

Table S1. List of genes studied

MTHFR, SDHB, MUTYH, RAD54L, PTGFR, DPYD, GSTM1, CHRNB2, FDPS, SDHC, FCGR2A, FCGR3A, F5, SERPINC1, CYB5R1, EPHX1, PARP1, EPCAM, MSH2, MSH6, FANCL, GGCX, BUB1, PROC, POLD1, BARD1, ATIC, UGT1A9, UGT1A4, UGT1A1, FANCD2, VHL, MLH1, BAP1, PROS1, UMPS, ATR, ADD1, PDGFRA, KIT, UGT2B15, UGT2B10, COQ2, FAM175A, ABCG2, EGF, FASTKD3, MTRR, HTR1A, HMGCR, APC, RAD50, CTNNA1, SPINK1, ADRB2, TNF, FANCE, FKBP5, KIF6, CYB5R4, OPRM1, SOD2, LPA, PMS2, CRHR2, EGFR, ASL, SEMA3C, CYP3A5, CYP3A4, RINT1, CFTR, CALU, PRSS1, XRCC2, NAT1, NAT2, PPP2R2A, RPS20, NBN, CDKN2A, FANCG, SLC28A3, FANCC, PTGS1, ASS1, RET, SFTPA1, BMPR1A, PTEN, CYP2C19, CYP2C9, CYP2C8, NT5C2, TCF7L2, BUB3, HRAS, CYB5R2, FANCF, F2, GSTP1, MRE11A, ATM, C11orf65, SDHD, H2AFX, GRIK4, CHEK1, GNB3, LRP6, RECQL, CDK4, YEATS4, POLE, BRCA2, RB1, FANCM, RAD51B, MLH3, DICER1, AKT1, TP53BP1, CHRNA3, FANCI, POLG, BLM, NTHL1, SLX4, PALB2, VKORC1, CETP, CDH1, HAS3, FANCA, RPA1, GP1BA, TP53, SLC47A2, NF1, RAD51D, CDK12, ERBB2, BRCA1, NAGS, CRHR1, HOXB13, DLX4, RAD51C, PPM1D, BRIP1, ACE, RHBDL2, TYMS, RBBP8, SMAD4, NEDD4L, MC4R, STK11, LDLR, CYP4F2, BABAM1, CYP2A6, CYP2B6, APOE, POLD1, ITPA, TXNRD2, COMT, ADORA2A, CHEK2, CYP2D6, CYB5R3, FANCB, OTC, G6PD