Supplementary Table S1. Details of the cervical SCC cell lines studied

Cell line	HPV type	Anatomical site of origin	ATCC* reference	Original description	Previous karyotyping
C-33A	Negative	Cervix	HTB-31	Auersperg and Hawryluk, 1962	Harris et al., 2003; Zimonjic et al., 1995
C-4I	18	Cervix	CRL-1594	Auersperg and Hawryluk, 1962	Harris et al., 2003; James et al., 1989
CaSki	16	Small bowel mesentery metastasis	CRL-1550	Pattillo et al., 1977	Harris et al., 2003
HT-3	Negative	Lymph node metastasis	HTB-32	Fogh et al., 1977	Harris et al., 2003; Zimonjic et al., 1995
ME180	18 and 39	Omental metastasis	HTB-33	Sykes et al., 1970	Harris et al., 2003
MS751	18 and 45	Lymph node metastasis	HTB-34	Sykes et al., 1970	Harris et al., 2003
SiHa	16	Cervix	HTB-35	Friedl et al., 1970	Harris et al., 2003; Szuhai et al., 2000
SW756	18	Cervix	CRL-10302	Freedman et al., 1982	Harris et al., 2003

References for Supplementary Table S1

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* ATCC = American Type Culture Collection

Supplementary Table S2, Foster et al

Derived composite karyotypes for the eight cervical SCC cell lines

C-33A 47,XX,der(1)t(1;18)(p31;q21)[10],der(1)t(1;18)(p21;q21)[10],der(3)t(3;7)(q26;?)[10], +11[2],der(13)t(13;19)(q14;?)[10],-14[10],der(17)t(14;17)(?;?)[9],der(18)t(18;20) (q22;q13.2)[10],-19[3],der(21)t(1;21)(p12;p11)[10][cp10]
C-4I 47,XX,+X[3],del(2)(q33)[10],der(4)t(4;22)(p11;q12)[9],i(5p)(p10)[9],+der(5)t(5;8) (p12;q23)[6],-8[10],-10[5],del(11)(p11)[10],der(12)t(8;12)(?;p11)[10],der(13)t(10;13) (p11;p11)[30],del(14)(q23)[8],-15[10],der(15)t(15;15)(q10;q10)del(15)(q26)[10], der(17)t(17;19)(p11;q13.2)[10],del(18)(?)[10],ins(18;14)(?;?)[10],-22[10][cp10]
CaSki 78,X,der(X)t(X;5)(q11;q11)[9],der(X)t(X;8)(p10;q11)[10],der(1)t(1;4)(q31;q32)[10], del(2)(q12)[7],+der(2)t(2;7)(p16;?)[8],del(3)(q11?)[2],der(3)t(3;5)(?;?)[10],-4[10],

del(5)(p13)[9],der(5)t(3;5)(q11;p11)[6],+der(5)t(5;8)(p14;?)[x2 in 10],+der(5)t(5;16)(q11;q11)[8],+der(5)t(5;21)(q11;p11)[5],del(6)(p11)[5],+der(6)t(3;6)(?;q11?)[10],der(7)t(7;17)(q21;?)[7],+der(7)t(7;21)(p11;p11)[8],-8[7],+9[5],-10[9],der(10)t(5;10)(?;p12)[9],der(11)t(11;14)(p14;q23)[10],+der(11)t(11;14)(p12;q11.2)t(11;13)(q13;?)t(13;15)(?;q21)[10],del(12)(q12)[9],del(13)(q?)[7],der(13)t(11;13)(?;q21.3)[10],-14[10],-14[8],der(15)t(6;15)(?;q23)[7],+der(15)t(14;15)(q12;q12)[9],+der(15)t(14;15)(q12;q12)[3],del(16)(q?)[9],i(16)(q10)[9],der(17)t(2;17)(?;q22)[10],der(17)t(17;19)(p11;?)[5],der(18)t(12;18)(q12;q12)[5],+der(18)t(15;18)(?;q12)[4],-19[10],-19[10],+20[10],+der(20)t(10;20)(q12;p11)[8],-21[9],-21[5],der(21)t(10;21)(p11;p11)[7],-22[4],der(22)t(14;22)(q11;p11)t(11;22)(?;q11)[8],+der(?)t(?;3)(?;?)[2],+der(?)t(?;6)(?;?)[5][cp10]
HT-3 82,X,-X[10],-X[10],-X[6],der(1)t(1;9)(p11;p11)[7],der(1)t(1;9)(p11;p11)t(1;3)(q31;?)[4],der(1)t(1;12)(p11;q11)[8],+der(1)t(1;12)(?;?)[7],-2[4],del(2)(q34)[3],der(2)del(2)(p?)t(2;9)(q31;q33)[6],der(3)t(3;5)(?;p11)[2],der(3)del(3)(p22)t(3;6)(q11;q12)[2],der(3)del(3)(p?)t(3;8)(q?;?)t(6;8)(?;?)[100],-4[10],-4[10],der(4)t(3;4)(?;?)[10],der(5)t(X;5)(?;p13)[6],der(5)t(X;5)(p?;p13)t(5;12)(q?;?)[2],+der(5)t(5;6)(p13;p21)[2],-6[10],der(6)t(6;13)(q11;q11)[10](x2 in 5),der(7)t(4;7)(p11;p?)[6],der(7)t(7;12)(p11;?)t(5;7)(?;q21)[7],-8[9],der(8)t(1;8)(p34;p?)t(8;9)(q?;?)[9],der(8)t(5;8)(q21;?)[2],-9[10],-9[8],-9[5],i(9)(p10)[7],-10[10],-10[10],der(10)t(10;15)(q25;q21)[10],-11[7],del(11)(q11)[8],der(11)t(5;11)(?;q24)[5],-12[10],-12[8],-13[10],-13[10],-13[10],-14[10],-14[5],-14[4],

i(14)(q10)[10],-15[9],-15[4],der(15)t(2;15)(?;p11)[9],-16[10],der(16)t(9;16)(p11;q11)[x2 in 10],der(16)t(10;16)(q11;p11)[10],-17[6],del(17)(q?)[7],dup(17)(?)[4],der(18)t(X;18)(?;q12)[7],der(18)t(8;18)(p12;q11)[5],der(18)t(11;18)(?;q12)[5],der(18)t(14;18)(q?;?)[3],-19[7],der(19)t(8;19)(?;q11)[6],der(19)t(16;19)(?;p11)[9],der(20)t(6;20)(q11;?)[8],-21[10],-21[9],-22[5],der(22)t(11;22)(q14;q12)[9],+der(?)t(3;12)(?;?)[8],+der(?)t(?;6)(?;?)[5],+der(?)t(?;16)(?;?)[4][cp10]
ME180 64,XX,-X[4],-1[10],der(2)t(2;7)(?;p?)t(7;3)(p12;q21?)[8],+der(2)t(2;16)(?;q21?)[8],del(3)(?)[3],i(3)(q10)[10],-4[10],-5[10],del(6)(?)[2],der(7)t(7;9)(p12;q?)t(3;7)(q13;q21.1)[9],der(7)t(7;?)(?;?)t(3;7)(?;?)[2],-8[10],der(8)t(5;8)(q?;q?)[6],der(9)t(5;9)(p11;p11)[6],+der(9)t(5;9)(p?;p11)t(9;?)(q11;?)[2],+der(9)t(7;9)(q31;p12)[9],+der(9)t(?;9)(?;q11)t(?;7)(?;?)[2],-10[10],der(10)t(10;10)(q10;q10)t(10;10)(?;?)[10],-12[10],-13[10],der(14)t(5;14)(p11;p11)[5],+der(14)t(9;14)(?;p11)[8],der(15)t(12;15)(p11;p11)[10],der(15)t(12;15)(?;q25?)[6],-16[4],der(16)t(2;16)(?;p11)[5],-17[5],der(17)t(15;17)(?;p12)[6],-18[10],-20[5],-20[3],-21[10],-22[7],der(22)t(8;22)(q11;p11)[4],der(?)t(?;12)(?;?)[5][cp10]
MS751 85,X,-X[4],der(X)t(X;5)(q27;?)[x2 in 10],-1[5],-1[4],der(2)t(2;22)(q36;q?)[x2 in 9],

der(3)t(3;8)(p12;q11)[x2 in 10],-4[10],-4[10],-4[4],-5[10],-5[4],der(5)t(1;5)(p12;p15)[4], der(6)t(6;18)(p22.3;q?)[x2 in 7],-7[5],ins(7;21)(q?:q?)[x2 in 7],t(8;12)(p22;p12)[x2 in 10], der(8)t(8;18)(p12;p11)[x2 in 9],+der(8)t(8;12)(?;?)t(5;8)(p?;?)[5],-9[4],+10[2],-11[6], der(11)t(11;22)(?;?)[6],-12[5],-13[10],-13[10],-14[5],der(14)t(7;14)(?;p11)[x2 in 10],-15[7], -15[4],-16[6],-16[4],-17[5],der(17)t(?;17)(?;?)[5],-18[9],-18[5],-18[3],-19[10],-19[10],-20[5], der(20)t(20;21)(q12?;q11)[x2 in 7],-21[10],-21[10],-21[10],-21[10],-22[10],-22[10],der(22) t(20;22)(q11;p11)t(22;15)(q13?;q21.1)[x2 in 9],+der(?)t(?;5)(?;?)[2][cp10]
SiHa 75,XX,ins(X;3)(p11;q24)[10],+der(X)ins(X;3)(p11;q24)t(X;5)(p22;?)t(X;12)(q27;?)[10] +der(X)t(X;9)(q25;?)[10],der(2)t(2;10)(q36;q?)[6],der(3)t(3;6)(q12;p?)[6],-4[10],der(5)t(5;7) (p15;q21)[3],+i(5p)(p10)[10],+i(5p)(p10)[10],del(6)(p?q?)[6],del(8)(?)[10],der(9)t(9;10) (p12;p?)[5],-10[10],-11[5],der(12)t(6;12)(?;q23)[10],-13[10],-15[4],der(16)t(7;16) (q11;q11)[3],dup(16)(q21q24)[7],+del(17)(p?;q?)[3],-18[4],der(18)t(18;20)(q12;p12)[9], -19[3],der(19)t(15;19)(q?;q?)[10],der(19)t(19;20)(?;?)[6],-21[4],idic(21;21)(q10;q10)[10], +22[10][cp10]
SW756 90,XXX,-X[4],+X[3],+del(X)(?)[10],der(1)t(1;9)(p34?;?)[2],-2[3],der(2)t(2;8)(q11;q11)

[9],der(3)t(?;?)(?;?)[2],-4[10],-4[8],del(5)(p11)[2],der(5)t(1;5)(?;p13)[7],+i(5)(p10)[10],
+der(6)t(6;17)(?;?)[2],-8[10],-8[4],-9[10],-9[4],-10[10],-10[4],-11[9],der(11)t(7;11)
(?;q12)[9],i(12)(p10)[9],i(12)(q10)[6],-13[10],der(13)t(13;13)(q10;q10)del(13)(q12q21)
[9],-14[10],der(14)t(14;20)(p11;?)[10],-15[9],-15[4],der(15)t(11;15)(q14;q?)[9],-16[10],
-16[4],der(16)t(15;16)(q23;p12)[9],-17[6],-18[10],-18[3],der(19)t(17;19)(?;?)[4],+20[7],
der(21)t(5;21)(p11;p11)[3],+der(21)t(9;21)(q11;p?)[8],-22[10][cp10]

Supplementary Table S3, Foster et al

All chromosomal rearrangements detected by M-FISH/aCGH in eight cervical SCC cell lines

All rearrangements detected in the present study are given, as well as a comparison with data from the previous SKY/mCGH investigation (Harris et al. 2003). For those identified in this study, the percentage of metaphases in which the abnormality was detected is given. Codes: 'C'= common to both studies, 'CR'= common to both studies but refined in the present investigation, 'N'= novel to this study, 'A'= absent in this study but present in the SKY report.

M-FISH/aCGH	Published SKY/mCGH karyotype	Frequency	Code
C-33A			
der(1)t(1;18)(p31;q21)	der(1)t(1;18)(p36;q21)	100	C
der(1)t(1;18)(p21;q21)	der(1)t(1;18)(p13;q21)	100	C
der(3)t(3;7)(q26;?)	der(3)t(3;7)(q25;q32)	100	C
der(13)t(13;19)(q14;?)	der(13)t(13;19)(q22;?)	100	C
der(18)t(18;20)(q22;q13.2)	der(18)t(18;20)(q12;?)	100	C
der(21)t(1;21)(p12;p11)	der(21)t(1;21)(p13;p11)	100	C
der(17)t(14;17)(?;?)		90	CR
der(8)t(?;8)(?;?)		10	N
del(10)(?)		10	N
	t(X;10)(q25;q24)		A
	der(1)t(1;10)(q32;q11.2)		A
	der(2)t(2;7)(?;p15)del(2)(q21)		A
	der(3)t(1;3)(p21;?)t(3;8)(q25;?)		A
	der(8)t(2;8)(p11;q11)		A

	der(9)t(2;9)(q31;q34)		A
	der(14)t(4;14)(?;?)		A
	der(14)t(7;14)(?;p11)		A
C-4I			
del(2)(q33)	del(2)(q33)	100	C
del(11)(p11)	del(11)(p11)	100	C
der(12)t(8;12)(?;p11)	der(12)t(8;12)(q11;p11)	100	C
der(15)t(15;15)(q10;q10)del(15)(q26)	der(15)t(15;15)(q10;q10)t(15;16)(q24;?)	100	C
der(17)t(17;19)(p11;q13.2)	der(17)t(17;19)(p13;?)	100	C
ins(18;14)(?;?)	ins(18;14)(q21;q21-q24)	100	C
del(18)(?)	i(18)(p10)	100	C
der(4)t(4;22)(p11;q12)	der(4)t(4;22)(p11;q11)	90	C
i(5p)(p10)	i(5)(p10)	90	C
del(14)(q23)	del(14)(q13)	80	C
der(5)t(5;8)(p12;q23)	der(5)t(5;8)(p15;q23)	60	C
der(13)t(10;13)(p11;p11)		30	N
t(11;13)(?;?)		10	N
del(17)(?)	del(17)(p11)	10	C
del(17)(?)		10	N
der(18)t(?;18)(?;?)		10	N
der(?)t(?;4)(?;?)		10	N
	dup(11)(q14q22)		A
CaSki			
der(X)t(X;8)(p10;q11)	der(X)t(X;8)(p11;p11)	100	C
der(1)t(1;4)(q31;q32)	der(1)t(1;4)(q44;?)	100	C
der(3)t(3;5)(?;?)	der(3)t(3;5)(p22;q35)	100	C

der(5)t(5;8)(p14;?) x2	der(5)t(5;8)(p15;q23) x2	100	C
der(6)t(3;6)(?;q11?)		100	N
der(11)t(11;14)(p14;q23)	der(11)t(11;14)(p11.2;?)	100	C
der(11)t(11;14)(p12;q11.2)t(11;13)(q13;?)	der(11)t(11;14)(p11;q22)t(11;13)(q13;?)t	100	C
t(13;15)(?;q21)	(13;15)(?;q21)		
der(13)t(11;13)(?;q21.3)		100	C
der(17)t(2;17)(?;q22)		100	N
der(X)t(X;5)(q11;q11)	der(X)t(X;5)(?;?)	90	C
del(5)(p13)	del(5)(p11)	90	C
der(10)t(5;10)(?;p12)	der(10)t(5;10)(?;p11)	90	C
del(12)(q12)	del(12)(q11)	90	C
der(15)t(14;15)(q12;q12) (x2 in 30%)	der(14)t(14;15)(q10;q10)	90	C
i(16)(q10)	i(16)(q10)	90	C
del(16)(q?)	del(16)(q11)	90	C
der(2)t(2;7)(p16;?)	der(2)t(2;7)(q31;q22)	80	C
der(5)t(5;16)(q11;q11)	der(5)t(5;16)(q11;?)	80	C
der(7)t(7;21)(p11;p11)		80	N
der(20)t(10;20)(q12;p11)	der(10)t(10;20)(p11;?)	80	C
der(22)t(14;22)(q11;p11)t(11;22)(?;q11)		80	N
del(2)(q12)	del(2)(q11)	70	C
der(7)t(7;17)(q21;?)	der(7)t(7;17)(q11.2;q21)	70	C
del(13)(q?)	del(13)(q?)	70	C
der(15)t(6;15)(?;q23)	der(15)t(6;15)(?;q26)	70	C
der(21)t(10;21)(p11;p11)	der(21)t(10;21)(?;p11.1)	70	C
der(5)t(3;5)(q11;p11)	der(3)t(3;5)(p11;?)	60	C
der(5)t(5;21)(q11;p11)		50	N
del(6)(p11)	del(6)(q11)	50	C
der(17)t(17;19)(p11;?)		50	N
der(18)t(12;18)(q12;q12)	der(18)t(12;18)(q11;q11)	50	C

der(?)t(?;6)(?;?)		50	N
der(18)t(15;18)(?;q12)	der(18)t(15;18)(?;q11)	40	C
del(3)(q11?)		20	N
der(?)t(?;3)(?;?)		20	N
der(3)t(3;13)(?;?)		10	N
der(6)t(3;6)(?;?)		10	N
der(7)t(6;7)(?;q11)	der(6)t(6;9)(p11;?)t(6;7)(q27;?)	10	C
der(11)t(?;11)(?;?)		10	N
t(11;14)(?;?)		10	N
der(21)t(11;21)(?;p11)		10	N
der(21)t(19;21)(?;?)		10	N
der(?)t(?;3)(?;?)		10	N
der(?)t(?;6)(?;?)		10	N
der(?)t(?;9)(?;?)		10	N
	del(2)(p22-p24)		A
	del(5)(q11)		A
	der(7)t(7;8)(p11;q23)		A
HT-3			
der(3)del(3)(p?)t(3;8)(q?;?)t(6;8)(?;?)	der(3)t(3;21)(q25;q?)t(6;21)(q?;q?)	100	CR
der(4)t(3;4)(?;?)	der(4)t(3;4)(?;?)	100	C
der(6)t(6;13)(q11;q11) (x2 in 50%)	der(6;13)(p10;q10)	100	C
der(10)t(10;15)(q25;q21)	der(10)t(10;15)(q24;q11)	100	C
i(14)(q10)	der(14;14)(q10;q10)	100	C
der(16)t(9;16)(p11;q11) x2	der(16)t(9;16)(q11;p11) x2	100	C
der(16)t(10;16)(q11;p11)		100	N
der(8)t(1;8)(p34;p?)t(8;9)(q?;?)	der(8)t(4;8)(?;p23)t(8;9)(q24;p13)	90	CR
der(15)t(2;15)(?;p11)	der(15)t(2;15)(?;q24)	90	C

der(19)t(16;19)(?;p11)	der(16;19)(p10;q10) x2	90	C
der(22)t(11;22)(q14;q12)	der(22)t(11;22)(q13;q13)	90	C
der(1)t(1;12)(p11;q11)	der(1)t(1;12)(p11;q11)	80	C
del(11)(q11)	del(11)(q11)	80	C
der(20)t(6;20)(q11;?)	der(20)t(6;20)(q15;p13)	80	C
der(?)t(3;12)(?;?)	der(3)t(3;12)(p11;p11)	80	C
der(1)t(1;9)(p11;p11)	der(1)t(1;9)(p11;p11)	70	C
der(1)t(1;12)(?;?)	der(1)t(1;12)(p32;q24)	70	C
der(7)t(7;12)(p11;?)t(5;7)(?;q21)	der(7)t(7;22)(p11;q11)t(7;5)(q32;q35)	70	CR
i(9)(p10)	del(9)(q22)	70	C
del(17)(q?)		70	N
der(18)t(X;18)(?;q12)	der(18)t(X;18)(p15;q11)	70	C
der(2)del(2)(p?)t(2;9)(q31;q33)		60	N
der(5)t(X;5)(?;p13)		60	C
der(7)t(4;7)(p11;p?)	der(7)t(4;7)(p11;q11)	60	C
der(19)t(8;19)(?;q11)	der(19)t(8;19)(?;?)	60	C
der(11)t(5;11)(?;q24)		50	C
der(18)t(8;18)(p12;q11)	der(18)t(8;18)(?;q21)	50	C
der(18)t(11;18)(?;q12)	der(18)t(11;18)(q12;q12)	50	C
der(?)t(?;6)(?;?)		50	N
der(1)t(1;9)(p11;p11)t(1;3)(q31;?)		40	N
dup(17)(?)	der(17)dup(17)(q11.2q21)t(1;17)(?;q25)	40	C
der(?)t(?;16)(?;?)		40	N
del(2)(q34)	del(2)(q34)	30	C
der(18)t(14;18)(q?;?)		30	N
der(3)t(3;5)(?;p11)		20	N
der(3) del(3)(p22)t(3;6)(q11;q12)		20	N
der(5)t(X;5)(p?;p13)t(5;12)(q?;?)	der(5)t(X;5)(q21;p11)t(5;12)(q?;q15)	20	C
der(5)t(5;6)(p13;p21)		20	N

der(8)t(5;8)(q21;?)		20	N
der(3)t(1;3)(?;?)t(3;6)(?;?)		10	N
der(3)t(?;3)(?;?)		10	N
del(5)(p?)		10	N
der(5)t(?;5)(?;?)		10	N
der(6)t(6;13)(q11;q11)t(13;7)(q?;?)		10	N
der(12)t(12;5)(?;?)t(?;12)(?;?)		10	N
der(?)t(?;X)(?;?)		10	N
der(?)t(?;7)(?;?)		10	N
der(?)t(?;8)(?;?)		10	N
	del(9)(?)		A
	der(10)t(8;10)(?;p11)t(8;10)(?;?)		A
	del(11)(q23)		A
	der(13)t(4;13)(p11;p11)		A
	der(19)t(5;19)(q31;q13)		A
ME180			
i(3)(q10)	i(3)(q10)	100	C
der(10)t(10;10)(q10;q10)t(10;10)(?;?)	der(10)t(10;10)(?;?)	100	C
der(15)t(12;15)(p11;p11)	der(12;15)(p10;q10)	100	C
der(7)t(7;9)(p12;q?)t(3;7)(q13;q21.1)	der(7)t(7;9)(p15;q33)t(3;7)(q25;q22)	90	C
der(9)t(7;9)(q31;p12)	der(9)t(7;9)(q22;p13)	90	C
der(2)t(2;7)(?;p?)t(7;3)(p12;q21?)		80	N
der(2)t(2;16)(?;q21?)		80	N
der(14)t(9;14)(?;p11)		80	N
der(8)t(5;8)(q?;q?)	der(8)t(5;8)(q?;q24)	60	C
der(9)t(5;9)(p11;p11)	der(9)t(5;9)(p13;p13)	60	C
der(15)t(12;15)(?;q25?)		60	N

der(17)t(15;17)(?;p12)		60	N
der(14)t(5;14)(p11;p11)		50	N
der(16)t(2;16)(?;p11)	der(16)t(2;16)(q32;p11)	50	C
der(?)t(?;12)(?;?)		50	N
der(22)t(8;22)(q11;p11)	der(8;22)(p10;q10)	40	C
del(3)(?)	del(3)(p11)	30	C
der(9)t(5;9)(p?;p11)t(9;?)(q11;?)		20	N
der(9)t(?;9)(?;q11)t(?;7)(?;?)		20	N
del(6)(?)		20	N
der(7)t(7;?)(?;?)t(3;7)(?;?)		20	N
der(14)t(7;14)(p11;p11)	der(14)t(7;14)(q32;p11)	10	C
der(?)t(5;22)(?;?)		10	N
der(?)t(?;5)(?;?)		10	N
der(?)t(?;11)(?;?)		10	N
	del(5)(q11)		A
	der(9)t(8;9)(q?;p24)		A
	der(22)t(17;22)(?;q13)		A
MS751			
der(X)t(X;5)(q27;?) x2	der(X)t(X;5)(q?24;q?)	100	C
der(3)t(3;8)(p12;q11) x2	der(3)t(3;8)(p11;q11)	100	C
t(8;12)(p22;p12) x2	der(12)t(8;12)(p13;?)	100	CR
der(14)t(7;14)(?;p11) x2	der(14)t(7;14)(?;p11.1)	100	C
der(2)t(2;22)(q36;q?) x2	der(2)t(2;22)(q?31;q11)	90	C
der(8)t(8;18)(p12;p11) x2	der(8)t(8;18)(p11;p?)	90	C
der(22)t(20;22)(q11;p11)t(22;15)(q13?;q21.1) x2	der(20)t(20;22)(p11;q11)t(15;22)(q?;q13)	90	C
der(6)t(6;18)(p22.3;q?) x2	der(6)t(6;18)(p23;p?)	70	C

ins(7;21)(q?:q?) x2	der(7)del(7)(p15p22)t(7;22)(q36;q?)t(3;22)(?;q?)	70	C
der(20)t(20;21)(q12?;q11) x2	der(21)t(20;21)(q11;q10)	70	C
der(11)t(11;22)(?;?)	der(11)t(11;22)(p11;q11)	60	C
der(8)t(8;12)(?;?)t(5;8)(p?;?)		50	N
der(17)t(?;17)(?;?)		50	N
der(5)t(1;5)(p12;p15)		40	N
der(?)t(?;5)(?;?)		20	N
der(3)t(3;8)(?;?)t(8;12)(?;?)		10	N
der(5)t(5;18)(q11;p11)		10	N
der(8)t(X;8)(?;?)		10	N
der(22)t(3;22)t(?;p11?)t(15;22)(q?;q13?)	der(22)t(3;22)(?;p11.1)t(15;22)(q13;q?)	10	C
der(7)t(?;7)(?;?)		10	N
der(?)t(?;3)(?;?)		10	N
der(?)t(?;3)(?;?)		10	N
der(?)t(?;18)(?;?)		10	N
	i(X)(q10)		A
	der(1)t(1;2)(p13;q?13)		A
	der(1)t(1;8)(p11;?)		A
	der(5)t(5;8)(q11;?)		A
	del(5)(q11)		A
	del(11)(q21-q25)		A
	der(11)t(11;22)(p11;q?)t(14;22)(q11;?)		A
	der(11)t(11;22)(p11;q?)t(1;22)(p?;?)		A
	der(16)t(16;20)(q11;q11)		A
	der(17)t(3;17)(?;p13)		A
	der(18)t(X;18)(?;q23)		A
	der(20)t(15;20)(q?;p11)		A
	der(21)t(6;21)(?;?)		A

SiHa			
ins(X;3)(p11;q24)	X	100	CR
der(X)ins(X;3)(p11;q24)t(X;5)(p22;?)t(X;12)(q27;?)	X	100	CR
der(X)t(X;9)(q25;?)	der(X)t(X;9)(q22;q32)	100	C
i(5p)(p10) x2	i(5)(p10)	100	C
del(8)(?)	del(8)(q?)	100	C
der(12)t(6;12)(?;q23)	der(12)t(6;12)(?;q22)	100	C
der(19)t(15;19)(q?;q?)	der(19)t(15;19)(q?;p11)	100	C
idic(21;21)(q10;q10)	idic(21;21)(q10;q10)	100	C
der(18)t(18;20)(q12;p12)	der(18)t(18;20(q12;?)	90	C
dup(16)(q21q24)	dup(16)(q21q24)	70	C
der(2)t(2;10)(q36;q?)	der(2)t(2;10)(q23;q22)	60	C
der(3)t(3;6)(q12;p?)	der(3)t(3;6)(q11;p21)	60	C
del(6)(p?q?)		60	N
der(19)t(19;20)(?;?)	der(19)t(19;20)(p11;q11)	60	C
der(9)t(9;10)(p12;p?)	der(9)t(9;10)(p11;p11)	50	C
der(5)t(5;7)(p15;q21)	der(5)t(5;7)(p?;q22)	30	C
der(16)t(7;16)(q11;q11)	der(16)t(7;16)(q?;q11)	30	C
del(17)(p?;q?)	del(17)(q12q?)	30	C
dup(15)(?)		10	N
del(15)(?)		10	N
	del(5)(q15)		A
	der(8)del(8)(p11)		A
	der(12)t(6;12)(?;q24)		A

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del(X)(?)	del(X)(?)	100	C
i(5)(p10)	i(5)(p10)	100	C
der(14)t(14;20)(p11;?)	der(14)t(14;20)(p11;p11)	100	C
der(2)t(2;8)(q11;q11)	der(8)t(2;8)(p11;p11)	90	C
der(11)t(7;11)(?;q12)	der(11)t(7;11)(q11;q13)	90	C
i(12)(p10)	i(12)(p10)	90	C
der(13)t(13;13)(q10;q10)del(13)(q12q21)	der(13)t(13;13)(p11;q14)	90	C
der(15)t(11;15)(q14;q?)		90	N
der(16)t(15;16)(q23;p12)		90	N
der(21)t(9;21)(q11;p?)	der(21)t(9;21)(q22;q22)	80	C
der(5)t(1;5)(?;p13)	der(5)t(1;5)(q21;p15)	70	C
i(12)(q10)		60	N
der(19)t(17;19)(?;?)		40	N
der(21)t(5;21)(p11;p11)	der(21)t(5;21)(?;?)	30	C
der(1)t(1;9)(p34?;?)		20	N
del(5)(p11)	del(5)(p11)	20	C
der(3)t(?;?)(?;?)		20	N
der(6)t(6;17)(?;?)	der(6)t(6;17)(p11;q21)	20	C
der(?)t(?;2)(?;?)		10	N
	del(7)(q11)		A

Supplementary Table S4. Identification of Recurrent Breakpoints

A. Recurrent breakpoints (present in two or more derivative chromosomes) identified by M-FISH and aCGH. Bold text indicates breakpoints in bands known to contain common fragile sites.

B. Recurrent breakpoints common to the current investigation and the previous SKY/mCGH study [Harris et al., 2003].

A 1p34, 1p12, 1p11, **1q31**, 2q36, 3q10, 3q11, 3q24, 4p11, **5p13**, 5p11, 5p10, 5q11, 6q11, 7p12, 7p11, **7q21**, 8p12, 8q11, 9p12, 9p11, 9p10, 9q11, 10p11, 10q10, **11q14**, 12p11, 12p10, 12q10, 12q12, 13q10, **13q21**, 14p11, 14q10, 14q11, **14q23**, 15p11, 15q10, 15q21, 15q23, 16p11, 16q10, 16q11, 16q21, 17p11, **18q12**, **18q21**, 21p11, 21q10, 22p11, **22q12**, Xp11, **Xq27**.
B 1p11, 4p11, 5p13, 5p11, 5p10, 5q11, 7p11, 8q11, 9p11, 10p11, 12p11, 14p11, 14q10, 15q10, 16p11, 16q11, 17p11, 18q12, 18q21, 21p11, 21q10.

Supplementary Results

Comparison with reported karyotype analysis of independent cell stocks

Consistent with the increased cytogenetic resolution of M-FISH/aCGH compared to SKY/mCGH, we consider that we were able to refine the analysis of 7 of the rearrangements identified in both studies. These abnormalities are coded 'CR' in Supplementary Table S3. We identified 2 derivative chromosomes in SiHa that contained insertions in chromosome X: ins(X;3)(p11;q24) and der(X)t(X;5)(p22;?) ins(X;3)(p11;q24)t(X;12)(q27;?) (fig. 1). Based on the karyotypes provided [Harris et al., 2003], we conclude that these chromosomes were present in the cells examined by SKY but at least one was interpreted as a normal copy of chromosome X. We further identified that the derivative chromosome in HT-3 previously reported as a der(3)t(3;21;6) is actually a der(3)t(3;8;6). We believe that the novel reciprocal translocation detected in MS751, t(8;12)(p22;p12), was probably also present in the MS751 cells assessed by SKY. However, only one derivative (the der(12)t(8;12)) was detected by SKY [Harris et al., 2003], suggesting that the corresponding der(8)t(8;12) was misclassified, apparently as a normal chromosome 8.

Thirty-eight of the 181 structural abnormalities reported in the previous SKY/mCGH study [Harris et al., 2003] were not detected by us, including the reciprocal translocation t(X;10) in C-33A. Another 4 rearrangements were seen by us, but only in a single metaphase and were therefore not included in our composite karyotypes. The SKY/mCGH analysis reported identifying 51 recurrent breakpoints, although these were not listed. Of the 53 identified in the present investigation (using criteria identical to those in the SKY/mCGH study), only 21 appear to have been consistent between the 2 studies (Supplementary Table S4B), based on our analysis of the SKY composite karyotypes [Harris et al., 2003]. The SKY/mCGH study did report 15 breakpoint clusters, although only 2 overlapped with the 9 clusters seen by us (those at 5p13 and 8q11). Interestingly, 8q11 was among the three breakpoint clusters identified by us in 4 different cell lines (see above).