

**Supplementary Table S2.** List of mutated genes detected in the bile cfDNA of the 57 patients positive for Bilemut assay.

<b>Mutated gene</b>	<b>Number of patients</b>	<b>% of Bilemut positive patients</b>
<i>KRAS</i>	41	71.9
<i>TP53</i>	27	47.4
<i>ERBB3</i>	13	22.8
<i>GNAS</i>	9	15.8
<i>BRAF</i>	5	8.8
<i>PIK3CA</i>	5	8.8
<i>ERBB2</i>	5	8.8
<i>FBXW7</i>	4	7.0
<i>SMAD4</i>	4	7.0
<i>IDH1</i>	3	5.3
<i>CTNBB1</i>	3	5.3
<i>PTEN</i>	3	5.3
<i>APC</i>	2	3.5
<i>EGFR</i>	2	3.5
<i>IDH2</i>	2	3.5
<i>KIT</i>	2	3.5
<i>MAP2K1</i>	2	3.5
<i>SF3B1</i>	1	1.8
<i>RET</i>	1	1.8
<i>ESR1</i>	1	1.8
<i>FGFR2</i>	1	1.8
<i>FGFR3</i>	1	1.8
<i>MET</i>	1	1.8
<i>MTOR</i>	1	1.8