

**Table S1** Benign or likely benign single nucleotide variations present in both primary and relapsed tumor

	Locus	Gene	Amino Acid Change	Coding
1.	chr6:157405930	<i>ARID1B</i>	p.Ala807=	c.2421G>A
2.	chr11:108122729	<i>ATM</i>	p.Asn591=	c.1773T>C
3.	chr11:108175462	<i>ATM</i>	p.Asp1853Asn	c.5557G>A
4.	chr11:108183167	<i>ATM</i>	p.Asn1983Ser	c.5948A>G
5.	chr5:70800475	<i>BDP1</i>	p.Arg757Cys	c.2269C>T
6.	chr5:70805664	<i>BDP1</i>	p.Thr915=	c.2745G>A
7.	chr5:70806711	<i>BDP1</i>	p.Ile1264Met	c.3792C>G
8.	chr5:70806958	<i>BDP1</i>	p.Val1347Met	c.4039G>A
9.	chr5:70818150	<i>BDP1</i>	p.Gln1676Glu	c.5026C>G
10.	chr5:70837295	<i>BDP1</i>	p.Ile2013Leu	c.6037A>C
11.	chr5:70858194	<i>BDP1</i>	p.Arg2530=	c.7590C>T
12.	chr20:60348084	<i>CDH4</i>	p.Ala141Val	c.422C>T
13.	chr20:60485627	<i>CDH4</i>	p.Asp446=	c.1338C>T
14.	chr20:60504734	<i>CDH4</i>	p.Ile691=	c.2073C>T
15.	chr17:40860080	<i>EZH1</i>	p.Tyr519Cys	c.1556A>G
16.	chr11:534242	<i>HRAS</i>	p.His27=	c.81T>C
17.	chr11:118344418	<i>KMT2A</i>	p.Gly848=	c.2544G>C
18.	chr7:151864305	<i>KMT2C</i>	p.Phe3226Leu	c.9676T>C
19.	chr7:151877997	<i>KMT2C</i>	p.Ser2316=	c.6948T>C
20.	chr7:151878950	<i>KMT2C</i>	p.Ile1999Val	c.5995A>G
21.	chr7:151945128	<i>KMT2C</i>	p.Leu797=	c.2391G>T
22.	chr7:151945140	<i>KMT2C</i>	p.Ser793=	c.2379G>A
23.	chr7:151945167	<i>KMT2C</i>	p.Ser784=	c.2352C>A
24.	chr7:151962257	<i>KMT2C</i>	p.Pro350=	c.1050G>A
25.	chr7:151962265	<i>KMT2C</i>	p.Asp348Asn	c.1042G>A
26.	chr7:151962269	<i>KMT2C</i>	p.Val346=	c.1038G>A
27.	chr7:151970931	<i>KMT2C</i>	p.Leu291Phe	c.871C>T
28.	chr7:151970951	<i>KMT2C</i>	p.Arg284Gln	c.851G>A
29.	chr12:25362776	<i>KRAS</i>	p.?	c.*5598T>C
30.	chr12:25368462	<i>KRAS</i>	p.Arg161=	c.483G>A
31.	chr11:64572018	<i>MEN1</i>	p.Thr546Ala	c.1636A>G
32.	chr11:64572557	<i>MEN1</i>	p.His438=	c.1314T>C
33.	chr11:64572569	<i>MEN1</i>	p.Thr434=	c.1302G>A
34.	chr11:64572602	<i>MEN1</i>	p.Asp423=	c.1269C>T
35.	chr17:29422305	<i>MIR4733, NF1</i>	p.?	c.-22G>C
36.	chr10:43595968	<i>RET</i>	p.Ala45=	c.135A>G
37.	chr10:43597840	<i>RET</i>	p.Thr130Ala	c.388A>G
38.	chr10:43610119*	<i>RET</i>	p.Gly691Ser	c.2071G>A
39.	chr10:43613843*	<i>RET</i>	p.Leu769=	c.2307G>T
40.	chr10:43615633*	<i>RET</i>	p.Ser904=	c.2712C>G
41.	chr17:47677867	<i>SPOP</i>	p.Leu333Ter	c.998T>A
42.	chr8:133899160	<i>TG</i>	p.Gln515Glu	c.1543C>G
43.	chr8:133900252	<i>TG</i>	p.Ser734Ala	c.2200T>G
44.	chr8:133900386	<i>TG</i>	p.Pro778=	c.2334T>C
45.	chr8:133909974	<i>TG</i>	p.Met1028Val	c.3082A>G
46.	chr8:133920518*	<i>TG</i>	p.Asp1312Gly	c.3935A>G
47.	chr8:133931748	<i>TG</i>	p.Ala1502=	c.4506T>C
48.	chr8:133984058	<i>TG</i>	p.Arg1999Trp	c.5995C>T
49.	chr8:134108546	<i>TG</i>	p.Trp2501Arg	c.7501T>C
50.	chr8:134144113	<i>TG</i>	p.Tyr2640=	c.7920C>T
51.	chr17:7577085	<i>TP53</i>	p.Glu285Lys	c.853G>A
52.	chr17:7579472*	<i>TP53</i>	p.Pro72Arg	c.215C>G
53.	chr14:81534635	<i>TSHR</i>	p.Ser94Pro	c.280T>C
54.	chr14:81610583	<i>TSHR</i>	p.Glu727Asp	c.2181G>C
55.	chr16:72821475	<i>ZFHX3</i>	p.Glu3567Gly	c.10700A>G
56.	chr16:72827758	<i>ZFHX3</i>	p.Gly2941=	c.8823A>G
57.	chr16:72828265	<i>ZFHX3</i>	p.His2772=	c.8316C>T
58.	chr16:72832135	<i>ZFHX3</i>	p.Ala1482=	c.4446A>T
59.	chr16:72984636	<i>ZFHX3</i>	p.Ser983Ter	c.2948C>G
60.	chr16:72991660	<i>ZFHX3</i>	p.Pro795=	c.2385G>C
61.	chr16:72992138	<i>ZFHX3</i>	p.Ser636Leu	c.1907C>T
62.	chr16:72992269	<i>ZFHX3</i>	p.Asp592=	c.1776C>T
63.	chr16:72993251	<i>ZFHX3</i>	p.Asp265Gly	c.794A>G

\*, with a potential role in tumor's pathogenesis according to pre-existing evidence.