

Day 0

Mock

Image 01: 46,XX

Image 02: 46,XX

Image 03: 46,XX

Image 04: 46,XX

Image 05: 46,XX

Image 06: 46,XX

Image 07: 46,XX

Image 08: 46,XX

Image 09: 46,XX

Image 10: 46,XX

Image 11: 46,XX

Image 12: 46,XX

Image 13: 46,XX

Image 14: 46,XX

Image 15: 46,XX

Image 16: 46,XX

Image 17: 46,XX

Image 18: 46,XX

Image 19: 46,XX

Image 20: 46,XX

Day 40

Mock

Chromosome	Image 1 (n=46)	Image 2 (n=44)	Image 3 (n=45)	Image 4 (n=44)
1	1 x2	1 x2	1 x2	1 x2
2	2 x2	2 x2	2 x2	2 x2
3	3 x2	3 x2	3 x2	3 x1 der(3)t(3;9)x1
4	4 x2	4 x2	4 x2	4 x2
5	5 x2	5 x2	5 x2	5 x2
6	6 x2	6 x2	6 x2	6 x2
7	7 x2	7 x2	7 x2	7 x2
8	8 x2	8 x2	8 x2	8 x2
9	9 x2	9 x2	9 x2	9 x1
10	10 x2	10 x1	10 x2	10 x2
11	11 x2	11 x2	11 x2	11 x2
12	12 x2	12 x2	12 x2	12 x2
13	13 x2	13 x2	13 x1	13 x2
14	14 x2	14 x2	14 x2	14 x2
15	15 x2	15 x2	15 x2	15 x1 der(15)t(15;19)x1
16	16 x2	16 x2	16 x2	16 x2
17	17 x2	17 x1	17 x2	17 x1
18	18 x2	18 x2	18 x2	18 x2
19	19 x1 der(19)t(3;19)x1	19 x1 der(19)t(10;19)x1	19 x1 der(19)t(13;19)x1	19 x2
20	20 x2	20 x2	20 x2	20 x2
21	21 x2	21 x2	21 x2	21 x2
22	22 x2	22 x2	22 x2	22 x2
X	X x2	X x2	X x2	X x2

Chromosome	Image 5 (n=45)	Image 6 (n=41)	Image 7 (n=45)	Image 8 (n=45)
1	1 x2	1 x2	1 x2	1 x2
2	2 x2	2 x2	2 x2	2 x2
3	3 x2	3 x2	3 x2	3 x2
4	4 x2	4 x1	4 x2	4 x2
5	5 x2	5 x2	5 x2	5 x2
6	6 x2	6 x1 der(6)t(4;6)x1	6 x2	6 x2
7	7 x1	7 x1 del(7q)x1	7 x2	7 x1
8	8 x2	8 x2	8 x2	8 x2
9	9 x2	9 x2	9 x2	9 x2
10	10 x2	10 x1 der(10)t(20;7;20;10)x1	10 x2	10 x2
11	11 x2	11 x2	11 x1 der(11)t(11;13)x1	11 x2
12	12 x1 der(12)t(X;12)x1	12 x1	12 x2	12 x2
13	13 x2	13 x2	13 x1	13 x2
14	14 x2	14 x2	14 x2	14 x1 der(14)t(6;14)x1
15	15 x2	15 x2	15 x2	15 x2
16	16 x2	16 x2	16 x2	16 x2
17	17 x2	17 x1 der(17)t(1;17)x1	17 x2	17 x2
18	18 x2	18 x2	18 x2	18 x2
19	19 x1 der(19)t(7;19)x1	19 x1	19 x2	19 x2
20	20 x2	20 x1	20 x2	20 x2
21	21 x2	21 x2	21 x2	21 x2
22	22 x2	22 x1	22 x2	22 x2
X	X x1 ? del(X)x1	X x2	X x2	X x2

Chromosome	Image 9 (n=46)	Image 10 (n=45)	Image 11 (n=44)	Image 12 (n=46)
1	1 x2	1 x2	1 x2	1 x2
2	2 x2	2 x1 t(2;16)x1	2 x2	2 x2
3	3 x1 der(3)t(3;17)x1	3 x2	3 x2	3 x2
4	4 x2	4 x2	4 x2	4 x2
5	5 x2	5 x2	5 x2	5 x2
6	6 x2	6 x2	6 x2	6 x2
7	7 x2	7 x1	7 x2	7 x2
8	8 x2	8 x2	8 x2	8 x2
9	9 x2	9 x1 der(9)t(9;7;15)x2	9 x1 del(9q)x1	9 x1 der(9)t(9;15)x1
10	10 x2	10 x2	10 x2	10 x2
11	11 x2	11 x2	11 x2	11 x2
12	12 x2	12 x2	- der(12)t(20;12;12)x1 der(12)t(12;21)x1	12 x2
13	13 x2	13 x3	13 x2	13 x2
14	14 x2	14 x2	14 x2	14 x2
15	15 x2	15 x1	15 x1 der(15)t(9;15)x1	15 x2
16	16 x2	16 x1 t(2;16)x1	16 x2	16 x2
17	17 x2	17 x2	17 x2	17 x2
18	18 x2	18 x2	18 x2	18 x2
19	19 x2	19 x2	- der(19)t(19;20;19)x1	19 x2
20	20 x2	20 x1	20 x1	20 x2
21	21 x2	21 x2	21 x2	21 x2
22	22 x2	22 x2	22 x2	22 x1 der(22)t(17;22)x1
X	X x2	X x2	X x2	X x2

Chromosome	Image 13 (n=44)	Image 14 (n=44)	Image 15 (n=47)	Image 16 (n=45)
1	1 x1 der(1)t(1;20;3;20)x1	1 x2	1 x2	1 x2
2	2 x2	2 x2	2 x2	2 x2
3	3 x1 del(3)x1	3 x2	3 x2	3 x2
4	4 x2	4 x2	4 x2	4 x2 del(4q)x1
5	5 x2	5 x2	5 x2	5 x2
6	6 x2	6 x2	6 x2	6 x2
7	7 x2	7 x2	7 x2	7 x2
8	8 x2	8 x2	8 x2	8 x2
9	9 x2	9 x2	9 x2	9 x1 der(9)t(9;15)x1
10	10 x2	10 x2	10 x2	10 x2
11	11 x2	11 x2	11 x1 del(11q)x1	11 x2
12	12 x2	12 x2	12 x2	12 x2
13	13 x2	13 x2	13 x2	13 x2
14	14 x2	14 x2	14 x2	14 x2
15	15 x2	15 x2	15 x2	15 x2
16	16 x1 der(16)t(16;17)x1	16 x2	16 x2	16 x2
17	17 x1	17 x2	17 x2	17 x2
18	18 x2	18 x2	18 x2	18 x2
19	19 x2	19 x2	19 x2 del(19)x1	19 x2
20	20 x1	20 x2	20 x2	20 x2
21	21 x2		21 x2	21 x2
22	22 x2	22 x2	22 x2	
X	X x2	X x2	X x2	X x2

Chromosome	Image 17 (n=45)	Image 18 (n=46)	Image 19 (n=45)	Image 20 (n=43)
1	1 x1 del(1q)x1	1 x2	1 x1 del(1q)x1	1 x2
2	2 x2	2 x2	2 x2	2 x2
3	3 x2	3 x2	3 x2	3 x2
4	4 x2	4 x2	4 x2	4 x2
5	5 x2	5 x2	5 x2	5 x2
6	6 x2	6 x2	6 x2	6 x1 der(6)t(6;22)x1
7	7 x2	7 x2	7 x2	7 x2
8	8 x2	8 x2	8 x2	8 x1 der(8)t(8;5;17)x1
9	9 x2	9 x2	9 x2	9 x2
10	10 x2	10 x2	10 x2	10 x2
11	11 x1	11 x2	11 x1 der(11)t(9;11)x1	11 x2
12	12 x2	12 x2	12 x2	12 x2
13	13 x2	13 x2	13 x1	13 x2
14	14 x2	14 x2	14 x2	14 x2
15	15 x2	15 x2	15 x2	15 x2
16	16 x2	16 x2	16 x2	16 x2
17	17 x2	17 x2	17 x2	1 del(17q)x1
18	18 x2	18 x2	18 x2	18 x2
19	19 x2	19 x2	19 x2	19 x2
20	20 x2	20 x1 der(20)t(2;20)x1	20 x2	20 x2
21	21 x2	21 x2	21 x2	21 x2
22	1 der(22)t(11;22)x1 der(22)t(11;22)x1	22 x2	22 x2	1
X	X x2	X x2	X x2	X x2

Day 40

sh-scramble

Chromosome	Image 1 (n=45)	Image 2 (n=43)	Image 3 (n=46)	Image 4 (n=44)
1	1 x1 der(1)t(1;9)x1	1 x2	1 x2	1 x2
2	2 x2	2 x1 der(2)t(2;10)x1	2 x2	2 x2
3	3 x2	3 x2	3 x2	3 x2
4	4 x2	4 x2	4 x2	4 x2
5	5 x2	5 x2	5 x2	5 x2
6	6 x2	6 x2	6 x2	6 x2
7	7 x2	7 x2	7 x1 der(7)t(7;17)x1	7 x1
8	8 x2	8 x2	8 x2	8 x2
9	9 x2	9 x2	9 x2	9 x1
10	10 x2	10 x2	10 x2	10 x2
11	11 x2	11 x1 der(11)t(11;19)x1	11 x2	11 x2
12	12 x2	12 x2	12 x2	12 x2
13	13 x2	13 x1 der(13)t(13;16)x1	13 x2	13 x2
14	14 x2	14 x2	14 x2	14 x2
15	15 x2	15 x2	15 x2	15 x2
16	16 x2	16 x1	16 x2	16 x2
17	17 x2	17 x2	17 x1 der(17)t(2;17)x1	17 x2
18	18 x2	18 x2	18 x2	18 x2
19	19 x2	19 x1	19 x2	19 x2
20	20 x1	20 x1	20 x2	20 x2
21	21 x2	21 x2	21 x2	21 x2
22	22 x2	22 x2	22 x2	22 x2
X	X x2	X x2	X x2	X x2

Chromosome	Image 5 (n=44)	Image 6 (n=44)	Image 7 (n=44)	Image 8 (n=46)
1	1 x2	1 x1 der(1)t(X;1)x1	1 x2	1 x2
2	2 x2	2 x2	2 x2	2 x2
3	3 x1 der(3)t(2;3)x1	3 x2	3 x2	3 x2
4	4 x2	4 x2	4 x2	4 x2
5	5 x1 der(5)t(5;8)x1	5 x2	5 x2	5 x2
6	6 x2	6 x2	6 x1 der(6)t(11;6;22;6)x1	6 x2
7	7 x1 der(7)t(7;16)x1	7 x2	7 x2	7 x2
8	8 x1	8 x2	8 x2	8 x2
9	9 x2	9 x1	9 x2	9 x2
10	10 x2	10 x2	10 x2	10 x2
11	11 x1 der(11)t(11;12)x1	11 x2	11 x1	11 x1 der(11)t(11;13;11) x1
12	12 x2	12 x2	12 x1 der(12)t(9;6;12;22)x1	12 x2
13	13 x2	13 x2	13 x2	13 x2
14	14 x2	14 x2	14 x1 der(14)t(3;14;11)x1	14 x2
15	15 x2	15 x2	15 x1 der(15)t(15;11;14)x1	15 x1 der(15)t(15;19)x1
16	16 x1 der(16)t(5;16)x1	16 x2	16 x2	16 x2
17	17 x1	17 x2	17 x2	17 x2
18	18 x2	18 x2	18 x2	18 x2
19	19 x2	19 x2	19 x2	19 x2
20	20 x1 der(20)t(17;20)x1	20 x2	20 x1 der(20)t(14;20)x1	20 x2
21	21 x2	21 x1 der(21)t(X;21)x1	21 x2	21 x2
22	22 x2	22 x1	22 x1	22 x2

X	X x2	X x2	X x2	X x2
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Chromosome	Image 9 (n=43)	Image 10 (n=45)	Image 11 (n=44)	Image 12 (n=45)
1	1 x1 der(1)t(1;20)x1	1 x2	1 x2	1 x2
2	2 x2	2 x2	2 x2	2 x2
3	3 x2	3 x2	3 x2	3 x2
4	4 x2	4 x2	4 x2	4 x2
5	5 x2	5 x2	5 x1	5 x2
6	6 x2	6 x1 der(6)t(6;20)x1	6 x2	6 x2
7	7 x2	7 x2	7 x2	7 x1
8	8 x2	8 x2	8 x2	8 x2
9	9 x2	9 x2	9 x2	9 x2
10	10 x2	10 x2	10 x2	10 x2
11	11 x2	11 x2	11 x1 der(11)t(11;20)x1	11 x2
12	12 x1 der(12)t(12;19)x1	12 x2	12 x1 der(12)t(7;12)x1	12 x2
13	13 x2	13 x2	13 x2	13 x2
14	14 x1	14 x2	14 x2	14 x1 der(14)t(14;20)x1
15	15 x2	15 x2	15 x2	15 x2
16	16 x2	16 x2	16 x2	16 x2
17	17 x2	17 x2	17 x2	17 x2
18	18 x2	18 x1 del(18p)x1	18 x2	18 x2
19	19 x1	19 x2	19 x2	19 x2
20	20 x1	20 x1	20 x1	20 x2
21	21 x2	21 x2	21 x2	21 x2
22	22 x2	22 x2	22 x2	22 x2
X	X x2	X x2	X x2	X x2

Chromosome	Image 13 (n=44)	Image 14 (n=44)	Image 15 (n=43)	Image 16 (n=45)
1	1 x2	1 x2	1 x2	1 x2
2	2 x2	2 x1	2 x2	2 x2
3	3 x2	3 x2 der(3)t(3;13)x1	3 x2	3 x2
4	4 x2	4 x2	4 x2	4 x2
5	5 x2	5 x2	5 x2	5 x2
6	6 x2	6 x1 der(6)t(6;8)x1	6 x1 der(6)t(6;20)x1	6 x2
7	7 x1	7 x2	7 x1 del(7q)x1	7 x2
8	8 x2	8 x1 der(8)t(8;8)x1	8 x2	8 x2
9	9 x2	9 x2	9 x2	9 x2
10	10 x2	10 x2	10 x2	10 x2
11	11 x2	11 x2	11 x1 der(11)t(11;14)x1	11 x2
12	12 x2	12 x2	12 x2	12 x2
13	13 x2	13 x1	13 x2	13 x1 der(13)t(13;19)x1
14	14 x2	14 x2	14 x1	14 x2
15	15 x2	15 x2	15 x2	15 x2
16	16 x2	16 x2	16 x2	16 x2
17	17 x2	17 x1	17 x2	17 x2
18	18 x2	18 x2	18 x2	18 x2
19	19 x2	19 x1 der(19)t(5;19)x1	19 x2	19 x1
20	20 x1	20 x2	20 x1	20 x2
21	21 x2	21 x2	21 x2	21 x2
22	22 x2	22 x2	22 x1	22 x2
X	X x2	X x2	X x2	X x2

Chromosome	Image 17 (n=41)	Image 18 (n=46)	Image 19 (n=44)	Image 20 (n=46)
1	1 x2	1 x2	1 x2	1 x2
2	2 x2	2 x2	2 x2	2 x2
3	3 x1	3 x2	3 x2	3 x2
4	4 x1	4 x2	4 x2	4 x2
5	5 x1	5 x2	5 x2	5 x2
6	6 x1 der(6)t(6;14)x1	6 x2	6 x2	6 x2
7	7 x2	7 x2	7 x2	7 x2
8	8 x2	8 x2	8 x1 der(8)t(8;8)x1	8 x2
9	9 x1	9 x2	9 x1 der(9)t(9;18)x1	9 x2
10	10 x2	10 x2	10 x2	10 x2
11	11 x2	11 x2	11 x2	11 x2
12	12 x2	12 x2	12 x2	12 x2
13	13 x2	13 x2	13 x1 der(13)t(13;19)x1	13 x2
14	14 x2	14 x2	14 x2	14 x2
15	15 x2	15 x2	15 x2	15 x2
16	16 x2	16 x2	16 x1 der(16)t(16;16)x1	16 x2
17	17 x2	17 x2	17 x2	17 x2
18	18 x1	18 x2	18 x1	18 x2
19	19 x2	19 x2	19 x1	19 x2
20	20 x2	20 x2	20 x2	20 x2
21	21 x2	21 x2	21 x1 der(21)t(16;21)x1	21 x2
22	22 x2	22 x2	22 x2	22 x2
X	X x2	X x2	X x2	X x2

Day 40

sh-ATG3

Chromosome	Image 1 (n=44)	Image 2 (n=44)	Image 3 (n=43)	Image 4 (n=41)
1	1 x2	1 x2	1 x2	1 x2
2	2 x2	2 x1 der(2)t(2;12)x1	2 x1	2 x2
3	3 x2	3 x2	3 x2	3 x2
4	4 x2	4 x2	4 x2	4 x2
5	5 x2	5 x2	5 x2	5 x2
6	6 x1 der(6)t(1;6)x1	6 x2	6 x1	6 x1 der(6)t(6;9)x1
7	7 x2	7 x2	7 x2	7 x1 der(7)t(7;12)x1
8	8 x2	8 x2	8 x2	8 x2
9	9 x2	9 x2	9 x2	9 x1
10	10 x1 del(10q)x1	10 x2	10 x2	10 x2
11	11 x2	11 x1 der(11)t(11;15)x1	11 x2	11 x2
12	12 x1	12 x1	12 x2	12 x1
13	13 x2	13 x2	13 x2	13 x2
14	14 x2	14 x2	14 x1	14 x2
15	15 x2	15 x1	15 x1 der(15)t(2;15)x1	15 x2
16	16 x2	16 x2	16 x2	16 x2
17	17 x2	17 x2	17 x2	17 x2
18	18 x1	18 x2	18 x2	18 x2
19	19 x2	19 x2	19 x2	19 x2 der(19)t(8;19)x1
20	20 x2	20 x2	20 x2	20 x2
21	21 x2	21 x2	21 x2	21 x2
22	22 x2	22 x2	22 x2	22 x2
X	X x2	X x2	X x2	X x2

Chromosome	Image 5 (n=45)	Image 6 (n=46)	Image 7 (n=45)	Image 8 (n=43)
1	1 x2	1 x2	1 x2	1 x2
2	2 x2	2 x2	2 x2	2 x2
3	3 x2	3 x2	3 x2	3 x2
4	4 x2	4 x2	4 x2	4 x2
5	5 x1 der(5)t(5;15)x1	5 x2	5 x2	5 x1 der(5)t(20;9;5)x1
6	6 x2	6 x2	6 x2	6 x1 der(6)t(6;12;22;13)x1
7	7 x2	7 x2	7 x2	7 x2
8	8 x2	8 x2	8 x1 der(8)t(8;9)x1	8 x2
9	9 x1 del(9q)x1	9 x2	9 x1	9 x2
10	10 x2	10 x2	10 x2	10 x2
11	11 x1 del(11q)x1	11 x2	11 x2	11 x2
12	12 x2	12 x2	12 x2	12 x1 der(12)t(6;12)x1
13	13 x2	13 x2	13 x2	13 x2
14	14 x2	14 x2	14 x2	14 x2
15	15 x1	15 x2	15 x1 der(15)t(11;15)x1	15 x2
16	16 x2	16 x2	16 x2	16 x1 der(16)t(16;5;17)x1
17	17 x2	17 x2	17 x2	17 x1
18	18 x2	18 x2	18 x2	18 x2
19	19 x2	19 x2	19 x1 der(19)t(9;19)x1	19 x2
20	20 x2	20 x2	20 x2	20 x1
21	21 x2	21 x2	21 x2	21 x2
22	22 x2	22 x2	22 x2	22 x1
X	X x2	X x2	X x2	X x2

Chromosome	Image 9 (n=45)	Image 10 (n=45)	Image 11 (n=43)	Image 12 (n=44)
1	1 x2	1 x2	1 x2	1 x2
2	2 x2	2 x2	2 x1 der(2)t(2;5;16)x1	2 x2
3	3 x2	3 x1	3 x2	3 x2
4	4 x2	4 x2	4 x2	4 x2
5	5 x2	5 x2	5 x1	5 x1 der(5)t(5;19)x1
6	6 x2	6 x2	6 x2	6 x2
7	7 x2	7 x2	7 x1	7 x2
8	8 x2	8 x2	8 x2	8 x2
9	9 x2	9 x2	9 x2	9 x2
10	10 x2	10 x2	10 x2	10 x2
11	11 x2	11 x2	11 x2	11 x2
12	12 x2	12 x2	12 x2	12 x2
13	13 x2	13 x2	13 x2	13 x2
14	14 x2	14 x2	14 x2	14 x2
15	15 x2	15 x2	15 x2	15 x2
16	16 x1	16 x2	16 x2	16 x1
17	17 x2	17 x2	17 x2	17 x2
18	18 x2	18 x2	18 x1	18 x2
19	19 x2	19 x2	19 x2	19 x1 der(19)t(19;22)x1
20	20 x2	20 x1 der(20)t(3;20)x1	20 x2	20 x2
21	21 x2	21 x2	21 x2	21 x2
22	22 x2	22 x2	22 x2	22 x1
X	X x2	X x2	X x2	X x2

Chromosome	Image 13 (n=43)	Image 14 (n=43)	Image 15 (n=39)	Image 16 (n=46)
1	1 x2	1 x1 der(1)t(1;19)x1	1 x2	1 x2
2	2 x2	2 x2	2 x2	2 x2
3	3 x2	3 x2	3 x1	3 x2
4	4 x1 del(4p)x1 del(4q)x1	4 x2	4 x2	4 x2
5	5 x2	5 x1	5 x1	5 x2
6	6 x1 der(6)t(7;13;6)x1	6 x2	6 x2	6 x2
7	7 x1	7 x1 der(7)t(7;8)x1	7 x1	7 x2
8	8 x1 der(6)t(18;9;8)x1	8 x1	8 x2	8 x2
9	9 x1	9 x2	9 x2	9 x2
10	10 x2	10 x2	10 x1	10 x2
11	11 x2	11 x2	11 x2	11 x1 del(11q)x1
12	12 x2	12 x2	12 x2	12 x2
13	13 x2	13 x1 der(13)t(13;17)x1	13 x2	13 x2
14	14 x2	14 x2	14 x2	14 x2
15	15 x2	15 x2	15 x2	15 x2
16	16 x2	16 x2	16 x1	16 x2
17	17 x2	17 x2	17 x1	17 x2
18	18 x1	18 x2	18 x2	18 x2
19	19 x2	19 x1	19 x2	19 x2
20	20 x2	20 x2	20 x2	20 x2
21	21 x1 der(21)t(9;21)x1	21 x2	21 x2	21 x2
22	22 x2	22 x2	22 x1	22 x2
X	X x2	X x2	X x2	X x2

Chromosome	Image 17 (n=40)	Image 18 (n=42)	Image 19 (n=45)	Image 20 (n=44)
1	1 x2	1 x2	1 x2	1 x2
2	2 x2	2 x2	2 x2	2 x2
3	3 x2	3 x2	3 x2	3 x2
4	4 x2	4 x2	4 x2	4 x1 der(4)t(20;19;4)x1
5	5 x2	5 x2	5 x2	5 x2
6	6 x2	6 x2	6 x2	6 x2
7	7 x2	7 x2	7 x1 der(7)t(7;17)x1	7 x1 der(7)t(19;4;7)x1
8	8 x2	8 x2	8 x1 der(8)t(8;20)x1	8 x2
9	9 x2	9 x2	9 x1 t(9;19)x1	9 x2
10	10 x2	10 x2	10 x2	10 x2
11	11 x1	11 x2	11 x1 der(11)t(9;11)x1	11 x2
12	12 x2	12 x1 der(12)t(12;22)x1	12 x2	12 x2
13	13 x1	13 x2	13 x2	13 x2
14	14 x2	14 x1 der(14)t(14;22)x1	14 x2	14 x2
15	15 x2	15 x1 del(15)x1	15 x2	15 x2
16	16 x2	16 x2	16 x2	16 x2
17	17 x2	17 x2	17 x2	17 x2
18	18 x1	18 x2	18 x2	18 x2
19	19 x2	- der(19)t(15;19)x1	19 x1 t(9;19)x1	19 x1
20	20 x1	20 x2	20 x1	20 x1
21	21 x1	21 x2	21 x2	21 x2
22	22 x1	-	22 x2	22 x2
X	X x2	X x1 der(X)t(X;19)x1	X x2	X x2

Day 40

sh-ATG5

Chromosome	Image 1 (n=44)	Image 2 (n=43)	Image 3 (n=45)	Image 4 (n=72)
1	1 x2	1 x1 der(1)t(1;20) x1	1 x2	1 x4
2	2 x2	2 x2	2 x2	2 x3
3	3 x2	3 x2	3 x2	3 x4
4	4 x2	4 x2	4 x2	4 x3
5	5 x2	5 x2	5 x2	5 x2 der(5)t(2;5) x1
6	6 x2	6 x2	6 x2	6 x2 der(6)t(6;10) x1
7	7 x2	7 x1 der(7)t(7;8) x1	7 x2	7 x3 der(7)t(6;7) x1
8	8 x2	8 x1	8 x2	8 x3
9	9 x2	9 x1	9 x2	9 x3
10	10 x2	10 x2	10 x2	10 x2 del(10)x1
11	11 x1 der(11)t(11;14) x1	11 x2	11 x2	11 x3
12	12 x1 der(12)t(12;20) x1	12 x2	12 x2	12 x4
13	13 x2	13 x2	13 x2	13 x3
14	14 x1	14 x2	14 x2	14 x2
15	15 x2	15 x2	15 x1 der(15)t(22;19;15) x1	15 x1
16	16 x2	16 x2	16 x2	16 x4
17	17 x2	17 x2	17 x2	17 x3
18	18 x2	18 x2	18 x2	18 x2
19	19 x2	19 x2	19 x2	19 x4

20	20 x1	20 x1	20 x2	20 x4
21	21 x2	21 x2	21 x2	21 x2
22	22 x2	22 x2	22 x1	22 x4
X	X x2	X x2	X x2	X x3

Chromosome	Image 5 (n=43)	Image 6 (n=44)	Image 7 (n=41)	Image 8 (n=81)
1	1 x2	1 x1	1 x2	1 x4
2	2 x2	2 x2	2 x2	2 x4
3	3 x2	3 x2	3 x2	3 x4
4	4 x2	4 x2	4 x2	4 x4
5	5 x2	5 x2	5 x1	5 x3
6	6 x2	6 x2	6 x2	6 x4
7	7 x2	7 x1 der(7)t(1;7)x1	7 x2	7 x4
8	8 x2	8 x2	8 x2	8 x4
9	9 x2	9 x2	9 x1 del(9q)x1	9 x2 i(9p)x1
10	10 x2	10 x2	10 x2	10 x4
11	11 x2	11 x2	11 x2	11 x4
12	12 x2	12 x2	12 x2	12 x4
13	13 x2	13 x2	13 x2	13 x3
14	14 x2	14 x2	14 x2	14 x3
15	15 x2	15 x2	15 x1	15 x3
16	16 x2	16 x2	16 x2	16 x3
17	17 x2	17 x2	17 x1	17 x2 der(17)t(17;20)x1 der(17)t(17;21)x1
18	18 x2	18 x2	18 x2	18 x4
19	19 x2	19 x2	19 x1	19 x3
20	20 x1	20 x2	20 x2	20 x2 der(20)t(20;21)x1
21	21 x1	21 x2	21 x1	21 x1
22	22 x1	22 x1	22 x2	22 x4
X	X x2	X x2	X x2	X x4

Chromosome	Image 9 (n=81)	Image 10 (n=87)	Image 11 (n=43)	Image 12 (n=46)
1	1 x4	1 x4	1 x1 der(1)t(1;17)x1	1 x2
2	2 x4	2 x4	2 x2	2 x2
3	3 x4	3 x4	3 x2	3 x2
4	4 x2 der(4)t(4;19)x2	4 x4	4 x2	4 x2
5	5 x4	5 x4	5 x2	5 x2
6	6 x3	6 x4	6 x2	6 x2
7	7 x4	7 x4	7 x2	7 x2
8	8 x4	8 x4	8 x2	8 x2
9	9 x4	9 x4	9 x2	9 x2
10	10 x3	10 x4	10 x2	10 x2
11	11 x4	11 x4	11 x2	11 x2
12	12 x4	12 x3	12 x2	12 x2
13	13 x2 der(13)t(13;13) x1	13 x4	- der(13)t(11;13) x1 der(13)t(13;22) x1	13 x2
14	14 x3	14 x4	14 x2	14 x2
15	15 x4	15 x4	15 x2	15 x2
16	16 x2 del(16q)x1	16 x2 der(16)t(15;20;21) x2	16 x2	16 x2
17	17 x4	17 x4	17 x1	17 x2
18	18 x3	18 x4	18 x2	18 x2
19	19 x2	19 x2 der(19)t(19;20)x2	19 x2	19 x2
20	20 x2 del(20)x1	20 x2	20 x2	20 x2
21	21 x2	21 x2	21 x1 der(21)t(21;22) x1	21 x2
22	22 x2	22 x4	-	22 x2

	der(22)t(21;22) x1			
X	X x4	X x4	X x2	X x2

Chromosome	Image 13 (n=43)	Image 14 (n=46)	Image 15 (n=45)	Image 16 (n=46)
1	1 x1 der(1)t(1;9)x1	1 x2	1 x2	1 x2
2	2 x2	2 x2	2 x1 del(2)x1	2 x2
3	3 x2	3 x2	3 x2	3 x2
4	4 x2	4 x2	4 x2	4 x2
5	5 x2	5 x1	5 x2	5 x2
6	6 x1 der(6)t(6;19)x1	6 x2	6 x2	6 x2
7	7 x2	7 x2	7 x2	7 x2
8	8 x2	8 x2	8 x2	8 x2
9	9 x1	9 x2	9 x2	9 x1 del(9q)x1
10	10 x2	10 x2	10 x2	10 x2
11	11 x2	11 x2	11 x2	11 x2
12	12 x2	12 x2	12 x2	12 x2
13	13 x2	13 x2	13 x2	13 x1 der(13)t(13;16) x1
14	14 x2	14 x2	14 x2	14 x2
15	15 x2	15 x2	15 x2	15 x2
16	16 x2	16 x3	16 x2	16 x2
17	17 x2	17 x1 del(17p)x1	17 x2	17 x2
18	18 x2	18 x2	18 x2	18 x2
19	19 x1	19 x3	19 x2	19 x2
20	20 x2	20 x1 der(20)t(20;22) x1	20 x2	20 x2

21	21 x2	21 x2	21 x2	21 x2
22	22 x1	22 x2	22 x1	22 x2
X	X x2	X x2	X x2	X x2

Chromosome	Image 17 (n=44)	Image 18 (n=84)	Image 19 (n=88)	Image 20 (n=45)
1	1 x2	1 x4	1 x4	1 x2
2	2 x2	2 x2 der(2)t(2;11)x ₁ der(2)t(2;2)x1	2 x2 der(2)t(2;15)x ₁ der(2)t(2;3;21)x1	2 x2
3	3 x2	3 x3 del(3p)x1	3 x3 del(3p)x1	3 x2
4	4 x2	4 x4	4 x2 der(4)t(2;15)x ₁ der(4)t(2;3;21)x1	4 x2
5	5 x2	5 x4	5 x4	5 x1 der(5)t(5;19)x1
6	6 x2	6 x2 i(6q)x1	6 x4	6 x2
7	7 x2	- der(7)t(7;9)x2 der(7)t(2;7)x2	7 x4	7 x1 del(7)x1
8	8 x1 der(8)t(8;16)x ₁	8 x2 der(8)t(3;8)x1 del(8q)x1	8 x4	8 x2
9	9 x2	9 x2	9 x4	9 x2
10	10 x2	10 x4	10 x4	10 x1 der(3)t(5;10)x1
11	11 x2	11 x3	11 x4	11 x2
12	12 x2	12 x3 der(12)t(X;12)x1	12 x4	12 x2
13	13 x1	13 x4	13 x4	13 x2

	der(13)t(13;16) x1			
14	14 x2	14 x4	14 x4	14 x2
15	15 x2	15 x4	15 x2	15 x2
16	16 x1	16 x3 del(16p)x1	16 x4	16 x2
17	17 x2	17 x3	17 x4	17 x2
18	18 x2	18 x4	18 x4	18 x2
19	19 x2	19 x2 der(19)t(19;22) x1	19 x4	19 x1
20	20 x2	20 x4	20 x4	20 x2
21	21 x2	21 x4	21 x2	21 x2
22	22 x2	22 x2	22 x4	22 x2
X	X x1	X x3 der(X)t(X;11)x 1	X x4	X x2

Day 40

sh-ATG7

Chromosome	Image 1 (n=87)	Image 2 (n=45)	Image 3 (n=45)	Image 4 (n=44)
1	1 x4	1 x2	1 x2	1 x1
2	2 x4	2 x2	2 x2	2 x2
3	3 x4	3 x2	3 x2	3 x2
4	4 x4	4 x2	4 x2	4 x2
5	5 x4	5 x2	5 x2	5 x2
6	6 x4	6 x2	6 x2	6 x2
7	7 x4	7 x2	7 x2	7 x2
8	8 x4	8 x1 der(8)t(8;10) x1	8 x2	8 x2
9	9 x1 del(9q)x1 der(9)t(9;19) x2	9 x2	9 x2	9 x2
10	10 x4	10 x2	10 x2	10 x2

11	11 x4	11 x2	11 x2	11 x1
12	12 x4	12 x2	12 x2	12 x2
13	13 x2 der(13)t(13;14)x2	13 x2	13 x1	13 x2
14	14 x4	14 x2	14 x2	14 x2
15	15 x4	15 x2	15 x2	15 x2
16	16 x4	16 x2	16 x2	16 x1 der(16)t(16;18)x1
17	17 x2 i(17q)x1	17 x2	17 x2	17 x2
18	18 x4	18 x1	18 x2	18 x2
19	- der(19)t(8;19)x2	19 x1 der(19)t(18;19)x1	19 x1 der(19)t(11;19)x1	19 x2
20	20 x4	20 x2	20 x1 der(20)t(16;20)x1	20 x2
21	21 x4	21 x2	21 x2	21 x2
22	22 x2	22 x2	22 x2	22 x2
X	X x4	X x2	X x2	X x1 der(X)t(X;11;X;11)x1

Chromosome	Image 5 (n=43)	Image 6 (n=43)	Image 7 (n=47)	Image 8 (n=46)
1	1 x2	1 x2	1 x2	1 x2
2	2 x2	2 x2	2 x2	2 x2
3	3 x2	3 x2	3 x2	3 x2
4	4 x1 der(4)t(4;21)x1	4 x1	4 x2	4 x2
5	5 x2	5 x1 der(5)t(5;20)x1	5 x2	5 x2
6	6 x1 der(6)t(6;22)x1	6 x2	6 x2	6 x2

7	7 x3	7 x2	7 x1 del(7q)x 1	7 x2
8	8 x2	8 x2	8 x1 del(8p)x 1	8 x2
9	9 x2	9 x2	9 x1 del(9)x1	9 x2
10	10 x1	10 x2	10 x2	10 x2
11	11 x2	11 x2	11 x2	11 x1 der(11)t(11;3;11) x1
12	12 x2	12 x2	12 x2	12 x2
13	13 x2	13 x1	13 x2	13 x2
14	14 x2	14 x2	14 x2	14 x2
15	15 x1	15 x2	15 x2	15 x2
16	16 x2	16 x2	16 x2	16 x2
17	17 x2	17 x2	17 x3	17 x2
18	18 x2	18 x2	18 x2	18 x2
19	19 x2	19 x2	19 x2	19 x2
20	20 x2	20 x1	20 x2	20 x2
21	21 x1	21 x2	21 x2	21 x2
22	22 x1	22 x2	22 x2	22 x2
X	X x2	X x2	X x2	X x2

Chromosome	Image 9 (n=45)	Image 10 (n=46)	Image 11 (n=45)	Image 12 (n=44)
1	1 x2	1 x2	1 x2	1 x1 der(1)t(1;16;15; X)x1
2	2 x2	2 x2	2 x2	2 x2
3	3 x2	3 x2	3 x2	3 x2
4	4 x2	4 x2	4 x2	4 x2
5	5 x2	5 x2	5 x2	5 x2
6	6 x2	6 x2	6 x2	6 x2
7	7 x1	7 x1	7 x2	7 x2

	der(7)t(6;7)x1	del(7q)x1		
8	8 x2	8 x2	8 x2	8 x2
9	9 x2	9 x1 der(9)t(7;9) x1	9 x2	9 x2
10	10 x2	10 x2	10 x2	10 x1 del(10p)x1 der(10)t(2;10)x1
11	11 x1 der(11)t(11;1) 1)x1	11 x2	11 x2	11 x2 del(11q)x1
12	12 x2	12 x2	12 x2	12 x2
13	13 x1	13 x2	13 x2	13 x1
14	14 x2	14 x2	14 x2	14 x2
15	15 x1 t(X;15)x1	15 x2	15 x2	15 x1
16	16 x2	16 x2	16 x2	16 x1 del(16q)x1
17	17 x2	17 x2	17 x2	17 x2
18	18 x2	18 x2	18 x2	18 x2
19	19 x2	19 x2	-	19 x1
20	20 x2	20 x2	20 x1 der(20)t(19;2) 0)x1	20 x2
21	21 x2	21 x2	21 x3	21 x2
22	22 x2	22 x2	22 x2	22 x2
X	X x1 t(X;15)x1	X x2	X x2	- del(Xq)x1

Chromosome	Image 13 (n=43)	Image 14 (n=45)	Image 15 (n=45)	Image 16 (n=45)
1	1 x2	1 x2	1 x2	1 x1 der(1)t(1;12) x1
2	2 x1 der(2)t(2;7) 1	2 x2	2 x2	2 x2
3	3 x2	3 x2	3 x2	3 x1

				der(3)t(3;12) x1
4	4 x2	4 x2	4 x2	4 x2
5	5 x2	5 x2	5 x2	5 x1 der(5)t(1;3; 5)x1
6	6 x2	6 x2	6 x2	6 x2
7	7 x1	7 x2	7 x2	7 x2
8	8 x1 der(8)t(7;18) x1	8 x2	8 x2	8 x2
9	9 x1 del(9q)x1	9 x2	9 x2	9 x2
10	10 x2	10 x2	10 x2	10 x2
11	11 x2	11 x2	11 x2	11 x2
12	12 x1 der(12)t(7;1 2)x1	12 x2	12 x2	12 x1
13	13 x2	13 x1 der(13)t(13;2 2)x1	13 x2	13 x2
14	14 x2	14 x2	14 x2	14 x2
15	15 x2	15 x2	15 x2	15 x2
16	16 x2	16 x2	16 x2	16 x2
17	17 x1 del(17)x1	17 x2	17 x2	17 x2
18	18 x1	18 x2	18 x2	18 x2
19	19 x1	19 x2	19 x1	19 x2
20	20 x2	20 x2	20 x1 der(20)t(20;20;1 9)x1	20 x2
21	21 x2	21 x2	21 x2	21 x2
22	22 x2	22 x1	22 x2	22 x2
X	X x2	X x2	X x2	X x2

Chromosome	Image 17 (n=43)	Image 18 (n=45)	Image 19 (n=43)	Image 20 (n=42)
1	1 x2	1 x2	1 x2	1 x2
2	2 x2	2 x2	2 x2	2 x2
3	3 x2	3 x2	3 x2	3 x2
4	4 x2	4 x2	4 x1 der(4)t(16;16;4) x1	4 x2
5	5 x2	5 x1 der(5)t(5;5)x1	5 x1 del(5q)x1	5 x2
6	6 x2	6 x1 del(6)x1 del(6)x1	6 x2	6 x2
7	7 x2	7 x2	7 x2	7 x1
8	8 x2	8 x2	8 x1 der(8)t(8;21)x1	8 x2
9	9 x2	9 x1 der(9)t(9;20;20)x 1	9 x2	9 x2
10	10 x2	10 x2	10 x2	10 x2
11	11 x2	- der(11)t(11;17;1 1)x1	11 x2	11 x2
12	12 x2	12 x2	12 x2	12 x2
13	13 x1	13 x2	13 x2	13 x1
14	14 x2	14 x2	14 x2	14 x2
15	15 x2	15 x2	15 x2	15 x2
16	16 x2	16 x1 der(16)t(16;18)x 1	16 x1	16 x1 der(16)t(16;16;1 9)x1
17	17 x2	17 x1 der(17)t(X;17)x1	17 x2	17 x2
18	18 x2	18 x2	18 x2	18 x2

19	19 x2	19 x2	19 x2	19 x1
20	20 x2	20 x1	20 x2	20 x2
21	21 x1	21 x2	21 x1	21 x1
22	22 x1	22 x2	22 x1	22 x2
X	X x2	X x1 del(X)x1	X x2	X x2

Day 85

sh-ATG3

Chromosome	Image 1 (n=110)	Image 2 (n=82)	Image 3 (n=84)
1	1 x5	1 x3 der(1)t(1;7)x1	1 x3 der(1)t(1;6)x1
2	2 x4 der(2)t(2;2)x2	2 x4	2 x4
3	3 x6 der(3)t(3;3)x1	3 x4	3 x4
4	4 x2 der(4)t(4;16)x3 der(4)t(11;19;16;4)x1	4 x3 der(4)t(4;20)x1	4 x4
5	5 x4	5 x3 der(5)t(5;5)x1	5 x4
6	6 x4	6 x4	6 x2 der(6)t(6;6;14)x1 i(6p)x1
7	7 x3	7 x2 der(7)t(7;19)x1 der(7)t(7;17)x1	7 x2 der(7)t(20;17;7;17;7)x2
8	8 x3 der(8)t(8;15)x2	8 x4	8 x2 del(8p)x2
9	9 x3 i(9p)x2	9 x2 der(9)t(9;16)x1 der(9)t(2;18;9)x1	9 x3 der(9)t(9;19)x1
10	10 x6	10 x3	10 x4

11	11 x7	11 x2 der(1)t(11;11;19)x1 del(11q)x1	11 x4
12	12 x6	12 x4	12 x4
13	13 x6	13 x2 del(13)x1	13 x4
14	14 x5	14 x4	14 x3
15	15 x2	15 x4	15 x4
16	16 x3	16 x3	16 x2
17	17 x5	17 x1 der(17)t(17;17)x1 der(17)t(17;19)x1	17 x1 der(17)t(16;17;16)x1 der(17)t(17;19)x1
18	18 x2	18 x3	18 x4
19	- der(19)t(19;19)x2 der(19)t(11;19)x3	-	19 x2
20	20 x3 der(20)t(17;20)x3	20 x3	20 x2
21	21 x2	21 x4	21 x2
22	22 x3 der(22)t(22;22)x2	22 x4	22 x2
X	X x8	X x4	X x2

Chromosome	Image 4 (n=83)	Image 5 (n=77)	Image 6 (n=80)
1	1 x4	1 x3 der(1)t(1;7)x1	1 x4
2	2 x4	2 x4	2 x4
3	3 x2 der(3)t(3;9)x2	3 x4	3 x3
4	4 x4	4 x4	4 x4
5	5 x4	5 x4	5 x4
6	6 x4	6 x4	6 x2 der(6)t(6;19)x1
7	7 x2 der(7)t(7;7)x2	7 x2 del(7p)x1	7 x1
8	8 x3 der(8)t(8;8)x1	8 x3	8 x4

9	9 x2	9 x3	9 x3
10	10 x4	10 x3	10 x4
11	11 x2 der(11)t(11;12)x1 der(11)t(16;20;13;11)x1	11 x2	11 x3
12	· der(12)t(12;16)x1 der(12)t(22;12;12)x1 der(12)t(12;22)x1	12 x4	12 x4
13	13 x2	13 x2	13 x3
14	14 x4	14 x3 der(14)t(14;17)x1	14 x4
15	15 x4	15 x4	15 x3
16	16 x2	16 x4	16 x3
17	17 x3 der(17)t(17;13;20;X)x1	17 x1	17 x4
18	18 x4	18 x4	18 x4
19	19 x3 der(19)t(12;19)x1	19 x1 der(19)t(19;20)x1 der(19)t(20;19;19;20;8)x1	19 x2
20	20 x2	20 x3	20 x3
21	21 x4	21 x2	21 x4
22	22 x4	22 x4	22 x4
X	X x4	X x4	X x5

Chromosome	Image 7 (n=80)	Image 8 (n=80)	Image 9 (n=81)
1	1 x3	1 x2 del(1q)x1	1 x4
2	2 x4	2 x5 der(2)t(2;17)x1	2 x3 der(2)t(2;15)x1
3	3 x2 der(3)t(3;11;9)x1	3 x4 del(3)x2	3 x2 del(3q)x1
4	4 x4	4 x5 der(4)t(4;18)x1	4 x3
5	5 x4	5 x5	5 x4
6	6 x2	6 x2	6 x2

		der(6)t(3;6)x1	der(6)t(3;6)x1 der(6)t(11;19;6)x1
7	7 x3	7 x2	7 x3
8	8 x4	8 x3	8 x4
9	9 x3 der(9)t(7;9)x1	9 x2	9 x3
10	10 x4	10 x4	10 x4
11	11 x3 der(11)t(11;17)x1	11 x1 del(11q)x1	11 x4
12	12 x4	12 x4 der(12)t(12;20)x1	12 x4
13	13 x4	13 x3	13 x4
14	14 x4	14 x4	14 x4
15	15 x3	15 x5	15 x2
16	16 x2	16 x2	16 x3
17	17 x2 der(17)t(17;14;11;6)x1	17 x2	17 x3
18	18 x3	18 x4	18 x4
19	19 x2	19 x3	19 x2
20	20 x3	20 x2	20 x3
21	21 x4	21 x3	21 x4
22	22 x4	22 x3	22 x4
X	X x4	X x2	X x4

Chromosome	Image 10 (n=73)	Image 11 (n=39)	Image 12 (n=42)
1	1 x4	1 x2	1 x2
2	2 x3 der(2)t(2;10)x1	2 x1	2 x1
3	3 x1 del(3p)x1	3 x2	3 x1 der(3)t(3;9)x1
4	4 x2	4 x2	4 x2
5	5 x4	5 x2	5 x2
6	6 x2 der(6)t(6;16)x1	6 x1 der(6)t(6;9)x1	6 x2
7	7 x1 del(7p)x1	7 x1 der(7)t(7;22)x1	7 x2

	del(7q)x1		
8	8 x4	8 x2	8 x2
9	9 x3	9 x1	9 x1
10	10 x2	10 x2	10 x2
11	11 x2	11 x2	11 x2
12	12 x4	12 x2	12 x2
13	13 x3	- der(13)t(13;14)x1	13 x2
14	14 x3	14 x1	14 x2
15	15 x3	15 x2	15 x2
16	16 x3	16 x1	16 x1
17	17 x4	17 x1 del(17)x1	17 x2
18	18 x3	18 x1 der(18)t(16;19;18)x1	18 x2
19	19 x1 del(19q)x1	19 x1	19 x1
20	20 x2 der(20)t(15;19;15;20)x1 der(20)t(20;7;20;7)x1	20 x2	20 x1 der(20)t(X;20)x1
21	21 x4	21 x2	21 x1 der(21)t(16;21)x1
22	22 x3	22 x1	22 x2
X	X x4	X x2	X x2

Chromosome	Image 13 (n=38)	Image 14 (n=83)	Image 15 (n=82)
1	1 x2	1 x4	1 x4
2	2 x2	2 x4	2 x4
3	3 x2	3 x3	3 x2 der(3)t(19;6;19;3)x1
4	4 x2	4 x4	4 x4
5	5 x1 der(5)t(5;14)x1	5 x4	5 x4
6	6 x2	6 x2 der(6)t(6;20)x1	6 x2 del(6p)x1
7	7 x1	7 x2	7 x2

		der(7)t(7;19)x1 del(7p)x1	der(7)t(7;16)x1
8	8 x2	8 x4	8 x4
9	9 x2	9 x4	9 x3
10	10 x1	10 x4	10 x4
11	11 x1 der(11)t(11;11;19)x1	11 x3	11 x3
12	12 x1 der(12)t(12;17)x1	12 x4	12 x4
13	13 x1	13 x4	13 x3
14	14 x2	14 x4	14 x4
15	15 x2	15 x3	15 x4
16	16 x1	16 x3	16 x2
17	17 x1	17 x4	17 x4
18	18 x1	18 x4	18 x3 der(18)t(16;18)x1
19	19 x1	19 x2	19 x2
20	20 x1	20 x3	20 x3 der(20)t(20;19;7)x1
21	21 x2	21 x4	21 x4
22	22 x2	22 x3	22 x4
X	X x2	X x4	X x4

Chromosome	Image 16 (n=45)	Image 17 (n=38)	Image 18 (n=80)
1	1 x2	1 x3	1 x3 der(1)t(1;7)x1
2	2 x1	2 x2	2 x4
3	3 x1	3 x2	3 x3
4	4 x2	4 x1	4 x4
5	5 x4	5 x2	5 x3
6	6 x1	- der(6)t(6;18)x1	6 x4
7	7 x1	7 x1	7 x2
8	8 x1	-	8 x3
9	9 x2	9 x1	9 x3

10	10 x1	10 x1	10 x3
11	11 x1 del(11q)x1	11 x2	11 x2 der(11)t(11;19;9)x1
12	12 x3	-	12 x3
13	13 x1	13 x3	13 x3
14	14 x3	14 x1	14 x4
15	15 x3	- der(15)t(12;15)x1	15 x3
16	16 x4	16 x1	16 x4
17	17 x1 der(17)t(17;1;7)x1	17 x2	17 x4
18	18 x1	18 x2	18 x4
19	19 x1	- der(19)t(9;19)x2	19 x2 der(19)t(5;19)x1
20	20 x2	20 x4 der(20)t(20;19;2;20)x1	20 x2 der(20)t(9;20)x1 der(20)t(12;20)x1
21	21 x2	21 x2	21 x4
22	22 x2	-	22 x4
X	X x3	X x3	X x4

Chromosome	Image 19 (n=42)	Image 20 (n=43)
1	1 x2	1 x2
2	2 x2	2 x2
3	3 x2	3 x1 der(3)t(7;18;3)x1
4	4 x2	4 x2
5	5 x2	5 x2
6	6 x2	6 x2
7	7 x1	7 x1
8	8 x2	8 x2
9	9 x2	9 x1 del(9q)x1
10	10 x2	10 x2
11	11 x1	11 x2
12	12 x1 del(12p)x1	12 x2
13	- der(13)t(11;13)x1	13 x2
14	14 x2	14 x2
15	15 x2	- der(15)t(15;15)x1
16	16 x2	16 x2
17	17 x1 der(17)t(7;17)x1	17 x2
18	18 x2	18 x1
19	19 x1 der(19)t(19;20)x1	19 x2
20	20 x1	20 x1 der(20)t(4;20)x1
21	21 x2	21 x2
22	22 x2	22 x1 der(22)t(22;22)x1
X	X x2	X x2

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Chromosome	Image 1 (n=43)	Image 2 (n=78)	Image 3 (n=80)
1	1 x2	1 x4	1 x4
2	2 x2	2 x4	2 x4
3	3 x2	3 x3 der(3)t(3;7)x1	3 x4
4	4 x2	4 x4	4 x4
5	5 x2	5 x2 der(5)t(5;14)x2	5 x2 der(5)t(5;17)x2
6	6 x2	6 x4	6 x4
7	7 x1 der(7)t(7;7)x1	7 x3	7 x2 der(7)t(7;19;7)x1 der(7)t(7;19;9)x1
8	8 x1 der(8)t(8;13)x1	8 x4	8 x2 der(8)t(8;19;17;19;8)x1
9	9 x2	9 x3	9 x3 der(9)t(9;19;9;19;7)x1
10	10 x2 del(10p)x1	10 x3 der(10)t(10;20)x1	10 x4
11	11 x1 der(11)t(11;15;7;19)x1	11 x3	11 x2 der(11)t(11;20)x2
12	12 x2	12 x4	12 x2 der(12)t(12;12)x1
13	13 x1	13 x2 der(13)t(13;13)x1	13 x3 der(13)t(19;18;13)x1
14	14 x2	14 x2	14 x3 der(14)t(17;18;14)x1
15	15 x2	15 x4	15 x4
16	16 x1 del(16q)x1	16 x4	16 x3
17	17 x1 del(17q)x1	17 x2	17 x3
18	18 x2	18 x3	18 x4

		der(18)t(7;18)x1	
19	19 x1	19 x4	19 x1
20	20 x2	20 x2	20 x2
21	21 x2	21 x3	21 x1
22	22 x1	22 x1	22 x4
X	X x2	X x4	X x4

Chromosome	Image 4 (n=84)	Image 5 (n=80)	Image 6 (n=44)
1	1 x4	1 x4	1 x2
2	2 x4	2 x2 der(2)t(2;19)x1 del(2p)x1	2 x2
3	3 x4	3 x4	3 x1 der(3)t(20;11;3)x1
4	4 x2	4 x4	4 x2
5	5 x4	5 x4	5 x2
6	6 x3 del(6p)x1	6 x3 der(6)t(X;6)x1	6 x2
7	7 x2 del(7q)x1 der(7)t(4;7)x1	7 x4	7 x2
8	8 x3	8 x3	8 x2
9	9 x2 del(9p)x1 del(9q)x1	9 x3	9 x2
10	10 x4	10 x4	10 x2
11	11 x4	11 x4	11 x1 der(11)t(11;11)x1 der(11)t(11;13;11;13)x1 der(11)t(11;14;11)x1
12	12 x3 der(12)t(20;17;12)x1	12 x3 der(12)t(12;19)x1	12 x2
13	13 x3	13 x2 der(13)t(13;19)x1	13 x1
14	14 x3 del(14)x1	14 x4	14 x1
15	15 x3	15 x2	15 x2

		der(15)t(8;15)x1	
16	16 x3	16 x2	- der(16)t(16;16)x1 der(16)t(16;21)x1
17	17 x4	17 x3	17 x2
18	18 x3 i(18p)x1	18 x4	18 x2
19	19 x3 der(19)t(19;20;19)x1	19 x1	19 x2
20	20 x2	20 x4	20 x1
21	21 x4	21 x4	21 x1
22	22 x4	22 x3	- der(22)t(11;22)x1 der(22)t(11;22)x1
X	X x4	X x3	X x2

Chromosome	Image 7 (n=83)	Image 8 (n=43)	Image 9 (n=43)
1	1 x4	1 x2	1 x2
2	2 x4	2 x2	2 x1 der(2)t(2;20;22)x1
3	3 x3 del(3p)x1 del(3q)x1	3 x2	3 x2
4	4 x4	4 x2	4 x2
5	5 x2 der(5)t(5;16)x1 der(5)t(5;8)x1	5 x2	5 x1 der(5)t(X;5)x1
6	6 x3 del(6p)x1	6 x2	6 x2
7	- der(7)t(7;15)x1 der(7)t(7;21)x1 der(7)t(7;19;7)x1	7 x1	7 x2
8	8 x3	8 x2	8 x1
9	9 x4	9 x1 del(9q)x1	9 x2
10	10 x4	10 x2	10 x2

11	11 x4	11 x1	11 x2
12	12 x3	12 x2	12 x2
13	13 x3	- der(13)t(13;13)x1	13 x2
14	14 x2 der(14)t(13;14)x1 der(14)t(14;7;20)x1 der(14)t(14;7;13;7;14;12)x1	14 x2	14 x2
15	15 x2 der(15)t(15;17)x1 der(15)t(15;21)x1	15 x3	15 x2
16	16 x2	- der(16)t(16;16)x1 der(16)t(11;16)x1	16 x1
17	17 x3	17 x2	17 x2
18	18 x5	18 x2	18 x2
19	19 x3 der(19)t(14;19;17)x1	19 x1 der(19)t(19;20)x1	19 x2
20	20 x3	20 x1 der(20)t(20;20)x1	20 x1 der(20)t(18;20)x1
21	21 x1	21 x2	21 x2
22	22 x4	22 x2	22 x1
X	X x4	X x1	X x2

Chromosome	Image 10 (n=83)	Image 11 (n=42)	Image 12 (n=69)
1	1 x4	1 x2	1 x3 del(1q)x1
2	2 x4	2 x2	2 x1 der(2)t(2;5)x1 der(2)t(2;15)x1
3	3 x4	3 x2	3 x3
4	4 x4	4 x2	4 x4
5	5 x4	5 x2	5 x2 der(5)t(2;5)x1 der(5)t(5;11)x1
6	6 x2 der(6)t(6;6)x1	6 x2	6 x1 der(6)t(6;10)x1

7	7 x4	7 x1	7 x2 der(7)t(7;17)x1
8	8 x4	8 x2	8 x4
9	9 x2 der(9)t(9;14)x2	9 x1 der(9)t(9;19)x1	9 x1
10	10 x4	10 x2	10 x2
11	11 x3 del(11q)x1	11 x2	11 x2 der(11)t(11;20;9;16)x1
12	12 x4	12 x2	12 x3
13	13 x2 der(13)t(13;19)x1	13 x1	13 x3
14	14 x2 der(14)t(14;14)x1	14 x2	14 x2 der(14)t(14;17)x1 der(14)t(10;14)x1
15	15 x4	15 x1 der(15)t(15;19)x1	15 x2 der(15)t(2;5;12;7;15)x1
16	16 x3 del(16p)x1	16 x1	16 x3 der(16)t(16;9;7)x1
17	17 x2	17 x1 der(17)t(17;17)x1	17 x1
18	18 x1	18 x2	18 x3
19	19 x2 der(19)t(19;19)x1	19 x1	19 x2 der(19)t(17;19)x1
20	20 x1	20 x2	20 x3
21	21 x2	21 x2	21 x2
22	22 x4	22 x2	22 x4
X	X x4	X x2	X x3

Chromosome	Image 13 (n=71)	Image 14 (n=73)	Image 15 (n=41)
1	1 x4	1 x4	1 x2
2	2 x2 der(2)t(5;12;2)x1 der(2)t(2;19)x1	2 x2 der(2)t(2;12;19;21;16)x1 der(2)t(2;19;12)x1	2 x2
3	3 x3	3 x2 del(3q)x1	3 x2
4	4 x4	4 x3	4 x2

5	5 x3	5 x4	5 x2
6	6 x2 der(6)t(5;6)x1	6 x4	6 x2
7	7 x2 der(7)t(7;7;16)x2	7 x2 der(7)t(7;21)x1	7 x1 der(7)t(7;17)x1
8	8 x2 der(8)t(17;18;8)x2	8 x3	8 x2
9	9 x4	9 x2	9 x2
10	10 x4	10 x3	10 x1
11	11 x4	11 x4	11 x2
12	12 x2	12 x3	12 x1 der(12)t(10;20;12)x1
13	13 x2	13 x3	13 x1 der(13)t(13;22)x1
14	14 x4	14 x3	14 x2
15	15 x3	15 x2	15 x1
16	16 x2	16 x3	16 x2
17	17 x1 der(17)t(17;22)x1	17 x4	17 x1
18	18 x2	18 x4	18 x2
19	19 x2	- der(19)t(15;19)x1	19 x1 der(19)t(19;21)x1
20	20 x2 der(20)t(20;22;17)x1 der(20)t(20;17)x1	20 x3	- der(20)t(10;20)x1 der(20)t(15;20)x1
21	21 x3	21 x2 der(21)t(X;21)x1	21 x1
22	-	22 x4	22 x1
X	X x2 del(X)x2	X x3	X x2

Chromosome	Image 16 (n=52)	Image 17 (n=77)	Image 18 (n=54)
1	1 x2	1 x3	1 x3
2	2 x1	2 x3	2 x3
3	3 x3	3 x4	3 x3
4	4 x3	4 x3	4 x2

	der(4)t(4;17)x1		
5	5 x3 der(5)t(5;11)x1	5 x4	5 x1
6	6 x1	6 x2	6 x1 der(6)t(6;16)x1
7	7 x1	7 x2	7 x2
8	8 x2	8 x2	8 x2
9	9 x1 der(9)t(2;9)x1 der(9)t(5;9)x1	9 x4	9 x2
10	10 x1	10 x4	10 x4
11	11 x3	11 x3 der(11)t(X;11)x1	11 x3 der(11)t(11;11;19)x1
12	12 x2	12 x4	12 x2
13	13 x2	13 x2	13 x2
14	14 x1 der(14)t(10;14)x1	14 x4	14 x3
15	15 x2 der(15)t(2;15)x1	15 x4	15 x1
16	16 x1	16 x2	16 x1
17	17 x2 der(17)t(2;17)x1	17 x4	17 x2
18	18 x2	18 x2	18 x2
19	19 x4	19 x2 der(19)t(19;20)x1	19 x1
20	20 x1	20 x2	20 x2 der(20)t(15;20)x1 der(20)t(17;20)x1
21	21 x2	21 x1	21 x2
22	22 x3	22 x1	22 x2
X	X x2	X x4	X x4

Chromosome	Image 19 (n=43)	Image 20 (n=81)
1	1 x2	1 x4
2	2 x2	2 x4
3	3 x2	3 x4

4	4 x2	4 x4
5	5 x2	5 x4
6	6 x2	6 x4
7	7 x2	7 x4
8	8 x2	8 x4
9	9 x1 der(9)t(9;14)x1	9 x3 der(9)t(9;11;20)x1
10	10 x1	10 x3
11	11 x2	11 x2
12	12 x1 der(12)t(12;17)x1	12 x4
13	13 x2	13 x3
14	14 x2	14 x4
15	15 x2	15 x3
16	16 x2	16 x4
17	17 x2	17 x2
18	18 x2	18 x4
19	19 x2	19 x2 der(19)t(19;19)x1 del(19q)x1
20	20 x2	20 x3
21	21 x2	21 x3
22	22 x2	22 x2
X	X x2	X x4

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Chromosome	Image 1 (n=80)	Image 2 (n=42)	Image 3 (n=84)
1	1 x2 der(1)t(1;11)x2	1 x1 - der(1)t(1;12)x1	1 x2 - der(1)t(1;12)x2
2	2 x4	2 x1 der(2)t(2;15)x1	2 x3 del(2p)x1 del(2q)x1
3	3 x4	3 x2	3 x3
4	4 x4	4 x2	4 x4
5	5 x4	5 x2	5 x4
6	6 x4	6 x2	6 x4
7	7 x2	7 x1 der(7)t(20;11;7)x1	7 x2
8	8 x4	8 x2	8 x4
9	9 x4	9 x2	9 x3
10	10 x4	10 x2	10 x4
11	-	- del(11p)x1	11 x1
12	12 x3 del(12p)x1 del(12q)x1	12 x1 der(11)t(11;12)x1	12 x2 der(11)t(11;12)x2
13	13 x2	13 x1	13 x2
14	14 x4	14 x1 der(14)t(13;14)x1	14 x3 der(14)t(13;14)x1
15	15 x4	15 x1	15 x4
16	16 x4	16 x2	16 x4
17	17 x4	17 x2	17 x4
18	18 x4	18 x2	18 x4
19	19 x2 der(19)t(19;11;1)x2	19 x1 der(19)t(19;11;1)x1	19 x2 der(19)t(19;11;1)x2
20	20 x2	20 x1	20 x2 der(20)t(6;20)x2

21	21 x2 der(21)t(21;21)x1	21 x2	21 x4
22	22 x4	22 x2	22 x3 der(22)t(11;22)x1
X	X x2	X x2	X x4

Chromosome	Image 4 (n=42)	Image 5 (n=42)	Image 6 (n=43)
1	1 x1 der(1)t(1;11)x1	1 x1 der(1)t(1;11)x1	1 x1 der(1)t(1;11)x1
2	2 x2	2 x2	2 x2
3	3 x2	3 x2	3 x2
4	4 x2	4 x2	4 x2
5	5 x2	5 x2	5 x2
6	6 x2	6 x2	6 x2
7	7 x1	7 x1 del(7p)x1	7 x1 der(7)t(7;22)x1
8	8 x2	8 x2	8 x2
9	9 x2	9 x2	9 x2
10	10 x2	10 x2	10 x2
11	11 x1	11 x1	- del(11q)x1
12	12 x2	12 x2	12 x2
13	13 x1	13 x1	13 x1
14	14 x1 der(14)t(13;14)x1	14 x1 der(14)t(13;14)x1	14 x1 der(14)t(13;14)x1
15	15 x2	15 x2	15 x2
16	16 x2	16 x2	16 x2
17	17 x2	17 x2	17 x2
18	18 x2	18 x2	18 x2
19	19 x1 der(19)t(19;11;1)x1	19 x1 der(19)t(19;11;1)x1	19 x1 der(19)t(19;11;1)x1
20	20 x2	20 x1	20 x2
21	21 x2	21 x2	21 x2
22	22 x1	22 x1	22 x1
X	X x2	X x2	X x2

Chromosome	Image 7 (n=43)	Image 8 (n=43)	Image 9 (n=85)
1	1 x1 der(1)t(1;11)x1	1 x1 - der(1)t(1;12)x1	1 x2 der(1)t(1;11)x2
2	2 x2	2 x2	2 x4
3	3 x2	3 x2	3 x4
4	4 x2	4 x2	4 x3
5	5 x2	5 x2	5 x4
6	6 x2	6 x2	6 x4
7	7 x1 del(7p)x1	7 x1	7 x4
8	8 x2	8 x2	8 x4
9	9 x2	9 x2	9 x4
10	10 x2	10 x2	10 x2
11	11 x1	11 x1	11 x2
12	12 x2	12 x1 der(11)t(11;12)x1	12 x4
13	13 x1	13 x1	13 x2
14	14 x1 der(14)t(13;14)x1	14 x1 der(14)t(13;14)x1	14 x2 der(14)t(13;14)x2
15	15 x2	15 x2	15 x4
16	16 x2	16 x2	16 x4
17	17 x2	17 x2	17 x4
18	18 x2	18 x2	18 x4
19	19 x1 der(19)t(19;11;1)x1	19 x1 der(19)t(19;11;1)x1	19 x2 der(19)t(19;11;1)x2
20	20 x1	20 x1 del(20)x1	20 x4
21	21 x2	21 x2	21 x4
22	22 x2	22 x2	22 x2
X	X x2	X x2	X x4

Chromosome	Image 10 (n=42)	Image 11 (n=74)	Image 12 (n=43)
1	1 x1	1 x1	1 x1

	der(1)t(1;11)x1	der(1)t(1;11)x2	der(1)t(1;11)x1
2	2 x2	2 x4	2 x2
3	3 x2	3 x3	3 x2
4	4 x2	4 x3	4 x2
5	5 x2	5 x4	5 x2
6	6 x2	6 x3	6 x2
7	7 x1 der(7)t(7;20)x1	7 x1 del(7p)x2	7 x1 der(7)t(6;7)x1
8	8 x1	8 x3	8 x2
9	9 x2	9 x4	9 x2
10	10 x2	10 x3	10 x2
11	11 x1	11 x2	11 x1
12	12 x2	12 x3	12 x1 der(12)t(12;22)x1
13	13 x1	13 x3	13 x1 der(13)t(13;14)x1
14	14 x1 der(14)t(13;14)x1	14 x2 der(14)t(13;14)x2	- der(14)t(13;14)x1
15	15 x2	15 x4	15 x2
16	16 x2	16 x3	16 x2
17	17 x2	17 x4	17 x1 der(17)t(12;17)x1
18	18 x2	18 x4	18 x2
19	19 x1 der(19)t(19;11;1)x1	19 x2 der(19)t(19;11;1)x1	19 x1 der(19)t(19;11;1)x1
20	20 x1	20 x2	20 x2
21	21 x2	21 x3	21 x2
22	22 x1 der(22)t(8;22)x1	22 x2	22 x1
X	X x2	X x4	X x2

Chromosome	Image 13 (n=44)	Image 14 (n=42)	Image 15 (n=43)
1	1 x1 der(1)t(1;11)x1 der(1)t(1;11)x1	1 x1 der(1)t(1;11)x1	1 x1 der(1)t(1;11)x1
2	2 x2	2 x2	2 x2

3	3 x2	3 x2	3 x2
4	4 x2	4 x2	4 x1 del(4)x1
5	5 x2	5 x2	5 x2
6	6 x2	6 x2	6 x2
7	7 x1	7 x1 der(7)t(7;20)x1	7 x1
8	8 x2	8 x2	8 x2
9	9 x2	9 x2	9 x2
10	10 x2	10 x2	10 x2
11	11 x1	11 x1	11 x1
12	12 x2	12 x2	12 x2
13	13 x2	13 x2	13 x1
14	14 x1 der(14)t(13;14)x1	- der(14)t(14;14;13)x1	14 x1 der(14)t(13;14)x1
15	15 x2	15 x2	15 x2
16	16 x2	16 x2	16 x2
17	17 x2	17 x2	17 x2
18	18 x2 del(18q)x1	18 x2	18 x2
19	19 x1 der(19)t(19;11;1)x1	19 x1 der(19)t(19;11;1)x1	19 x1 der(19)t(19;11;1)x1
20	20 x2	20 x1	20 x2
21	21 x2	21 x2	21 x2
22	22 x1	22 x1	22 x2
X	X x2	X x2	X x2

Chromosome	Image 16 (n=43)	Image 17 (n=42)	Image 18 (n=42)
1	1 x1 der(1)t(1;11)x1	1 x1 der(1)t(1;11)x1	1 x1 der(1)t(1;11)x1
2	2 x2	2 x2	2 x2
3	3 x2	3 x2	3 x1 der(3)t(3;20)x1
4	4 x2	4 x2	4 x2
5	5 x2	5 x2	5 x2

6	6 x2	6 x2	6 x1 t(6;8)x1
7	7 x2	7 x1	7 x1 der(7)t(7;20)x1
8	8 x2	8 x1	8 x1 t(6;8)x1
9	9 x2	9 x1 der(9)t(9;17)x1	9 x2
10	10 x2	10 x2	10 x2
11	11 x1	11 x1	11 x1
12	12 x2	12 x2	12 x2
13	13 x1 der(13)t(13;13)x1	13 x1	13 x1
14	14 x1 der(14)t(13;14)x1	14 x1 der(14)t(13;14)x1	- der(14)t(13;14)x1
15	15 x2	15 x2	15 x2
16	16 x2	16 x2	16 x2
17	17 x2	17 x1	17 x2
18	18 x2	18 x2	18 x2
19	19 x1 der(19)t(19;11;1)x1	19 x1 der(19)t(19;11;1)x2	19 x1 der(19)t(19;11;1)x1
20	20 x1	20 x2	20 x1
21	21 x2	21 x2	21 x2
22	22 x1	22 x2	22 x2
X	X x2	X x2	X x2

Chromosome	Image 19 (n=42)	Image 20 (n=44)
1	1 x1 - der(1)t(1;12)x1	1 x1 der(1)t(1;11)x1
2	2 x2	2 x2
3	3 x2	3 x2
4	4 x2 del(4q)x1	4 x2
5	5 x2	5 x2
6	6 x2	6 x2

7	7 x1	7 x1 der(7)t(7;20)x1
8	8 x2	8 x2
9	9 x2	9 x2
10	10 x2	10 x2
11	11 x1	11 x1
12	12 x1 der(12)t(11;12)x1	12 x2
13	13 x1	13 x1
14	14 x1 der(14)t(13;14)x1	14 x1 der(14)t(13;14)x1
15	15 x1 der(15)t(15;20)x1	15 x2
16	16 x2	16 x2
17	17 x2	17 x2
18	18 x2	18 x2
19	19 x1 der(19)t(19;11;1)x1	19 x1 der(19)t(19;11;1)x1
20	20 x1	20 x2
21	21 x2	21 x2
22	22 x1	22 x2
X	X x2	X x2