -0.1937 0.186 -1.041 0.298 -0.558 0.171

DRB1\*15:01 -0.0344 0.106 -0.324 0.746 -0.243 0.174

DRB1\*15:01\_inter\_BMI -0.0199 0.220 -0.091 0.928 -0.451 0.411

A\*23:01 -0.0016 0.047 -0.034 0.973 -0.094 0.091

A\*23:01\_inter\_BMI 0.1267 0.096 1.315 0.189 -0.062 0.316

DRB1\*13:01 0.0229 0.075 0.305 0.760 -0.124 0.170

DRB1\*13:01\_inter\_BMI -0.2216 0.153 -1.451 0.147 -0.521 0.078

C\*02:02 -0.1230 0.070 -1.753 0.080 -0.261 0.014

C\*02:02\_inter\_BMI 0.2748 0.145 1.900 0.057 -0.009 0.558

B\*49:01 0.1291 0.063 2.034 0.042 0.005 0.253

B\*49:01\_inter\_BMI -0.1032 0.129 -0.798 0.425 -0.357 0.150

DQB1\*06:02 0.0434 0.109 0.398 0.691 -0.170 0.257

DQB1\*06:02\_inter\_BMI -0.0425 0.226 -0.188 0.851 -0.484 0.400

B\*44:02 0.0806 0.069 1.174 0.240 -0.054 0.215

B\*44:02\_inter\_BMI 0.1504 0.143 1.053 0.292 -0.130 0.430

DRB1\*10:01 0.1651 0.085 1.937 0.053 -0.002 0.332

DRB1\*10:01\_inter\_BMI -0.1861 0.178 -1.045 0.296 -0.535 0.163

A\*30:01 0.0464 0.049 0.938 0.348 -0.051 0.143

A\*30:01\_inter\_BMI 0.1305 0.100 1.309 0.190 -0.065 0.326

B\*50:01 0.0400 0.069 0.578 0.564 -0.096 0.176

B\*50:01\_inter\_BMI -0.0028 0.141 -0.020 0.984 -0.280 0.274

A\*33:01 0.0067 0.050 0.133 0.894 -0.092 0.105

A\*33:01\_inter\_BMI -0.0506 0.104 -0.485 0.628 -0.255 0.154

A\*29:01 0.0602 0.050 1.213 0.225 -0.037 0.158

A\*29:01\_inter\_BMI 0.0154 0.104 0.148 0.882 -0.188 0.219

B\*07:02 0.0058 0.072 0.081 0.936 -0.135 0.147

B\*07:02\_inter\_BMI 0.0351 0.146 0.241 0.810 -0.251 0.321

A\*68:02 -0.0298 0.050 -0.593 0.553 -0.128 0.069

A\*68:02\_inter\_BMI 0.0627 0.104 0.602 0.547 -0.141 0.267

A\*02:05 -0.0247 0.051 -0.481 0.631 -0.125 0.076

A\*02:05\_inter\_BMI -0.0528 0.108 -0.491 0.624 -0.264 0.158

B\*57:01 -0.0123 0.070 -0.175 0.861 -0.150 0.125

B\*57:01\_inter\_BMI 0.1477 0.144 1.024 0.306 -0.135 0.430

A\*02:02 -0.0263 0.057 -0.465 0.642 -0.137 0.085

A\*02:02\_inter\_BMI -0.0103 0.116 -0.089 0.929 -0.237 0.217

DQB1\*05:02 -0.0030 0.116 -0.026 0.979 -0.230 0.224

DQB1\*05:02\_inter\_BMI -0.1298 0.238 -0.546 0.585 -0.596 0.336

C\*15:02 0.0843 0.072 1.178 0.239 -0.056 0.225

C\*15:02\_inter\_BMI 0.1373 0.149 0.919 0.358 -0.155 0.430

DRB1\*13:03 0.1465 0.061 2.416 0.016 0.028 0.265

DRB1\*13:03\_inter\_BMI -0.1398 0.125 -1.119 0.263 -0.385 0.105

C\*05:01 0.1465 0.061 2.403 0.016 0.027 0.266

C\*05:01\_inter\_BMI -0.0386 0.131 -0.294 0.768 -0.295 0.218

C\*15:05 -0.0871 0.140 -0.624 0.533 -0.361 0.186

C\*15:05\_inter\_BMI 0.2383 0.281 0.847 0.397 -0.313 0.790

A\*30:02 -0.0619 0.057 -1.088 0.277 -0.174 0.050

A\*30:02\_inter\_BMI 0.1964 0.115 1.715 0.086 -0.028 0.421

C\*01:02 -0.1712 0.081 -2.119 0.034 -0.329 -0.013

C\*01:02\_inter\_BMI 0.2836 0.168 1.687 0.092 -0.046 0.613

B\*07:05 0.1243 0.140 0.888 0.375 -0.150 0.399

B\*07:05\_inter\_BMI -0.0771 0.282 -0.273 0.785 -0.630 0.476

B\*55:01 0.1889 0.089 2.128 0.033 0.015 0.363

B\*55:01\_inter\_BMI -0.1231 0.183 -0.672 0.501 -0.482 0.236

DQB1\*04:02 0.1074 0.094 1.141 0.254 -0.077 0.292

DQB1\*04:02\_inter\_BMI -0.2227 0.206 -1.079 0.280 -0.627 0.182

B\*15:17 0.0760 0.073 1.041 0.298 -0.067 0.219

B\*15:17\_inter\_BMI 0.0015 0.149 0.010 0.992 -0.290 0.293

B\*58:01 0.1936 0.072 2.681 0.007 0.052 0.335

B\*58:01\_inter\_BMI -0.1810 0.158 -1.148 0.251 -0.490 0.128

C\*16:04 8.238e-05 0.066 0.001 0.999 -0.129 0.129

C\*16:04\_inter\_BMI -0.0933 0.142 -0.659 0.510 -0.371 0.184

DRB1\*12:01 0.0621 0.060 1.032 0.302 -0.056 0.180

DRB1\*12:01\_inter\_BMI -0.0340 0.125 -0.271 0.786 -0.280 0.212

DRB1\*16:01 0.0055 0.123 0.044 0.965 -0.236 0.247

DRB1\*16:01\_inter\_BMI 0.2002 0.250 0.802 0.423 -0.289 0.690

DRB1\*13:05 0.0410 0.065 0.630 0.529 -0.086 0.168

DRB1\*13:05\_inter\_BMI -0.1681 0.137 -1.228 0.219 -0.436 0.100

A\*68:01 -0.0438 0.059 -0.739 0.460 -0.160 0.072

A\*68:01\_inter\_BMI 0.0006 0.123 0.005 0.996 -0.240 0.241

B\*41:02 -0.0260 0.100 -0.259 0.795 -0.223 0.171

B\*41:02\_inter\_BMI -0.0112 0.214 -0.052 0.958 -0.431 0.409

B\*53:01 0.0685 0.074 0.930 0.353 -0.076 0.213

B\*53:01\_inter\_BMI -0.1448 0.152 -0.951 0.342 -0.443 0.154

DQB1\*02:02 -0.1561 0.067 -2.318 0.020 -0.288 -0.024

DQB1\*02:02\_inter\_BMI -0.0542 0.139 -0.389 0.697 -0.327 0.219

C\*03:04 -0.2036 0.094 -2.168 0.030 -0.388 -0.020

C\*03:04\_inter\_BMI 0.2452 0.198 1.240 0.215 -0.142 0.633

DQB1\*06:09 0.0421 0.116 0.364 0.716 -0.184 0.269

DQB1\*06:09\_inter\_BMI -0.3930 0.217 -1.810 0.070 -0.819 0.033

DRB1\*04:04 0.0586 0.082 0.715 0.475 -0.102 0.219

DRB1\*04:04\_inter\_BMI 0.0092 0.177 0.052 0.959 -0.338 0.356

DRB1\*04:05 0.1161 0.075 1.547 0.122 -0.031 0.263

DRB1\*04:05\_inter\_BMI -0.0708 0.159 -0.446 0.656 -0.382 0.241

A\*25:01 0.2051 0.058 3.516 0.000 0.091 0.319

A\*25:01\_inter\_BMI -0.0501 0.126 -0.398 0.691 -0.297 0.197

C\*03:03 -0.1665 0.081 -2.048 0.041 -0.326 -0.007

C\*03:03\_inter\_BMI 0.2250 0.169 1.330 0.183 -0.107 0.557

DRB1\*01:01 0.0312 0.095 0.329 0.742 -0.155 0.217

DRB1\*01:01\_inter\_BMI -0.1343 0.198 -0.678 0.498 -0.523 0.254

DQB1\*03:03 0.0033 0.073 0.045 0.964 -0.140 0.146

DQB1\*03:03\_inter\_BMI -0.1448 0.155 -0.935 0.350 -0.448 0.159

B\*35:03 0.0660 0.074 0.886 0.375 -0.080 0.212

B\*35:03\_inter\_BMI 0.0873 0.151 0.580 0.562 -0.208 0.382

A\*66:01 0.0459 0.063 0.723 0.470 -0.079 0.170

A\*66:01\_inter\_BMI 0.0308 0.133 0.232 0.817 -0.230 0.291

DQB1\*03:05 0.1121 0.074 1.525 0.127 -0.032 0.256

DQB1\*03:05\_inter\_BMI -0.3024 0.160 -1.890 0.059 -0.616 0.011

A\*69:01 0.0872 0.069 1.266 0.206 -0.048 0.222

A\*69:01\_inter\_BMI 0.0191 0.143 0.133 0.894 -0.261 0.299

B\*40:01 0.2554 0.103 2.474 0.013 0.053 0.458

B\*40:01\_inter\_BMI -0.2843 0.220 -1.295 0.195 -0.715 0.146

C\*16:01 -0.0944 0.074 -1.275 0.202 -0.240 0.051

C\*16:01\_inter\_BMI 0.2548 0.155 1.644 0.100 -0.049 0.559

C\*16:02 -0.1163 0.105 -1.105 0.269 -0.322 0.090

C\*16:02\_inter\_BMI 0.3766 0.213 1.768 0.077 -0.041 0.794

A\*31:01 0.1156 0.065 1.782 0.075 -0.012 0.243

A\*31:01\_inter\_BMI -0.2868 0.147 -1.954 0.051 -0.574 0.001

A\*29:02 -0.0185 0.070 -0.265 0.791 -0.155 0.118

A\*29:02\_inter\_BMI 0.1696 0.141 1.204 0.228 -0.106 0.446

C\*14:02 -0.0665 0.093 -0.717 0.474 -0.248 0.115

C\*14:02\_inter\_BMI 0.3773 0.188 2.009 0.045 0.009 0.745

B\*15:01 0.1367 0.083 1.641 0.101 -0.027 0.300

B\*15:01\_inter\_BMI 0.1228 0.171 0.719 0.472 -0.212 0.457

B\*51:08 -0.0471 0.120 -0.394 0.694 -0.282 0.188

B\*51:08\_inter\_BMI -0.5019 0.256 -1.958 0.050 -1.004 0.001

C\*03:02 -0.0657 0.095 -0.693 0.488 -0.251 0.120

C\*03:02\_inter\_BMI -0.0259 0.213 -0.122 0.903 -0.443 0.392

B\*27:02 0.3492 0.094 3.729 0.000 0.166 0.533

B\*27:02\_inter\_BMI -0.2695 0.196 -1.375 0.169 -0.654 0.115

A\*24:03 0.0132 0.072 0.184 0.854 -0.127 0.153

A\*24:03\_inter\_BMI -0.1732 0.159 -1.088 0.276 -0.485 0.139

DRB1\*04:01 0.1156 0.078 1.474 0.140 -0.038 0.269

DRB1\*04:01\_inter\_BMI 0.0772 0.161 0.480 0.631 -0.238 0.393

C\*07:04 -0.0324 0.092 -0.350 0.726 -0.213 0.149

C\*07:04\_inter\_BMI -0.1312 0.204 -0.645 0.519 -0.530 0.268

B\*37:01 -0.1487 0.091 -1.640 0.101 -0.326 0.029

B\*37:01\_inter\_BMI 0.1144 0.185 0.617 0.537 -0.249 0.478

DRB1\*08:01 -0.0326 0.123 -0.265 0.791 -0.274 0.208

DRB1\*08:01\_inter\_BMI 0.0591 0.272 0.217 0.828 -0.474 0.592

A\*02:17 0.0389 0.087 0.444 0.657 -0.133 0.210

A\*02:17\_inter\_BMI 0.1614 0.170 0.951 0.342 -0.171 0.494

B\*15:03 0.3361 0.114 2.953 0.003 0.113 0.559

B\*15:03\_inter\_BMI -0.4685 0.261 -1.794 0.073 -0.980 0.043

A\*01:03 -0.0349 0.104 -0.335 0.737 -0.239 0.169

A\*01:03\_inter\_BMI 0.2887 0.207 1.397 0.162 -0.116 0.694

B\*27:05 0.1765 0.106 1.664 0.096 -0.031 0.384

B\*27:05\_inter\_BMI -0.0943 0.220 -0.428 0.668 -0.526 0.337

B\*40:02 -0.0427 0.102 -0.418 0.676 -0.243 0.158

B\*40:02\_inter\_BMI 0.0758 0.206 0.368 0.713 -0.328 0.479

A\*33:03 0.1162 0.089 1.310 0.190 -0.058 0.290

A\*33:03\_inter\_BMI 0.2515 0.181 1.393 0.164 -0.102 0.605

A\*30:04 0.1125 0.102 1.107 0.268 -0.087 0.312

A\*30:04\_inter\_BMI -0.0153 0.211 -0.072 0.942 -0.429 0.399

DRB1\*14:04 -0.2808 0.152 -1.842 0.065 -0.580 0.018

DRB1\*14:04\_inter\_BMI -0.0869 0.297 -0.293 0.770 -0.668 0.494

DRB1\*04:06 -0.2664 0.171 -1.556 0.120 -0.602 0.069

DRB1\*04:06\_inter\_BMI -0.2247 0.386 -0.582 0.561 -0.982 0.532

B\*39:01 0.2208 0.096 2.306 0.021 0.033 0.408

B\*39:01\_inter\_BMI -0.2855 0.219 -1.305 0.192 -0.714 0.143

DQB1\*03:04 0.2078 0.118 1.758 0.079 -0.024 0.439

DQB1\*03:04\_inter\_BMI -0.2038 0.260 -0.784 0.433 -0.713 0.306

DRB1\*08:04 -0.0930 0.143 -0.653 0.514 -0.372 0.186

DRB1\*08:04\_inter\_BMI 0.1060 0.288 0.368 0.713 -0.458 0.670

A\*31:08 0.0091 0.092 0.098 0.922 -0.171 0.190

A\*31:08\_inter\_BMI 0.1188 0.186 0.639 0.523 -0.246 0.483

DRB1\*11:03 0.1546 0.101 1.534 0.125 -0.043 0.352

DRB1\*11:03\_inter\_BMI 0.1139 0.205 0.555 0.579 -0.288 0.516

A\*24:07 -0.2317 0.131 -1.763 0.078 -0.489 0.026

A\*24:07\_inter\_BMI 0.7030 0.241 2.912 0.004 0.230 1.176

DRB1\*09:01 0.0222 0.125 0.178 0.859 -0.223 0.267

DRB1\*09:01\_inter\_BMI 0.3566 0.248 1.438 0.150 -0.129 0.843

B\*50:02 0.2039 0.171 1.190 0.234 -0.132 0.540

B\*50:02\_inter\_BMI 0.1857 0.350 0.531 0.596 -0.500 0.871

A\*24:17 0.1190 0.115 1.033 0.302 -0.107 0.345

A\*24:17\_inter\_BMI 0.1465 0.247 0.594 0.553 -0.337 0.630

B\*45:01 0.0699 0.126 0.555 0.579 -0.177 0.316

B\*45:01\_inter\_BMI -0.0289 0.254 -0.114 0.910 -0.527 0.469

B\*56:01 0.0899 0.137 0.659 0.510 -0.178 0.358

B\*56:01\_inter\_BMI -0.1787 0.291 -0.614 0.539 -0.749 0.392

C\*15:04 -0.1920 0.125 -1.539 0.124 -0.437 0.053

C\*15:04\_inter\_BMI 0.1404 0.269 0.522 0.601 -0.386 0.667

DRB1\*15:03 -0.6816 0.404 -1.687 0.092 -1.474 0.110

DRB1\*15:03\_inter\_BMI -0.0062 0.866 -0.007 0.994 -1.703 1.691

B\*44:05 0.2998 0.125 2.390 0.017 0.054 0.546

B\*44:05\_inter\_BMI -0.4336 0.266 -1.631 0.103 -0.955 0.088

B\*51:06 0.4356 0.125 3.473 0.001 0.190 0.681

B\*51:06\_inter\_BMI -0.0147 0.257 -0.057 0.954 -0.519 0.490

DRB1\*16:02 0.0062 0.168 0.037 0.971 -0.323 0.335

DRB1\*16:02\_inter\_BMI 0.3877 0.330 1.176 0.239 -0.258 1.034

DRB1\*01:03 0.1443 0.122 1.179 0.238 -0.096 0.384

DRB1\*01:03\_inter\_BMI -0.1529 0.260 -0.588 0.557 -0.663 0.357

C\*04:07 0.2705 0.160 1.693 0.090 -0.043 0.584

C\*04:07\_inter\_BMI -0.1024 0.365 -0.281 0.779 -0.817 0.612

A\*24:04 0.1996 0.115 1.736 0.082 -0.026 0.425

A\*24:04\_inter\_BMI -0.9124 0.365 -2.503 0.012 -1.627 -0.198

B\*73:01 -0.0299 0.202 -0.148 0.883 -0.427 0.367

B\*73:01\_inter\_BMI 0.0129 0.404 0.032 0.975 -0.780 0.806

DRB1\*04:08 -0.0973 0.155 -0.629 0.529 -0.401 0.206

DRB1\*04:08\_inter\_BMI 0.4456 0.324 1.377 0.169 -0.189 1.080

B\*39:06 -0.1679 0.155 -1.082 0.279 -0.472 0.136

B\*39:06\_inter\_BMI -0.2417 0.357 -0.677 0.499 -0.942 0.458

B\*48:01 -0.1568 0.456 -0.344 0.731 -1.050 0.736

B\*48:01\_inter\_BMI -0.0983 1.130 -0.087 0.931 -2.313 2.117

B\*27:07 0.3085 0.127 2.425 0.015 0.059 0.558

B\*27:07\_inter\_BMI -0.6698 0.312 -2.144 0.032 -1.282 -0.058

B\*40:06 0.2754 0.151 1.820 0.069 -0.021 0.572

B\*40:06\_inter\_BMI -0.6452 0.349 -1.848 0.065 -1.329 0.039

B\*57:03 0.1528 0.147 1.042 0.297 -0.135 0.440

B\*57:03\_inter\_BMI -0.1420 0.321 -0.442 0.659 -0.772 0.488

C\*14:03 -0.2074 0.156 -1.327 0.184 -0.514 0.099

C\*14:03\_inter\_BMI 0.3153 0.318 0.990 0.322 -0.309 0.939

B\*14:01 -0.2360 0.233 -1.012 0.311 -0.693 0.221

B\*14:01\_inter\_BMI -0.4251 0.524 -0.811 0.418 -1.453 0.603

C\*08:03 0.2305 0.486 0.474 0.636 -0.723 1.184

C\*08:03\_inter\_BMI -0.8356 1.203 -0.695 0.487 -3.193 1.522

B\*57:02 -0.1013 0.772 -0.131 0.896 -1.615 1.413

B\*57:02\_inter\_BMI 0.1955 1.559 0.125 0.900 -2.859 3.251

C\*18:01 0.1237 0.637 0.194 0.846 -1.125 1.372

C\*18:01\_inter\_BMI 0.5694 1.134 0.502 0.616 -1.653 2.792

DRB1\*04:07 0.3624 0.145 2.505 0.012 0.079 0.646

DRB1\*04:07\_inter\_BMI -0.4529 0.324 -1.397 0.162 -1.088 0.182

B\*47:01 -0.0718 0.184 -0.389 0.697 -0.433 0.290

B\*47:01\_inter\_BMI 0.5915 0.336 1.763 0.078 -0.066 1.249

DRB1\*12:02 -0.0699 0.205 -0.341 0.733 -0.471 0.331

DRB1\*12:02\_inter\_BMI -0.7214 0.516 -1.398 0.162 -1.733 0.290

A\*02:06 -0.2319 0.202 -1.145 0.252 -0.629 0.165

A\*02:06\_inter\_BMI 1.1577 0.454 2.551 0.011 0.268 2.047

DRB1\*08:03 -0.0561 0.172 -0.326 0.744 -0.393 0.281

DRB1\*08:03\_inter\_BMI -0.2246 0.378 -0.594 0.553 -0.966 0.517

B\*51:07 0.0591 0.191 0.310 0.757 -0.315 0.433

B\*51:07\_inter\_BMI -0.2368 0.378 -0.627 0.531 -0.977 0.503

A\*74:01 0.3220 0.263 1.222 0.222 -0.194 0.838

A\*74:01\_inter\_BMI -0.1675 0.531 -0.316 0.752 -1.208 0.873

DRB1\*11:02 0.0404 0.195 0.206 0.836 -0.343 0.423

DRB1\*11:02\_inter\_BMI 0.3063 0.366 0.836 0.403 -0.411 1.024

A\*34:02 -0.0373 0.218 -0.171 0.864 -0.465 0.390

A\*34:02\_inter\_BMI -0.4707 0.448 -1.052 0.293 -1.348 0.407

C\*08:01 0.2503 0.347 0.721 0.471 -0.430 0.931

C\*08:01\_inter\_BMI -0.6913 0.894 -0.773 0.439 -2.443 1.060

C\*02:10 0.0351 0.181 0.194 0.846 -0.319 0.390

C\*02:10\_inter\_BMI 0.6284 0.365 1.720 0.085 -0.088 1.344

DRB1\*14:06 4.505e-05 0.229 0.000 1.000 -0.448 0.448

DRB1\*14:06\_inter\_BMI 0.8407 0.377 2.230 0.026 0.102 1.579

B\*42:01 0.1658 0.229 0.723 0.470 -0.284 0.615

B\*42:01\_inter\_BMI 0.0941 0.461 0.204 0.838 -0.810 0.998

B\*13:01 0.2564 0.297 0.863 0.388 -0.326 0.839

B\*13:01\_inter\_BMI -0.9881 0.933 -1.059 0.290 -2.817 0.840

DQB1\*04:01 0.0293 0.279 0.105 0.916 -0.518 0.576

DQB1\*04:01\_inter\_BMI -0.1852 0.678 -0.273 0.785 -1.515 1.144

B\*15:16 -0.0513 0.223 -0.230 0.818 -0.489 0.387

B\*15:16\_inter\_BMI -0.2462 0.474 -0.520 0.603 -1.175 0.683

B\*15:10 0.1434 0.282 0.509 0.611 -0.409 0.696

B\*15:10\_inter\_BMI -1.1208 0.788 -1.423 0.155 -2.664 0.423

B\*39:10 -0.2097 0.371 -0.566 0.572 -0.936 0.517

B\*39:10\_inter\_BMI 0.7185 0.591 1.215 0.224 -0.440 1.877

A\*02:03 -1.8241 0.616 -2.962 0.003 -3.031 -0.617

A\*02:03\_inter\_BMI 1.5417 0.937 1.645 0.100 -0.295 3.378

A\*80:01 0.0582 0.226 0.258 0.797 -0.384 0.500

A\*80:01\_inter\_BMI 0.4332 0.429 1.009 0.313 -0.408 1.275

C\*04:03 0.2131 0.373 0.571 0.568 -0.518 0.945

C\*04:03\_inter\_BMI 0.3547 0.974 0.364 0.716 -1.555 2.264

B\*37:02 0.3301 0.246 1.342 0.180 -0.152 0.812

B\*37:02\_inter\_BMI 0.1273 0.524 0.243 0.808 -0.899 1.153

B\*15:18 0.4652 0.235 1.982 0.047 0.005 0.925

B\*15:18\_inter\_BMI 0.5296 0.489 1.083 0.279 -0.429 1.488

B\*38:02 0.9936 0.337 2.948 0.003 0.333 1.654

B\*38:02\_inter\_BMI -0.4348 0.801 -0.543 0.587 -2.005 1.135

B\*15:24 -0.2493 0.353 -0.707 0.480 -0.941 0.442

B\*15:24\_inter\_BMI -0.2485 0.711 -0.350 0.727 -1.642 1.145

B\*27:12 0.3449 0.299 1.153 0.249 -0.242 0.931

B\*27:12\_inter\_BMI -1.1600 0.793 -1.463 0.144 -2.714 0.394

A\*74:03 0.3231 0.747 0.432 0.665 -1.141 1.788

A\*74:03\_inter\_BMI -8.0074 110.845 -0.072 0.942 -225.260 209.246

DRB1\*08:02 0.2518 0.322 0.782 0.434 -0.379 0.883

DRB1\*08:02\_inter\_BMI 0.7049 0.569 1.239 0.215 -0.410 1.820

B\*15:29 -0.3349 0.433 -0.774 0.439 -1.183 0.513

B\*15:29\_inter\_BMI 0.6279 0.713 0.880 0.379 -0.770 2.026

B\*48:04 0.2115 0.500 0.423 0.672 -0.768 1.191

B\*48:04\_inter\_BMI -15.7281 3619.402 -0.004 0.997 -7109.625 7078.169

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