**Supplemental Table S2.** Top scoring 200 SNP-BN models in the TGen dataset. (MA: minor allele, Chr: chromosome number)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Rank | Known SNP | MA | Dataset SNP | MA | Chr. |
| 1 | rs429358 | T | rs7412 | T | 19 |
| 2 | rs2373115 | A | rs7412 | T | 19 |
| 3 | rs574695 | C | rs7412 | T | 19 |
| 4 | rs676309 | C | rs7412 | T | 19 |
| 5 | rs6656401 | T | rs7412 | T | 19 |
| 6 | rs7110631 | C | rs7412 | T | 19 |
| 7 | rs726601 | T | rs7412 | T | 19 |
| 8 | rs1049296 | T | rs7412 | T | 19 |
| 9 | rs9296558 | T | rs7412 | T | 19 |
| 10 | rs429358 | T | rs4420638 | G | 19 |
| 11 | rs429358 | T | rs7079348 | T | 10 |
| 12 | rs429358 | T | rs16967491 | T | 15 |
| 13 | rs429358 | T | rs6717497 | G | 2 |
| 14 | rs429358 | T | rs1950636 | A | 14 |
| 15 | rs429358 | T | rs10499687 | T | 7 |
| 16 | rs429358 | T | rs2122339 | A | 4 |
| 17 | rs429358 | T | rs3760114 | C | 16 |
| 18 | rs429358 | T | rs17126808 | G | 8 |
| 19 | rs429358 | T | rs2517509 | T | 6 |
| 20 | rs429358 | T | rs3732443 | G | 3 |
| 21 | rs429358 | T | rs2779550 | T | 9 |
| 22 | rs429358 | T | rs12671823 | T | 7 |
| 23 | rs429358 | T | rs383407 | G | 10 |
| 24 | rs429358 | T | rs16892852 | C | 8 |
| 25 | rs429358 | T | rs17013939 | A | 2 |
| 26 | rs429358 | T | rs910171 | C | 6 |
| 27 | rs429358 | T | rs4300052 | G | 9 |
| 28 | rs429358 | T | rs746767 | G | 1 |
| 29 | rs429358 | T | rs4408717 | G | 2 |
| 30 | rs429358 | T | rs2739771 | T | 15 |
| 31 | rs429358 | T | rs11170573 | A | 12 |
| 32 | rs429358 | T | rs6018172 | C | 20 |
| 33 | rs429358 | T | rs934745 | G | 18 |
| 34 | rs429358 | T | rs17756423 | G | 2 |
| 35 | rs429358 | T | rs7817227 | T | 8 |
| 36 | rs2373115 | A | rs4420638 | G | 19 |
| 37 | rs429358 | T | rs10508364 | G | 10 |
| 38 | rs429358 | T | rs11985044 | G | 8 |
| 39 | rs429358 | T | rs13044152 | A | 20 |
| 40 | rs429358 | T | rs17280356 | C | 5 |
| 41 | rs429358 | T | rs1210715 | T | 22 |
| 42 | rs429358 | T | rs16846058 | G | 1 |
| 43 | rs429358 | T | rs41479848 | G | 14 |
| 44 | rs429358 | T | rs1396702 | T | 16 |
| 45 | rs429358 | T | rs6486444 | G | 12 |
| 46 | rs429358 | T | rs903639 | T | 4 |
| 47 | rs429358 | T | rs4362167 | G | 11 |
| 48 | rs429358 | T | rs41412544 | G | 1 |
| 49 | rs429358 | T | rs13333829 | C | 16 |
| 50 | rs429358 | T | rs16909497 | T | 10 |
| 51 | rs429358 | T | rs17064302 | T | 8 |
| 52 | rs429358 | T | rs6508182 | C | 18 |
| 53 | rs429358 | T | rs6593919 | A | 1 |
| 54 | rs429358 | T | rs4356530 | A | 17 |
| 55 | rs429358 | T | rs16938663 | T | 8 |
| 56 | rs429358 | T | rs816470 | A | 5 |
| 57 | rs429358 | T | rs12535674 | C | 7 |
| 58 | rs429358 | T | rs7236694 | T | 18 |
| 59 | rs429358 | T | rs4394475 | C | 9 |
| 60 | rs429358 | T | rs17209127 | A | 11 |
| 61 | rs429358 | T | rs2140641 | A | 7 |
| 62 | rs429358 | T | rs17048904 | A | 4 |
| 63 | rs429358 | T | rs16903767 | T | 5 |
| 64 | rs429358 | T | rs6583904 | A | 10 |
| 65 | rs429358 | T | rs16974268 | C | 15 |
| 66 | rs429358 | T | rs17330779 | A | 7 |
| 67 | rs429358 | T | rs230305 | T | 1 |
| 68 | rs429358 | T | rs7198681 | C | 16 |
| 69 | rs429358 | T | rs7585710 | C | 2 |
| 70 | rs429358 | T | rs17151584 | G | 10 |
| 71 | rs429358 | T | rs7097398 | T | 10 |
| 72 | rs429358 | T | rs7979117 | A | 12 |
| 73 | rs429358 | T | rs1553903 | G | 4 |
| 74 | rs429358 | T | rs4771333 | C | 13 |
| 75 | rs429358 | T | rs188429 | T | 9 |
| 76 | rs429358 | T | rs9879473 | T | 3 |
| 77 | rs429358 | T | rs11842721 | A | 13 |
| 78 | rs429358 | T | rs12942139 | T | 17 |
| 79 | rs429358 | T | rs6094514 | T | 20 |
| 80 | rs429358 | T | rs7277699 | A | 21 |
| 81 | rs429358 | T | rs2522 | G | 10 |
| 82 | rs429358 | T | rs9562355 | A | 13 |
| 83 | rs429358 | T | rs17831322 | A | 8 |
| 84 | rs429358 | T | rs9982394 | T | 21 |
| 85 | rs429358 | T | rs10905444 | G | 10 |
| 86 | rs429358 | T | rs10115381 | C | 9 |
| 87 | rs429358 | T | rs12658567 | G | 5 |
| 88 | rs429358 | T | rs10517069 | C | 4 |
| 89 | rs429358 | T | rs11096511 | T | 2 |
| 90 | rs429358 | T | rs16967411 | G | 13 |
| 91 | rs429358 | T | rs17407781 | G | 10 |
| 92 | rs429358 | T | rs12673707 | A | 7 |
| 93 | rs429358 | T | rs17710010 | G | 14 |
| 94 | rs429358 | T | rs2184380 | T | 10 |
| 95 | rs429358 | T | rs11625439 | A | 14 |
| 96 | rs429358 | T | rs475093 | G | 1 |
| 97 | rs429358 | T | rs6972352 | T | 7 |
| 98 | rs429358 | T | rs7001472 | A | 8 |
| 99 | rs429358 | T | rs2374656 | G | 12 |
| 100 | rs429358 | T | rs573399 | A | 18 |
| 101 | rs429358 | T | rs16967391 | T | 13 |
| 102 | rs429358 | T | rs41461248 | A | 4 |
| 103 | rs429358 | T | rs17475512 | G | 7 |
| 104 | rs429358 | T | rs868535 | A | 10 |
| 105 | rs429358 | T | rs8119865 | C | 20 |
| 106 | rs429358 | T | rs16942981 | C | 18 |
| 107 | rs429358 | T | rs1983539 | G | 3 |
| 108 | rs429358 | T | rs2428192 | A | 6 |
| 109 | rs429358 | T | rs2913719 | C | 5 |
| 110 | rs429358 | T | rs3007246 | T | 13 |
| 111 | rs429358 | T | rs17139138 | A | 7 |
| 112 | rs429358 | T | rs4379923 | C | 13 |
| 113 | rs429358 | T | rs10824310 | T | 10 |
| 114 | rs429358 | T | rs17226741 | C | 16 |
| 115 | rs429358 | T | rs17473848 | C | 8 |
| 116 | rs429358 | T | rs11600112 | C | 11 |
| 117 | rs429358 | T | rs582790 | G | 11 |
| 118 | rs429358 | T | rs623758 | A | 9 |
| 119 | rs429358 | T | rs2333612 | C | 14 |
| 120 | rs429358 | T | rs9838256 | G | 3 |
| 121 | rs429358 | T | rs2225741 | T | 9 |
| 122 | rs429358 | T | rs4658692 | C | 1 |
| 123 | rs429358 | T | rs1671413 | T | 8 |
| 124 | rs429358 | T | rs12050816 | C | 15 |
| 125 | rs429358 | T | rs1275996 | G | 2 |
| 126 | rs429358 | T | rs10272660 | G | 7 |
| 127 | rs429358 | T | rs17048190 | G | 2 |
| 128 | rs429358 | T | rs4565533 | G | 9 |
| 129 | rs429358 | T | rs11694103 | A | 2 |
| 130 | rs429358 | T | rs6035760 | C | 20 |
| 131 | rs429358 | T | rs10976715 | G | 9 |
| 132 | rs429358 | T | rs313142 | G | 4 |
| 133 | rs429358 | T | rs6453333 | G | 5 |
| 134 | rs429358 | T | rs1022055 | G | 5 |
| 135 | rs429358 | T | rs3118548 | A | 9 |
| 136 | rs429358 | T | rs10406148 | A | 19 |
| 137 | rs429358 | T | rs6550942 | T | 3 |
| 138 | rs429358 | T | rs4669836 | A | 2 |
| 139 | rs429358 | T | rs7077757 | T | 10 |
| 140 | rs429358 | T | rs10905447 | C | 10 |
| 141 | rs429358 | T | rs11118165 | A | 1 |
| 142 | rs429358 | T | rs7299181 | T | 12 |
| 143 | rs429358 | T | rs215924 | T | 6 |
| 144 | rs429358 | T | rs17279525 | G | 1 |
| 145 | rs429358 | T | rs4780141 | T | 15 |
| 146 | rs429358 | T | rs6747871 | G | 2 |
| 147 | rs429358 | T | rs1477599 | C | 15 |
| 148 | rs429358 | T | rs1345186 | T | 3 |
| 149 | rs429358 | T | rs752123 | A | 2 |
| 150 | rs429358 | T | rs1038891 | A | 11 |
| 151 | rs429358 | T | rs1021135 | G | 3 |
| 152 | rs429358 | T | rs16847008 | G | 2 |
| 153 | rs429358 | T | rs10823349 | A | 10 |
| 154 | rs429358 | T | rs17170955 | T | 7 |
| 155 | rs429358 | T | rs17119283 | A | 11 |
| 156 | rs429358 | T | rs16941373 | T | 17 |
| 157 | rs429358 | T | rs17041561 | C | 2 |
| 158 | rs429358 | T | rs2242452 | G | 10 |
| 159 | rs429358 | T | rs41495846 | C | 19 |
| 160 | rs429358 | T | rs641205 | A | 18 |
| 161 | rs429358 | T | rs6536071 | C | 4 |
| 162 | rs429358 | T | rs16940197 | T | 15 |
| 163 | rs429358 | T | rs17151710 | T | 5 |
| 164 | rs429358 | T | rs17216650 | G | 3 |
| 165 | rs429358 | T | rs17104648 | G | 10 |
| 166 | rs429358 | T | rs543352 | A | 13 |
| 167 | rs429358 | T | rs4749805 | T | 10 |
| 168 | rs429358 | T | rs2779556 | A | 9 |
| 169 | rs429358 | T | rs10466295 | C | 10 |
| 170 | rs429358 | T | rs10513196 | A | 3 |
| 171 | rs429358 | T | rs1325874 | T | 10 |
| 172 | rs429358 | T | rs877196 | C | 12 |
| 173 | rs429358 | T | rs4964503 | C | 12 |
| 174 | rs429358 | T | rs2615994 | T | 1 |
| 175 | rs429358 | T | rs11038071 | A | 11 |
| 176 | rs429358 | T | rs4852482 | A | 2 |
| 177 | rs429358 | T | rs16912248 | C | 9 |
| 178 | rs429358 | T | rs223226 | C | 1 |
| 179 | rs429358 | T | rs4404123 | A | 17 |
| 180 | rs429358 | T | rs17452064 | C | 10 |
| 181 | rs429358 | T | rs5999604 | A | 22 |
| 182 | rs429358 | T | rs11900757 | G | 2 |
| 183 | rs429358 | T | rs10509602 | C | 10 |
| 184 | rs429358 | T | rs7232965 | G | 18 |
| 185 | rs429358 | T | rs16936670 | C | 8 |
| 186 | rs429358 | T | rs7904521 | A | 10 |
| 187 | rs429358 | T | rs8110293 | G | 19 |
| 188 | rs429358 | T | rs16856031 | A | 2 |
| 189 | rs429358 | T | rs12430052 | G | 13 |
| 190 | rs429358 | T | rs4749807 | G | 10 |
| 191 | rs429358 | T | rs17115455 | A | 1 |
| 192 | rs429358 | T | rs16905332 | A | 8 |
| 193 | rs429358 | T | rs10510121 | T | 10 |
| 194 | rs429358 | T | rs11832371 | A | 12 |
| 195 | rs429358 | T | rs7838203 | G | 8 |
| 196 | rs429358 | T | rs17160942 | T | 7 |
| 197 | rs429358 | T | rs7582851 | A | 2 |
| 198 | rs429358 | T | rs4666189 | T | 2 |
| 199 | rs429358 | T | rs4778564 | C | 15 |
| 200 | rs429358 | T | rs6972615 | G | 7 |