Table SI. Targeted microsatellite regions.

Test	BAT25	BAT26	NR21	NR24	MONO27	D5S346	D17S250	D2S123
MSI test kit (FALCO Biosystems, Ltd.)	○	○	○	○	○			
In-house MSI test (validation)	○	○	○	○		○	○	○

MSI, microsatellite instability.

1 Table SII. Primer sequences.

A, In-house MSI test			
Gene name (transcript ID)	Primer position (hg38)	Primer name	Primer sequence (5'-3')
c-Kit (NM_000222.3)	chr4:54731985-54732004	BAT25 forward	TCGCCTCCAAGAATGTAAGT
	chr4:54732088-54732108	BAT25 reverse	TCTGCATTTTAACTATGGCTC
MSH2 (NM_000251.3)	chr2:47414348-47414368	BAT26 forward	TGACTACTTTTGACTTCAGCC
	chr2:47414448-47414469	BAT26 reverse	AACCATTCAACATTTTTAACCC
SLC7A8 (NM_012244.4)	chr14:23183077-23183096	NR21 forward	ATTCCTACTCCGCATTCACA
	chr14:23183161-23183180	NR21 reverse	TAAATGTATGTCTCCCCTGG
ZNF2 (NM_021088.4)	chr2:95183554-95183573	NR24 forward	CCATTGCTGAATTTTACCTC
	chr2:95183667-95183686	NR24 reverse	ATTGTGCCATTGCATTCCAA
NRXN1 (NM_001330078.2)	chr2:51061299-51061318	D2S123 forward	AAACAGGATGCCTGCCTTTA

	chr2:51061490-51061509	D2S123 reverse	GGACTTTCCACCTATGGGAC
APC (NM_000038.6)	chr5:112877927-112877951	D5S346 forward	AGCAGATAAGACAGTATTACTAGTT
	chr5:112878031-112878051	D5S346 reverse	ACTCACTCTAGTGATAAATCG
chr 17 intergenic region	chr17:38995839-38995862	D17S250 forward	GCTGGCCATATATATATTTAAACC
	chr17:38995971-38995990	D17S250 reverse	GGAAGAATCAAATAGACAAT
B, *MLH1* promoter methylation analysis			
Gene name (transcript ID)	Primer position (hg38)	Primer name	Primer sequence (5'-3')
MLH1 (NM_000249.4)	chr3:36993271-36993291	*MLH1* forward[a]	AGGAAGAGCGGATAGCGATTT
	chr3:36993334-36993354	*MLH1* reverse[a]	TCTTCGTCCCTCCCTAAAACG

	chr3:36993296-36993326	*MLH1* probe[a]	6FAM-CCCGCTACCTAAAAAAATATACGCTTACGCG-BHQ1

[a]Primers are designed for sequences after bisulfite treatment. MSI, microsatellite instability

Table SIII. Number of positive markers.

No. of positive markers	5/5	4/5	3/5	2/5	1/5	0/5
Cases	45	5	1	1	5	432

Table SIV. Correlation between all subtypes (predominant and mixed) and MSI status.

Histological subtypes	MSS/MSI-L	MSI-H
Pap	51	2
Tub1	150	20
Tub2	311	46
Por1	207	37
Por2	210	11
Sig	132	4
Muc	69	8

MSI, microsatellite instability; MSI-H, MSI-high; MSI-L, MSI-low; MSS, microsatellite stable

Table SV. Mixed components and MSI status within tub2 and por1 histological subtypes

Mixed components	MSS/MSI-L	MSI-H	P-value
Tub2 and Por1 co-exist	118	27	<0.05[a]
Not co-exist (co-exist with other subtypes)	134	15	

[a]Fisher's exact test. MSI, microsatellite instability; MSI-H, MSI-high; MSI-L, MSI-low; MSS, microsatellite stable.