

Additional File 4. Information on the genic locations of the genetic polymorphisms nominally ($p < 1.0 \times 10^{-5}$) associated with the outcomes.

| Group/Outcome | Locus (dbSNP (1)) | Gene name (Entrez Gene (2)) | Gene ID (Entrez Gene (2)) | Gene type (Entrez Gene (2)) | SNP | Chr | Position |
|---------------|-------------------|---|------------------------------|-------------------------------------|------------|-----|-----------|
| MSS/MSI-L-OS | LOC101928923 | LOC101928923 | 101928923 | non-coding RNA (uncharacterized) | rs17087282 | 6 | 156588020 |
| MSS/MSI-L-OS | DPP10 | dipeptidyl-peptidase 10 | 57628 | protein-coding (non- functional) | rs17048372 | 2 | 115213756 |
| MSS/MSI-L-OS | n/a (intergenic) | n/a | n/a | n/a | rs1998584 | 9 | 13704539 |
| MSS/MSI-L-OS | LOC101928923 | uncharacterized LOC101928923 | 101928923 | non-coding RNA (uncharacterized) | rs6917119 | 6 | 156585838 |
| MSS/MSI-L-OS | LINC01121 | long intergenic non-protein coding RNA 1121 | 400952 | non-coding RNA | rs6720296 | 2 | 45408269 |
| MSS/MSI-L-OS | n/a (intergenic) | n/a | n/a | n/a | rs992457 | 9 | 13705882 |
| MSS/MSI-L-OS | n/a (intergenic) | n/a | n/a | n/a | rs12187751 | 5 | 162585645 |
| MSS/MSI-L-OS | n/a (intergenic) | n/a | n/a | n/a | rs1573948 | 6 | 6786425 |
| MSS/MSI-L-OS | n/a (intergenic) | n/a | n/a | n/a | rs1590404 | 9 | 13697152 |
| MSS/MSI-L-OS | n/a (intergenic) | n/a | n/a | n/a | rs10040610 | 5 | 6353815 |
| MSS/MSI-L-OS | GRIA1 | glutamate receptor, ionotropic, AMPA 1 | 2890 | protein coding | rs1493383 | 5 | 152991398 |
| MSS/MSI-L-OS | HCN1 | hyperpolarization activated cyclic nucleotide-gated potassium channel 1 | 348980 | protein coding | rs13180087 | 5 | 45265768 |
| MSS/MSI-L-DFS | LINC01121 | long intergenic non-protein coding RNA 1121 | 400952 | non-coding RNA | rs6720296 | 2 | 45408269 |
| MSS/MSI-L-DFS | n/a (intergenic) | n/a | n/a | n/a | rs1407508 | 9 | 101644538 |
| MSS/MSI-L-DFS | n/a (intergenic) | n/a | n/a | n/a | rs912294 | 13 | 31698294 |
| colon-OS | n/a (intergenic) | n/a | n/a | n/a | rs4812219 | 20 | 59422971 |
| colon-OS | ISM1 | isthmin 1, angiogenesis inhibitor | 140862 | protein coding | rs6105057 | 20 | 13229326 |
| colon-OS | ISM1 | isthmin 1, angiogenesis inhibitor | 140862 | protein coding | rs6134830 | 20 | 13225350 |

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|------------|------------------|---|-----------|---------------------------------|------------|----|-----------|
| colon-OS | HCN1 | hyperpolarization activated cyclic nucleotide-gated potassium channel 1 | 348980 | protein coding | rs13180087 | 5 | 45265768 |
| colon-OS | n/a (intergenic) | n/a | n/a | n/a | rs17325431 | 23 | 148462072 |
| colon-OS | ISM1 | isthmin 1, angiogenesis inhibitor | 140862 | protein coding | rs6109769 | 20 | 13216257 |
| colon-OS | DSG3 | desmoglein 3 | 1830 | protein coding | rs3794924 | 18 | 29041734 |
| colon-OS | n/a (intergenic) | n/a | n/a | n/a | rs10921219 | 1 | 192587863 |
| colon-OS | n/a (intergenic) | n/a | n/a | n/a | rs10733072 | 1 | 192596512 |
| colon-OS | n/a (intergenic) | n/a | n/a | n/a | rs17280262 | 14 | 97053924 |
| colon-OS | DPP10 | dipeptidyl-peptidase 10 | 57628 | protein-coding (non-functional) | rs17048372 | 2 | 115213756 |
| colon-OS | DSG3 | desmoglein 3 | 1830 | protein coding | rs8091481 | 18 | 29051677 |
| colon-OS | n/a (intergenic) | n/a | n/a | n/a | rs12062810 | 1 | 192569804 |
| colon-OS | PARVG | parvin, gamma | 64098 | protein coding | rs139156 | 22 | 44596085 |
| colon-OS | n/a (intergenic) | n/a | n/a | n/a | rs4844011 | 23 | 148392640 |
| colon-DFS | n/a (intergenic) | n/a | n/a | n/a | rs17280262 | 14 | 97053924 |
| colon-DFS | n/a (intergenic) | n/a | n/a | n/a | rs8035094 | 15 | 33564482 |
| colon-DFS | C20orf27 | chromosome 20 open reading frame 27 | 54976 | protein coding | rs658495 | 20 | 3737495 |
| rectum-OS | n/a (intergenic) | n/a | n/a | n/a | rs17026425 | 4 | 150672514 |
| rectum-OS | n/a (intergenic) | n/a | n/a | n/a | rs6854845 | 4 | 75746665 |
| rectum-OS | n/a (intergenic) | n/a | n/a | n/a | rs157411 | 5 | 67294907 |
| rectum-OS | EFR3A | EFR3 homolog A (S. cerevisiae) | 23167 | protein coding | rs7004484 | 8 | 132934538 |
| rectum-OS | n/a (intergenic) | n/a | n/a | n/a | rs338389 | 15 | 68260008 |
| rectum-OS | n/a (intergenic) | n/a | n/a | n/a | rs1555895 | 10 | 837407 |
| rectum-OS | n/a (intergenic) | n/a | n/a | n/a | rs16867335 | 2 | 181458934 |
| rectum-OS | n/a (intergenic) | n/a | n/a | n/a | rs6739798 | 2 | 181465853 |
| rectum-OS | n/a (intergenic) | n/a | n/a | n/a | rs1573948 | 6 | 6786425 |
| rectum-OS | n/a (intergenic) | n/a | n/a | n/a | rs10152207 | 15 | 38129779 |
| rectum-OS | n/a (intergenic) | n/a | n/a | n/a | rs1827439 | 15 | 38123182 |
| rectum-OS | n/a (intergenic) | n/a | n/a | n/a | rs10153021 | 15 | 38123785 |
| rectum-DFS | n/a (intergenic) | n/a | n/a | n/a | rs1570271 | 10 | 115288501 |
| rectum-DFS | AC011343.1 | uncharacterized LOC101927766 | 101927766 | non-coding RNA | rs17057166 | 5 | 159248014 |
| rectum-DFS | n/a (intergenic) | n/a | n/a | n/a | rs4868304 | 5 | 173131457 |

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|------------|-------------------|--|-------|----------------|------------|----|-----------|
| rectum-DFS | n/a (intergenic) | n/a | n/a | n/a | rs6854845 | 4 | 75746665 |
| rectum-DFS | SLC22A23 | solute carrier family 22, member 23 | 63027 | protein coding | rs4959799 | 6 | 3295028 |
| rectum-DFS | n/a (intergenic) | n/a | n/a | n/a | rs11138220 | 9 | 82060528 |
| rectum-DFS | n/a (intergenic) | n/a | n/a | n/a | rs11138231 | 9 | 82066164 |
| rectum-DFS | n/a (intergenic) | n/a | n/a | n/a | rs1015311 | 9 | 82078454 |
| rectum-DFS | n/a (intergenic) | n/a | n/a | n/a | rs11138250 | 9 | 82083082 |
| rectum-DFS | n/a (intergenic) | n/a | n/a | n/a | rs10491791 | 9 | 82096194 |
| rectum-DFS | n/a (intergenic) | n/a | n/a | n/a | rs13286432 | 9 | 82098952 |
| rectum-DFS | n/a (intergenic) | n/a | n/a | n/a | rs1890836 | 9 | 82119180 |
| rectum-DFS | *n/a (intergenic) | n/a | n/a | n/a | rs10275272 | 7 | 19160897 |
| rectum-DFS | ANO1 | anoctamin 1, calcium activated chloride channel | 55107 | protein coding | rs3781663 | 11 | 69999252 |
| rectum-DFS | n/a (intergenic) | n/a | n/a | n/a | rs9419702 | 10 | 133531153 |
| rectum-DFS | n/a (intergenic) | n/a | n/a | n/a | rs11138252 | 9 | 82087111 |

Chr: chromosome, DFS: disease-free survival, MSS: microsatellite stable, MSI-L: microsatellite instability-low, n/a: not available, OS: overall survival, SNP: single nucleotide polymorphism. *close to a gene.

References

- (1) Sherry ST, Ward MH, Kholodov M, Baker J, Phan L, Smigielski EM, et al. dbSNP: the NCBI database of genetic variation. Nucleic Acids Res 2001 Jan 1;29(1):308-311.
- (2) Maglott D, Ostell J, Pruitt KD, Tatusova T. Entrez Gene: gene-centered information at NCBI. Nucleic Acids Res 2011 Jan;39(Database issue):D52-7.