

**Supplementary Table S1:** Sex chromosome determination of miscalled genotyped CLSA participants

Self reported sex	Affymetrix sex corrected by SVM	PLINK sex (raw F estimate <0.3 female raw F estimate >0.8 male)	discordance in section Sex chromosome composition	PLINK sex (adjusted F estimate <0.4 female adjusted F estimate >0.8 male)	sex determined by combined Affymetrix/PLINK/CNV approach	CLSA self-reported phenotype	chromosomal abnormality from CNV profile	Raw F estimate	Adjusted F estimate
male	female	female	1	female	female		No abnormality	-0.00301	0.01745
male	male	female	1	female	male		Klinefelter Syndrome (47,XXY)	0.1048	0.1002
female	male	male	1	male	male		No abnormality	1	1
male	female	female	1	female	female		No abnormality	0.01533	0.02791
female	female	unknown		female	female		Low heterozygosity on chrX	0.3495	0.3644
female	female	unknown	1	unknown	female		45,X/46,XX mosaicism	0.5095	0.4773
female	female	unknown	1	unknown	female		Low heterozygosity on chrX	0.4637	0.4485
female	female	unknown	1	unknown	female		Low heterozygosity on chrX	0.4352	0.4746
male	female	female	1	female	female		No abnormality	0.008892	0.03223
female	male	male	1	male	male		No abnormality	1	1
female	male	male	1	male	male		No abnormality	1	1
male	female	female	1	female	female		No abnormality	-0.03065	-0.02794
female	female	male	1	male	female	Turner Syndrome	Turner Syndrome (45,X)	0.9507	0.9614
female	male	male	1	male	male		No abnormality	1	1
female	female	unknown		female	female		Low heterozygosity on chrX	0.3043	0.2802
male	female	female	1	female	female		No abnormality	-0.002689	-0.01603
female	male	male	1	male	male		No abnormality	1	1
male	male	unknown	1	female	male		Klinefelter Syndrome (47,XXY)	0.3124	0.3235
female	male	male	1	male	male		No abnormality	1	1
male	male	unknown	1	unknown	male		No abnormality	0.6854	0.6878
male	male	unknown	1	unknown	male		45,X/46,XY mosaicism	0.5798	0.5893
female	female	male	1	male	female		Turner Syndrome (45,X)	0.9792	0.9875
female	male	male	1	male	male		No abnormality	1	1
male	female	female	1	female	female		No abnormality	0.04474	0.03819
female	female	male	1	male	female		Turner Syndrome (45,X)	0.9439	0.9545
male	male	unknown		male	male		45,X/46,XY mosaicism	0.7965	0.8497
female	female	unknown	1	unknown	female		Low heterozygosity on chrX	0.4524	0.4305
male	female	male		male	female		45,X/46,XY mosaicism	0.9748	0.986
female	female	unknown	1	unknown	female		Low heterozygosity on chrX	0.5457	0.5504

male	female	male		male	male		45,X/46,XY mosaicism	0.9678	0.9797
female	female	male	1	unknown	female		Low heterozygosity on chrX	0.8076	0.7966
female	male	male	1	male	male		No abnormality	1	1
female	male	unknown	1	male	female	Turner Syndrome	45,X/46,XY mosaicism	0.7827	0.8404
male	male	female	1	female	male		Klinefelter Syndrome (47,XXY)	-0.0457	-0.04304
female	female	male	1	male	female		Turner Syndrome (45,X)	0.879	0.9028
female	female	unknown		female	female		Low heterozygosity on chrX	0.3035	0.3339
male	male	unknown	1	unknown	male		45,X/46,XY mosaicism	0.6732	0.7016
male	male	female	1	female	male	Klinefelter Syndrome	Klinefelter Syndrome (47,XXY)	-0.03886	-0.02651
female	male	male	1	male	male		No abnormality	1	1
male	male	unknown	1	female	male		Klinefelter Syndrome (47,XXY)	0.3093	0.2872
male	female	male		male	male		45,X/46,XY mosaicism	1	0.9603
female	female	male	1	male	female	Turner Syndrome	Turner Syndrome (45,X)	0.9273	0.9527
female	female	unknown		female	female		Low heterozygosity on chrX	0.4004	0.3584
female	female	unknown	1	unknown	female		Low heterozygosity on chrX	0.3838	0.4362
male	male	unknown		male	male		45,X/46,XY mosaicism	0.7707	0.8358
female	female	unknown		female	female		Low heterozygosity on chrX	0.3978	0.3886
female	female	unknown	1	unknown	female		Low heterozygosity on chrX	0.7748	0.7842
female	female	unknown		female	female		No abnormality	0.3298	0.3527
male	male	unknown	1	unknown	male		45,X/46,XY mosaicism	0.6658	0.7601
male	female	male		male	male		45,X/46,XY mosaicism	1	0.9827
female	female	unknown	1	unknown	female		45,X/46,XX mosaicism	0.4148	0.4228
male	female	female	1	female	female		No abnormality	-0.003668	-0.01753
female	female	unknown		female	female		Low heterozygosity on chrX	0.3489	0.2975
female	male	male	1	male	male		No abnormality	1	1
male	female	female	1	female	female		No abnormality	-0.02345	-0.01932
male	male	female	1	female	male	Klinefelter Syndrome	Klinefelter Syndrome (47,XXY)	-0.03581	-0.02924
female	female	unknown	1	unknown	female		45,X/46,XX mosaicism	0.5139	0.5022
female	female	unknown		female	female		Low heterozygosity on chrX	0.3461	0.3336
male	female	female	1	female	female		No abnormality	0.01936	-0.006017
male	female	female	1	female	female		No abnormality	-0.04206	-0.0411
female	male	male	1	male	male		No abnormality	1	1
male	female	male		male	male		45,X/46,XY mosaicism	0.9756	0.9832

male	male	unknown	1	unknown	male	45,X/46,XY mosaicism	0.72	0.7971
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