Table S1: Validation of clinical (GMP)-grade iPSC Working Bank derived from CD34+ cells. iPSC Working Banks at passage 10 were validated for being sterile (free of bacteria, fungus, and mycoplasma); normal G-band karyotyping; expression of pluripotency markers (SSEA4, TRA1-60, TRA1-81, and OCT4 positivity); percent cells that have lost the reprograming plasmid; identity of iPSCs with patient material

	Age	Pheno-type	Clone	Sterility/ mycoplasma	Karyotype*/ Gender	% ve SSEA4$^+$ cells	% ve TRA1-60$^+$ cells	% ve TRA1-81$^+$ cells	% ve OCT4$^+$ cells	% Cells with plasmid loss	STR analysis PBMC=iPSC (patient match)	Onco-gene sequence (patient match)
2	85	Bilateral GA	A	UD	Normal 46/ XY	99.3	99.03	99.80	99.94	100	matched	matched
			B	UD	Normal 46/ XY	99.50	100	100	100	100	matched	Several mis-match
			C	UD	Normal 46/ XY	99.56	99.56	100	99	100	matched	matched
3	89	Bilateral GA	A	UD	Normal 46/XY	99.25	99.97	100.00	99.96	100	matched	matched
			C	UD	Normal 46/ XY	99.24	100	99.95	100	100	matched	matched
			D	UD	Normal 46/ XY	99.25	99.97	100.00	99.96	100	matched	matched
4	87	Bilateral GA	A	UD	Normal 46/ XX	99.8	100	100	99.96	100	matched	matched
			B	UD	Normal 46/ XX	99.38	100	100	99.96	100	matched	matched
			C	UD	Normal 46/ XX	99.8	100	100	99.96	100	matched	matched

UD = undetectable. Sterility was tested at WuXi AppTec; G-band Karyotyping and STR analysis was performed at Cell Line Genetics; Plasmid loss was detected using a fluidigm single cell qPCR assay at Cellular Dynamics International, Inc.