

Table S1. Results of univariate screening of variants vs PFS

| SNP | Missing Genotypes | | Cox Regression ¹ | Trend Test | Exact Trend Test | Log-rank Test |
|------------|-------------------|----|-----------------------------|--------------|------------------|---------------|
| | N<6 | N= | | | | |
| rs735320 | | y | 0.001 | 0.001 | 0.003 | 0.002 |
| rs171248 | | | 0.002 | 0.002 | 0.006 | 0.003 |
| rs1789915 | | | 0.002 | 0.002 | 0.007 | 0.010 |
| rs207440 | | y | 0.003 | 0.009 | 0.035 | 0.008 |
| rs149738 | | | 0.005 | 0.004 | 0.017 | 0.014 |
| rs7483 | | | 0.005 | 0.005 | 0.003 | 0.0004 |
| rs533486 | | | 0.006 | 0.004 | 0.017 | 0.014 |
| rs16947 | | | 0.009 | 0.007 | 0.027 | 0.013 |
| rs13959 | | | 0.010 | 0.008 | 0.028 | 0.018 |
| rs1541290 | | | 0.011 | 0.009 | 0.025 | 0.009 |
| rs1051640 | | y | 0.021 | 0.037 | 0.11 | 0.008 |
| rs7889839 | | y | 0.032 | 0.017 | 0.018 | 0.006 |
| rs7886938 | | y | 0.032 | 0.017 | 0.018 | 0.006 |
| rs2266780 | | y | 0.045 | 0.041 | 0.034 | 0.014 |
| rs279942 | | | 0.017 | 0.015 | 0.038 | |
| rs183574 | | | 0.017 | 0.016 | 0.044 | |
| rs6851610 | | y | 0.019 | 0.029 | 0.096 | |
| rs11584174 | | y | 0.025 | 0.039 | 0.035 | |
| rs8187755 | | y | 0.029 | 0.066 | 0.13 | |
| rs4149057 | | | 0.039 | 0.036 | 0.040 | |
| rs6162 | | | 0.048 | 0.079 | 0.058 | |
| rs1042640 | | y | 0.036 | 0.033 | | 0.025 |
| rs17064 | | y | 0.044 | 0.037 | | 0.019 |
| rs188096 | | y | 0.047 | 0.039 | | 0.038 |
| rs2291075 | | | 0.017 | 0.015 | | |
| rs12179 | | | 0.025 | 0.023 | | |
| rs1080983 | | | 0.026 | 0.027 | | |
| rs1049793 | | | 0.032 | 0.029 | | |
| rs10929303 | | | 0.034 | 0.030 | | |
| rs1135840 | | | 0.034 | 0.031 | | |
| rs1800566 | | | 0.035 | 0.030 | | |
| rs1061040 | | y | 0.035 | 0.031 | | |
| rs903247 | | | 0.037 | 0.033 | | |
| rs3756067 | | | 0.039 | 0.036 | | |
| rs11249460 | | | 0.041 | 0.036 | | |
| rs2302387 | | | 0.041 | 0.037 | | |

| | | | | | |
|------------|----|---|--------------|-------|----------------------------|
| rs12727968 | | y | 0.044 | 0.039 | |
| rs3788010 | | | 0.044 | 0.041 | |
| rs17216275 | | y | 0.001 | | 0.048 |
| rs3862476 | | | 0.002 | | 0.003 |
| rs4986782 | | y | 0.002 | | 0.057 |
| rs45446698 | | y | 0.005 | | 0.020 |
| rs67807361 | 45 | y | 0.005 | | 0.088 |
| rs45494802 | | y | 0.006 | | 0.021 |
| rs3765534 | | y | 0.008 | | 0.16 |
| rs8191439 | | y | 0.009 | | 0.059 |
| rs4148768 | | | 0.010 | | 0.007 |
| rs45467892 | 13 | y | 0.011 | | 0.032 |
| rs67944833 | | y | 0.011 | | 0.058 |
| rs67944833 | | y | 0.011 | | 0.058 |
| rs57633837 | 40 | | 0.013 | | 0.010 |
| rs741817 | | y | 0.013 | | 0.012 |
| rs7798757 | | y | 0.016 | | 0.012 |
| rs7899457 | | y | 0.016 | | 0.039 |
| rs8187706 | | y | 0.016 | | 0.039 |
| rs1783811 | | y | 0.016 | | 0.049 |
| rs28399499 | | y | 0.018 | | 0.051 |
| rs8187838 | | | 0.022 | | 0.016 |
| rs4148942 | | y | 0.027 | | 0.013 |
| rs5769 | | y | 0.027 | | 0.16 |
| rs915909 | | y | 0.029 | | 0.014 |
| rs41303343 | | | 0.030 | | 0.019 |
| rs1051752 | | y | 0.030 | | 0.022 |
| rs7623741 | | y | 0.030 | | 0.27 |
| rs16975056 | | y | 0.033 | | 0.018 |
| rs10770865 | | y | 0.033 | | 0.13 |
| rs8177517 | | y | 0.033 | | 0.13 |
| rs9457846 | | y | 0.033 | | 0.13 |
| rs8187737 | | y | 0.039 | | 0.027 |
| rs4808326 | | | 0.039 | | 0.033 |
| rs7334118 | | y | 0.047 | | 0.034 |
| rs28399454 | | y | 0.049 | | 0.019 |
| rs6196 | | y | | 0.019 | 0.0002 0.001 |
| rs2032588 | | y | | 0.047 | 0.020 |
| rs4149056 | | y | | 0.081 | 0.009 |
| rs2762934 | | y | | 0.11 | 0.040 |
| | | | | | 0.32 |

| | | | | | |
|------------|----|---|-------|--------------|--------------|
| rs2470890 | | | 0.12 | 0.006 | 0.002 |
| rs3731722 | | y | 0.51 | 0.059 | 0.31 |
| rs2053098 | | | 0.047 | 0.015 | |
| rs55802895 | | y | 0.22 | 0.059 | |
| rs886205 | | | 0.44 | 0.005 | |
| rs2276299 | | y | 0.45 | 0.065 | |
| rs2267665 | | y | 0.045 | | 0.048 |
| rs1003973 | | y | 0.047 | | 0.049 |
| rs2038067 | | y | 0.047 | | 0.049 |
| rs2267669 | | y | 0.047 | | 0.049 |
| rs2306283 | | | 0.047 | | |
| rs6980478 | | y | | 0.026 | 0.044 |
| rs1229983 | | y | | 0.036 | 0.029 |
| rs6163 | | | | 0.015 | |
| rs3770603 | | y | | 0.015 | |
| rs6792261 | | y | | 0.017 | |
| rs13119049 | | | | 0.020 | |
| rs13142440 | | | | 0.021 | |
| rs1064349 | 27 | y | | 0.021 | |
| rs17036104 | | y | | 0.021 | |
| rs3731680 | | y | | 0.021 | |
| rs998383 | | | | 0.023 | |
| rs2297809 | | y | | 0.023 | |
| rs2644905 | | y | | 0.024 | |
| rs4986907 | | y | | 0.024 | |
| rs6193 | | y | | 0.024 | |
| rs8187722 | | y | | 0.024 | |
| rs1800822 | | | | 0.026 | |
| rs1517618 | | y | | 0.027 | |
| rs10046 | | | | 0.032 | |
| rs1884725 | | y | | 0.034 | |
| rs6965343 | | | | 0.035 | |
| rs1056892 | | | | 0.038 | |
| rs743572 | | | | 0.038 | |
| rs3748930 | | | | 0.040 | |
| rs700518 | | | | 0.040 | |
| rs4783745 | | y | | 0.041 | |
| rs4148949 | | y | | 0.042 | |
| rs55676788 | | | | 0.044 | |
| rs2277624 | | | | 0.045 | |

| | | |
|------------|---|-------|
| rs4148951 | | 0.046 |
| rs7072219 | | 0.046 |
| rs3842 | y | 0.15 |
| rs17863783 | y | 0.17 |
| rs11678615 | y | 0.25 |

¹P-value calculated by the Chi-square test.