

Supplementary Table 5: Somatic mutations identified in 15 genes, *POLE* and *MSH6*, in the combined discovery and prevalence screen cohorts of 53 uterine carcinosarcomas

Gene Symbol	Ref Seq ID	Tumor No.	Genomic coordinates (Hg19)	Nucleotide Change	Amino Acid Change
<i>TAF1</i>	NM_138923	196T	chrX:70618551	c.3747G>C	p.Lys1249Asn
		198T	chrX:70612510	c.2870C>T	p.Thr957Met
		1203T	chrX:70597024	c.694G>T	p.Glu232*
		1203T	chrX:70627923	c.4303C>T	p.Arg1435Cys
		1910T	chrX:70643034	c.4517C>T	p.Ala1506Val
<i>PAPL</i>	NM_001004318	192T	chr19:39591471	c.785G>C	p.Arg262Pro
		194T	chr19:39597636	c.1163G>T	p.Ser388Ile
		1241T	chr19:39589272	c.296G>A	p.Arg99His
		1939T	chr19:39589271	c.295C>T	p.Arg99Cys
<i>C2CD2</i>	NM_015500	190T	chr21:43327116	c.1303T>G	p.Ser435Ala
		191T	chr21:43327785	c.1127G>T	p.Gly376Val
		1203T	chr21:43327130	c.1289A>G	p.Asp430Gly
<i>INSR</i>	NM_000208	188T	chr19:7132270	c.2741G>A	p.Arg914His
<i>KLF5</i>	NM_001730	190T	chr19:7119474	c.3780C>A	p.Asn1260Lys
		191T	chr13:73636627	c.890C>T	p.Ala297Val
<i>PLXNC1</i>	NM_005761	193T	chr13:73636650	c.913C>G	p.Pro305Ala
		188T	chr12:94697806	c.4581C>A	p.Tyr1527*
<i>RPS6KA3</i>	NM_004586	191T	chr12:94641761	c.2471T>G	p.Val824Gly
		189T	chrX:20183111	c.1670T>C	p.Ile557Thr
<i>ABCC9</i>	NM_005691	201T	chrX:20212374	c.419A>T	p.Glu140Val
		190T	chr12:21998545	c.3088G>T	p.Ala1030Ser
		196T	chr12:22069947	c.497G>A	p.Arg166His
		1203T	chr12:22025607	c.2150C>T	p.Ala717Val
<i>STAG2</i>	NM_001042750	1939T	chr12:21981927	c.3634C>A	p.Leu1212Ile
		192T	chrX:123176464	c.431T>A	p.Ile144Lys
		199T	chrX:123202415	c.2267A>T	p.Glu756Val
<i>TP53</i>	NM_000546	187T	chr17:7578403	c.527G>A	p.Cys176Tyr
		189T	chr17:7577538	c.743G>A	p.Arg248Gln
		190T	chr17:7578190	c.659A>G	p.Tyr220Cys
		191T	chr17:7577556	c.725G>T	p.Cys242Phe
		192T	chr17:7577539	c.742C>T	p.Arg248Trp
		193T	chr17:7578479	c.451delC	p.Pro152Argfs*18
		194T	chr17:7577121	c.817C>T	p.Arg273Cys
		195T	chr17:7577121	c.817C>T	p.Arg273Cys
		196T	chr17:7577120	c.818G>A	p.Arg273His
		198T	chr17:7578303	c.560_561-	Not determined
		199T	chr17:7579320	c.	Not determined
		199T	chr17:7578407	c.523C>G	p.Arg175Gly
		200T	chr17:7577538	c.743G>A	p.Arg248Gln
		201T	chr17:7578235	c.614A>G	p.Tyr205Cys
		203T	chr17:7578271	c.578A>G	p.His193Arg
		1208T	chr17:7578419	c.511G>T	p.Glu171*
		1338T	chr17:7578404	c.526T>A	p.Cys176Ser
		1354T	chr17:7579536	c.151G>T	p.Glu51*
		1469T	chr17:7577538	c.743G>A	p.Arg248Gln
		1595T	chr17:7577124	c.814G>T	p.Val272Leu
		1596T	chr17:7578535	c.390_392delCAA	p.Asn131del
		1643T	chr17:7577120	c.818G>A	p.Arg273His
		1690T	chr17:7578265	c.584T>C	p.Ile195Thr
		1698T	chr17:7577058	c.880G>T	p.Glu294*
		1728T	chr17:7578534	c.396G>T	p.Lys132Asn
		1828T	chr17:7577568	c.713G>A	p.Cys238Tyr
		1895T	chr17:7578216	c.633delT	p.Arg213Aspfs*34
		1910T	chr17:7577120	c.818G>A	p.Arg273His
		1949T	chr17:7574003	c.1024C>T	p.Arg342*
		1965T	chr17:7578203	c.646G>A	p.Val216Met
		1980T	chr17:7577569	c.712T>C	p.Cys238Arg
		2073T	chr17:7577120	c.818G>A	p.Arg273His
		2087T	chr17:7578455	c.475G>C	p.Ala159Pro
		2215T	chr17:7577100	c.838A>G	p.Arg280Gly
2465T	chr17:7577538	c.743G>A	p.Arg248Gln		
2486T	chr17:7579396	c.291delC	p.Pro98Leufs*25		
2558T	chr17:7576882	c.964delC	p.Pro322Hisfs*23		
2031T	chr17:7577570	c.711G>A	p.Met237Ile		
2111T	chr17:7578208	c.641A>G	p.His214Arg		
1467T	chr17:7579863	c.50delA	p.Thr18Hisfs*26		
1765T	chr17:7577096	c.842A>T	p.Asp281Val		
<i>PIK3CA</i>	NM_006218	191T	chr3:178952088	c.3143A>G	p.His1048Arg
		192T	chr3:178952085	c.3140A>T	p.His1047Leu
		198T	chr3:178916876	c.263G>A	p.Arg88Gln
		1203T	chr3:178916855	c.242A>C	p.Glu81Ala
		1203T	chr3:178916876	c.263G>A	p.Arg88Gln
		1203T	chr3:178919231	c.716T>G	p.Leu239Arg
		1241T	chr3:178916728	c.115G>A	p.Glu39Lys

		1354T	chr3:178952085	c.3140A>T	p.His1047Leu
		1469T	chr3:178916876	c.263G>A	p.Arg88Gln
		1595T	chr3:178928079	c.1357G>A	p.Glu453Lys
		1630T	chr3:178936091	c.1633G>A	p.Glu545Lys
		1850T	chr3:178936094	c.1636C>A	p.Gln546Lys
		1895T	chr3:178916944	c.331A>G	p.Lys111Glu
		1910T	chr3:178927987	c.1265T>G	p.Leu422Trp
		1939T	chr3:178916725	c.112C>T	p.Arg38Cys
		1939T	chr3:178922324	c.1093G>A	p.Glu365Lys
		1949T	chr3:178936082	c.1624G>A	p.Glu542Lys
		1980T	chr3:178936095	c.1637A>G	p.Gln546Arg
		2087T	chr3:178952085	c.3140A>G	p.His1047Arg
		2250T	chr3:178917478	c.353G>A	p.Gly118Asp
		2486T	chr3:178916944	c.331A>G	p.Lys111Glu
CHD4	NM_001273	191T	chr12:6697096	c.3485G>A	p.Arg1162Gln
		199T	chr12:6700874	c.3208C>T	p.Leu1070Phe
		1354T	chr12:6701583	c.2924G>A	p.Arg975His
		1467T	chr12:6697008	c.3573A>C	p.Lys1191Asn
		1595T	chr12:6696651	c.3778C>T	p.Arg1260Cys
		1689T	chr12:6703716	c.2222G>A	p.Trp741*
		1698T	chr12:6700644	c.3328G>T	p.Asp1110Tyr
		1939T	chr12:6701895	c.2741A>G	p.His914Arg
		1949T	chr12:6687228	c.5195G>T	p.Arg1732Leu
PPP2R1A	NM_014225	187T	chr19:52716326	c.770G>T	p.Trp257Leu
		196T	chr19:52715971	c.536C>G	p.Pro179Arg
		1203T	chr19:52716241	c.685G>A	p.Val229Met
		1203T	chr19:52719863	c.1075G>T	p.Asp359Tyr
		1338T	chr19:52715971	c.536C>G	p.Pro179Arg
		1354T	chr19:52715971	c.536C>G	p.Pro179Arg
		1413T	chr19:52716327	c.771G>T	p.Trp257Cys
		1467T	chr19:52716323	c.767C>T	p.Ser256Phe
		1765T	chr19:52715971	c.536C>G	p.Pro179Arg
		1939T	chr19:52719268	c.934A>C	p.Asn312His
		2558T	chr19:52716323	c.767C>T	p.Ser256Phe
FBXW7	NM_033632	190T	chr4:153247168	c.1634A>G	p.Tyr545Cys
		191T	chr4:153247289	c.1513C>A	p.Arg505Ser
		192T	chr4:153247367	c.1435C>G	p.Arg479Gly
		194T	chr4:153249468	c.1310G>T	p.Gly437Val
		201T	chr4:153249384	c.1394G>A	p.Arg465His
		1630T	chr4:153249384	c.1394G>T	p.Arg465Leu
		1690T	chr4:153249510	c.1268G>T	p.Gly423Val
		1728T	chr4:153249503	c.1275G>C	p.Trp425Cys
		1939T	chr4:153247366	c.1436G>A	p.Arg479Gln
		2215T	chr4:153249510	c.1268G>T	p.Gly423Val
POLE	NM_006231	1208T	chr12:133253197	c.844C>T	p.Pro282Ser
		1939T	chr12:133253184	c.857C>G	p.Pro286Arg
MSH6	NM_000179	1203T	chr2:48026204	c.1082G>A	p.Arg361His
		1689T	chr2:48030640	c.3254delC	p.Phe1088Serfs*2
		1939T	chr2:48028062	c.2940A>C	p.Glu980Asp