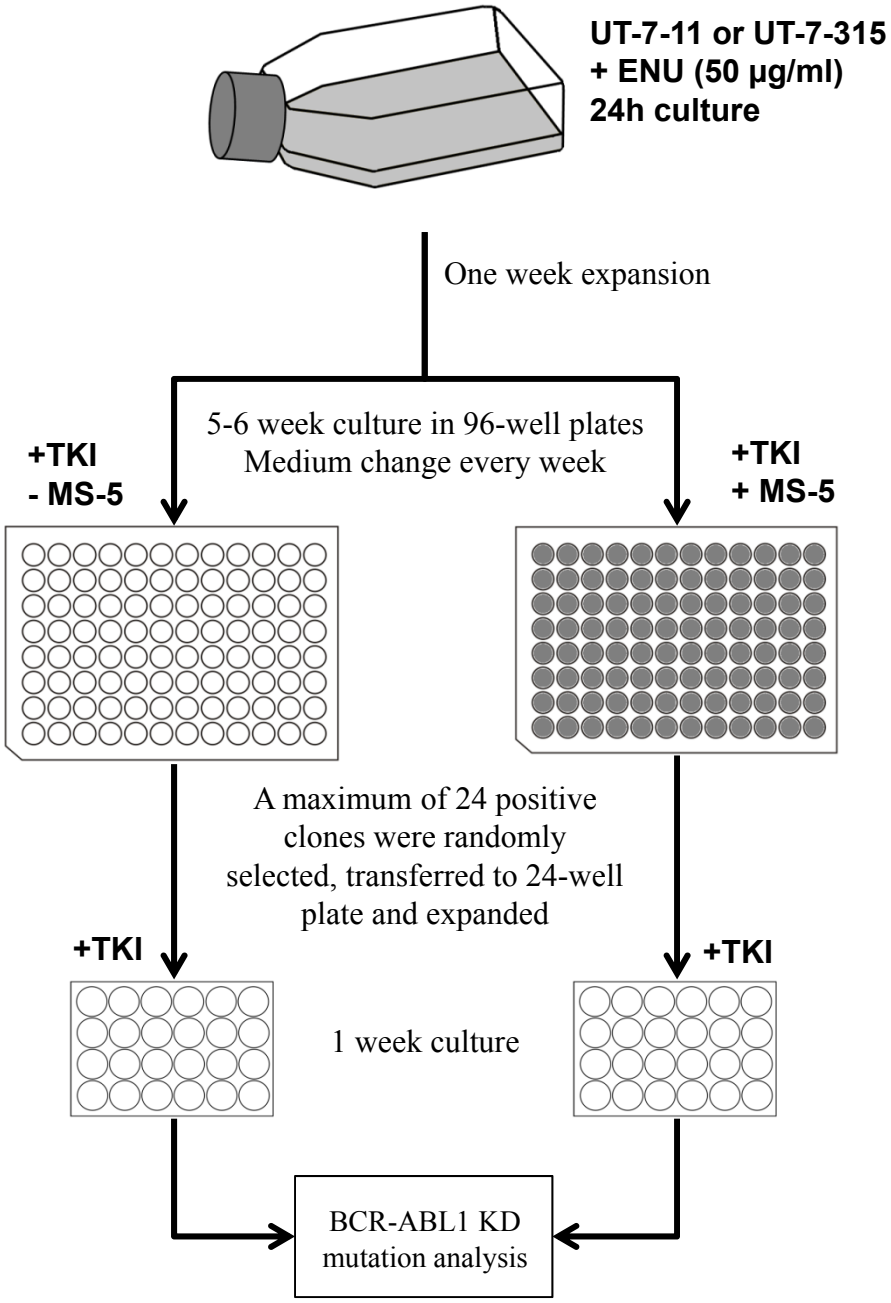

Fig. S1. Design of the mutagenesis assay.

UT-7 cell lines expressing native or T315I-mutated BCR-ABL1 were used. Mutagenesis was carried out with N-ethyl-N-Nitrosourea (ENU) for 24h in culture at a concentration of 50 µg/ml. Cells were then washed three times with culture medium, replated in complete medium and expanded over one week. ENU exposed UT-7 cells were then cultured in 96-well plates at 10^5cells/well in 200 µl medium in the presence or in the absence of MS-5 feeder. They were cultured with the following TKI concentrations: imatinib 2µM, nilotinib 75nM, dasatinib 10nM, ponatinib 30nM. When used as a niche model, MS-5 cells were plated a day before in the 96-well plates at a concentration of 6000 cells/well. Cell growth was monitored by microscopic inspection twice a week for 5-6 weeks. A maximum of 24 positive wells (randomly chosen) were then transferred to 24-well plates and expanded using the same TKI concentration for subsequent BCR-ABL1 kinase domain (KD) mutation analysis.

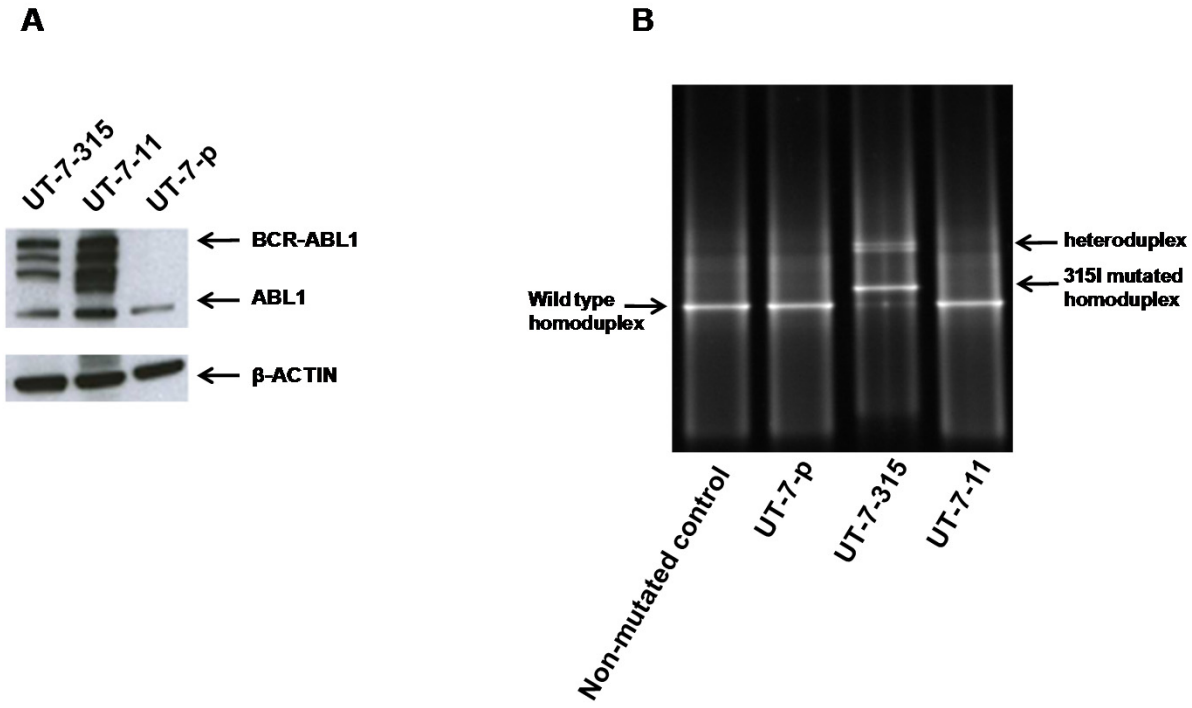

Fig. S2. Characterization of UT-7 cell lines.
(A) Western-blot analysis showed that the BCR-ABL1 oncoprotein is present in UT-7-11 and UT-7-315, but not in UT-7 parental (UT-7-p) cell line from which they derive. (B) Mutation screening of the BCR-ABL1 kinase domain by DGGE (Denaturing Gradient Gel Electrophoresis) shows the presence of the gatekeeper mutation in UT-7-315 cell line and confirms the absence of any mutation in UT-7 parental or UT-7-11 cell lines as compared to non-mutated control.

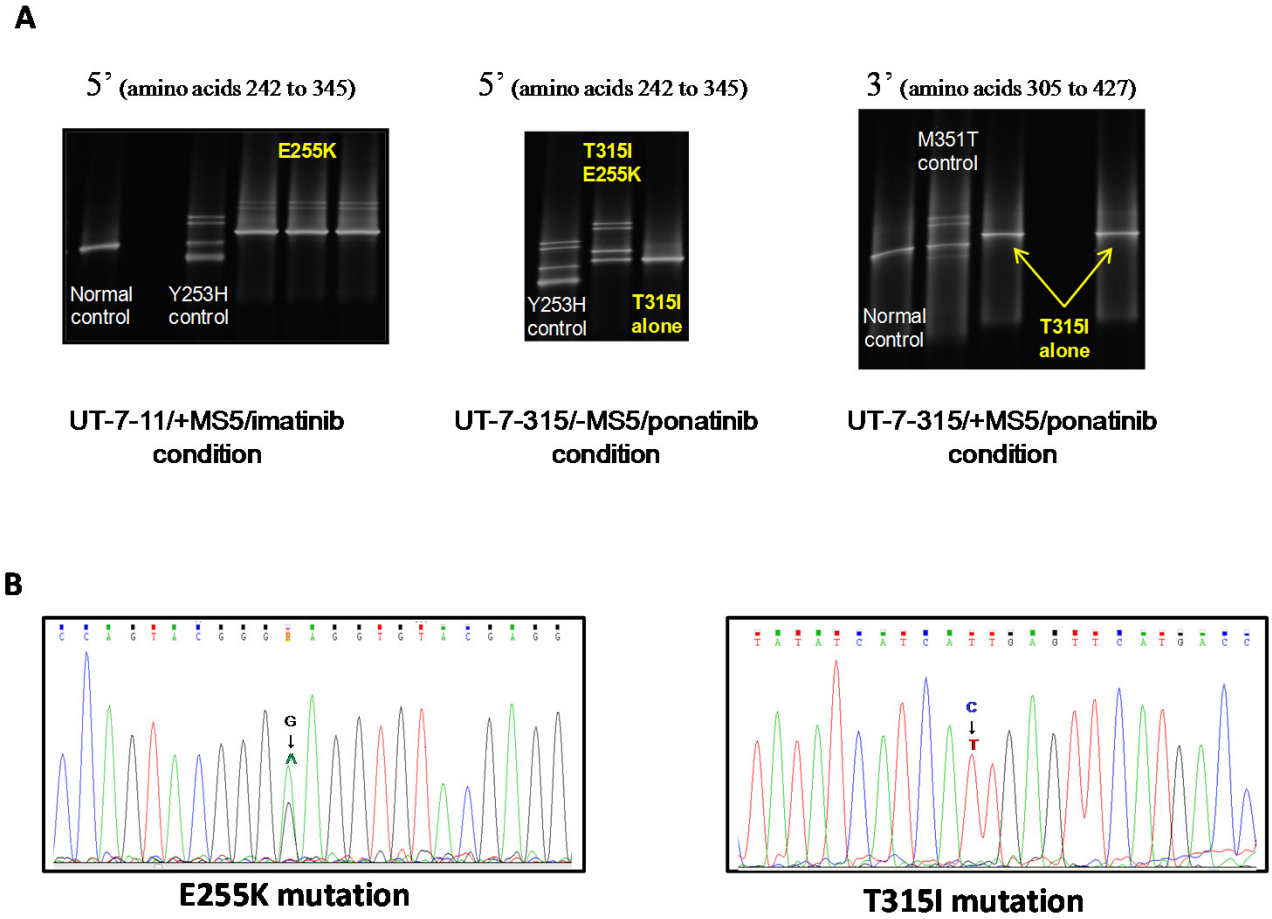

Fig. S3: Examples of BCR-ABL1-KD mutation screening.
(A) DGGE screening of the 5' end (amino acids 242 to 345) or the 3' end (amino acids 305 to 427) of the BCR-ABL1 kinase domain. (B) Direct sequencing characterization of E255K and T315I mutations.

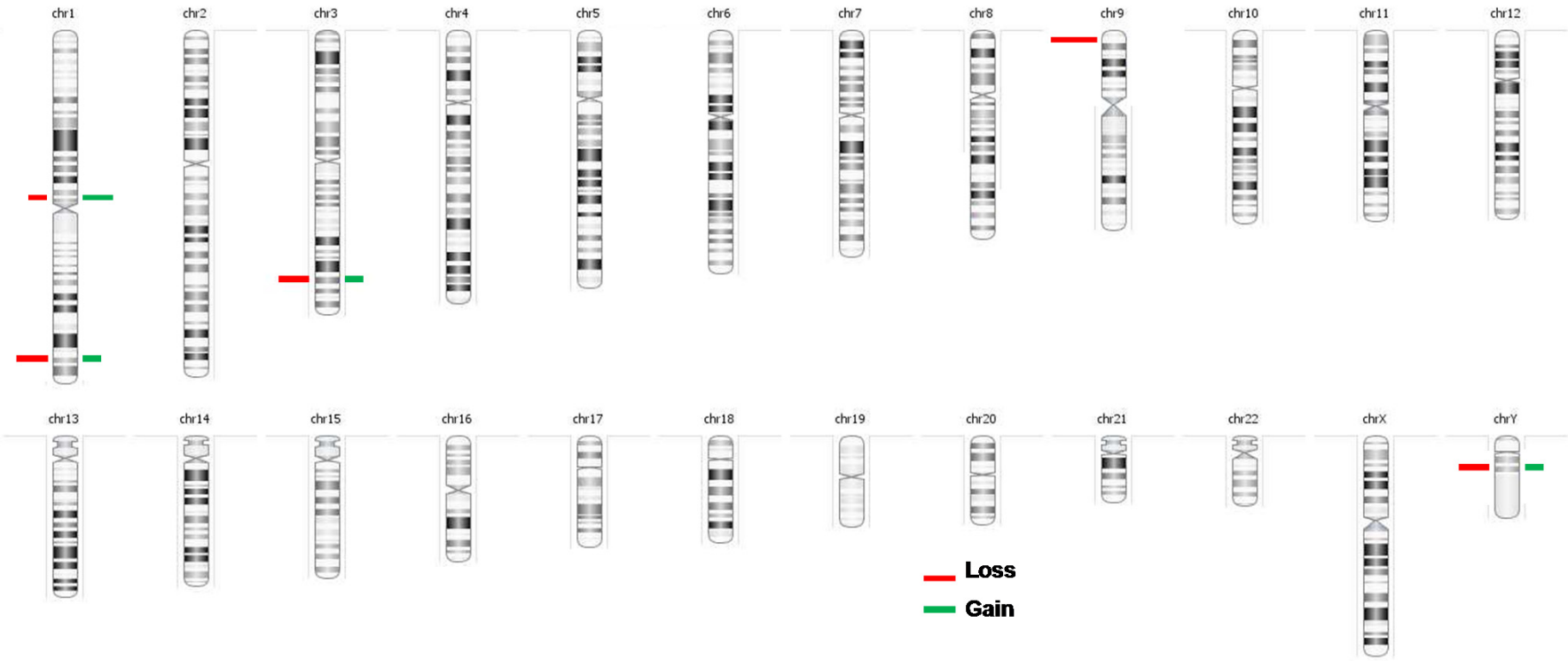

Fig. S4: Recurrent chromosome variations observed in imatinib-resistant UT-7-11 cells (n=1) and ponatinib-resistant UT-7-315 cells (n=2) according to MS-5 presence.

Table S1: UT-7 cell mortality determined at the plateau concentration for each TKI (n=3).

UT-7 cell lines		no TKI	imatinib (1µM)	nilotinib (50nM)	dasatinib (5nM)	ponatinib (15nM)
UT-7-p		12%	14.4%	16.7%	21%	21%
UT-7-11	wild type BCR-ABL1	16.2%	**80%**	**86%**	**86%**	**91.5%**
UT-7-315	T315I-mutated BCR-ABL1	9%	9%	7%	17%	**86%**

UT-7-p : UT-7 parental.

Table S2: Comparison of resistant clones cultured in the presence or in the absence of MS-5 feeder by array-CGH.

Cell line/ TKI	With MS-5 feeder	Without MS-5 feeder (used as calibrator)	Total number of variations	Losses	Gains
UT-7-11 imatinib	clone F3 *E255K*	clone E5 *E255K*	117	57	60
UT-7-315 ponatinib	clone A23 *E255K + T315I*	clone C9 *E255K + T315I*	58	31	27
UT-7-315 ponatinib	clone A24 *E255K + T315I*	clone B4 *E255K + T315I*	59	32	27

Mutation(s) detected in UT-7 clones are in italic.

Table S3. Array-CGH analysis comparing imatinib-resistant UT-7-11 clones F3 (with MS-5) *vs* E5 (without MS-5).

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr1:52,174,291-53,101,776	Gain	927,486	p32.3	BTF3L4, CC2D1B, FAM159A, GPX7, KTI12, ORC1, PRPF38A, RAB3B, SELRC1, TXNDC12, ZCCHC11, ZFYVE9, ZYG11A, ZYG11B		
chr1:116,337,471-116,919,312	Loss	581,842	p13.1	ATP1A1, ATP1A1OS, CD58, IGSF3, MAB21L3, SLC22A15		
chr1:117,306,259-118,883,465	Gain	1577,207	p13.1 - p12	CD101, FAM46C, GDAP2, MAN1A2, MIR942, PTGFRN, SPAG17, TRIM45, TTF2, VTCN1, WDR3	hsa-mir-942	
chr1:148,467,954-149,948,427	Gain	1480,474	q21.2 - q21.3	ADAMTSL4, ANP32E, ANXA9, APH1A, ARNT, BNIPL, C1orf51, C1orf54, C1orf56, CA14, CDC42SE1, CELF3, CERS2, CGN, CTSK, CTSS, ECM1, ENSA, FAM63A, GABPB2, GOLPH3L, HORMAD1, LINC00568, LYSMD1, MCL1, MIR4257, MIR554, MLLT11, MRPS21, PI4KB, PIP5K1A, POGZ, PRPF3, PRUNE, PSMB4, PSMD4, RFX5, RPRD2, SCNM1, SELENBP1, SEMA6C, SETDB1, SNX27, TARS2, TMOD4, TNFAIP8L2, TNFAIP8L2-SCNM1, TUFT1, VPS72, ZNF687	hsa-mir-554	ARNT, MLLT11
chr1:151,670,991-154,822,634	Gain	3151,644	q21.3 - q23.1	ADAM15, ADAR, AQP10, ARHGEF2, ASH1L, ASH1L-AS1, ATP8B2, BGLAP, C1orf189, C1orf43, C1orf61, C1orf85, CCT3, CHRNB2, CHTOP, CKS1B, CLK2, CREB3L4, CRTC2, DAP3, DCST1, DCST2, DENND4B, DPM3, EFNA1, EFNA3, EFNA4, FAM189B, FDPS, FLAD1, GATAD2B, GBA, GBAP1, GON4L, HAX1, HCN3, IL6R, ILF2, INTS3, IQGAP3, JTB, KCNN3, KIAA0907, KRTCAP2, LAMTOR2, LENEP, LMNA, LOC100505666, MEF2D, MEX3A, MIR190B, MIR4258, MIR555, MIR9-1, MIR92B, MSTO1, MSTO2P, MTX1, MUC1, NPR1, NUP210L, PAQR6, PBXIP1, PKLR, PMF1, PMF1-BGLAP, PMVK, POU5F1P4, PYGO2, RAB13, RAB25, RHBG, RIT1, RPS27, RUSC1, RUSC1-AS1, RXFP4, S100A1, S100A13, S100A14, S100A16, S100A2, S100A3, S100A4, S100A5, S100A6, S100A7, S100A7L2, SCAMP3, SCARNA4, SEMA4A, SHC1, SHE, SLC25A44, SLC27A3, SLC39A1, SLC50A1, SMG5, SNAPIN, SNORA42, SSR2, SYT11, TDRD10, THBS3, TMEM79, TPM3, TRIM46, TSACC, TTC24, UBAP2L, UBE2Q1, UBQLN4, VHLL, YY1AP1, ZBTB7B	hsa-mir-9-1, hsa-mir-190b, hsa-mir-92b, hsa-mir-555	TPM3, MUC1
chr1:159,754,964-159,951,019	Gain	196,056	q23.3	FCGR2A, FCGR2B, FCGR2C, FCGR3A, FCGR3B, FCRLA, HSPA6, HSPA7, RPL31P11		FCGR2B
chr1:200,669,183-204,599,252	Gain	3930,07	q32.1	ADIPOR1, ADORA1, ATP2B4, AVPR1B, BTG2, C1orf186, CDK18, CHI3L1, CHIT1, CNTN2, CTSE, CYB5R1, DSTYK, ELK4, ETNK2, FAM72A, FMOD, GOLT1A, KDM5B, KDM5B-AS1, KISS1, KLHDC8A, KLHL12, LAX1, LEMD1, LEMD1-AS1, LINC00260, LINC00303, LINC00628, LOC148709, LOC284578, LOC284581, LOC401980, LOC641515, LOC730227, LRRN2, MDM4, MFSD4, MIR135B, MYBPH, MYOG, NFASC, NUAK2, NUCKS1, OPTC, PIK3C2B, PLEKHA6, PM20D1, PPFIA4, PPP1R12B, PPP1R15B, PRELP, RAB7L1, RABIF, RBBP5, REN, SLC26A9, SLC41A1, SLC45A3, SNORA77, SNRPE, SOX13, SRGAP2, SYT2, TMCC2, TMEM183A, TMEM183B, TMEM81, ZBED6, ZC3H11A	hsa-mir-135b	MDM4, ELK4, SLC45A3

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr1:206,192,979-209,374,590	Loss	3181,612	q32.2	C1orf74, CAMK1G, DIEXF, G0S2, HHAT, HSD11B1, IRF6, KCNH1, LAMB3, MIR205, MIR205HG, MIR4260, PLXNA2, SERTAD4, SERTAD4-AS1, SYT14, TRAF3IP3	hsa-mir-205	
chr1:211,536,743-229,774,281	Loss	18237,54	q32.3 - q42.2	ABCB10, ACBD3, ACTA1, ADCK3, AGT, AIDA, ARF1, ARV1, AURKAPS1, BPNT1, BROX, C1orf115, C1orf131, C1orf140, C1orf145, C1orf198, C1orf35, C1orf65, C1orf95, CAPN2, CAPN8, CAPN9, CCSAP, CDC42BPA, CENPF, CNIH3, CNIH4, COG2, DEGS1, DISP1, DNAH14, DUSP10, DUSP5P1, EGLN1, ENAH, EPHX1, EPRS, ESRRG, EXOC8, FAM177B, FAM89A, FBXO28, GALNT2, GJC2, GNPAT, GPATCH2, GUK1, H3F3A, H3F3AP4, HHIPL2, HIST3H2A, HIST3H2BB, HIST3H3, HLX, IARS2, IBA57, ITPKB, JMJD4, KCNK2, KCTD3, LBR, LEFTY1, LEFTY2, LIN9, LINC00210, LINC00538, LOC100130093, LOC149373, LOC643723, LOC728463, LYPLAL1, MARC1, MARC2, MARK1, MIA3, MIR1182, MIR194-1, MIR215, MIR320B2, MIR3620, MIR4666A, MIR4742, MIR5008, MIR548F3, MIR664, MIXL1, MRPL55, NUP133, NVL, OBSCN, PARP1, PGBD5, PROX1, PRSS38, PSEN2, PTPN14, PYCR2, RAB3GAP2, RAB4A, RHOU, RNF187, RNU5F-1, RRP15, SDE2, SLC30A10, SMYD2, SNAP47, SNORA36B, SNRPD2P2, SPATA17, SPHAR, SPRTN, SRP9, SUSD4, TAF1A, TAF5L, TGFB2, TLR5, TMEM63A, TP53BP2, TRIM11, TRIM17, TRIM67, TSNAX, TSNAX-DISC1, TTC13, URB2, USH2A, WDR26, WNT3A, WNT9A, ZNF678, ZNF847P	hsa-mir-1182, hsa-mir-320b-2, hsa-mir-664, hsa-mir-194-1, hsa-mir-215	
chr2:45,857-8,992,327	Loss	8946,471	p25.3 - p25.1	ACP1, ADI1, ALLC, CMPK2, COLEC11, FAM150B, ID2, KIDINS220, LINC00299, LINC00487, LOC100505964, LOC100506054, LOC100506274, LOC150622, LOC339788, LOC339822, LOC400940, LOC727982, LOC730811, MBOAT2, MYT1L, PXDN, RNASEH1, RNF144A, RNF144A-AS1, RPS7, RSAD2, SH3YL1, SNTG2, SOX11, TMEM18, TPO, TRAPPC12, TSSC1		
chr2:11,458,171-23,776,383	Loss	12318,21	p25.1 - p24.1	APOB, C2orf43, DDX1, E2F6, FAM49A, FAM84A, FLJ12334, GDF7, GEN1, GREB1, HS1BP3, KCNS3, KLHL29, LAPTM4A, LINC00570, LOC100506474, LOC645949, LPIN1, MATN3, MIR3125, MIR3681, MIR4262, MIR4429, MIR4757, MSGN1, MYCN, MYCNOS, NBAS, NT5C1B, NT5C1B-RDH14, NTSR2, OSR1, PUM2, RAD51AP2, RDH14, RHOB, SDC1, SMC6, TRIB2, TTC32, VSNL1, WDR35		MYCN
chr2:29,298,600-31,772,887	Loss	2474,288	p23.2 - p23.1	ALK, CAPN13, CAPN14, EHD3, GALNT14, LBH, LCLAT1, SRD5A2, XDH, YPEL5		ALK
chr2:100,429,953-100,462,718	Gain	32,766	q11.2	NMS		
chr2:107,628,543-108,638,831	Gain	1010,289	q12.3 - q13	GCC2, LIMS1, LOC729121, RGPD4, SLC5A7, SULT1C2, SULT1C2P1, SULT1C3, SULT1C4		
chr2:113,890,983-114,010,857	Loss	119,875	q14.1	CBWD2, FOXD4L1		
chr2:144,711,391-144,860,090	Gain	148,7	q22.3	GTDC1, ZEB2		
chr2:148,771,371-149,115,036	Gain	343,666	q23.1	MBD5		

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr2:183,303,714-183,585,338	Gain	281,625	q32.1	DNAJC10, FRZB, NCKAP1		
chr2:187,041,361-188,127,412	Gain	1086,052	q32.1	CALCRL, FAM171B, ITGAV, TFPI, ZC3H15, ZSWIM2		
chr2:201,539,011-204,172,649	Gain	2633,639	q33.1 - q33.2	ABI2, ALS2, ALS2CR11, ALS2CR12, ALS2CR8, BMPR2, CASP10, CASP8, CDK15, CFLAR, CFLAR-AS1, CYP20A1, FAM117B, FAM126B, FZD7, ICA1L, MPP4, NBEAL1, NDUFB3, NOP58, RAPH1, SNORD11, SNORD11B, SNORD70, STRADB, SUMO1, TMEM237, TRAK2, WDR12		
chr2:241,833,989-242,460,220	Gain	626,232	q37.3	ATG4B, BOK, BOK-AS1, D2HGDH, DTYMK, FARP2, GAL3ST2, HDLBP, ING5, NEU4, PDCD1, SEPT2, STK25, THAP4		
chr3:49,820-3,746,746	Loss	3696,927	p26.3 - p26.2	CHL1, CNTN4, CNTN4-AS2, CNTN6, CRBN, IL5RA, TRNT1		
chr3:4,299,772-4,674,599	Loss	374,828	p26.2	ITPR1, SETMAR, SUMF1		
chr3:4,801,049-9,224,242	Loss	4423,194	p26.2 - p25.3	ARL8B, BHLHE40, BHLHE40-AS1, CAV3, EDEM1, GRM7, ITPR1, LINC00312, LMCD1, LMCD1-AS1, MIR4790, OXTR, RAD18, SRGAP3, SSUH2		SRGAP3
chr3:10,346,128-19,752,961	Loss	9406,834	p25.3 - p24.3	ANKRD28, ATG7, ATP2B2, BTD, C3orf20, CAND2, CAPN7, CCDC174, CHCHD4, COL6A4P1, COLQ, DAZL, DPH3, EAF1, FBLN2, FGD5, FGD5-AS1, FGD5P1, GALNTL2, GRIP2, HACL1, HDAC11, HRH1, IQSEC1, KCNH8, LINC00606, LINC00620, LOC100129480, LOC339862, LSM3, METTL6, MIR3714, MIR4270, MIR4791, MIR563, MIR885, MKRN2, MRPS25, NR2C2, NUP210, OXNAD1, PLCL2, PPARG, RAF1, RFTN1, RPL32, SATB1, SH3BP5, SH3BP5-AS1, SLC6A1, SLC6A1-AS1, SLC6A11, SLC6A6, SNORA7A, SYN2, TAMM41, TBC1D5, TIMP4, TMEM40, TMEM43, TPRXL, TSEN2, VGLL4, WNT7A, XPC, ZFYVE20	hsa-mir-885, hsa-mir-563	PPARG, RAF1, XPC
chr3:20,727,572-31,336,733	Loss	10609,16	p24.3 - p23	AZI2, CMC1, EOMES, GADL1, LOC152024, LOC285326, LOC644990, LOC645206, LRRC3B, MIR4442, MIR4792, NEK10, NGLY1, NKIRAS1, NR1D2, OXSM, RARB, RBMS3, RPL15, SLC4A7, TGFBR2, THRB, TOP2B, UBE2E1, UBE2E2, VENTXP7, ZCWPW2, ZNF385D		
chr3:33,920,498-38,853,588	Loss	4933,091	p22.3 - p22.2	ACAA1, ACVR2B, ACVR2B-AS1, ARPP21, C3orf35, CTDSPL, DCLK3, DLEC1, EPM2AIP1, EXOG, GOLGA4, ITGA9, LRRFIP2, MIR128-2, MIR26A1, MLH1, MYD88, OXSR1, PLCD1, SCN10A, SCN5A, SLC22A13, SLC22A14, STAC, TRANK1, VILL, XYLB	hsa-mir-26a-1, hsa-mir-128-2	MLH1, MYD88
chr3:53,584,702-56,496,815	Loss	2912,114	p21.1 - p14.3	ACTR8, CACNA1D, CACNA2D3, CACNA2D3-AS1, CHDH, ERC2, ERC2-IT1, ESRG, IL17RB, LRTM1, MIR3938, SELK, WNT5A		
chr3:58,943,743-60,620,802	Loss	1677,06	p14.2	C3orf67, FHIT		FHIT
chr3:60,960,937-61,101,375	Loss	140,439	p14.2	FHIT		FHIT
chr3:62,685,505-68,801,741	Loss	6116,237	p14.2 - p14.1	ADAMTS9, ADAMTS9-AS2, ATXN7, C3orf49, CADPS, FAM19A1, KBTBD8, LOC100287879, LOC285401, LRIG1, MAGI1, MAGI1-AS1, MIR4272, MIR548AN, PRICKLE2, PRICKLE2-AS1, PRICKLE2-AS2, PRICKLE2-AS3, PSMD6, PSMD6-AS2, SLC25A26, SNTN, SUCLG2, SYNPR, SYNPR-AS1, THOC7		

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr3:73,423,925-87,858,993	Loss	14435,07	p13 - p11.2	CADM2, CADM2-AS2, CHMP2B, CNTN3, FAM86DP, FLJ20518, FRG2C, GBE1, LOC401074, LOC440970, MIR1324, MIR4273, MIR4444-1, MIR4795, MIR5688, PDZRN3, POU1F1, RNU6-69, ROBO1, ROBO2, VGLL3, ZNF717	hsa-mir-1324	
chr3:173,711,933-174,194,891	Gain	482,959	q26.31	ECT2, NCEH1, SPATA16, TNFSF10		
chr3:180,071,299-180,846,962	Gain	775,664	q26.32 - q26.33	ACTL6A, GNB4, KCNMB3, MFN1, MRPL47, NDUFB5, PIK3CA, ZMAT3, ZNF639		PIK3CA
chr5:31,570,156-32,645,451	Gain	1075,296	p13.3	C5orf22, GOLPH3, MIR4279, MTMR12, PDZD2, SUB1, ZFR	hsa-mir-579	
chr5:56,675,009-59,878,074	Loss	3203,066	q11.2 - q12.1	ACTBL2, GAPT, PART1, PDE4D, PLK2, RAB3C	hsa-mir-582	
chr6:34,768,585-34,876,380	Gain	107,796	p21.31	C6orf106, SNRPC, UHRF1BP1		
chr6:107,645,048-111,458,933	Gain	3813,886	q21	AKD1, AMD1, ARMC2, CCDC162P, CD164, CDC40, CDK19, CEP57L1, DDO, FIG4, FOXO3, GPR6, GTF3C6, LACE1, LINC00222, METTL24, MICAL1, NR2E1, OSTM1, PDSS2, PPIL6, RPF2, SCML4, SEC63, SESN1, SLC22A16, SMPD2, SNX3, SOBP, WASF1, ZBTB24		FOXO3
chr6:135,284,717-135,377,461	Gain	92,745	q23.3	ALDH8A1, HBS1L, MIR3662		
chr6:135,377,520-135,539,456	Gain	161,937	q23.3	HBS1L		
chr6:151,939,874-158,834,033	Gain	6894,16	q25.1 - q25.3	ARID1B, CCDC170, CLDN20, CNKSR3, ESR1, FBXO5, GTF2H5, IPCEF1, MIR3692, MIR4466, MTRF1L, MYCT1, NOX3, OPRM1, RGS17, SCAF8, SERAC1, SNX9, SYNE1, SYNJ2, SYNJ2-IT1, TFB1M, TIAM2, TULP4, VIP, ZDHHC14	hsa-mir-1202	
chr7:38,515,933-39,557,127	Loss	1041,195	p14.1	AMPH, FAM183B, POU6F2, POU6F2-AS1, VPS41		
chr7:40,808,686-42,997,611	Loss	2188,926	p14.1	C7orf10, C7orf25, GLI3, INHBA, INHBA-AS1, MRPL32, PSMA2		
chr7:45,197,383-55,756,780	Gain	10559,4	p13 - p11.2	ABCA13, ADCY1, C7orf57, C7orf65, C7orf69, C7orf72, CDC14C, COBL, DDC, EGFR, EGFR-AS1, FIGNL1, FKBP9L, FLJ45974, GRB10, HPVC1, HUS1, IGFBP1, IGFBP3, IKZF1, LANCL2, LINC00525, LOC100129427, LOC285878, PKD1L1, POM121L12, SEC61G, SEPT7P2, SUN3, TNS3, UPP1, VOPP1, VSTM2A, VWC2, ZPBP		IKZF1, EGFR
chr7:68,579,533-68,942,882	Gain	363,35	q11.22	AUTS2		
chr7:71,677,963-75,945,347	Gain	4267,385	q11.22 - q11.23	ABHD11, ABHD11-AS1, BAZ1B, BCL7B, CCL24, CCL26, CLDN3, CLDN4, CLIP2, DNAJC30, DTX2, EIF4H, ELN, FDPSL2A, FKBP6, FZD9, GATSL1, GATSL2, GTF2I, GTF2IP1, GTF2IRD1, GTF2IRD2, GTF2IRD2B, GTF2IRD2P1, HIP1, HSPB1, LAT2, LIMK1, LOC100093631, LOC541473, MDH2, MIR4284, MIR4650-1, MIR4650-2, MIR4651, MIR590, MLXIPL, NCF1, NCF1B, NCF1C, NSUN5, NSUN5P1, NSUN5P2, PMS2L2, PMS2P3, PMS2P5, POM121, POM121C, POR, RFC2, RHBDD2, SBDSP1, SNORA14A, SPDYE5, SPDYE7P, SPDYE8P, SRCRB4D, SRRM3, STAG3L1, STAG3L2, STAG3L3, STX1A, STYXL1, TBL2, TMEM120A, TRIM50, TRIM73, TRIM74, TYW1B, VPS37D, WBSCR16, WBSCR22, WBSCR27, WBSCR28, YWHAG, ZP3	hsa-mir-590	ELN, HIP1

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr7:101,904,918-102,096,550	Gain	191,633	q22.1	POLR2J, POLR2J2, POLR2J3, RASA4, SPDYE2, SPDYE2L, UPK3BL		
chr8:130,770,082-130,773,707	Loss	3,626	q24.21			
chr9:1,022,409-5,999,912	Loss	4977,504	p24.3 - p24.1	AK3, CD274, CDC37L1, DMRT2, ERMP1, FLJ35024, GLIS3, GLIS3-AS1, INSL4, INSL6, JAK2, KCNV2, KIAA0020, KIAA1432, KIAA2026, MIR101-2, MIR4665, MLANA, PDCD1LG2, PLGRKT, PPAPDC2, RCL1, RFX3, RLN1, RLN2, SLC1A1, SMARCA2, SPATA6L, VLDLR	hsa-mir-101-2	JAK2, CD274
chr9:6,067,101-6,701,708	Gain	634,608	p24.1	GLDC, IL33, TPD52L3, UHRF2		
chr9:7,034,677-8,006,161	Loss	971,485	p24.1	C9orf123, KDM4C		
chr9:11,108,658-12,979,790	Loss	1871,133	p23	LURAP1L, TYRP1		
chr9:33,840,532-34,223,117	Gain	382,586	p13.3	DCAF12, SNORD121A, SNORD121B, UBAP1, UBAP2, UBE2R2		
chr9:34,803,277-35,688,747	Gain	885,471	p13.3	ARHGEF39, ATP8B5P, C9orf131, CA9, CCDC107, CD72, DNAJB5, FAM166B, FAM205B, FAM214B, FANCG, KIAA1045, MIR4667, PIGO, RMRP, RUSC2, SIT1, STOML2, TESK1, TLN1, TPM2, UNC13B, VCP		FANCG
chr9:69,472,934-69,716,786	Loss	243,853	q12	CBWD3, CBWD5, FOXD4L2, FOXD4L4		
chr9:119,007,989-119,543,442	Loss	535,454	q33.1	ASTN2, TLR4		
chr9:126,700,419-127,058,353	Gain	357,935	q33.3	GOLGA1, HSPA5, PPP6C, RABEPK, SCAI		
chr9:129,237,457-133,568,096	Gain	4330,64	q33.3 - q34.13	ABL1, AIF1L, AK1, ASB6, ASS1, C9orf106, C9orf114, C9orf117, C9orf16, C9orf50, C9orf78, CCBL1, CDK9, CERCAM, CIZ1, COQ4, CRAT, DNM1, DOLK, DOLPP1, DPM2, ENDOG, ENG, EXOSC2, FAM102A, FAM129B, FAM73B, FAM78A, FIBCD1, FNBP1, FPGS, FUBP3, GLE1, GOLGA2, GPR107, IER5L, LAMC3, LCN2, LOC100272217, LOC100289019, LOC100506100, LOC100506190, LOC389791, LRRC8A, LRSAM1, MIR199B, MIR219-2, MIR2861, MIR2964A, MIR3154, MIR3911, MIR3960, MIR4672, NAIF1, NCS1, NTMT1, NUP188, NUP214, ODF2, PHYHD1, PIP5KL1, PKN3, POMT1, PPAPDC3, PPP2R4, PRDM12, PRRC2B, PRRX2, PTGES, PTGES2, PTRH1, QRFP, RAPGEF1, RPL12, SET, SH2D3C, SH3GLB2, SLC25A25, SLC27A4, SNORA65, SNORD62A, SNORD62B, SPTAN1, ST6GALNAC4, ST6GALNAC6, STXBP1, SWI5, TBC1D13, TOR1A, TOR1B, TOR2A, TRUB2, TTC16, UCK1, URM1, USP20, WDR34, ZDHHC12, ZER1, ZNF79	hsa-mir-199b, hsa-mir-219-2	SET, ABL1, NUP214
chr10:11,681,203-12,670,334	Gain	989,132	p14 - p13	C10orf47, CAMK1D, CDC123, DHTKD1, ECHDC3, LOC219731, MIR4480, NUDT5, SEC61A2, UPF2, USP6NL		
chr10:60,517,126-64,452,930	Loss	3935,805	q21.1 - q21.2	ADO, ANK3, ARID5B, C10orf107, C10orf40, CCDC6, CDK1, EGR2, FAM13C, M1, MIR548AV, PHYHIPL, RHOBTB1, RTKN2, SLC16A9, TMEM26, ZNF365		CCDC6

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr10:114,556,933-120,300,754	Loss	5743,822	q25.2 - q26.11	ABLIM1, ADRB1, AFAP1L2, ATRNL1, C10orf118, C10orf82, CASC2, CASP7, CCDC172, DCLRE1A, EMX2, EMX2OS, ENO4, FAM160B1, FAM204A, GFRA1, HABP2, HSPA12A, KCNK18, KIAA1598, MIR2110, MIR3663, MIR4483, NHLRC2, NRAP, PDZD8, PLEKHS1, PNLIP, PNLIPRP1, PNLIPRP2, PNLIPRP3, RAB11FIP2, SLC18A2, TCF7L2, TDRD1, TRUB1, VAX1, VTI1A, VWA2	hsa-mir-2110	
chr10:121,972,874-135,235,140	Loss	13262,27	q26.12 - q26.3	ACADSB, ADAM12, ADAM8, ARMS2, ATE1, BCCIP, BNIP3, BTBD16, BUB3, C10orf120, C10orf137, C10orf88, C10orf90, C10orf91, CALY, CHST15, CLRN3, CPXM2, CTAGE7P, CTBP2, CUZD1, CYP2E1, DHX32, DMBT1, DOCK1, DPYSL4, EBF3, ECHS1, FAM175B, FAM196A, FAM24A, FAM24B, FAM24B-CUZD1, FAM53B, FANK1, FGFR2, FLJ37035, FLJ46300, FLJ46361, FOXI2, FUOM, GLRX3, GPR123, GPR26, HMX2, HMX3, HTRA1, IKZF5, INPP5A, JAKMIP3, KNDC1, LHPP, LOC100169752, LOC283038, LOC387723, LOC399815, LOC399829, LOC619207, LRRC27, METTL10, MGMT, MIR202, MIR378C, MIR3941, MIR3944, MIR4296, MIR4297, MIR4484, MIR5694, MKI67, MMP21, MTG1, NKX1-2, NKX6-2, NPS, NSMCE4A, OAT, PAOX, PLEKHA1, PPAPDC1A, PPP2R2D, PRAP1, PSTK, PTPRE, PWWP2B, SPRN, SPRNP1, STK32C, SYCE1, TACC2, TCERG1L, TEX36, TTC40, TUBGCP2, UROS, UTF1, VENTX, WDR11, WDR11-AS1, ZNF511, ZRANB1	hsa-mir-202	FGFR2
chr11:118,472,904-118,662,946	Gain	190,043	q23.3	ABCG4, C2CD2L, CBL, CCDC153, DPAGT1, HINFP, NLRX1, PDZD3		CBL
chr11:133,635,039-133,733,087	Gain	98,049	q25	ACAD8, GLB1L2, GLB1L3		
chr12:130,574,940-132,283,344	Gain	1708,405	q24.33	ANKLE2, CHFR, DDX51, EP400, EP400NL, FBRSL1, GALNT9, GOLGA3, LOC100130238, LRCOL1, MMP17, NOC4L, P2RX2, PGAM5, POLE, PUS1, PXMP2, SFSWAP, SNORA49, ULK1, ZNF10, ZNF140, ZNF26, ZNF268, ZNF605, ZNF84		
chr13:49,696,818-50,350,033	Loss	653,216	q14.3	DLEU7, DLEU7-AS1		
chr13:63,276,254-63,629,038	Loss	352,785	q21.31			
chr13:97,442,160-97,535,532	Gain	93,373	q32.2	IPO5		
chr14:19,359,996-19,552,750	Loss	192,755	q11.2	OR4K1, OR4K14, OR4K15, OR4K2, OR4K5, OR4N2		
chr14:70,901,834-71,005,628	Gain	103,795	q24.2	SNORD56B		
chr14:72,516,904-73,822,148	Gain	1305,245	q24.2 - q24.3	ABCD4, ACOT1, ACOT2, ACOT4, ACOT6, ALDH6A1, C14orf169, CCDC176, COQ6, DNAL1, ELMSAN1, ENTPD5, FAM161B, HEATR4, LIN52, MIR4505, NUMB, PAPLN, PNMA1, PSEN1, PTGR2, RBM25, VSX2, ZFYVE1, ZNF410		
chr14:76,238,797-77,461,704	Gain	1222,908	q24.3	ADCK1, AHSA1, ALKBH1, ANGEL1, C14orf166B, C14orf178, GSTZ1, IRF2BPL, ISM2, KIAA1737, MIR1260A, NGB, NOXRED1, POMT2, SAMD15, SLIRP, SNW1, SPTLC2, TMED8, TMEM63C, VASH1, VIPAS39, ZDHHC22	hsa-mir-1260	

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr14:101,445,526-103,447,259	Gain	2001,734	q32.31 - q32.33	AMN, ANKRD9, APOPT1, BAG5, CDC42BPB, CINP, CKB, DYNC1H1, EIF5, EXOC3L4, HSP90AA1, KLC1, LINC00605, LINC00637, MARK3, MIR4309, MOK, PPP1R13B, PPP2R5C, RCOR1, SNORA28, TECPR2, TNFAIP2, TRAF3, TRMT61A, WDR20, XRCC3, ZFYVE21, ZNF839		HSP90AA1
chr14:104,351,335-105,357,226	Gain	1005,892	q32.33	AHNAK2, BRF1, BTBD6, C14orf79, C14orf80, CDCA4, CRIP1, CRIP2, ELK2AP, GPR132, JAG2, KIAA0284, LINC00638, MTA1, NUDT14, PACS2, PLD4, TEX22, TMEM121		
chr15:92,632,460-99,520,942	Loss	6888,483	q26.2 - q26.3	ADAMTS17, ALDH1A3, ARRDC4, ASB7, CERS3, DNM1P46, FAM169B, FLJ42289, HSP90B2P, IGF1R, LINS, LOC145820, LOC400456, LOC91948, LRRC28, LRRK1, LYSMD4, MCTP2, MEF2A, MIR1469, MIR4714, NR2F2, PGPEP1L, PRKXP1, SPATA8, SYNM, TTC23	hsa-mir-1469	
chr16:11,247,099-11,979,901	Gain	732,803	p13.13	BCAR4, GSPT1, LITAF, PRM1, PRM2, PRM3, RMI2, RSL1D1, SNN, SNX29, SOCS1, TNFRSF17, TNP2, TXNDC11, ZC3H7A	hsa-mir-548h-2	SOCS1, RMI2, TNFRSF17, RUNDC2A
chr16:87,945,758-87,986,817	Gain	41,06	q24.3	ANKRD11		
chr17:19,003,417-19,075,717	Gain	72,301	p11.2			
chr17:28,174,436-29,809,172	Loss	1634,737	q11.2 - q12	AA06, ASIC2, CCL1, CCL11, CCL13, CCL2, CCL7, CCL8, MIR548AC, MYO1D, SPACA3, TMEM98		
chr17:31,455,585-31,887,361	Gain	431,777	q12	CCL3L1, CCL3L3, CCL4, CCL4L1, CCL4L2, TBC1D3B, TBC1D3C, TBC1D3F, TBC1D3G, TBC1D3H		
chr17:33,334,831-33,658,061	Gain	323,231	q12	LOC440434, TBC1D3, TBC1D3F		
chr17:41,541,432-41,720,952	Gain	179,521	q21.31	KANSL1, KANSL1-AS1		
chr17:47,059,820-48,929,241	Loss	1869,422	q21.33 - q22	C17orf112, CA10		
chr18:6,177,548-7,953,566	Gain	1776,019	p11.31 - p11.23	ARHGAP28, L3MBTL4, LAMA1, LINC00668, LOC100130480, LRRC30, MIR4317, PTPRM		
chr19:8,805,762-11,345,918	Gain	2540,157	p13.2	ANGPTL6, AP1M2, ATG4D, C19orf38, C19orf52, C19orf66, C19orf80, C3P1, CARM1, CCDC159, CDC37, CDKN2D, COL5A3, DNM2, DNMT1, DOCK6, EIF3G, FBXL12, FDX1L, ICAM1, ICAM3, ICAM4, ICAM5, ILF3, ILF3-AS1, KANK2, KEAP1, KRI1, LDLR, LOC284385, LPPR2, MBD3L1, MIR1181, MIR1238, MIR199A1, MIR4322, MIR4748, MIR638, MRPL4, MUC16, OLFM2, OR1M1, OR7D2, OR7D4, OR7E24, OR7G1, OR7G2, OR7G3, P2RY11, PDE4A, PIN1, PPAN, PPAN-P2RY11, QTRT1, RAB3D, RAVER1, RDH8, S1PR2, S1PR5, SLC44A2, SMARCA4, SNORD105, SNORD105B, SPC24, TMED1, TMEM205, TSPAN16, TYK2, UBL5, YIPF2, ZGLP1, ZNF121, ZNF177, ZNF266, ZNF317, ZNF426, ZNF559, ZNF559-ZNF177, ZNF560, ZNF561, ZNF562, ZNF699, ZNF812, ZNF846	hsa-mir-638, hsa-mir-199a-1, hsa-mir-1238, hsa-mir-1181	SMARCA4
chr19:41,216,001-41,528,195	Gain	312,195	q13.12	CAPNS1, COX7A1, LINC00665, LOC100134317, OVOL3, POLR2I, TBCB, THAP8, WDR62, ZFP14, ZNF146, ZNF565		
chr20:13,894,196-13,988,218	Gain	94,023	p12.1	MACROD2, SEL1L2		

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr20:13,925,326-14,968,466	Loss	1043,141	p12.1	FLRT3, MACROD2, MACROD2-AS1		
chr20:22,319,521-22,563,013	Loss	243,493	p11.21	FOXA2, LINC00261, LOC284788		
chr20:33,361,057-35,185,135	Gain	1824,079	q11.22 - q11.23	AAR2, C20orf118, C20orf132, C20orf173, C20orf24, CEP250, CNMPD1, CPNE1, DLGAP4, DSN1, EPB41L1, ERGIC3, FER1L4, GDF5, LINC00657, MYL9, NDRG3, NFS1, PHF20, RBL1, RBM12, RBM39, ROMO1, SAMHD1, SCAND1, SLA2, SOGA1, SPAG4, TGIF2, TGIF2-C20ORF24, UQCC	hsa-mir-1289-1	
chr20:45,312,208-45,556,019	Gain	243,812	q13.12	LOC100131496, ZMYND8		
chr20:47,014,674-47,315,646	Gain	300,973	q13.13	ARFGEF2, CSE1L, DDX27, STAU1, ZNFX1		
chr20:48,701,717-50,206,769	Gain	1505,053	q13.13 - q13.2	ADNP, ATP9A, BCAS4, DPM1, KCNG1, MIR3194, MOCS3, NFATC2, PARD6B, SALL4, ZFP64		
chr20:51,475,357-51,856,995	Gain	381,639	q13.2	TSHZ2, ZNF217		
chr20:54,351,788-54,931,221	Gain	579,434	q13.2 - q13.31	AURKA, CASS4, CSTF1, FAM209A, FAM209B, FAM210B, GCNT7, RTFDC1, TFAP2C		
chr21:14,424,909-26,218,975	Loss	11794,07	q11.2 - q21.3	ABCC13, APP, ATP5J, BTG3, C21orf37, C21orf91, C21orf91-OT1, CHODL, CHODL-AS1, CXADR, D21S2088E, GABPA, HSPA13, JAM2, LINC00158, LINC00308, LINC00317, LINC00320, LINC00478, LINC00515, LIPI, LOC339622, LOC388813, MIR125B2, MIR155, MIR155HG, MIR99A, MIRLET7C, MRPL39, NCAM2, NRIP1, RBM11, RNU6-67, SAMSN1, SAMSN1-AS1, TMPRSS15, USP25	hsa-mir-125b-2, hsa-mir-99a, hsa-let-7c, hsa-mir-155	
chr21:26,799,634-29,120,748	Loss	2321,115	q21.3	ADAMTS1, ADAMTS5, CYYR1, LINC00113, LINC00161, LINC00314, MIR4759, MIR5009		
chr21:39,802,029-46,907,149	Loss	7105,121	q22.2 - q22.3	ABCG1, ADARB1, AGPAT3, AIRE, B3GALT5, BACE2, C21orf128, C21orf2, C21orf33, C21orf58, C21orf67, C21orf88, C21orf90, C2CD2, CBS, COL18A1, COL18A1-AS1, COL18A1-AS2, COL6A1, COL6A2, CRYAA, CSTB, DIP2A, DIP2A-IT1, DNMT3L, DSCAM, DSCAM-AS1, DSCAM-IT1, FAM207A, FAM3B, FTCD, HSF2BP, ICOSLG, IGSF5, ITGB2, ITGB2-AS1, KRTAP10-1, KRTAP10-10, KRTAP10-11, KRTAP10-12, KRTAP10-2, KRTAP10-3, KRTAP10-4, KRTAP10-5, KRTAP10-6, KRTAP10-7, KRTAP10-8, KRTAP10-9, KRTAP12-1, KRTAP12-2, KRTAP12-3, KRTAP12-4, LINC00111, LINC00112, LINC00162, LINC00163, LINC00313, LINC00319, LINC00323, LINC00479, LOC100129027, LOC284837, LOC642852, LRRC3, LRRC3-AS1, LSS, MCM3AP, MCM3AP-AS1, MIR3197, MIR4760, MX1, MX2, NDUFV3, PCBP3, PCNT, PCP4, PDE9A, PDXK, PFKL, PKNOX1, PLAC4, POFUT2, PRDM15, PRMT2, PTTG1IP, PWP2, RIPK4, RRP1, RRP1B, RSPH1, S100B, SH3BGR, SIK1, SLC19A1, SLC37A1, SPATC1L, SSR4P1, SUMO3, TFF1, TFF2, TFF3, TMPRSS2, TMPRSS3, TRAPPC10, TRPM2, TSPEAR, U2AF1, UBASH3A, UBE2G2, UMODL1, WDR4, YBEY, ZNF295, ZNF295-AS1		TMPRSS2
chr22:14,763,133-15,918,297	Loss	1155,165	q11.1	ANKRD62P1-PARP4P3, CCT8L2, CECR7, GAB4, HSFY1P1, OR11H1, TPTEP1, XKR3		

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr22:46,535,490-48,140,017	Loss	1604,528	q13.31 - q13.32	FAM19A5, LOC100128946, LOC284933, MIR3201, MIR4535		
chrX:6,329-229,611	Loss	223,283	p22.33	GTPBP6, PLCXD1, PPP2R3B		
chrX:9,978,135-10,038,900	Loss	60,766	p22.2	WWC3		
chrX:10,272,377-10,370,692	Loss	98,316	p22.2			
chrX:36,644,120-36,972,467	Loss	328,348	p21.1	FAM47C, FTH1P18		
chrX:46,334,243-49,260,494	Gain	2926,252	p11.3 - p11.23	ARAF, CACNA1F, CCDC120, CCDC22, CDK16, CFP, CHST7, CXXC1P1, CXorf31, EBP, ELK1, ERAS, FOXP3, FTSJ1, GAGE1, GAGE10, GAGE12B, GAGE12C, GAGE12D, GAGE12E, GAGE12F, GAGE12G, GAGE12H, GAGE12I, GAGE12J, GAGE13, GAGE2A, GAGE2B, GAGE2C, GAGE2D, GAGE2E, GAGE4, GAGE5, GAGE6, GAGE7, GAGE8, GATA1, GLOD5, GPKOW, GRIPAP1, HDAC6, INE1, KCND1, LOC100133957, MAGIX, MIR4769, NDUFB11, OTUD5, PCSK1N, PHF16, PIM2, PLP2, PORCN, PPP1R3F, PQBP1, PRAF2, PRICKLE3, RBM10, RBM3, RGN, RP2, SLC35A2, SLC38A5, SLC9A7, SNORA11C, SPACA5, SPACA5B, SSX1, SSX3, SSX4, SSX4B, SSX5, SSX6, SSX9, SUV39H1, SYN1, SYP, TBC1D25, TFE3, TIMM17B, TIMP1, UBA1, USP11, UXT, WAS, WDR13, WDR45, ZNF157, ZNF182, ZNF41, ZNF630, ZNF81		SSX1, SSX4, WAS, GATA1, TFE3
chrX:52,954,827-54,604,813	Gain	1649,987	p11.22	FAM120C, FAM156A, FAM156B, FGD1, GNL3L, GPR173, HSD17B10, HUWE1, IQSEC2, KDM5C, MIR5684, MIR98, MIRLET7F2, PHF8, RIBC1, SMC1A, TSPYL2, TSR2, WNK3	hsa-mir-98, hsa-let-7f-2	KDM5C
chrX:55,504,304-55,508,361	Loss	4,058	p11.21			
chrX:72,137,133-72,217,950	Gain	80,818	q13.1 - q13.2	PABPC1L2A, PABPC1L2B		
chrX:154,599,488-154,894,377	Loss	294,89	q28	IL9R, SPRY3, VAMP7		
chrY:6,181,134-6,401,059	Loss	219,926	p11.2	TTTY1, TTTY1B, TTTY2, TTTY21, TTTY21B, TTTY2B, TTTY7, TTTY7B, TTTY8, TTTY8B		
chrY:7,488,962-10,358,451	Loss	2869,49	p11.2	FAM197Y2, FAM197Y5, RBMY1A3P, RBMY3AP, TSPY1, TSPY3, TSPY4, TSPY8, TTTY1, TTTY11, TTTY12, TTTY16, TTTY18, TTTY19, TTTY1B, TTTY2, TTTY20, TTTY21, TTTY21B, TTTY22, TTTY23, TTTY23B, TTTY2B, TTTY7, TTTY7B, TTTY8, TTTY8B		
chrY:13,217,989-16,313,509	Loss	3095,521	q11.21 - q11.221	DDX3Y, NLGN4Y, NLGN4Y-AS1, TMSB4Y, TTTY15, USP9Y, UTY, VCY, VCY1B		
chrY:16,504,762-18,416,664	Loss	1911,903	q11.221	FAM224A, FAM224B, FAM41AY1, FAM41AY2, XKRY, XKRY2		
chrY:18,418,194-18,701,486	Loss	283,293	q11.221	CDY2A, CDY2B		
chrY:18,731,892-23,684,657	Loss	4952,766	q11.221 - q11.223	BCORP1, BPY2, BPY2B, BPY2C, CD24, EIF1AY, FAM224A, FAM224B, FAM41AY1, FAM41AY2, HSFY1, HSFY2, KDM5D, NCRNA00185, PRY, PRY2, RBMY1A1, RBMY1B, RBMY1D, RBMY1E, RBMY1F, RBMY1J, RBMY2EP, RBMY2FP, RPS4Y2, TTTY10, TTTY13, TTTY14, TTTY17A, TTTY17B, TTTY17C, TTTY5, TTTY6, TTTY6B, TTTY9A, TTTY9B, TXLNG2P, XKRY, XKRY2		

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chrY:23,885,207-25,323,292	Loss	1438,086	q11.223	BPY2, BPY2B, BPY2C, CDY1, CDY1B, CSPG4P1Y, DAZ3, DAZ4, GOLGA2P2Y, GOLGA2P3Y, TTTY17A, TTTY17B, TTTY17C, TTTY3, TTTY3B, TTTY4, TTTY4B, TTTY4C		
chrY:25,504,095-26,742,672	Loss	1238,578	q11.23	BPY2, BPY2B, BPY2C, CDY1, CDY1B, CSPG4P1Y, GOLGA2P2Y, GOLGA2P3Y, TTTY17A, TTTY17B, TTTY17C, TTTY3, TTTY3B		

Table S4. Array-CGH analysis comparing ponatinib-resistant UT-7-315 clones A23 (with MS-5) *vs* C9 (without MS-5).

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr1:115,154,338-115,172,381	Loss	18,044	p13.2			
chr1:115,452,228-115,479,732	Loss	27,505	p13.2			
chr1:115,503,351-116,919,312	Gain	1415,962	p13.2 - p13.1	ATP1A1, ATP1A1OS, CASQ2, CD58, IGSF3, MAB21L3, NGF, NHLH2, SLC22A15, VANGL1		
chr1:159,749,160-159,891,063	Gain	141,904	q23.3	FCGR2A, FCGR2C, FCGR3A, FCGR3B, HSPA6, HSPA7		FCGR2B
chr1:197,147,959-198,181,788	Gain	1033,83	q31.3 - q32.1	LOC100131234		
chr1:204,404,417-205,354,108	Loss	949,692	q32.1 - q32.2	C1orf116, C1orf186, C4BPA, C4BPB, CTSE, DYRK3, EIF2D, FAIM3, FCAMR, IKBKE, IL10, IL19, IL20, IL24, MAPKAPK2, PFKFB2, PIGR, RASSF5, SRGAP2, YOD1		
chr1:229,220,576-229,774,281	Loss	553,706	q42.2	C1orf131, EGLN1, EXOC8, FAM89A, GNPAT, LOC149373, MIR1182, SNRPD2P2, SPRTN, TRIM67, TSNAX, TSNAX-DISC1	hsa-mir-1182	
chr1:245,617,250-247,171,256	Loss	1554,007	q44	GCSAML, GCSAML-AS1, LYPD8, MIR3124, NLRP3, OR11L1, OR13G1, OR14A16, OR14C36, OR14I1, OR1C1, OR2AK2, OR2B11, OR2C3, OR2G2, OR2G3, OR2G6, OR2L13, OR2L1P, OR2L2, OR2L3, OR2L5, OR2L8, OR2M1P, OR2M2, OR2M3, OR2M4, OR2M5, OR2M7, OR2T1, OR2T10, OR2T11, OR2T12, OR2T2, OR2T27, OR2T29, OR2T3, OR2T33, OR2T34, OR2T35, OR2T4, OR2T5, OR2T6, OR2T8, OR2W3, OR2W5, OR6F1, PGBD2, SH3BP5L, TRIM58, ZNF672, ZNF692		
chr2:45,857-1,257,265	Gain	1211,409	p25.3	ACP1, FAM150B, LOC339822, SH3YL1, SNTG2, TMEM18		
chr2:1,500,891-1,586,297	Gain	85,407	p25.3	TPO		
chr2:11,507,501-11,558,540	Loss	51,04	p25.1	E2F6		
chr2:169,500,037-169,681,406	Gain	181,37	q31.1	ABCB11, DHRS9		
chr3:173,711,933-174,194,891	Loss	482,959	q26.31	ECT2, NCEH1, SPATA16, TNFSF10		
chr4:148,887,669-151,395,065	Loss	2507,397	q31.23 - q31.3	ARHGAP10, DCLK2, MIR4799, NR3C2		
chr5:132,596,984-132,617,409	Gain	20,426	q31.1	FSTL4		

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr6:53,021,823-88,576,214	Gain	35554,39	p12.1 - q15	AKIRIN2, B3GAT2, BAG2, BAI3, BCKDHB, BEND6, BMP5, C6orf147, C6orf162, C6orf163, C6orf164, C6orf165, C6orf57, C6orf7, CD109, CGA, COL12A1, COL19A1, COL21A1, COL9A1, COX7A2, CYB5R4, DDX43, DOPEY1, DPPA5, DST, EEF1A1, ELOVL4, ELOVL5, EYS, FAM135A, FAM46A, FAM83B, FBXO9, FILIP1, GCLC, GCM1, GFRAL, GJB7, GUSBP4, HCRTR2, HMGCLL1, HMGN3, HTR1B, HTR1E, IBTK, ICK, IMPG1, IRAK1BP1, KCNQ5, KCNQ5-AS1, KHDC1, KHDC1L, KHDC3L, KHDRBS2, KIAA1009, KIAA1586, KLHL31, LCA5, LGSN, LINC00472, LMBRD1, LOC100288198, LOC100506804, LOC441155, LRRC1, MB21D1, ME1, MIR30A, MIR30C2, MIR4282, MIR548AD, MIR5685, MLIP, MLIP-IT1, MRAP2, MTO1, MYO6, NT5E, OGFRL1, OOEP, ORC3, PGM3, PHF3, PHIP, PRIM2, PRSS35, PTP4A1, RAB23, RARS2, RIMS1, RIPPLY2, RNU6-71, RPS16P5, RWDD2A, SENP6, SH3BGRL2, SLC17A5, SLC25A51P1, SLC35A1, SMAP1, SNAP91, SNHG5, SNORD50A, SNORD50B, SNX14, SYNCRIP, TBX18, TINAG, TMEM30A, TPBG, TTK, UBE3D, ZNF292, ZNF451	hsa-mir-30c-2, hsa-mir-30a	
chr6:106,239,409-135,318,005	Gain	29078,59	q21 - q23.3	AIM1, AKAP7, AKD1, ALDH8A1, AMD1, ARG1, ARHGAP18, ARMC2, ASF1A, ATG5, BEND3, BET3L, BRD7P3, C6orf170, C6orf203, C6orf225, C6orf58, CCDC162P, CD164, CDC40, CDK19, CENPW, CEP57L1, CEP85L, CLVS2, COL10A1, CTAGE9, CTGF, DCBLD1, DDO, DSE, ECHDC1, ENPP1, ENPP3, EPB41L2, EYA4, FABP7, FAM162B, FAM184A, FAM26D, FAM26E, FAM26F, FIG4, FLJ34503, FOXO3, FRK, FYN, GJA1, GOPC, GPR6, GPRC6A, GSTM2P1, GTF3C6, HDAC2, HDDC2, HEY2, HINT3, HMGA1P7, HS3ST5, HSF2, KIAA0408, KIAA1919, KPNA5, L3MBTL3, LACE1, LAMA2, LAMA4, LINC00222, LINC00326, LOC100287632, LOC100422737, LOC100507203, LOC100507254, LOC154092, LOC285758, LOC285762, LOC643623, MAN1A1, MARCKS, MCM9, MED23, METTL24, MGC34034, MICAL1, MIR548B, MOXD1, NCOA7, NKAIN2, NR2E1, NT5DC1, NUS1, OR2A4, OSTM1, PDSS2, PKIB, PLN, PPIL6, PRDM1, PTPRK, QRSL1, REV3L, RFPL4B, RFX6, RNF146, RNF217, ROS1, RPF2, RPS12, RSPH4A, RSPO3, RTN4IP1, RWDD1, SAMD3, SCML4, SEC63, SERINC1, SESN1, SGK1, SLC16A10, SLC18B1, SLC22A16, SLC2A12, SLC35F1, SMPD2, SMPDL3A, SNORA33, SNORD100, SNORD101, SNX3, SOBP, SOGA3, STL, STX7, TAAR1, TAAR2, TAAR3, TAAR5, TAAR6, TAAR8, TAAR9, TBPL1, TCF21, THEMIS, TMEM200A, TMEM244, TPD52L1, TPI1P3, TRAF3IP2, TRAF3IP2-AS1, TRDN, TRMT11, TSPYL1, TSPYL4, TUBE1, VGLL2, VNN1, VNN2, VNN3, WASF1, WISP3, ZBTB24, ZUFSP	hsa-mir-548b, hsa-mir-587, hsa-mir-588	PRDM1, FOXO3, ROS1, GOPC
chr6:159,350,382-160,160,110	Gain	809,729	q25.3	ACAT2, FNDC1, LOC100129518, MRPL18, PNLDC1, SNORA20, SNORA29, SOD2, TAGAP, TCP1, WTAP		

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr7:1,941,326-2,155,122	Loss	213,797	p22.3 - p22.2	MAD1L1		
chr7:55,259,660-55,534,909	Loss	275,25	p11.2	LANCL2, VOPP1		
chr8:12,975,060-13,414,607	Gain	439,548	p22	DLC1		
chr8:118,965,914-119,714,487	Gain	748,574	q24.11 - q24.12	EXT1, SAMD12, SAMD12-AS1		EXT1
chr8:130,458,786-130,637,003	Gain	178,218	q24.21			
chr9:33,972-227,197	Gain	193,226	p24.3	C9orf66, CBWD1, DOCK8, FOXD4		
chr9:2,496,958-2,523,497	Loss	26,54	p24.2			
chr9:4,029,367-9,825,448	Loss	5796,082	p24.2 - p23	AK3, C9orf123, CD274, CDC37L1, ERMP1, GLDC, GLIS3, IL33, INSL4, INSL6, JAK2, KDM4C, KIAA1432, KIAA2026, MIR101-2, MIR4665, MLANA, PDCD1LG2, PLGRKT, PPAPDC2, PTPRD, RANBP6, RCL1, RLN1, RLN2, SLC1A1, SPATA6L, TPD52L3, UHRF2	hsa-mir-101-2	JAK2, CD274
chr9:11,108,658-12,529,977	Loss	1421,32	p23			
chr9:20,245,178-32,102,682	Gain	11857,50	p21.3 - p21.1	C9orf53, C9orf72, CAAP1, CDKN2A, CDKN2B, CDKN2B-AS1, DMRTA1, ELAVL2, EQTN, FLJ35282, FOCAD, IFNA1, IFNA10, IFNA13, IFNA14, IFNA16, IFNA17, IFNA2, IFNA21, IFNA22P, IFNA4, IFNA5, IFNA6, IFNA7, IFNA8, IFNB1, IFNE, IFNK, IFNW1, IFT74, IZUMO3, KLHL9, LINC00032, LINGO2, LOC100506422, LOC401497, LRRC19, MIR31, MIR31HG, MIR4473, MIR4474, MIR491, MIR873, MIR876, MLLT3, MOB3B, MTAP, PLAA, PTPLAD2, TEK, TUSC1	hsa-mir-876, hsa-mir-31, hsa-mir-491, hsa-mir-873	MLLT3, CDKN2A
chr9:32,004,034-32,102,682	Loss	98,649	p21.1			
chr10:128,605,650-128,701,435	Loss	95,786	q26.2	DOCK1		
chr13:51,415,888-51,441,856	Loss	25,969	q14.3	ATP7B		
chr13:63,276,254-63,629,038	Loss	352,785	q21.31			
chr13:90,579,146-90,727,954	Loss	148,809	q31.3	LINC00379		
chr13:90,822,300-91,270,798	Loss	448,499	q31.3	GPC5		
chr14:18,407,780-19,359,996	Gain	952,217	q11.1 - q11.2	LOC642426, OR11H12, OR11H2, OR4M1, OR4Q3, POTEG, POTEM		
chr14:24,784,036-24,901,016	Loss	116,981	q12			
chr16:77,713,183-77,795,795	Gain	82,613	q23.1	WWOX		
chr17:31,455,585-31,887,361	Gain	431,777	q12	CCL3L1, CCL3L3, CCL4, CCL4L1, CCL4L2, TBC1D3B, TBC1D3C, TBC1D3F, TBC1D3G, TBC1D3H		
chr17:33,334,831-33,658,061	Gain	323,231	q12	LOC440434, TBC1D3, TBC1D3F		

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr18:70,626,420-72,301,711	Gain	1675,292	q22.3 - q23	C18orf62, LOC339298, TSHZ1, ZADH2, ZNF407, ZNF516		
chr18:73,477,939-74,857,608	Gain	1379,67	q23	SALL3		
chr19:56,795,726-56,845,576	Loss	49,851	q13.33	SIGLEC14, SIGLEC5		
chr19:56,962,999-57,320,049	Loss	357,051	q13.33	FPR2, FPR3, ZNF350, ZNF432, ZNF577, ZNF613, ZNF614, ZNF615, ZNF616, ZNF649, ZNF841		
chr19:59,231,080-59,251,120	Loss	20,041	q13.42	VSTM1		
chr20:3,836,585-4,075,142	Gain	238,558	p13	MIR103A2, MIR103B2, PANK2, RNF24	hsa-mir-103-2, hsa-mir-103-2-as	
chr21:17,572,446-17,686,293	Loss	113,848	q21.1			
chr21:18,041,169-29,079,923	Gain	11038,75	q21.1 - q21.3	ADAMTS1, ADAMTS5, APP, ATP5J, C21orf91, C21orf91-OT1, CHODL, CHODL-AS1, CYYR1, D21S2088E, GABPA, JAM2, LINC00113, LINC00158, LINC00161, LINC00308, LINC00314, LINC00317, LINC00320, LINC00515, LOC339622, MIR155, MIR155HG, MIR4759, MIR5009, MRPL39, NCAM2, RNU6-67, TMPRSS15	hsa-mir-155	
chr21:34,674,531-46,907,149	Loss	12232,61	q22.11 - q22.3	ABCG1, ADARB1, AGPAT3, AIRE, B3GALT5, BACE2, BRWD1, BRWD1-AS1, BRWD1-IT2, C21orf128, C21orf2, C21orf33, C21orf58, C21orf67, C21orf88, C21orf90, C2CD2, CBR1, CBR3, CBR3-AS1, CBS, CHAF1B, CLDN14, CLIC6, COL18A1, COL18A1-AS1, COL18A1-AS2, COL6A1, COL6A2, CRYAA, CSTB, DIP2A, DIP2A-IT1, DNMT3L, DOPEY2, DSCAM, DSCAM-AS1, DSCAM-IT1, DSCR10, DSCR3, DSCR4, DSCR6, DSCR8, DSCR9, DYRK1A, ERG, ETS2, FAM165B, FAM207A, FAM3B, FTCD, HLCS, HMGN1, HSF2BP, ICOSLG, IGSF5, ITGB2, ITGB2-AS1, KCNE1, KCNJ15, KCNJ6, KRTAP10-1, KRTAP10-10, KRTAP10-11, KRTAP10-12, KRTAP10-2, KRTAP10-3, KRTAP10-4, KRTAP10-5, KRTAP10-6, KRTAP10-7, KRTAP10-8, KRTAP10-9, KRTAP12-1, KRTAP12-2, KRTAP12-3, KRTAP12-4, LCA5L, LINC00111, LINC00112, LINC00114, LINC00160, LINC00162, LINC00163, LINC00313, LINC00319, LINC00323, LINC00479, LOC100129027, LOC100133286, LOC100506385, LOC284837, LOC642852, LRRC3, LRRC3-AS1, LSS, MCM3AP, MCM3AP-AS1, MIR3197, MIR4760, MIR802, MORC3, MX1, MX2, NDUFV3, PCBP3, PCNT, PCP4, PDE9A, PDXK, PFKL, PIGP, PKNOX1, PLAC4, POFUT2, PRDM15, PRMT2, PSMG1, PTTG1IP, PWP2, RCAN1, RIPK4, RRP1, RRP1B, RSPH1, RUNX1, RUNX1-IT1, S100B, SETD4, SH3BGR, SIK1, SIM2, SLC19A1, SLC37A1, SPATC1L, SSR4P1, SUMO3, TFF1, TFF2, TFF3, TMPRSS2, TMPRSS3, TRAPPC10, TRPM2, TSPEAR, TTC3, U2AF1, UBASH3A, UBE2G2, UMODL1, WDR4, WRB, YBEY, ZNF295, ZNF295-AS1	hsa-mir-802	RUNX1, ERG, TMPRSS2

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr22:24,852,634-24,887,626	Gain	34,993	q12.1	MIR1302-1		
chrX:918,399-921,332	Loss	2,934	p22.33			
chrX:3,553,206-3,678,990	Gain	125,785	p22.33	PRKX		
chrX:55,950,543-55,967,087	Gain	16,545	p11.21			
chrX:90,059,469-90,356,371	Loss	296,903	q21.31			
chrX:90,416,005-90,756,769	Gain	340,765	q21.31	PABPC5		
chrY:918,399-926,844	Loss	8,446	p11.32			
chrY:22,636,421-23,058,870	Loss	422,45	q11.223	PRY, PRY2, RBMY1F, RBMY1J, RBMY2FP, TTTY5, TTTY6, TTTY6B		
chrY:23,171,649-23,327,051	Loss	155,403	q11.223			
chrY:26,659,439-26,689,998	Loss	30,56	q11.23			

Table S5. Array-CGH analysis comparing ponatinib-resistant UT-7-315 clones A24 (with MS-5) *vs* B4 (without MS-5).

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr1:113,878,387-113,995,349	Gain	116,963	p13.2	MAGI3		
chr1:115,154,338-115,172,381	Loss	18,044	p13.2			
chr1:115,503,351-116,910,628	Gain	1407,278	p13.2 - p13.1	ATP1A1, ATP1A1OS, CASQ2, CD58, MAB21L3, NGF, NHLH2, SLC22A15, VANGL1		
chr1:117,007,943-119,033,535	Gain	2025,593	p13.1 - p12	CD101, CD2, FAM46C, GDAP2, IGSF3, MAN1A2, MIR320B1, MIR942, PTGFRN, SPAG17, TRIM45, TTF2, VTCN1, WDR3	hsa-mir-320b-1, hsa-mir-942	
chr1:173,328,582-173,585,591	Gain	257,01	q25.1	KIAA0040, TNN, TNR		
chr1:182,930,923-196,999,802	Gain	14068,88	q25.3 - q31.3	ASPM, ATP6V1G3, B3GALT2, C1orf27, C1orf53, CDC73, CFH, CFHR1, CFHR2, CFHR3, CFHR4, CFHR5, CRB1, DENND1B, EDEM3, F13B, FAM129A, FAM5C, GLRX2, HMCN1, IVNS1ABP, KCNT2, LHX9, LOC100288079, LOC440704, MIR1278, MIR4735, NEK7, OCLM, PDC, PLA2G4A, PRG4, PTGS2, PTPRC, RGS1, RGS13, RGS18, RGS2, RGS21, RNF2, RNU6-72, SWT1, TPR, TRMT1L, TROVE2, UCHL5, ZBTB41	hsa-mir-1278	TPR, CDC73
chr1:197,147,959-197,395,503	Gain	247,545	q31.3	LOC100131234		
chr1:205,365,393-206,178,926	Gain	813,534	q32.2	C4BPA, CD34, CD46, CD55, CR1, CR1L, CR2, LOC148696, MIR29B2, MIR29C	hsa-mir-29c, hsa-mir-29b-2	
chr1:229,211,041-229,446,737	Gain	235,697	q42.2	C1orf131, FAM89A, GNPAT, LOC149373, MIR1182, TRIM67	hsa-mir-1182	
chr1:241,050,211-241,183,178	Loss	132,968	q43			
chr1:245,715,340-247,171,256	Gain	1455,917	q44	GCSAML, GCSAML-AS1, LYPD8, MIR3124, OR11L1, OR13G1, OR14A16, OR14C36, OR14I1, OR1C1, OR2AK2, OR2C3, OR2G2, OR2G3, OR2G6, OR2L13, OR2L1P, OR2L2, OR2L3, OR2L5, OR2L8, OR2M1P, OR2M2, OR2M3, OR2M4, OR2M5, OR2M7, OR2T1, OR2T10, OR2T11, OR2T12, OR2T2, OR2T27, OR2T29, OR2T3, OR2T33, OR2T34, OR2T35, OR2T4, OR2T5, OR2T6, OR2T8, OR2W3, OR2W5, OR6F1, PGBD2, SH3BP5L, TRIM58, ZNF672, ZNF692		
chr2:85,959,401-86,096,136	Loss	136,736	p11.2	ST3GAL5		
chr2:152,303,950-152,899,220	Loss	595,271	q23.3	ARL5A, CACNB4, STAM2		
chr2:169,500,037-169,501,119	Gain	1,083	q31.1	ABCB11		
chr2:212,035,464-212,224,004	Gain	188,541	q34	ERBB4		
chr3:3,746,746-4,299,772	Gain	553,027	p26.2	LRRN1		

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr3:87,927,361-88,199,556	Loss	272,196	p11.2	CGGBP1, HTR1F		
chr3:173,711,933-174,194,891	Loss	482,959	q26.31	ECT2, NCEH1, SPATA16, TNFSF10		
chr4:132,751,038-133,195,125	Gain	444,088	q28.3			
chr5:134,320,277-137,784,356	Loss	3464,08	q31.1 - q31.2	BRD8, C5orf20, CATSPER3, CDC23, CDC25C, CXCL14, FAM13B, FAM53C, FBXL21, GFRA3, H2AFY, HNRNPA0, IL9, KDM3B, KIF20A, KLHL3, LECT2, LOC340073, LOC340074, LOC389332, MIR874, MYOT, NEUROG1, NME5, NPY6R, PCBD2, PITX1, PKD2L2, SLC25A48, SMAD5, SMAD5-AS1, SPOCK1, TGFBI, TIFAB, TRPC7, VTRNA2-1, WNT8A	hsa-mir-886, hsa-mir-874	
chr6:2,625,415-2,752,897	Loss	127,483	p25.2	MYLK4, WRNIP1		

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr6:41,252,762-101,898,646	Loss	60645,885	p21.1 - q16.3	AARS2, ABCC10, AKIRIN2, ANKRD6, ASCC3, ATP6V0CP3, B3GAT2, BACH2, BAG2, BAI3, BCKDHB, BEND6, BMP5, BYSL, C6orf108, C6orf132, C6orf141, C6orf147, C6orf162, C6orf163, C6orf164, C6orf165, C6orf223, C6orf226, C6orf57, C6orf7, CAPN11, CASP8AP2, CCNC, CCND3, CD109, CD2AP, CDC5L, CENPQ, CGA, CLIC5, CNPY3, CNR1, COL12A1, COL19A1, COL21A1, COL9A1, COQ3, COX7A2, CRIP3, CRISP1, CRISP2, CRISP3, CUL7, CUL9, CYB5R4, CYP39A1, DDX43, DEFB110, DEFB112, DEFB113, DEFB114, DEFB133, DLK2, DOPEY1, DPPA5, DST, EEF1A1, EFHC1, ELOVL4, ELOVL5, ENPP4, ENPP5, EPHA7, EYS, FAM135A, FAM46A, FAM83B, FAXC, FBXL4, FBXO9, FHL5, FILIP1, FOXP4, FRS3, FUT9, GABRR1, GABRR2, GCLC, GCM1, GFRAL, GJA10, GJB7, GLYATL3, GNMT, GPR110, GPR111, GPR115, GPR116, GPR63, GSTA1, GSTA2, GSTA3, GSTA4, GSTA5, GSTA7P, GTPBP2, GUCA1A, GUCA1B, GUSBP4, HCRTR2, HMGCLL1, HMGN3, HSP90AB1, HTR1B, HTR1E, IBTK, ICK, IL17A, IL17F, IMPG1, IRAK1BP1, KCNQ5, KCNQ5-AS1, KHDC1, KHDC1L, KHDC3L, KHDRBS2, KIAA0240, KIAA1009, KIAA1586, KLC4, KLHDC3, KLHL31, KLHL32, LCA5, LGSN, LINC00472, LMBRD1, LOC100132354, LOC100287718, LOC100288198, LOC100506804, LOC441155, LOC728012, LOC730101, LRRC1, LRRC73, LYRM2, MAD2L1BP, MANEA, MAP3K7, MB21D1, MCHR2, MCM3, MDFI, MDN1, ME1, MEA1, MED20, MEP1A, MIR133B, MIR206, MIR2113, MIR30A, MIR30C2, MIR4282, MIR4464, MIR4641, MIR4642, MIR4643, MIR4647, MIR548AD, MIR5685, MIR586, MLIP, MLIP-IT1, MMS22L, MRAP2, MRPL14, MRPL2, MRPS10, MRPS18A, MTO1, MUT, MYO6, NCR2, NDUFAF4, NFKBIE, NT5E, OGFRL1, OOEP, OPN5, ORC3, PAQR8, PEX6, PGC, PGK2, PGM3, PHF3, PHIP, PKHD1, PLA2G7, PM20D2, PNISR, PNRC1, POLH, POLR1C, POU3F2, PPP2R5D, PRDM13, PRICKLE4, PRIM2, PRPH2, PRSS35, PTCHD4, PTCRA, PTK7, PTP4A1, RAB23, RARS2, RCAN2, RHAG, RIMS1, RIPPLY2, RNGTT, RNU6-71, RPL7L1, RPS16P5, RRAGD, RRP36, RSPH9, RUNX2, RWDD2A, SENP6, SH3BGRL2, SIM1, SLC17A5, SLC22A7, SLC25A27, SLC25A51P1, SLC29A1, SLC35A1, SLC35B2, SMAP1, SNAP91, SNHG5, SNORD50A, SNORD50B, SNX14, SPACA1, SPATS1, SRF, SRSF12, SUPT3H, SYNCRIP, TAF8, TBCC, TBX18, TCTE1, TDRD6, TFAP2B, TFAP2D, TFEB, TINAG, TJAP1, TMEM14A, TMEM151B, TMEM30A, TMEM63B, TNFRSF21, TOMM6, TPBG, TRAM2, TREM1, TREML2, TREML3P, TREML4, TREML5P, TRERF1, TSG1, TSTD3, TTBK1, TTK, UBE2J1, UBE3D, UBR2, UFL1, USP45, USP49, VEGFA, XPO5, YIPF3, ZNF292, ZNF318, ZNF451	hsa-mir-30c-2, hsa-mir-133b, hsa-mir-206, hsa-mir-586, hsa-mir-2113, hsa-mir-30a	TFEB, CCND3, HSP90AB1

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr7:130,978-2,155,122	Gain	2024,145	p22.3 - p22.2	ADAP1, C7orf50, COX19, CYP2W1, ELFN1, FAM20C, FLJ44511, GET4, GPER, GPR146, HEATR2, INTS1, MAD1L1, MAFK, MICALL2, MIR339, MIR4655, PDGFA, PRKAR1B, PSMG3, PSMG3-AS1, SUN1, TFAMP1, TMEM184A, UNCX, ZFAND2A	hsa-mir-339	
chr8:1,750,526-1,814,248	Gain	63,723	p23.3	ARHGEF10, MIR596	hsa-mir-596	
chr8:2,055,105-2,209,932	Gain	154,828	p23.3 - p23.2	MYOM2		
chr8:118,965,914-119,714,487	Gain	748,574	q24.11 - q24.12	EXT1, SAMD12, SAMD12-AS1		EXT1
chr8:130,358,880-130,773,707	Gain	414,828	q24.21			
chr9:2,496,958-2,523,497	Gain	26,54	p24.2			
chr9:5,380,368-5,999,912	Loss	619,545	p24.1	CD274, ERMP1, KIAA1432, KIAA2026, MIR4665, MLANA, PDCD1LG2, PLGRKT		CD274
chr9:8,096,536-8,167,385	Gain	70,85	p24.1			
chr9:8,374,089-9,825,448	Gain	1451,36	p24.1 - p23	PTPRD		
chr9:12,529,977-12,979,790	Gain	449,814	p23	LURAP1L, TYRP1		
chr9:20,245,178-32,102,682	Loss	11857,505	p21.3 - p21.1	C9orf53, C9orf72, CAAP1, CDKN2A, CDKN2B, CDKN2B-AS1, DMRTA1, ELAVL2, EQTN, FLJ35282, FOCAD, IFNA1, IFNA10, IFNA13, IFNA14, IFNA16, IFNA17, IFNA2, IFNA21, IFNA22P, IFNA4, IFNA5, IFNA6, IFNA7, IFNA8, IFNB1, IFNE, IFNK, IFNW1, IFT74, IZUMO3, KLHL9, LINC00032, LINGO2, LOC100506422, LOC401497, LRRC19, MIR31, MIR31HG, MIR4473, MIR4474, MIR491, MIR873, MIR876, MLLT3, MOB3B, MTAP, PLAA, PTPLAD2, TEK, TUSC1	hsa-mir-876, hsa-mir-31, hsa-mir-491, hsa-mir-873	MLLT3, CDKN2A
chr9:102,097,962-102,884,174	Loss	786,213	q31.1	INVS, LPPR1, MSANTD3, MSANTD3-TMEFF1, MURC, TEX10, TMEFF1		
chr10:37,490,461-37,524,172	Loss	33,712	p11.21	ANKRD30A		
chr10:60,517,126-64,979,704	Loss	4462,579	q21.1 - q21.3	ADO, ANK3, ARID5B, C10orf107, C10orf40, CCDC6, CDK1, EGR2, FAM13C, JMJD1C, LOC84989, M1, MIR1296, MIR548AV, NRBF2, PHYHIPL, REEP3, RHOBTB1, RTKN2, SLC16A9, TMEM26, ZNF365	hsa-mir-1296	CCDC6
chr10:81,148,306-81,566,427	Loss	418,122	q22.3	LOC650623, SFTPA1, SFTPA2		
chr10:88,920,768-89,249,049	Loss	328,282	q23.2	FAM22A, FAM22D, FAM35A, LOC439994, LOC728190, LOC728218		
chr11:14,539,491-14,715,074	Loss	175,584	p15.2	PDE3B, PSMA1		
chr11:61,226,358-61,251,263	Loss	24,906	q12.2	DAGLA		
chr12:103,480,720-103,527,717	Gain	46,998	q23.3	CHST11, MIR3922		
chr13:51,415,888-51,441,856	Loss	25,969	q14.3	ATP7B		
chr14:18,407,780-19,359,996	Loss	952,217	q11.1 - q11.2	LOC642426, OR11H12, OR11H2, OR4M1, OR4Q3, POTEG, POTEM		

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr14:24,784,036-25,825,716	Gain	1041,681	q12			
chr16:14,899,883-15,030,993	Loss	131,111	p13.11	MIR1972-1, MIR1972-2, MIR3179-1, MIR3179-2, MIR3179-3, MIR3180-1, MIR3180-2, MIR3180-3, NPIP, PDXDC1	hsa-mir-1972	
chr16:68,559,335-68,749,192	Loss	189,858	q22.1	MIR1972-1, MIR1972-2, PDPR, PDXDC2P	hsa-mir-1972	
chr16:77,492,443-77,510,238	Gain	17,796	q23.1	WWOX		
chr17:41,541,432-41,720,952	Loss	179,521	q21.31	KANSL1, KANSL1-AS1		
chr17:42,037,190-42,121,317	Loss	84,128	q21.32	NSF, NSFP1		
chr19:56,950,190-59,313,839 Part1	Loss	2363,65	q13.33 - q13.42	BIRC8, CACNG6, CACNG7, CACNG8, DPRX, ERVV-1, ERVV-2, FAM90A27P, FPR2, FPR3, LOC284379, MIR1283-1, MIR1283-2, MIR1323, MIR371A, MIR371B, MIR372, MIR373, MIR498, MIR512-1, MIR512-2, MIR515-1, MIR515-2, MIR516A1, MIR516A2, MIR516B1, MIR516B2, MIR517A, MIR517B, MIR517C, MIR518A1, MIR518A2, MIR518B, MIR518C, MIR518D, MIR518E, MIR518F, MIR519A1, MIR519A2, MIR519B, MIR519C, MIR519D, MIR519E, MIR520A, MIR520B, MIR520C, MIR520D, MIR520E, MIR520F, MIR520G, MIR520H, MIR521-1, MIR521-2, MIR522, MIR523, MIR524, MIR525, MIR526A1, MIR526A2, MIR526B, MIR527, MIR643, MIR935, MYADM, NDUFA3, NLRP12, OSCAR, PPP2R1A, PRKCG, PRPF31, TARM1, TFPT, TPM3P9, VN1R2, VN1R4, VSTM1, ZNF137P, ZNF160, ZNF28, ZNF320, ZNF321P, ZNF331, ZNF347, ZNF350, ZNF415, ZNF432, ZNF468, ZNF480, ZNF525, ZNF528, ZNF534, ZNF577, ZNF578, ZNF600, ZNF610, ZNF611, ZNF613, ZNF614, ZNF615, ZNF616, ZNF649, ZNF665, ZNF677, ZNF701, ZNF702P, ZNF761, ZNF765, ZNF766, ZNF808, ZNF813, ZNF816, ZNF816-ZNF321P, ZNF818P, ZNF83, ZNF836, ZNF841, ZNF845, ZNF880	hsa-mir-518f, hsa-mir-512-1, hsa-mir-519a-1, hsa-mir-512-2, hsa-mir-519a-2, hsa-mir-518a-1, hsa-mir-518a-2, hsa-mir-518b, hsa-mir-518c, hsa-mir-518d, hsa-mir-518e, hsa-mir-520g, hsa-mir-520h, hsa-mir-520e, hsa-mir-520f, hsa-mir-520b, hsa-mir-520a, hsa-mir-520d, hsa-mir-520c, hsa-mir-519b, hsa-mir-373, hsa-mir-515-1, hsa-mir-372,	

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chr19:56,950,190-59,313,839 Part2	Loss	2363,65	q13.33 - q13.42		hsa-mir-519e, hsa-mir-519c, hsa-mir-519d, hsa-mir-522, hsa-mir-515-2, hsa-mir-1283-1, hsa-mir-525, hsa-mir-1283-2, hsa-mir-524, hsa-mir-523, hsa-mir-526a-1, hsa-mir-526a-2, hsa-mir-527, hsa-mir-643, hsa-mir-1323, hsa-mir-371, hsa-mir-526b, hsa-mir-516b-1, hsa-mir-516b-2, hsa-mir-521-2, hsa-mir-521-1, hsa-mir-516a-1, hsa-mir-498, hsa-mir-516a-2, hsa-mir-935, hsa-mir-517b, hsa-mir-517a, hsa-mir-517c	
chr20:14,986,306-14,993,757	Loss	7,452	p12.1	MACROD2		
chr22:35,546,170-35,687,378	Loss	141,209	q12.3	CSF2RB, NCF4		

Chromosome Region (hg18)	Event	Length (Kb)	Cytoband	Genes	miRNAs	Cancer Genes (Cancer Gene Census)
chrX:918,399-921,332	Loss	2,934	p22.33			
chrX:2,803,844-3,734,485	Loss	930,642	p22.33	ARSD, ARSE, ARSF, ARSH, CXorf28, GYG2, MXRA5, PRKX		
chrX:55,950,543-55,967,087	Loss	16,545	p11.21			
chrX:90,356,371-92,252,215	Loss	1895,845	q21.31 - q21.32	PABPC5, PCDH11X		
chrY:918,399-926,844	Loss	8,446	p11.32			
chrY:7,489,021-7,711,787	Gain	222,767	p11.2	TTTY16		
chrY:17,030,541-26,689,998	Gain	9659,458	q11.221 - q11.23	BCORP1, BPY2, BPY2B, BPY2C, CD24, CDY1, CDY1B, CDY2A, CDY2B, CSPG4P1Y, DAZ1, DAZ2, DAZ3, DAZ4, EIF1AY, FAM224A, FAM224B, FAM41AY1, FAM41AY2, GOLGA2P2Y, GOLGA2P3Y, HSFY1, HSFY2, KDM5D, NCRNA00185, PRY, PRY2, RBMY1A1, RBMY1B, RBMY1D, RBMY1E, RBMY1F, RBMY1J, RBMY2EP, RBMY2FP, RPS4Y2, TTTY10, TTTY13, TTTY14, TTTY17A, TTTY17B, TTTY17C, TTTY3, TTTY3B, TTTY4, TTTY4B, TTTY4C, TTTY5, TTTY6, TTTY6B, TTTY9A, TTTY9B, TXLNG2P, XKRY, XKRY2		

Table S6. Variations recurrently identified in array-CGH experiments (Sup Table S3, F3 *vs* E5; Sup Table S4, A23 *vs* C9; Sup Table S5, A24 *vs* B4).

Chromosome Region	Length (Kb)	Cytoband	Gene symbol or miRNA	Name	Biological Process
chr1:116,337,471-116,910,628	573,158	p13.1	SLC22A15	solute carrier family 22, member 15	ion transport
			MAB21L3	mab-21-like 3 (C. elegans)	-
			ATP1A1	ATPase, Na+/K+ transporting, alpha 1 polypeptide	ATP biosynthetic process, ion transmembrane transport, negative regulation of glucocorticoid biosynthetic process, regulation of heart contraction, positive regulation of striated muscle contraction, regulation of blood pressure, regulation of sodium ion transport, regulation of the force of heart contraction, response to drug, transmembrane transport
			ATP1A1OS	ATP1A1 opposite strand	-
			CD58	CD58 molecule	blood coagulation, cell adhesion, cell-cell adhesion, leukocyte migration
chr1:229,220,576-229,446,737	226,162	q42.2	MIR1182	microRNA 1182	MicroRNA expression signature of human sarcomas
			FAM89A	family with sequence similarity 89, member A	-
			LOC149373	uncharacterized LOC149373	-
			TRIM67	tripartite motif containing 67	zinc ion binding
			C1orf131	chromosome 1 open reading frame 131	-
			GNPAT	glyceronephosphate O-acyltransferase	cellular lipid metabolic process, cellular membrane organization, cerebellum morphogenesis, ether lipid biosynthetic process, glycerophospholipid biosynthetic process, paranodal junction assembly, phosphatidic acid biosynthetic process, phospholipid metabolic process, response to drug, response to fatty acid, response to nutrient, response to starvation, small molecule metabolic process, synapse assembly

Chromosome Region	Length (Kb)	Cytoband	Gene symbol or miRNA	Name	BiologicalProcess
chr3:173,711,933-174,194,891	482,959	q26.31	TNFSF10	tumor necrosis factor (ligand) superfamily, member 10	activation of cysteine-type endopeptidase activity involved in apoptotic process, cell-cell signaling, immune response, positive regulation of I-kappaB kinase/NF-kappaB cascade, positive regulation of extrinsic apoptotic signaling pathway, positive regulation of release of cytochrome c from mitochondria, signal transduction
			NCEH1	neutralcholesterol ester hydrolase 1	lipidcatabolicprocess
			ECT2	epithelial cell transforming sequence 2 oncogene	activation of RacGTPase activity, activation of Rho GTPase activity, activation of protein kinase activity, apoptotic process, cell cycle cytokinesis, cell morphogenesis, cellular response to calcium ion, cellular response to hydrogen peroxide, cellular response to ionizing radiation, nerve growth factor receptor signaling pathway, positive regulation of Cdc42 GTPase activity, positive regulation of I-kappaB kinase/NF-kappaB cascade, positive regulation of Rho GTPase activity, positive regulation of Rho GTPase activity, positive regulation of neuron differentiation, positive regulation of protein import into nucleus, protein homooligomerization, protein transport, regulation of attachment of spindle microtubules to kinetochore, tight junction assembly
			SPATA16	spermatogenesisassociated 16	cell differentiation, multicellular organismal development, spermatogenesis
chr8:130,637,003-130,770,082	133,08	q24.21	-	-	-
chr9:2,496,958-2,523,497	26,54	p24.2	-	-	-
chr9:32,004,034-32,102,682	98,649	p21.1	-	-	-
chr9:5,380,368-5,999,912	619,545	p24.1	PLGRKT	plasminogenreceptor, C-terminal lysine transmembraneprotein	chemotaxis, inflammatory response, positive regulation of plasminogen activation
			CD274	CD274 molecule	T cellcostimulation, cellproliferation, cell surface receptorsignalingpathway, immune response, negativeregulation of T cellproliferation, signal transduction
			PDCD1LG2	programmedcelldeath 1 ligand 2	T cellcostimulation, immune response, regulation of T cellproliferation
			KIAA1432	KIAA1432	
			ERMP1	endoplasmicreticulum metallopeptidase 1	ovarianfollicledevelopment, proteolysis
			MLANA	melan-A	proteinbinding
			KIAA2026	KIAA2026	-
			MIR4665	microRNA 4665	-

Chromosome Region	Length (Kb)	Cytoband	Gene symbol or miRNA	Name	BiologicalProcess
chrY:22,636,421-23,058,870	422,45	q11.223	PRY	PTPN13-like, Y-linked	-
			PRY2	PTPN13-like, Y-linked 2	-
			TTTY6	testis-specifictranscript, Y-linked 6 (non-proteincoding)	-
			TTTY6B	testis-specifictranscript, Y-linked 6B (non-proteincoding)	-
			RBMY1F	RNA binding motif protein, Y-linked, family 1, member F	-
			RBMY1J	RNA binding motif protein, Y-linked, family 1, member J	RNA splicing, mRNA processing, spermatogenesis
			TTTY5	testis-specifictranscript, Y-linked 5	-
			RBMY2FP	RNA binding motif protein, Y-linked, family 2, member F pseudogene	-
chrY:23,171,649-23,327,051	155,403	q11.223	-	-	-
chrY:26,659,439-26,689,998	30,56	q11.23	-	-	-