

Table S1 Identified variants in each tumor component

Tumor component	Gene	Reference sequence	Nucleotide change	Amino acid change	Variant allele frequency (%)	Clinical impact (AMP/ASCO/CAP guidelines)
Atypical carcinoid	<i>KIF5B(24)–ALK(20)</i>	-	-	-	-	Tier I
	<i>NOTCH1</i>	NM_017617.5	c.1612A>T	p.Lys538*	5.1	Tier II
	<i>NQO1</i>	NM_000903.3	c.559C>T	p.Pro187Ser	99.0	Tier III
	<i>PMS1</i>	NM_000534.5	c.2101T>A	p.Phe701Ile	23.8	Tier III
	<i>PXDNL</i>	NM_144651.5	c.969C>A	p.Tyr323*	21.4	Tier III
	<i>TMEM132C</i>	NM_001136103.2	c.1397T>C	p.Met466Thr	49.9	Tier III
Adenocarcinoma	<i>KIF5B(24)–ALK(20)</i>	-	-	-	-	Tier I
	<i>MSH3</i>	NM_002439.5	c.162_179delTGCAGCGGCCGCAGCGGC	p.Ala57_Ala62del	64.4	Tier III
	<i>NQO1</i>	NM_000903.3	c.559C>T	p.Pro187Ser	99.1	Tier III
	<i>PMS1</i>	NM_000534.5	c.2101T>A	p.Phe701Ile	41.9	Tier III
	<i>PXDNL</i>	NM_144651.5	c.969C>A	p.Tyr323*	4.8	Tier III
	<i>TMEM132C</i>	NM_001136103.2	c.1397T>C	p.Met466Thr	53.0	Tier III

AMP, Association for Molecular Pathology; ASCO, American Society of Clinical Oncology; CAP, College of American Pathologists.