Supplementary Table 1. List of causative genes of candidate diseases and summary of sequencing data

Gene	Disease	Mean depth (X)	% Bases above 10	% Bases above 20	% Bases above 30
PTPN11	Noonan syndrome	150.81	100	100	100
SOS1	Noonan syndrome	138.28	100	100	100
RAF1	Noonan syndrome	155.25	100	100	100
KRAS	Noonan syndrome	134.56	100	100	100
NRAS	Noonan syndrome	138.45	100	100	99.13
BRAF	Noonan syndrome	124.23	100	99.11	96.06
MAPK1	Noonan syndrome	125.28	100	100	99.60
MAP2K1	Noonan syndrome	157.97	100	100	100
SHOC2	Noonan-like disorders	159.68	100	100	100
CBL	Noonan-like disorders	155.33	100	100	100
HRAS	Costello Syndrome	222.94	100	100	100
RPS6KA3	Coffin-Lowry syndrome	117.41	100	99.76	98.64
ATRX	Alpha-thalassemia-X-linked intellectual disability syndrome	141.05	100	100	99.83
PHF6	Börjeson-Forssman-Lehmann Syndrome	133.43	100	100	100
ELN	Williams syndrome	135.40	100	100	100
RFC2	Williams syndrome	139.51	100	100	100
LIMK1	Williams syndrome	156.50	100	99.80	99.33
CLIP2	Williams syndrome	227.64	100	100	100
GTF2I	Williams syndrome	98.47	100	100	100
GTF2IRD1	Williams syndrome	165.01	100	100	100