

## Additional Tables

**Additional Table 1:** Baseline patients' characteristics of in-house cohort.

		Primary-resistant (n=24)	Drug-sensitive (n=12)	Total (n=36)
<b>Age</b>	Range	37-76	29-81	29-81
	Median	65.5	58.5	61
<b>Gender</b>	Male	17	7	24
	Female	7	5	12
<b>First-line Therapy</b>	FOLFOX	10	-	10
	FOLFOX/ Bevacizumab	4	3	7
	FOLFOX/anti-EGFR	2	1	3
	FOLFIRI/ Bevacizumab	3	4	7
	FOLFIRI/anti-EGFR	5	4	9
<b>Metastatic pattern</b>	Liver	19	6	25
	Lung	10	5	15
	Peritoneum	8	1	9
	Others	15	3	18

**Additional Table 2:** Baseline patients' characteristics of the TCGA cohort.

TCGA cohort		Hypermethylated Poor prognosis (n=11)	Hypomethylated Good prognosis (n=22)	Total (n=33)
<b>Age</b>	Range	45-71	54-76	52-72
	Median	68.3	59.3	61.4
<b>Gender</b>	Male	6	13	19
	Female	5	9	14
<b>TNM</b>	T1	/	/	/
	T2	/	/	/
	T3	6	16	22
	T4	2	2	4
	T4a	2	3	5
	T4b	1	1	2
	N0	2	3	5
	N1	2	12	14
N2	7	7	14	
<b>Site of primary tumor</b>	Right	7	8	15
	Left	4	14	18

**Additional Table 3: Oligonucleotides utilized in Real Time RT-PCR analysis.**

Primer name	Sequence (5'-3')	Amplicone size
KLC4 For KLC4 Rev	ATGGACATACCTCGGAGG TGCTGTAGCACCTTGACC	122 bp
LRRC2 For LRRC2 Rev	AAGAAATGGCTTCATAGACACC TGACCATTCTCTCAGGTGTG	190 bp
ACO2 For ACO2 Rev	ACTTCAGCTTCTGCCTG AGGTAGAGCACTGTGTTCTCAC	199 bp
C13orf18 For C13orf18 Rev	AGAGTGTCACTTATGAGCCAGAC TTCGGACACACTTTCATTTAC	162 bp
IL20RA For IL20RA Rev	ACAAAGTGTCCAAATGGG ATGGAACAGGAAGGTCTTC	164 bp
ARAP3 For ARAP3 Rev	TCTGTGTTGAGGCCTTTG TGCAGTACAGGAAGCCG	147 bp
NROB2 For NROB2 Rev	TGGAGATGTTGACATCGC AGGAGCCAAGTGTCTATAC	177 bp
AIFM3 For AIFM3 Rev	TACACTAAAGGCGACGAGG AGCTCAGGATCCTTTCCC	156 bp
PRKCZ For PRKCZ Rev	ATGATGACGAGGATATTGACTG TGACGTACTCAATGACCAGG	135 bp
APOM For APOM Rev	ACAGTCAACTGACAACCTCTGG AGCCATATTGAAGACAATGTTG	146 bp
VIL1 For VIL1 Rev	AGCTAGTGAACAAGCCTGTAGAG TTTGTGCTCCATCGAG	144 bp
LRRIQ4 For LRRIQ4 Rev	TGAAGAACCTTGAAGTCCTG AGTTTGAATCCCTGGTCTTG	141 bp
GPSM2 For GPSM2 Rev	AATCGGCAGACCATTAGTTAC TGCCAGAGAAGTATTAATGCC	186 bp
WIF1 For WIF1 Rev	ACGATGTATGAATGGTGGAC ATTTCACACTGCTCTCCCTC	177 bp
ACSL6 For ACSL6 Rev	AAGGTTATGGCCAAACTGAG TGAACACATTTGGTCCCTCTC	183 bp
LY6G6D For LY6G6D Rev	AGTTCTTGCAAAGAGGCC TCTCCACTTGATTGCAATG	147 bp
CEL For CEL Rev	AACAACCTGATGACGGC TTACCTGGCAGATTGGC	122 bp
FREM2 For FREM2 Rev	TTCTGAAGACTCTGACCAGG TGACCCTCATAGAGAATAAGACC	165 bp
ARL11 For ARL11 Rev	ACGTGCACTGACTCTCTGG TCGTTCCAGACTTCTGTGAG	160 bp
MLH3 For MLH3 Rev	TCTCAGAATGGGACAATCC TACTTGCTGGAGAACCCTGC	161 bp
PMS2 For PMS2 Rev	AGGAATATTAAGAAGGAGTATGCC AGCCGATATTTTCCTTTATGC	163 bp
MSH6 For MSH6 Rev	TTAATGCAGCAAGGCTTG TTATGGACAGCTTCAGCATC	157 bp
MLH1 For MLH1 Rev	AGCAGTACATATCTGAGGAGTCG AGGCAGGTTAGCAAGCTG	179 bp
MSH2 For MSH2 Rev	TCACCACTGAAGAGACCTTAAC TGATATCATATCCTTGCGATTC	183 bp

bp, base pair

**Additional Table 4:** Functionally methylated genes obtained from the intersection of in-house and TCGA datasets.

Entrez	HCGN symbol	gene	Gene	Dataset
89953	<i>KLC4</i>		Kinesin Light Chain 4	FOLFOX/FOLFIRI
79442	<i>LRRC2</i>		Leucine rich repeat containing 2	FOLFOX
8309	<i>ACOX2</i>		Acyl-CoA oxidase 2	FOLFOX
80183	<i>RUBCNL</i> ( <i>C13orf18</i> )		Rubicone like autophagy enhancer	FOLFOX/FOLFIRI
53832	<i>IL20RA</i>		Interleukin 20 receptor subunit alpha	FOLFOX
64411	<i>ARAP3</i>		ArfGAP with RhoGAO domain, Ankyrin repeat and PH domain 3	FOLFOX
8431	<i>NROB2</i>		Nuclear Receptor superfamily O group B member 2	FOLFOX/FOLFIRI
150209	<i>AIFM3</i>		Apoptosis Inducing Factor Mitochondria Associated 3	FOLFOX
5590	<i>PRKCZ</i>		Protein Kinase C Zeta	FOLFIRI
55937	<i>APOM</i>		Apolipoproteina M	FOLFIRI
7429	<i>VIL1</i>		Villin 1	FOLFIRI
344657	<i>LRRIQ4</i>		Leucine Rich Repeats and IQ Motif Containing 4	FOLFIRI

**Additional Dataset 1(separate file).** Differentially methylated genes (DMGs) between drug-resistant and drug-sensitive tumors.