Incidence and functional consequences of hMLH1 promoter hypermethylation in colorectal carcinoma

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#	Paper	IF	Citations
1630	Imprinting and colorectal cancer. **1998**, 4, 1236-7		6
1629	Loss of imprinting in normal tissue of colorectal cancer patients with microsatellite instability. **1998** , 4, 1276-80		249
1628	Accumulated clonal genetic alterations in familial and sporadic colorectal carcinomas with widespread instability in microsatellite sequences. **1998**, 153, 1063-78		166
1627	Biallelic inactivation of hMLH1 by epigenetic gene silencing, a novel mechanism causing human MSI cancers. *Proceedings of the National Academy of Sciences of the United States of America*, **1998**, 95, 8698-702	11.5	525
1626	Hypermethylation of the DAP-Kinase CpG Island Is a Common Alteration in B-Cell Malignancies. **1999**, 93, 4347-4353		282
1625	p15INK4BCpG Island Methylation in Primary Acute Leukemia Is Heterogeneous and Suggests Density as a Critical Factor for Transcriptional Silencing. **1999**, 94, 2445-2451		198
1624	Hypermethylation of the p16 gene in sporadic T3N0M0 stage colorectal cancers: association with DNA replication error and shorter survival. **1999**, 57, 149-56		63
1623	Demethylation and expression of methylated plasmid DNA stably transfected into HeLa cells. *Nucleic Acids Research*, **1999**, 27, 2332-8	20.1	18
1622	Molecular markers of prognosis in colorectal cancer. **1999**, 91, 1267-9		24
1621	Choice of management strategy for colorectal cancer based on a diagnostic immunohistochemical test for defective mismatch repair. **1999**, 45, 409-15		156
1620	Mechanisms of inactivation of mismatch repair genes in human colorectal cancer cell lines: the predominant role of hMLH1. *Proceedings of the National Academy of Sciences of the United States of America*, **1999**, 96, 10296-301	11.5	95
1619	Epigenetic phenotypes distinguish microsatellite-stable and -unstable colorectal cancers. *Proceedings of the National Academy of Sciences of the United States of America*, **1999**, 96, 12661-6	11.5	95
1618	Microsatellite instability and 8p allelic imbalance in stage B2 and C colorectal cancers. **1999**, 91, 1295-303		320
1617	Inhibition of DNA methyltransferase stimulates the expression of signal transducer and activator of transcription 1, 2, and 3 genes in colon tumor cells. *Proceedings of the National Academy of Sciences of the United States of America*, **1999**, 96, 14007-12	11.5	164
1616	CpG island methylator phenotype in colorectal cancer. *Proceedings of the National Academy of Sciences of the United States of America*, **1999**, 96, 8681-6	11.5	1985
1615	MLH1 promoter methylation and gene silencing is the primary cause of microsatellite instability in sporadic endometrial cancers. **1999**, 8, 661-6		244
1614	Folate and carcinogenesis: evidence, mechanisms, and implications. **1999**, 10, 66-88		448

1613	Aging, DNA methylation and cancer. **1999**, 32, 31-43		154
1612	Synergy of demethylation and histone deacetylase inhibition in the re-expression of genes silenced in cancer. **1999**, 21, 103-7		1643
1611	Cancer epigenetics comes of age. **1999**, 21, 163-7		1927
1610	A role for methylation of the hMLH1 promoter in loss of hMLH1 expression and drug resistance in ovarian cancer. **1999**, 18, 2335-41		292
1609	Mouse models for colorectal cancer. **1999**, 18, 5325-33		93
1608	Somatic frameshift mutations in the MBD4 gene of sporadic colon cancers with mismatch repair deficiency. **1999**, 18, 8044-7		121
1607	Microsatellite instability in sporadic colorectal cancer is not an independent prognostic factor. **1999**, 81, 190-3		85
1606	Hypermethylation of tumor suppressor genes in cancer. **1999**, 9, 359-67		152
1605	A new assay for the analysis of X-chromosome inactivation based on methylation-specific PCR. **1999**, 104, 49-55		145
1604	Methionine reduces spontaneous and alkylation-induced mutagenesis in Saccharomyces cerevisiae cells deficient in O6-methylguanine-DNA methyltransferase. **1999**, 430, 99-107		4
1603	The DNA methylation paradox. **1999**, 15, 34-7		523
1602	Genomic organization and chromosomal localization of the human CUL2 gene and the role of von Hippel-Lindau tumor suppressor-binding protein (CUL2 and VBP1) mutation and loss in renal-cell carcinoma development. **1999**, 26, 20-28		13
1601	Distinct methylation pattern and microsatellite instability in sporadic gastric cancer. *International Journal of Cancer*, **1999**, 83, 309-13	7.5	127
1600	Mammalian DNA mismatch repair. **1999**, 33, 533-64		374
1599	Mismatch repair and drug responses in cancer. **1999**, 2, 295-306		7
1598	Genetic pathways in colorectal and other cancers. **1999**, 35, 335-51		127
1597	Genetic pathways in colorectal and other cancers. **1999**, 35, 1986-2002		115
1596	The new biology: histopathology. **1999**, 354 Suppl 1, SI26-31		10

1595	DNA mismatch binding in human lung tumor cell lines. **1999**, 26, 15-25		7
1594	Gastric cancers of the microsatellite mutator phenotype display characteristic genetic and clinical features. **1999**, 116, 1348-57		157
1593	Colorectal cancer: molecules and populations. **1999**, 91, 916-32		680
1592	In situ detection of the hypermethylation-induced inactivation of the p16 gene as an early event in oncogenesis. *Proceedings of the National Academy of Sciences of the United States of America*, **1999**, 96, 12754-9	11.5	282
1591	Origin of microsatellite instability in gastric cancer. **1999**, 155, 205-11		124
1590	Genetic instability and the mutator phenotype. Studies in ulcerative colitis. **1999**, 154, 1621-6		56
1589	hMLH1 promoter hypermethylation in microsatellite instability-positive endometrial carcinoma. Cause or consequence?. **1999**, 155, 1399-402		13
1588	hMLH1 promoter hypermethylation is an early event in human endometrial tumorigenesis. **1999**, 155, 1767-72		260
1587	A core promoter and a frequent single-nucleotide polymorphism of the mismatch repair gene hMLH1. **1999**, 256, 488-94		82
1586	DNA methylation analysis using bisulfite treatment and PCR-single-strand conformation polymorphism in colorectal cancer showing microsatellite instability. **1999**, 262, 671-6		49
1585	Mutator phenotypes conferred by MLH1 overexpression and by heterozygosity for mlh1 mutations. **1999**, 19, 3177-83		153
1584	The stability of the genome and the genetic instability of tumors. **2000**, 43, 286-300		5
1583	Bibliography current world literature. **2000**, 16, B1-55		
1582	The molecular biology of endometrial tumorigenesis: does it have a message?. **2000**, 19, 310-3		13
1581	Genomic instability and colorectal cancer. **2000**, 16, 62-7		26
1580	Genomic alterations (LOH, MI) on chromosome 17q21-23 and prognosis of sporadic colorectal cancer. *International Journal of Cancer*, **2000**, 89, 1-7	7.5	28
1579	DNA methylation and cancer. **2000**, 183, 145-54		315
1578	Genomic instability and target gene mutations in colon cancers with different degrees of allelic shifts. **2000**, 27, 424-429		13

1577	The role of DNA hypermethylation in human neoplasia. **2000**, 21, 329-33		48
1576	Microsatellite analysis at 10q25-q26 in Sardinian patients with sporadic endometrial carcinoma: identification of specification patterns of genetic alteration. **2000**, 89, 1773-82		9
1575	Sporadic colorectal adenocarcinomas with high-frequency microsatellite instability. **2000**, 89, 2025-2037		165
1574	Methylation of the hMLH1 promoter but no hMLH1 mutations in sporadic gastric carcinomas with high-level microsatellite instability. *International Journal of Cancer*, **2000**, 87, 200-3	7.5	63
1573	Chromatin and cancer: Causes and consequences. **2000**, 79, 61-68		11
1572	DNA repair mechanisms and acute myeloblastic leukemia. **2000**, 18, 99-110		9
1571	Methylation of the CDH1 promoter as the second genetic hit in hereditary diffuse gastric cancer. **2000**, 26, 16-7		369
1570	Genetic instability is associated with histological transformation of follicle center lymphoma. **2000**, 14, 2142-8		37
1569	Epigenetic inactivation of LKB1 in primary tumors associated with the Peutz-Jeghers syndrome. **2000**, 19, 164-8		149
1568	DNA methylator and mismatch repair phenotypes are not mutually exclusive in colorectal cancer cell lines. **2000**, 19, 943-52		16
1567	Microsatellite instability and the PTEN1 gene mutation in a subset of early onset gliomas carrying germline mutation or promoter methylation of the hMLH1 gene. **2000**, 19, 1564-71		34
1566	Spontaneous development of drug resistance: mismatch repair and p53 defects in resistance to cisplatin in human tumor cells. **2000**, 19, 3138-45		100
1565	Distinct methylation patterns of two APC gene promoters in normal and cancerous gastric epithelia. **2000**, 19, 3642-6		148
1564	Transgenerational mutation by radiation. **2000**, 405, 37		151
1563	Crystal structures of mismatch repair protein MutS and its complex with a substrate DNA. **2000**, 407, 703-10		538
1562	TGF-beta receptors and DNA repair genes, coupled targets in a pathway of human colon carcinogenesis. **2000**, 1470, M13-20		25
1561	DNA hypermethylation in tumorigenesis: epigenetics joins genetics. **2000**, 16, 168-74		1329
1560	Genetic instability and aberrant DNA methylation in chronic hepatitis and cirrhosis--A comprehensive study of loss of heterozygosity and microsatellite instability at 39 loci and DNA hypermethylation on 8 CpG islands in microdissected specimens from patients with hepatocellular carcinoma. **2000**, 32, 970-9		211

1559	Extensive molecular screening for hereditary non-polyposis colorectal cancer. **2000**, 82, 871-80		65
1558	Identification of CpG islands hypermethylated in tumor and transformed cells by the methylation-sensitive arbitrarily primed polymerase chain reaction. **2000**, 34, 408-412		2
1557	DNA methylation and gastrointestinal malignancies: functional consequences and clinical implications. **2000**, 35, 727-34		25
1556	Microsatellite instability in colorectal adenomas: relevance and clinical importance. **2000**, 15, 189-96		11
1555	DNA Methylation and Breast Cancer. **2000**, 1, 41-58		1
1554	Reduced MLH1 expression in breast tumors after primary chemotherapy predicts disease-free survival. *Journal of Clinical Oncology*, **2000**, 18, 87-93	2.2	87
1553	Prospettive Terapeutiche Future per Il Trattamento Del Cancro Del Colon Retto Avanzato: La Nostra Esperienza Con Oxaliplatino Associato a Fluorofolati in Cronoinfusione. **2000**, 86, S26-S28		1
1552	Methylation patterns of the E-cadherin 5' CpG island are unstable and reflect the dynamic, heterogeneous loss of E-cadherin expression during metastatic progression. **2000**, 275, 2727-32		292
1551	Sequence interruptions confer differential stability at microsatellite alleles in mismatch repair-deficient cells. **2000**, 9, 2707-13		25
1550	Heterozygous DNA mismatch repair gene PMS2-knockout mice are susceptible to intestinal tumor induction with N-methyl-N-nitrosourea. **2000**, 21, 833-8		15
1549	p53 gene mutation, microsatellite instability and adjuvant chemotherapy: impact on survival of 388 patients with Dukes' C colon carcinoma. **2000**, 58, 52-9		126
1548	DNA methylation: past, present and future directions. **2000**, 21, 461-7		476
1547	Microsatellite instability in tumors as a model to study the process of microsatellite mutations. **2000**, 9, 347-52		25
1546	Chromatin modification and disease. **2000**, 37, 905-15		13
1545	Distinct genetic profiles in colorectal tumors with or without the CpG island methylator phenotype. *Proceedings of the National Academy of Sciences of the United States of America*, **2000**, 97, 710-5	11.5	378
1544	Aberrant methylation of gene promoters in cancer---concepts, misconcepts, and promise. **2000**, 92, 1460-1		107
1543	Defective hMSH2/hMLH1 protein expression is seen infrequently in ulcerative colitis associated colorectal cancers. **2000**, 46, 367-9		33
1542	The role of hypermethylation of the hMLH1 promoter region in HNPCC versus MSI+ sporadic colorectal cancers. **2000**, 37, 588-92		89

1541	Identification of a second MutL DNA mismatch repair complex (hPMS1 and hMLH1) in human epithelial cells. **2000**, 275, 15728-32	49
1540	Cytotoxicity and mutagenicity of frameshift-inducing agent ICR191 in mismatch repair-deficient colon cancer cells. **2000**, 92, 480-5	23
1539	E-Cadherin gene promoter hypermethylation in primary human gastric carcinomas. **2000**, 92, 569-73	257
1538	Small GTPase Rac1: structure, localization, and expression of the human gene. **2000**, 277, 741-51	52
1537	Higher risk of mismatch repair-deficient colorectal cancer in alpha(1)-antitrypsin deficiency carriers and cigarette smokers. **2000**, 71, 639-45	55
1536	Genetic and epigenetic modification of MLH1. **2000**, 157, 1052-3	5
1535	Genetic and epigenetic modification of MLH1 accounts for a major share of microsatellite-unstable colorectal cancers. **2000**, 156, 1773-9	230
1534	Promoter hypermethylation and BRCA1 inactivation in sporadic breast and ovarian tumors. **2000**, 92, 564-9	844
1533	Decreased UV sensitivity, mismatch repair activity and abnormal cell cycle checkpoints in skin cancer cell lines derived from UVB-irradiated XPA-deficient mice. **2000**, 459, 285-98	14
1532	Characterization of the hOGG1 promoter and its expression during the cell cycle. **2000**, 461, 109-18	87
1531	Genetic and epigenetic alterations in carcinogenesis. **2000**, 462, 235-46	52
1530	Familial colorectal cancer: pathology and molecular characteristics. **2000**, 1, 220-6	44
1529	Mismatch repair defects in cancer. **2000**, 10, 157-61	208
1528	Microsatellite instability is associated with genetic alteration but not with low levels of expression of the human mismatch repair proteins hMSH2 and hMLH1. **2000**, 36, 925-31	24
1527	Epigenetic lesions causing genetic lesions in human cancer: promoter hypermethylation of DNA repair genes. **2000**, 36, 2294-300	203
1526	[Fundamental aspects: mechanisms of carcinogenesis and dose-effect relationship]. **2000**, 323, 603-10	1
1525	Association of tumour site and sex with survival benefit from adjuvant chemotherapy in colorectal cancer. **2000**, 355, 1745-50	455
1524	Significance of multiple mutations in cancer. **2000**, 21, 379-85	314

1523	Tumor microsatellite instability and clinical outcome in young patients with colorectal cancer. **2000**, 342, 69-77		1076
1522	MethyLight: a high-throughput assay to measure DNA methylation. *Nucleic Acids Research*, **2000**, 28, E32	20.1	1083
1521	DNA mismatch repair genes and colorectal cancer. **2000**, 47, 148-53		126
1520	The genetic basis of colorectal cancer: insights into critical pathways of tumorigenesis. **2000**, 119, 854-65		323
1519	Colon cancer screening. **2000**, 119, 837-53		282
1518	DNA mismatch repair and genetic instability. **2000**, 34, 359-399		497
1517	Colon polyps in Beckwith-Wiedmann syndrome: role of imprinted genes. **2000**, 118, 637		5
1516	Detection of microsatellite instability by fluorescence multiplex polymerase chain reaction. **2000**, 2, 20-8		104
1515	Methylation of the hMLH1 promoter in multiple gastric carcinomas with microsatellite instability. **2001**, 51, 445-51		16
1514	The colon cancer burden of genetically defined hereditary nonpolyposis colon cancer. **2001**, 121, 830-8		209
1513	Extensive methylation of hMLH1 promoter region predominates in proximal colon cancer with microsatellite instability. **2001**, 121, 1300-9		163
1512	Multistep progression of colorectal cancer in the setting of microsatellite instability: new details and novel insights. **2001**, 121, 1497-502		25
1511	Microsatellite instability is a predictive marker for survival benefit from adjuvant chemotherapy in a population-based series of stage III colorectal carcinoma. **2001**, 1, 104-9		56
1510	Genomic imprinting and cancer; new paradigms in the genetics of neoplasia. **2001**, 120, 151-60		33
1509	GENETIC ANALYSIS OF hMLH1 IN TRANSITIONAL CELL CARCINOMA OF THE URINARY TRACT: PROMOTER METHYLATION OR MUTATION. **2001**, 165, 1760-1764		14
1508	Loss of imprinting of the insulin-like growth factor II gene occurs by biallelic methylation in a core region of H19-associated CTCF-binding sites in colorectal cancer. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 591-596	11.5	202
1507	Cancer epigenetics takes center stage. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 392-4	11.5	130
1506	Aberrant patterns of DNA methylation, chromatin formation and gene expression in cancer. **2001**, 10, 687-92		661

1505	Disruption of the helix-u-turn-helix motif of MutS protein: loss of subunit dimerization, mismatch binding and ATP hydrolysis. **2001**, 305, 805-16		42
1504	CpG island methylation in colorectal adenomas. **2001**, 159, 1129-35		181
1503	Loss of CDX2 expression and microsatellite instability are prominent features of large cell minimally differentiated carcinomas of the colon. **2001**, 159, 2239-48		180
1502	Histopathological identification of colon cancer with microsatellite instability. **2001**, 158, 527-35		401
1501	Primary ovarian carcinomas display multiple methylator phenotypes involving known tumor suppressor genes. **2001**, 158, 1121-7		169
1500	Potential of 5-aza-2'-deoxycytidine (Decitabine) a potent inhibitor of DNA methylation for therapy of advanced non-small cell lung cancer. **2001**, 34 Suppl 4, S111-5		83
1499	The frequency of hereditary defective mismatch repair in a prospective series of unselected colorectal carcinomas. **2001**, 69, 780-90		272
1498	Assessment of markers for the identification of microsatellite instability phenotype in gastric neoplasms. **2001**, 164, 61-8		19
1497	Methylation status in the promoter region of the human PGP9.5 gene in cancer and normal tissues. **2001**, 170, 73-9		33
1496	Trends in biomarker research for cancer detection. **2001**, 2, 698-704		301
1495	The instability within: problems in current analyses of microsatellite instability. **2001**, 461, 249-63		38
1494	DNA mismatch repair and cancer. **2001**, 488, 77-85		119
1493	From exposure to effect: a comparison of modeling approaches to chemical carcinogenesis. **2001**, 489, 17-45		18
1492	Favorable survival associated with microsatellite instability in endometrioid endometrial cancers. **2001**, 97, 417-22		44
1491	The endothelin receptor B (EDNRB) promoter displays heterogeneous, site specific methylation patterns in normal and tumor cells. **2001**, 10, 903-10		78
1490	Expression of DNA methyltransferases DNMT1, 3A, and 3B in normal hematopoiesis and in acute and chronic myelogenous leukemia. **2001**, 97, 1172-9		355
1489	Hypermethylation of tumor-related genes in genitourinary cancer cell lines. **2001**, 16, 756-61		8
1488	Molecular screening for hereditary nonpolyposis colorectal cancer: a prospective, population-based study. *Journal of Clinical Oncology*, **2001**, 19, 3944-50	2.2	91

1487	DNA methylation: an alternative pathway to cancer. **2001**, 234, 10-20		191
1486	Instability at sequence repeats in melanocytic tumours. **2001**, 11, 283-9		21
1485	Different mechanisms in the tumorigenesis of proximal and distal colon cancers. **2001**, 13, 63-9		153
1484	Bethesda guidelines: relation to microsatellite instability and MLH1 promoter methylation in patients with colorectal cancer. **2001**, 135, 566-76		53
1483	[Hereditary nonpolyposis colorectal carcinoma (HNPCC). Current review of etiology, clinical aspects, diagnosis and therapy]. **2001**, 96, 529-38		1
1482	An association between sebaceous carcinoma and microsatellite instability in immunosuppressed organ transplant recipients. **2001**, 116, 246-53		71
1481	Alteration of DNA methylation in gastrointestinal carcinogenesis. **2001**, 16, 960-8		37
1480	Technical aspects of minimal residual disease detection in carcinoma patients. **2001**, 20, 252-64		20
1479	Methylation and colorectal cancer. **2001**, 195, 111-34		107
1478	Correlation between microsatellite instability and metachronous disease recurrence after endoscopic mucosal resection in patients with early stage gastric carcinoma. **2001**, 91, 339-345		12
1477	Microsatellite instability and hMLH1/hMSH2 expression in Barrett esophagus-associated adenocarcinoma. **2001**, 91, 1451-7		43
1476	Concurrent hypermethylation of multiple tumor-related genes in gastric carcinoma and adjacent normal tissues. **2001**, 91, 2294-2301		117
1475	Loss of heterozygosity on chromosome 13q12-q14, BRCA-2 mutations and lack of BRCA-2 promoter hypermethylation in sporadic epithelial ovarian tumors. **2001**, 92, 787-95		40
1474	Microsatellite instability at AAAG repeat sequences in respiratory tract cancers. *International Journal of Cancer*, **2001**, 91, 200-4	7.5	53
1473	DNA methyltransferase expression and DNA methylation of CPG islands and peri-centromeric satellite regions in human colorectal and stomach cancers. *International Journal of Cancer*, **2001**, 91, 205-12	7.5	170
1472	MLH1 and MSH2 protein expression as a pre-screening marker in hereditary and non-hereditary endometrial hyperplasia and cancer. *International Journal of Cancer*, **2001**, 92, 398-403	7.5	57
1471	Resistance to topoisomerase poisons due to loss of DNA mismatch repair. *International Journal of Cancer*, **2001**, 93, 571-6	7.5	89
1470	Methylation pattern of different regions of the MLH1 promoter and silencing of gene expression in hereditary and sporadic colorectal cancer. **2001**, 31, 357-61		50

1469	Molecular predictors of survival after adjuvant chemotherapy for colon cancer. **2001**, 344, 1196-206	743
1468	Role of DNA methylation and histone acetylation in steroid receptor expression in breast cancer. **2001**, 6, 183-92	66
1467	The reliability of immunohistochemistry as a prescreening method for the diagnosis of hereditary nonpolyposis colorectal cancer (HNPCC)--results of an international collaborative study. **2001**, 1, 87-92	78
1466	Methylation in hMLH1 promoter interferes with its binding to transcription factor CBF and inhibits gene expression. **2001**, 20, 7120-7	65
1465	Expression of mRNA for DNA methyltransferases and methyl-CpG-binding proteins and DNA methylation status on CpG islands and pericentromeric satellite regions during human hepatocarcinogenesis. **2001**, 33, 561-8	204
1464	Contrasting molecular pathology of colorectal carcinoma in Egyptian and Western patients. **2001**, 85, 1037-46	62
1463	Immunohistochemical pattern of hMSH2/hMLH1 in familial and sporadic colorectal, gastric, endometrial and ovarian carcinomas with instability in microsatellite sequences. **2001**, 438, 39-48	91
1462	Molecular characterization of undifferentiated-type gastric carcinoma. **2001**, 81, 593-8	65
1461	SOCS-1, a negative regulator of the JAK/STAT pathway, is silenced by methylation in human hepatocellular carcinoma and shows growth-suppression activity. **2001**, 28, 29-35	586
1460	ABL1 methylation in Ph-positive ALL is exclusively associated with the P210 form of BCR-ABL. **2001**, 15, 575-82	15
1459	Hypermethylation of the hMLH1 gene promoter is associated with microsatellite instability in early human gastric neoplasia. **2001**, 20, 329-35	101
1458	Elevated mutant frequencies and increased C : G-->T : A transitions in Mlh1-/- versus Pms2-/- murine small intestinal epithelial cells. **2001**, 20, 619-25	32
1457	Searching for microsatellite mutations in coding regions in lung, breast, ovarian and colorectal cancers. **2001**, 20, 1005-9	17
1456	DNA methylation, methyltransferases, and cancer. **2001**, 20, 3139-55	599
1455	Extensive characterization of genetic alterations in a series of human colorectal cancer cell lines. **2001**, 20, 5025-32	148
1454	Cancer. Death and methylation. **2001**, 409, 141, 143-4	35
1453	Haemoglobin scavenger. **2001**, 409, 141	34
1452	Earth science. In the beginning. **2001**, 409, 144-5	24

1451	Causes of microsatellite instability in colorectal tumors: implications for hereditary non-polyposis colorectal cancer screening. **2001**, 126, 85-96		46
1450	Hereditary breast cancer. **2001**, 38, 387-480		111
1449	Targeting DNA mismatch repair for radiosensitization. **2001**, 11, 300-15		36
1448	Inactivation of retinoic acid receptor beta by promoter CpG hypermethylation in gastric cancer. **2001**, 68, 13-21		58
1447	Somatic frameshift mutations in the Bloom syndrome BLM gene are frequent in sporadic gastric carcinomas with microsatellite mutator phenotype. **2001**, 2, 14		13
1446	HIN-1, a putative cytokine highly expressed in normal but not cancerous mammary epithelial cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 9796-801	11.5	114
1445	Functional analysis of human MLH1 and MSH2 missense variants and hybrid human-yeast MLH1 proteins in Saccharomyces cerevisiae. **2001**, 10, 1889-900		55
1444	Microsatellite instability and the clinicopathological features of sporadic colorectal cancer. **2001**, 48, 821-9		264
1443	Understanding the interaction between environmental exposures and molecular events in colorectal carcinogenesis. **2001**, 19, 524-39		10
1442	Favorable Survival Associated With Microsatellite Instability in Endometrioid Endometrial Cancers. **2001**, 97, 417-422		40
1441	Concurrent hypermethylation of multiple genes is associated with grade of oligodendroglial tumors. **2001**, 60, 808-16		89
1440	Carcinogenesis in the GI tract: from morphology to genetics and back again. **2001**, 14, 236-45		34
1439	Sporadic colorectal cancers with microsatellite instability and their possible origin in hyperplastic polyps and serrated adenomas. **2001**, 93, 1307-13		283
1438	Expression of hMLH1 is inactivated in the gastric adenomas with enhanced microsatellite instability. **2001**, 85, 1147-52		36
1437	Frequent loss of expression without sequence mutations of the DCC gene in primary gastric cancer. **2001**, 85, 199-203		49
1436	Microsatellite-stable diploid carcinoma: a biologically distinct and aggressive subset of sporadic colorectal cancer. **2001**, 84, 232-6		59
1435	Overexpression of MnSOD protects murine fibrosarcoma cells (FSa-II) from apoptosis and promotes a differentiation program upon treatment with 5-azacytidine: involvement of MAPK and NFkappaB pathways. **2001**, 3, 375-86		39
1434	Hypermethylation of the promoter region of the E-cadherin gene (CDH1) in sporadic and ulcerative colitis associated colorectal cancer. **2001**, 48, 367-71		103

1433	The interaction of DNA mismatch repair proteins with human exonuclease I. **2001**, 276, 33011-8		118
1432	Selective association of the methyl-CpG binding protein MBD2 with the silent p14/p16 locus in human neoplasia. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 4990-5	11.5	172
1431	Promoter hypermethylation--can this change alone ever designate true tumor suppressor gene function?. **2001**, 93, 664-5		34
1430	Pseudoxanthoma elasticum: evidence for the existence of a pseudogene highly homologous to the ABCC6 gene. **2001**, 38, 457-61		11
1429	Heterogeneity of DNA methylation status analyzed by bisulfite-PCR-SSCP and correlation with clinico-pathological characteristics in colorectal cancer. **2001**, 39, 121-8		23
1428	Inactivation of DNA mismatch repair by increased expression of yeast MLH1. **2001**, 21, 940-51		42
1427	HPP1: A transmembrane protein-encoding gene commonly methylated in colorectal polyps and cancers. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 265-270	11.5	109
1426	Activation of the p53 DNA Damage Response Pathway after Inhibition of DNA Methyltransferase by 5-Aza-2?-deoxycytidine. **2001**, 59, 751-757		148
1425	Tolerance of human MSH2+/- lymphoblastoid cells to the methylating agent temozolomide. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 7164-9	11.5	32
1424	DNA methylation patterns in hereditary human cancers mimic sporadic tumorigenesis. **2001**, 10, 3001-7		328
1423	Mismatch repair defects as a cause of resistance to cytotoxic drugs. **2001**, 1, 149-58		29
1422	Promoter methylation status of the DNA repair genes hMLH1 and MGMT in gastric carcinoma and metaplastic mucosa. **2001**, 69, 143-9		34
1421	Somatic mutations in MEN type 1 tumors, consistent with the Knudson "two-hit" hypothesis. **2001**, 86, 4371-4		70
1420	Prognostic relevance of hMLH1, hMSH2, and BAX protein expression in endometrial carcinoma. **2001**, 14, 777-83		15
1419	Methylation matters. **2001**, 38, 285-303		393
1418	Carcinogen-specific induction of genetic instability. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 5770-5	11.5	140
1417	Deficiency of a novel mismatch repair activity in a bladder tumor cell line. *Nucleic Acids Research*, **2002**, 30, 2758-63	20.1	3
1416	An insight into the genetic pathway of adenocarcinoma of the small intestine. **2002**, 50, 218-23		109

1415	Implication of protein kinase C in the regulation of DNA mismatch repair protein expression and function. **2002**, 277, 18061-8		21
1414	HLTF gene silencing in human colon cancer. *Proceedings of the National Academy of Sciences of the United States of America*, **2002**, 99, 4562-7	11.5	127
1413	Hypermethylation of the hMLH1 gene promoter in solitary and multiple gastric cancers with microsatellite instability. **2002**, 86, 564-7		35
1412	Microsatellite instability and intratumoural heterogeneity in 100 right-sided sporadic colon carcinomas. **2002**, 87, 400-4		37
1411	Human exonuclease I is required for 5' and 3' mismatch repair. **2002**, 277, 13302-11		183
1410	Characterisation of colorectal cancers showing hypermethylation at multiple CpG islands. **2002**, 51, 797-802		195
1409	Immunohistochemical pattern of MLH1/MSH2 expression is related to clinical and pathological features in colorectal adenocarcinomas with microsatellite instability. **2002**, 15, 741-9		79
1408	Detection of multiple gene hypermethylation in the development of esophageal squamous cell carcinoma. **2002**, 23, 1713-20		86
1407	Evaluation of an inhibitor of DNA methylation, 5-aza-2'-deoxycytidine, for the treatment of lung cancer and the future role of gene therapy. **2000**, 465, 433-46		22
1406	Genetics of colorectal cancer: hereditary aspects and overview of colorectal tumorigenesis. **2002**, 64, 27-43		113
1405	DNA methyltransferase deficiency modifies cancer susceptibility in mice lacking DNA mismatch repair. **2002**, 22, 2906-17		90
1404	CpG methylation modifies the genetic stability of cloned repeat sequences. **2002**, 12, 1246-56		45
1403	Molecular markers of heterogeneity in colorectal cancers and adenomas. **2002**, 11, 85-97		10
1402	Building bridges in cancer: mismatch repair and microsatellite instability. **2002**, 24, 76-81		14
1401	Colorectal Cancer. **2002**,		2
1400	Correlation of DNA hypomethylation at pericentromeric heterochromatin regions of chromosomes 16 and 1 with histological features and chromosomal abnormalities of human breast carcinomas. **2002**, 161, 859-66		56
1399	Different incidence and pattern of p15INK4b and p16INK4a promoter region hypermethylation in Hodgkin's and CD30-Positive non-Hodgkin's lymphomas. **2002**, 161, 1007-13		52
1398	Specific patterns of gene methylation in natural killer cell lymphomas : p73 is consistently involved. **2002**, 160, 59-66		70

1397	Genetic and epigenetic alterations in colon cancer. **2002**, 3, 101-28	222
1396	Functional analysis of hMLH1 variants and HNPCC-related mutations using a human expression system. **2002**, 122, 211-9	155
1395	CpG island methylation in sporadic colorectal cancers and its relationship to microsatellite instability. **2002**, 122, 1376-87	310
1394	Emerging concepts in colorectal neoplasia. **2002**, 123, 862-76	398
1393	Reactivation of a silenced H19 gene in human rhabdomyosarcoma by demethylation of DNA but not by histone hyperacetylation. **2002**, 1, 2	171
1392	Gene expression patterns in bovine in vitro-produced and nuclear transfer-derived embryos and their implications for early development. **2002**, 4, 29-38	122
1391	A PCR-based method for studying DNA methylation. **2001**, 181, 205-16	1
1390	Hypermethylation pathways to colorectal cancer. Implications for prevention and detection. **2002**, 31, 945-58	13
1389	Genomic Imprinting. **2002**,	1
1388	Microsatellite instability, loss of heterozygosity, and loss of hMLH1 and hMSH2 protein expression in endometrial carcinoma. **2002**, 33, 347-54	54
1387	Distinction between familial and sporadic forms of colorectal cancer showing DNA microsatellite instability. **2002**, 38, 858-66	97
1386	The immunological synapse. **2002**, 38, 997-1002	18
1385	DNA mismatch repair defects: role in colorectal carcinogenesis. **2002**, 84, 27-47	113
1384	The genetic pathogenesis of colorectal cancer. **2002**, 16, 775-810	48
1383	Pathogenesis of colorectal cancer. **2002**, 82, 891-904	57
1382	Molecular staging of lung and esophageal cancer. **2002**, 82, 497-523	7
1381	The molecular and genetic basis of colon cancer. **2002**, 86, 1467-95	58
1380	Colorectal cancer screening. **2002**, 82, 943-57	17

1379	Plasma Nucleic Acids in the Diagnosis and Management of Malignant Disease. **2002**, 48, 1186-1193		117
1378	Microsatellite instability phenotype of tumors: genotyping or immunohistochemistry? The jury is still out. *Journal of Clinical Oncology*, **2002**, 20, 897-9	2.2	57
1377	Mutations of hMLH1 and hMSH2 in patients with suspected hereditary nonpolyposis colorectal cancer: correlation with microsatellite instability and abnormalities of mismatch repair protein expression. *Journal of Clinical Oncology*, **2002**, 20, 1203-8	2.2	61
1376	Oxidative stress inactivates the human DNA mismatch repair system. **2002**, 283, C148-54		203
1375	The role of genomic instabilities in affecting treatment responses of colorectal cancer. **2002**, 20, 73-80		1
1374	Mismatch repair genes and microsatellite instability as molecular markers for gynecological cancer detection. **2002**, 227, 579-86		15
1373	Ionising radiation and mutation induction at mouse minisatellite loci. The story of the two generations. **2002**, 499, 143-50		36
1372	Altered methylation patterns in cancer cell genomes: cause or consequence?. **2002**, 1, 299-305		243
1371	Pharmacologic unmasking of epigenetically silenced tumor suppressor genes in esophageal squamous cell carcinoma. **2002**, 2, 485-95		299
1370	Profile of methylated CpG sites of hMLH1 promoter in primary gastric carcinoma with microsatellite instability. **2002**, 52, 764-8		8
1369	Assessing the use of p16(INK4a) promoter gene methylation in serum for detection of bladder cancer. **2002**, 42, 622-8; discussion 628-30		55
1368	Genetic profiling of colon cancer. **2002**, 80, 204-13		19
1367	Evidence for an age-related influence of microsatellite instability on colorectal cancer survival. *International Journal of Cancer*, **2002**, 98, 844-50	7.5	31
1366	High-frequency microsatellite instability predicts better chemosensitivity to high-dose 5-fluorouracil plus leucovorin chemotherapy for stage IV sporadic colorectal cancer after palliative bowel resection. *International Journal of Cancer*, **2002**, 101, 519-25	7.5	97
1365	Promoter hypermethylation of tumor-related genes in gastric intestinal metaplasia of patients with and without gastric cancer. *International Journal of Cancer*, **2002**, 102, 623-8	7.5	120
1364	Evaluation of screening strategy for detecting hereditary nonpolyposis colorectal carcinoma. **2002**, 94, 911-920		30
1363	Intake of dietary folate vitamers and risk of colorectal carcinoma: results from The Netherlands Cohort Study. **2002**, 95, 1421-33		70
1362	Differential involvement of the hypermethylator phenotype in hereditary and sporadic colorectal cancers with high-frequency microsatellite instability. **2002**, 33, 322-5		48

1361	Deficient expression of O(6)-methylguanine-DNA methyltransferase combined with mismatch-repair proteins hMLH1 and hMSH2 is related to poor prognosis in human biliary tract carcinoma. **2002**, 9, 371-9	47
1360	DNA methylation and the regulation of gene transcription. **2002**, 59, 241-57	311
1359	Hereditäres Non-Polyposis kolorektales Karzinom (HNPCC) Aktuelle Übersicht zur Biologie, Klinik, Diagnostik und Therapie. **2002**, 24, 1-13	
1358	Analysis of genetic and epigenetic alterations of the PTEN gene in gastric cancer. **2002**, 440, 160-165	53
1357	Comparison of clinicopathologic characteristics and genetic alterations between microsatellite instability-positive and microsatellite instability-negative sporadic colorectal carcinomas in patients younger than 40 years old. **2002**, 45, 219-28	20
1356	The role of hMLH1 methylation in the development of synchronous sporadic colorectal carcinomas. **2002**, 45, 674-80	22
1355	Microsatellite instability and its relevance to cutaneous tumorigenesis. **2002**, 29, 257-67	21
1354	The colorectal adenoma-carcinoma sequence. **2002**, 89, 845-60	442
1353	Cancer as an epigenetic disease: DNA methylation and chromatin alterations in human tumours. **2002**, 196, 1-7	583
1352	Chromosomal autonomy of hMLH1 methylation in colon cancer. **2002**, 21, 1443-9	7
1351	Aberrant CpG island methylation in cancer cell lines arises in the primary cancers from which they were derived. **2002**, 21, 2114-7	44
1350	Aberrant methylation of the ATM promoter correlates with increased radiosensitivity in a human colorectal tumor cell line. **2002**, 21, 3864-71	84
1349	CpG island hypermethylation and tumor suppressor genes: a booming present, a brighter future. **2002**, 21, 5427-40	952
1348	Genetic and epigenetic modification of mismatch repair genes hMSH2 and hMLH1 in sporadic breast cancer with microsatellite instability. **2002**, 21, 5696-703	69
1347	5-Azacytidine and 5-aza-2'-deoxycytidine as inhibitors of DNA methylation: mechanistic studies and their implications for cancer therapy. **2002**, 21, 5483-95	992
1346	Frequent RASSF1A tumour suppressor gene promoter methylation in Wilms' tumour and colorectal cancer. **2002**, 21, 7277-82	73
1345	Germline, somatic and epigenetic events underlying mismatch repair deficiency in colorectal and HNPCC-related cancers. **2002**, 21, 7585-92	69
1344	Gene silencing in phenomena related to DNA repair. **2002**, 21, 9033-42	17

1343	Frameshift mutations of human gastrin receptor gene (hGARE) in gastrointestinal cancers with microsatellite instability. **2002**, 82, 265-71	20
1342	Regulation of DNA methylation of Rasgrf1. **2002**, 30, 92-6	142
1341	The fundamental role of epigenetic events in cancer. **2002**, 3, 415-28	4311
1340	Methylation of hMLH1 promoter correlates with the gene silencing with a region-specific manner in colorectal cancer. **2002**, 86, 574-9	82
1339	Reduced Fhit expression is associated with mismatch repair deficiency in human advanced colorectal carcinoma. **2002**, 87, 441-5	25
1338	Is reduced expression of mismatch repair genes MLH1 and MSH2 in patients with sporadic colorectal cancer related to their prognosis?. **2002**, 19, 71-7	17
1337	RB1 and CDKN2A Functional Defects Resulting in Retinoblastoma. **2002**, 36, 625-630	5
1336	Chemoprevention of colon cancer: current status and future prospects. **2002**, 21, 323-48	51
1335	Molecular markers in prognosis of colorectal cancer and prediction of response to treatment. **2002**, 16, 331-45	22
1334	Promoter methylations of p16INK4a and p14ARF genes in early and advanced gastric cancer. Correlations of the modes of their occurrence with histologic type. **2002**, 198, 785-94	14
1333	Promoter hypermethylation frequency and BRAF mutations distinguish hereditary non-polyposis colon cancer from sporadic MSI-H colon cancer. **2004**, 3, 101-7	154
1332	Prognosis in DNA mismatch repair deficient colorectal cancer: are all MSI tumours equivalent?. **2004**, 3, 85-91	36
1331	Transcriptional control of the DNA methyltransferases is altered in aging and neoplastically-transformed human fibroblasts. **2003**, 252, 33-43	149
1330	Phase I trial of continuous infusion 5-aza-2'-deoxycytidine. **2003**, 51, 231-9	92
1329	Methylation of the hMLH1 and hMSH2 promoter in early-onset sporadic colorectal carcinomas with microsatellite instability. **2003**, 18, 196-202	33
1328	Loss of expression of DNA repair enzymes MGMT, hMLH1, and hMSH2 during tumor progression in gastric cancer. **2003**, 6, 86-95	31
1327	Microsatellite instability and mutations in DNA mismatch repair genes in sporadic colorectal cancers. **2003**, 46, 1069-77	40
1326	Microsatellite instability in esophageal squamous cell carcinoma is not associated with hMLH1 promoter hypermethylation. **2003**, 53, 270-6	23

1325	Modulation of hOGG1 DNA repair enzyme in human cultured cells in response to pro-oxidant and antioxidant challenge. **2003**, 35, 397-405		12
1324	Downregulation of CD44v6 in colorectal carcinomas is associated with hypermethylation of the CD44 promoter region. **2003**, 74, 262-6		11
1323	Mutation frequency analysis of mononucleotide and dinucleotide repeats after oxidative stress. **2003**, 42, 75-84		12
1322	Methylation profile of the MLH1 promoter region and their relationship to colorectal carcinogenesis. **2003**, 36, 17-25		19
1321	Biallelic somatic inactivation of the mismatch repair gene MLH1 in a primary skin melanoma. **2003**, 37, 165-75		10
1320	Frequency of loss of hMLH1 expression in colorectal carcinoma increases with advancing age. **2003**, 97, 1421-7		86
1319	Evidence of a preferred molecular pathway in patients with synchronous colorectal cancer. **2003**, 98, 48-54		26
1318	High-resolution methylation analysis of the hMLH1 promoter in sporadic endometrial and colorectal carcinomas. **2003**, 98, 1540-6		26
1317	Mismatch repair gene expression defects contribute to microsatellite instability in ovarian carcinoma. **2003**, 98, 2199-206		83
1316	Methylation pattern of HLTF gene in digestive tract cancers. *International Journal of Cancer*, **2003**, 104, 433-6	7.5	32
1315	Role of hMLH1 promoter hypermethylation in drug resistance to 5-fluorouracil in colorectal cancer cell lines. *International Journal of Cancer*, **2003**, 106, 66-73	7.5	224
1314	Inactivation of p16INK4a by CpG hypermethylation is not a frequent event in colorectal cancer. **2003**, 84, 143-50		16
1313	Inactivation of helicase-like transcription factor by promoter hypermethylation in human gastric cancer. **2003**, 37, 91-7		20
1312	Hereditary nonpolyposis colorectal cancer and related conditions. **2003**, 122A, 325-34		62
1311	DNMT cooperativity--the developing links between methylation, chromatin structure and cancer. **2003**, 25, 1071-84		72
1310	Clinicopathological and molecular biological features of colorectal cancer in patients less than 40 years of age. **2003**, 90, 205-14		116
1309	Polymerase chain reaction-based methods of DNA methylation analysis. **2003**, 317, 259-65		36
1308	Tumor suppressor gene hypermethylation as a predictor of gastric stromal tumor behavior. **2003**, 7, 1004-14; discussion 1014		54

1307	Microsatellite mutations of transforming growth factor-beta receptor type II and caspase-5 occur in human precursor T-cell lymphoblastic lymphomas/leukemias in vivo but are not associated with hMSH2 or hMLH1 promoter methylation. **2003**, 27, 23-34	18
1306	Loss of mismatch repair proteins in sebaceous gland tumors. **2003**, 30, 178-84	42
1305	Expression of DNA (5-cytosin)-methyltransferases (DNMTs) in hepatocellular carcinomas. **2003**, 26, 186-191	44
1304	Sporadic colorectal cancers with defective mismatch repair display a number of specific morphological characteristics: relationship between the expression of hMLH1 and hMSH2 proteins and clinicopathological features of 273 adenocarcinomas. **2003**, 43, 40-7	12
1303	Microsatellite instability is associated with hypermethylation of the hMLH1 gene and reduced gene expression in mycosis fungoides. **2003**, 121, 894-901	45
1302	Aberrant methylation of the vascular endothelial growth factor receptor-1 gene in prostate cancer. **2003**, 94, 536-9	16
1301	Methylation of the hMLH1 promoter and its association with microsatellite instability in acute myeloid leukemia. **2003**, 17, 83-8	50
1300	Frequent hypermethylation of MLH1 promoter in normal endometrium of patients with endometrial cancers. **2003**, 22, 2352-60	77
1299	Transcriptional silencing of the DLC-1 tumor suppressor gene by epigenetic mechanism in gastric cancer cells. **2003**, 22, 3943-51	97
1298	A role for DNA mismatch repair in sensing and responding to fluoropyrimidine damage. **2003**, 22, 7376-88	53
1297	Distinct patterns of microsatellite instability are seen in tumours of the urinary tract. **2003**, 22, 8699-706	113
1296	Radiation-induced transgenerational instability. **2003**, 22, 7087-93	150
1295	Activated proliferation of B-cell lymphomas/leukemias with the SHP1 gene silencing by aberrant CpG methylation. **2003**, 83, 1849-58	58
1294	DNMT1 is required to maintain CpG methylation and aberrant gene silencing in human cancer cells. **2003**, 33, 61-5	502
1293	Genome-wide analysis of epigenetics in cancer. **2003**, 983, 101-9	43
1292	Epigenetics in carcinogenesis and cancer prevention. **2003**, 983, 213-9	77
1291	DNA methylation as a cancer-specific biomarker: from molecules to populations. **2003**, 983, 286-97	30
1290	Progression of gene hypermethylation in gallstone disease leading to gallbladder cancer. **2003**, 10, 882-9	45

1289	Epigenetic and genetic alterations in duodenal carcinomas are distinct from biliary and ampullary carcinomas. **2003**, 124, 1300-10		37
1288	Prognostic value of hMLH1 methylation and microsatellite instability in pancreatic endocrine neoplasms. **2003**, 134, 902-8; discussion 909		61
1287	Gene silencing in cancer in association with promoter hypermethylation. **2003**, 349, 2042-54		2694
1286	Frequent promoter methylation of CDH1, DAPK, RARB, and HIC1 genes in carcinoma of cervix uteri: its relationship to clinical outcome. **2003**, 2, 24		166
1285	Critical role of histone methylation in tumor suppressor gene silencing in colorectal cancer. **2003**, 23, 206-15		302
1284	Decreased expression of the DNA mismatch repair gene Mlh1 under hypoxic stress in mammalian cells. **2003**, 23, 3265-73		231
1283	Multiple mutations and cancer. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 776-81	11.5	557
1282	Chromosomal imbalances in the colorectal carcinomas with microsatellite instability. **2003**, 163, 1429-36		35
1281	Aberrant DNA methylation: have we entered the era of more than one type of colorectal cancer?. **2003**, 162, 1043-5		11
1280	The relationship between hypomethylation and CpG island methylation in colorectal neoplasia. **2003**, 162, 1361-71		153
1279	Hereditary colorectal cancer. **2003**, 348, 919-32		1540
1278	Human mismatch repair, drug-induced DNA damage, and secondary cancer. **2003**, 85, 1149-60		64
1277	Murine DNA cytosine C(5)-methyltransferase: in vitro studies of de novo methylation spreading. **2003**, 310, 209-14		7
1276	Possible association between tumor-suppressor gene mutations and hMSH2/hMLH1 inactivation in alveolar soft part sarcoma. **2003**, 34, 841-9		25
1275	Germline mutations but not somatic changes at the MYH locus contribute to the pathogenesis of unselected colorectal cancers. **2003**, 162, 1545-8		112
1274	Epigenetic gene silencing in cancer initiation and progression. **2003**, 190, 125-33		141
1273	Methylenetetrahydrofolate reductase polymorphisms and risk of sporadic and hereditary colorectal cancer with or without microsatellite instability. **2003**, 191, 179-85		36
1272	Expression of Fhit, Mlh1, and P53 protein in human gallbladder carcinoma. **2003**, 199, 131-8		25

1271	Multiple sites required for expression in 5'-flanking region of the hMLH1 gene. **2003**, 306, 57-65		28
1270	DNA repair defects in colon cancer. **2003**, 13, 61-9		74
1269	E-cadherin expression is silenced by DNA methylation in cervical cancer cell lines and tumours. **2003**, 39, 517-23		82
1268	Concurrent hypermethylation of gene promoters is associated with a MSI-H phenotype and diploidy in gastric carcinomas. **2003**, 39, 1222-7		41
1267	The role of mismatch repair in small-cell lung cancer cells. **2003**, 39, 1456-67		16
1266	Mismatch repair and response to DNA-damaging antitumour therapies. **2003**, 39, 2142-9		70
1265	Mechanism of 5'-directed excision in human mismatch repair. **2003**, 12, 1077-86		186
1264	Relevance of DNA methylation in the management of cancer. **2003**, 4, 351-8		251
1263	Inhibitors of DNA methylation in the treatment of hematological malignancies and MDS. **2003**, 109, 89-102		84
1262	DNA mismatch repair and acquired cisplatin resistance in E. coli and human ovarian carcinoma cells. **2003**, 2, 73-89		31
1261	Drug treatment in the development of mismatch repair defective acute leukemia and myelodysplastic syndrome. **2003**, 2, 547-59		42
1260	Advances in Male Mediated Developmental Toxicity. **2003**,		9
1259	Implications of genetic testing in the management of colorectal cancer. **2003**, 3, 73-88		9
1258	Regulation of the human MSH6 gene by the Sp1 transcription factor and alteration of promoter activity and expression by polymorphisms. **2003**, 23, 7992-8007		50
1257	Microsatellite Instability in Chronic Cholecystitis Is Indicative of an Early Stage in Gallbladder Carcinogenesis. **2003**, 120, 413-417		20
1256	Endothelin B receptor gene hypermethylation in prostate adenocarcinoma. **2003**, 56, 52-5		44
1255	Automated, multiplex assay for high-frequency microsatellite instability in colorectal cancer. *Journal of Clinical Oncology*, **2003**, 21, 3105-12	2.2	31
1254	The contribution of cis-elements to disease-associated repeat instability: clinical and experimental evidence. **2003**, 100, 25-55		120

1253	Reactivation of silenced genes and transcriptional therapy. **2003**, 100, 56-64		12
1252	SOCS-3 is frequently silenced by hypermethylation and suppresses cell growth in human lung cancer. *Proceedings of the National Academy of Sciences of the United States of America*, **2003**, 100, 14133-8	11.5	319
1251	CpG island methylation is a common finding in colorectal cancer cell lines. **2003**, 88, 413-9		44
1250	Tumor Suppressor Genes. **2003**,		1
1249	Toward new strategies to select young endometrial cancer patients for mismatch repair gene mutation analysis. *Journal of Clinical Oncology*, **2003**, 21, 4364-70	2.2	112
1248	Human DNA methyltransferase gene DNMT1 is regulated by the APC pathway. **2003**, 24, 17-24		40
1247	PCR plus phylogenetics pin down group A coxsackievirus infections. **2003**, 56, 55-55		
1246	Adverse prognostic effect of methylation in colorectal cancer is reversed by microsatellite instability. *Journal of Clinical Oncology*, **2003**, 21, 3729-36	2.2	166
1245	Molecular progression of promoter methylation in intraductal papillary mucinous neoplasms (IPMN) of the pancreas. **2003**, 24, 193-8		133
1244	Dietary factors and the occurrence of truncating APC mutations in sporadic colon carcinomas: a Dutch population-based study. **2003**, 24, 283-90		32
1243	DNA methylation markers in patients with gastrointestinal cancers. Current understanding, potential applications for disease management and development of diagnostic tools. **2003**, 21, 299-308		22
1242	Inadequate "caretaker" gene function and human cancer development. **2003**, 222, 249-68		5
1241	The APC tumor suppressor pathway. **2003**, 222, 21-40		3
1240	Hereditary colon cancer genes. **2003**, 222, 59-83		3
1239	Microsatellite instability and p53 expression in gallbladder carcinomas. **2003**, 12, 96-102		18
1238	Aberrant hypermethylation of tumor suppressor genes in pancreatic endocrine neoplasms. **2003**, 238, 423-31; discussion 431-2		123
1237	The hereditary nonpolyposis colorectal cancer syndrome: genetics and clinical implications. **2003**, 138, 560-70		219
1236	Current and evolving strategies for colorectal cancer screening. **2003**, 10, 193-204		27

1235	Polyp Biology. 351-357	
1234	DNA mismatch repair and cancer. **2003**, 8, d997-1017	63
1233	Characterization of mutator pathway in younger-age-onset colorectal adenocarcinomas. **2003**, 18, 387-91	5
1232	Microsatellite instability and MLH1 promoter methylation in human retinoblastoma. **2004**, 45, 3404-9	26
1231	Hypermethylation of E-cadherin gene is frequent and independent of p16INK4A methylation in non-small cell lung cancer: Potential prognostic implication. **2004**, 12, 389	1
1230	MSI-testing in hereditary non-polyposis colorectal carcinoma (HNPCC). **2004**, 20, 225-36	10
1229	Colorectal carcinogenesis: MSI-H versus MSI-L. **2004**, 20, 199-206	83
1228	The promise of biomarkers in colorectal cancer detection. **2004**, 20, 87-96	9
1227	Lynch syndrome (HNPCC) and microsatellite instability. **2004**, 20, 179-80	30
1226	Diagnostic application of hMLH1 methylation in hereditary non-polyposis colorectal cancer. **2004**, 20, 277-82	7
1225	DNA methylation analysis in human cancer. **2005**, 103, 123-36	10
1224	Microsatellite instability: theory and methods. **2004**, 97, 237-50	1
1223	Principles of Molecular Oncology. **2004**,	6
1222	The acquisition of hMLH1 methylation in plasma DNA after chemotherapy predicts poor survival for ovarian cancer patients. **2004**, 10, 4420-6	216
1221	Epigenetic loss of the familial tumor-suppressor gene exostosin-1 (EXT1) disrupts heparan sulfate synthesis in cancer cells. **2004**, 13, 2753-65	76
1220	Novel poly(ADP-ribose) polymerase-1 inhibitor, AG14361, restores sensitivity to temozolomide in mismatch repair-deficient cells. **2004**, 10, 881-9	146
1219	Relationship between CDX2 gene methylation and dietary factors in gastric cancer patients. **2005**, 26, 193-200	66
1218	Epigenetics and cancer. **2004**, 18, 2315-35	352

1217	Measurement of DNA mismatch repair activity in live cells. *Nucleic Acids Research*, **2004**, 32, e100	20.1	43
1216	Characterization of mutator phenotype in familial colorectal cancer patients not fulfilling amsterdam criteria. **2004**, 10, 6159-68		13
1215	Hypermethylation of a small CpGuanine-rich region correlates with loss of activator protein-2alpha expression during progression of breast cancer. **2004**, 64, 1611-20		63
1214	Detection of promoter hypermethylation of multiple genes in the tumor and bronchoalveolar lavage of patients with lung cancer. **2004**, 10, 2284-8		143
1213	Distinct patterns of KRAS mutations in colorectal carcinomas according to germline mismatch repair defects and hMLH1 methylation status. **2004**, 13, 2303-11		102
1212	Mutations in DNA mismatch repair genes: Implications for DNA damage signaling and drug sensitivity (Review). **2004**, 24, 1039		6
1211	Differential expression patterns of the insulin-like growth factor 2 gene in human colorectal cancer. **2004**, 25, 62-8		18
1210	Evaluation of microsatellite instability, hMLH1 expression and hMLH1 promoter hypermethylation in defining the MSI phenotype of colorectal cancer. **2004**, 3, 73-8		35
1209	Defining the microsatellite instability phenotype in colorectal cancer through analysis of surrogate markers. **2004**, 3, 79-81		
1208	Quantitative detection of promoter hypermethylation of multiple genes in the tumor, urine, and serum DNA of patients with renal cancer. **2004**, 64, 5511-7		200
1207	Hereditary Nonpolyposis Colorectal Cancer. **2004**, 166-188		
1206	Molecular Diagnosis of Cancer. **2004**,		1
1205	Molecular differences between sporadic serrated and conventional colorectal adenomas. **2004**, 10, 3082-90		67
1204	Activity (transcription) of the genes for MLH1, MSH2 and p53 in sporadic colorectal tumours with micro-satellite instability. **2004**, 90, 2006-12		6
1203	Methylation pattern of CDH13 gene in digestive tract cancers. **2004**, 91, 1139-42		37
1202	Pancreatic Cancer. **2004**,		
1201	Selenomethionine induces sustained ERK phosphorylation leading to cell-cycle arrest in human colon cancer cells. **2005**, 26, 109-17		36
1200	The contribution of genetic and epigenetic changes in granulosa cell tumors of ovarian origin. **2004**, 10, 5537-45		31

1199	Promoter methylation profiling of 30 genes in human malignant melanoma. **2004**, 95, 962-8	88
1198	DNA hypermethylation in gastric cancer. **2004**, 20 Suppl 1, 131-42	34
1197	Molecular differences between RER+ and RER- sporadic endometrial carcinomas in a large population-based series. **2004**, 14, 957-65	25
1196	Testing guidelines for hereditary non-polyposis colorectal cancer. **2004**, 4, 153-8	145
1195	CpG island methylator phenotype in cancer. **2004**, 4, 988-93	870
1194	DNA methylation changes in multiple myeloma. **2004**, 18, 1687-92	108
1193	Generating mutations but providing chemosensitivity: the role of O6-methylguanine DNA methyltransferase in human cancer. **2004**, 23, 1-8	262
1192	Aberrant methylation of integrin alpha4 gene in human gastric cancer cells. **2004**, 23, 3474-80	45
1191	RARbeta2 is a candidate tumor suppressor gene in myelofibrosis with myeloid metaplasia. **2004**, 23, 7846-53	41
1190	Allelic imbalance of APAF-1 locus at 12q23 is related to progression of colorectal carcinoma. **2004**, 23, 8292-300	30
1189	Mlh1 mediates tissue-specific regulation of mitotic recombination. **2004**, 23, 9017-24	22
1188	Promoter hypermethylation of MGMT, CDH1, RAR-beta and SYK tumour suppressor genes in granulosa cell tumours (GCTs) of ovarian origin. **2004**, 90, 874-81	20
1187	MSH6 missense mutations are often associated with no or low cancer susceptibility. **2004**, 91, 1287-92	35
1186	Aberrant CpG island hypermethylation of multiple genes in colorectal neoplasia. **2004**, 84, 884-93	127
1185	Alterations of DNA mismatch repair proteins and microsatellite instability levels in gastric cancer cell lines. **2004**, 84, 915-22	22
1184	Mucinous carcinoma of the colon: correlation of loss of mismatch repair enzymes with clinicopathologic features and survival. **2004**, 17, 696-700	116
1183	Unusual tumors associated with the hereditary nonpolyposis colorectal cancer syndrome. **2004**, 17, 981-9	59
1182	Three independent genetic profiles based on mucin expression in early differentiated-type gastric cancers--a new concept of genetic carcinogenesis of early differentiated-type adenocarcinomas. **2004**, 17, 1223-34	40

1181	Mutation rates in the complex microsatellite MYCL1 and related simple repeats in cultured human cells. **2004**, 545, 117-26		8
1180	Clinicopathologic features in colorectal cancer patients with microsatellite instability. **2004**, 568, 275-82		59
1179	Defective mismatch repair and the development of recurrent endometrial carcinoma. **2004**, 94, 550-9		24
1178	Microsatellite instability in in vitro ageing of T lymphocyte clones. **2004**, 39, 499-505		22
1177	Epigenetic regulation of the taxol resistance-associated gene TRAG-3 in human tumors. **2004**, 151, 1-13		27
1176	Epigenetic inactivation of tumor suppressor genes in hematologic malignancies. **2004**, 80, 108-19		3
1175	Beyond genetics--the emerging role of epigenetic changes in hematopoietic malignancies. **2004**, 80, 120-7		8
1174	The utility of immunohistochemical detection of DNA mismatch repair gene proteins. **2004**, 445, 431-41		83
1173	A DNA microarray-based methylation-sensitive (MS)-AFLP hybridization method for genetic and epigenetic analyses. **2004**, 271, 678-86		21
1172	BAX and caspase-5 frameshift mutations and spontaneous apoptosis in colorectal cancer with microsatellite instability. **2004**, 19, 538-44		12
1171	Novel aspects of macromolecular repair and relationship to human disease. **2004**, 82, 280-97		25
1170	Promoter methylation and expression of DNA repair genes hMLH1 and MGMT in acute myeloid leukemia. **2004**, 83, 628-33		18
1169	Gene silencing in DNA damage repair. **2004**, 61, 2168-72		5
1168	Simple and complex genetics of colorectal cancer susceptibility. **2004**, 129C, 35-43		24
1167	Mutations of BRAF are associated with extensive hMLH1 promoter methylation in sporadic colorectal carcinomas. *International Journal of Cancer*, **2004**, 108, 237-42	7.5	109
1166	Correlation of hMLH1 and HPP1 hypermethylation in gastric, but not in esophageal and cardiac adenocarcinoma. *International Journal of Cancer*, **2004**, 110, 208-11	7.5	28
1165	Histone deacetylase inhibitors: understanding a new wave of anticancer agents. *International Journal of Cancer*, **2004**, 112, 171-8	7.5	226
1164	Molecular diagnostic applications of DNA methylation technology. **2004**, 37, 595-604		51

1163	Hypermethylation in histologically distinct classes of breast cancer. **2004**, 10, 5998-6005		102
1162	Colorectal cancer with mutation in BRAF, KRAS, and wild-type with respect to both oncogenes showing different patterns of DNA methylation. *Journal of Clinical Oncology*, **2004**, 22, 4584-94	2.2	186
1161	Extensive but hemiallelic methylation of the hMLH1 promoter region in early-onset sporadic colon cancers with microsatellite instability. **2004**, 2, 147-56		95
1160	Aberrant gene expression in human non small cell lung carcinoma cells exposed to demethylating agent 5-aza-2′-deoxycytidine. **2004**, 6, 412-9		38
1159	Use of 5-fluorouracil and survival in patients with microsatellite-unstable colorectal cancer. **2004**, 126, 394-401		364
1158	CpG island methylation in gastroenterologic neoplasia: a maturing field. **2004**, 127, 1578-88		118
1157	Activity of the suppressor of cytokine signaling-3 promoter in human non-small-cell lung cancer. **2004**, 5, 366-70		25
1156	A CpG island hypermethylation profile of primary colorectal carcinomas and colon cancer cell lines. **2004**, 3, 28		122
1155	Challenges and pitfalls in HNPCC screening by microsatellite analysis and immunohistochemistry. **2004**, 6, 308-15		47
1154	Chemically induced DNA hypomethylation in breast carcinoma cells detected by the amplification of intermethylated sites. **2004**, 6, R329-37		24
1153	The clinical features of rectal cancers with high-frequency microsatellite instability (MSI-H) in Japanese males. **2004**, 216, 55-62		44
1152	Positive interactive radiosensitisation in vitro with the combination of two nucleoside analogues, (E)-2′-deoxy-2′-(fluoromethylene) cytidine and iododeoxyuridine. **2004**, 40, 1572-80		2
1151	Increased DNA methyltransferase 1 (DNMT1) protein expression correlates significantly with poorer tumor differentiation and frequent DNA hypermethylation of multiple CpG islands in gastric cancers. **2004**, 164, 689-99		240
1150	Emerging diet-related surrogate end points for colorectal cancer: UK Food Standards Agency diet and colonic health workshop report. **2004**, 91, 315-23		8
1149	Hyperplastic (serrated) polyps of the colorectum: relationship of CpG island methylator phenotype and K-ras mutation to location and histologic subtype. **2004**, 28, 423-34		147
1148	5-Aza-2′-deoxycytidine reactivates the CDH1 gene without influencing methylation of the entire CpG island or histone modification in a human cancer cell line. **2004**, 80, 342-348		2
1147	Immunohistochemistry and microsatellite instability testing for selecting MLH1, MSH2 and MSH6 mutation carriers in hereditary non-polyposis colorectal cancer. **2004**, 12, 621		3
1146	Value of immunohistochemical detection of DNA mismatch repair proteins in predicting germline mutation in hereditary colorectal neoplasms. **2005**, 29, 96-104		121

1145	Phenotype of microsatellite-stable colorectal carcinomas with CpG island methylation. **2005**, 29, 429-36	54
1144	Epigenetic events in the colorectum and in colon cancer. **2005**, 33, 684-8	71
1143	Methylation analysis of the cell cycle control genes in myelofibrosis with myeloid metaplasia. **2005**, 29, 511-5	25
1142	Aberrant DNA methylation as a cancer-inducing mechanism. **2005**, 45, 629-56	426
1141	Microsatellite instability in gastrointestinal tract cancers: a brief update. **2005**, 35, 1005-15	22
1140	Variable MLH1 promoter methylation patterns in endometrial carcinomas of endometrioid subtype lacking DNA mismatch repair. **2005**, 15, 1089-96	6
1139	Aspirin-induced nuclear translocation of NFkappaB and apoptosis in colorectal cancer is independent of p53 status and DNA mismatch repair proficiency. **2005**, 92, 1137-43	32
1138	The role of MLH1, MSH2 and MSH6 in the development of multiple colorectal cancers. **2005**, 93, 472-7	47
1137	Epigenetic alterations in gastric carcinogenesis. **2005**, 15, 247-54	64
1136	Modulation of CDK2-AP1 (p12(DOC-1)) expression in human colorectal cancer. **2005**, 24, 3657-68	11
1135	Methylation-associated silencing of death-associated protein kinase gene in laryngeal squamous cell cancer. **2005**, 115, 1395-401	22
1134	[Hereditary predispositions to colorectal cancer]. **2005**, 29, 701-10	1
1133	[Hereditary non polyposis colon cancer: diagnosis and management]. **2005**, 29, 1028-34	4
1132	Promoter methylation of the hMLH1 gene and protein expression of human mutL homolog 1 and human mutS homolog 2 in resected esophageal squamous cell carcinoma. **2005**, 130, 1371	28
1131	Genomic stability and tumorigenesis. **2005**, 15, 61-6	43
1130	Somatic evolution of cancer cells. **2005**, 15, 436-50	36
1129	Numbers of mutations to different types of colorectal cancer. **2005**, 5, 126	12
1128	Mutations in APC, CTNNB1 and K-ras genes and expression of hMLH1 in sporadic colorectal carcinomas from the Netherlands Cohort Study. **2005**, 5, 160	44

1127	Hereditary colorectal cancer-part II. **2005**, 42, 267-333		27
1126	Up-regulation of DNA methyltransferase 3B expression in endometrial cancers. **2005**, 96, 531-8		56
1125	Molecular cloning and characterization of FBXO47, a novel gene containing an F-box domain, located in the 17q12 band deleted in papillary renal cell carcinoma. **2005**, 43, 83-94		12
1124	Alterations of cancer-related genes in soft tissue sarcomas: hypermethylation of RASSF1A is frequently detected in leiomyosarcoma and associated with poor prognosis in sarcoma. *International Journal of Cancer*, **2005**, 114, 442-7	7.5	43
1123	Frequent microsatellite instability in primary esophageal carcinoma associated with extraesophageal primary carcinoma. *International Journal of Cancer*, **2005**, 114, 166-73	7.5	12
1122	Mucinous carcinomas of the colon and rectum show higher rates of microsatellite instability and lower rates of chromosomal instability: a study matched for T classification and tumor location. **2005**, 103, 2023-9		33
1121	BRAF mutations in colorectal carcinoma suggest two entities of microsatellite-unstable tumors. **2005**, 104, 952-61		55
1120	Molecular pathogenesis of colorectal cancer: implications for molecular diagnosis. **2005**, 104, 2035-47		112
1119	Expression of angiogenic VEGF-A (soluble isoforms 121, 165) and lymphangiogenic VEGF-C in colorectal cancers with micro-satellite instability. **2005**, 92, 317-25		4
1118	Clinical implications of aberrant DNA methylation patterns in acute myelogenous leukemia. **2005**, 84 Suppl 1, 39-46		67
1117	Mechanisms of microsatellite instability in colorectal cancer patients in different age groups. **2005**, 48, 2061-9		24
1116	Immunogenic hsp-70 is overexpressed in colorectal cancers with high-degree microsatellite instability. **2005**, 48, 2322-8		10
1115	Lynch syndrome (hereditary non-polyposis colorectal cancer): current concepts and approaches to management. **2005**, 7, 412-20		12
1114	Dormant hypermethylated tumour suppressor genes: questions and answers. **2005**, 205, 172-80		74
1113	Routine testing for mismatch repair deficiency in sporadic colorectal cancer is justified. **2005**, 207, 377-84		41
1112	Upstream CpG island methylation of the PAX3 gene in human rhabdomyosarcomas. **2005**, 44, 328-37		23
1111	MUC gene abnormalities in sporadic and hereditary mucinous colon cancers with microsatellite instability. **2005**, 21, 121-6		10
1110	Non-Genotoxic Causes of Cancer. **2005**,		

1109	Relationship between the extent of chromosomal losses and the pattern of CpG methylation in gastric carcinomas. **2005**, 20, 790-805		14
1108	Rectal Cancer: Pathological Features and their Relationship to Prognosis and Treatment. **2005**, 57-72		
1107	The molecular pathology of inflammatory bowel disease-associated neoplasia and preneoplasia. **2003**, 711-718		
1106	Mismatch repair system and aging: microsatellite instability in peripheral blood cells from differently aged participants. **2005**, 60, 285-92		38
1105	Expression of tumor suppressor and tumor-related proteins in differentiated carcinoma, undifferentiated carcinoma with tubular component and pure undifferentiated carcinoma of the stomach. **2005**, 35, 580-6		15
1104	Promoter hypermethylation of mismatch repair gene hMLH1 predicts the clinical response of malignant astrocytomas to nitrosourea. **2005**, 11, 1539-44		29
1103	Promoter hypermethylation is the predominant mechanism in hMLH1 and hMSH2 deregulation and is a poor prognostic factor in nonsmoking lung cancer. **2005**, 11, 5410-6		55
1102	Microsatellite instability testing in colorectal carcinoma: choice of markers affects sensitivity of detection of mismatch repair-deficient tumors. **2005**, 11, 2180-7		61
1101	Low level microsatellite instability may be associated with reduced cancer specific survival in sporadic stage C colorectal carcinoma. **2005**, 54, 103-8		53
1100	Gene expression profiling of microsatellite unstable and microsatellite stable endometrial cancers indicates distinct pathways of aberrant signaling. **2005**, 65, 5031-7		49
1099	5,10-methylenetetrahydrofolate reductase 677 and 1298 polymorphisms, folate intake, and microsatellite instability in colon cancer. *Cancer Epidemiology Biomarkers and Prevention*, **2005**, 14, 2023-9	4	33
1098	Detection of hypermethylated genes in women with and without cervical neoplasia. **2005**, 97, 273-82		153
1097	High frequency of hereditary colorectal cancer in Newfoundland likely involves novel susceptibility genes. **2005**, 11, 6853-61		45
1096	Promoter hypermethylation is associated with tumor location, stage, and subsequent progression in transitional cell carcinoma. *Journal of Clinical Oncology*, **2005**, 23, 2903-10	2.2	249
1095	Evidence that both genetic instability and selection contribute to the accumulation of chromosome alterations in cancer. **2005**, 26, 923-30		35
1094	Fruits, vegetables, and hMLH1 protein-deficient and -proficient colon cancer: The Netherlands cohort study. *Cancer Epidemiology Biomarkers and Prevention*, **2005**, 14, 1619-25	4	14
1093	Down-regulation of DNA mismatch repair proteins in human and murine tumor spheroids: implications for multicellular resistance to alkylating agents. **2005**, 4, 1484-94		31
1092	The prognostic significance of K-ras, p53, and APC mutations in colorectal carcinoma. **2005**, 54, 1283-6		168

1091	CpG Island Hypermethylation of Tumor Suppressor Genes in Human Cancer. **2005**, 69-84		
1090	Frequent promoter methylation of tumor-related genes in sporadic and men2-associated pheochromocytomas. **2005**, 113, 1-7		22
1089	Inherited colorectal cancer syndromes. **2005**, 18, 150-62		4
1088	Epigenetic and chromatin modifiers as targeted therapy of hematologic malignancies. *Journal of Clinical Oncology*, **2005**, 23, 3971-93	2.2	282
1087	Genome Instability in Cancer Development. **2005**,		1
1086	Association of mismatch repair deficiency with PTEN frameshift mutations in endometrial cancers and the precursors in a Japanese population. **2005**, 124, 89-96		25
1085	CHFR promoter hypermethylation in colon cancer correlates with the microsatellite instability phenotype. **2005**, 26, 1152-6		75
1084	Association between family history and mismatch repair in colorectal cancer. **2005**, 54, 636-42		12
1083	Evaluation of a 7-day continuous intravenous infusion of decitabine: inhibition of promoter-specific and global genomic DNA methylation. *Journal of Clinical Oncology*, **2005**, 23, 3897-905	2.2	121
1082	A methylation profile of in vitro immortalized human cell lines. **2005**, 26, 275		4
1081	Mucinous carcinomas of the colorectum have distinct molecular genetic characteristics. **2005**, 26, 745		3
1080	Downregulation of human kallikrein 10 (KLK10/NES1) by CpG island hypermethylation in breast, ovarian and prostate cancers. **2005**, 26, 324-36		50
1079	Microsatellite instability caused by hMLH1 promoter methylation increases with tumor progression in right-sided sporadic colorectal cancer. **2005**, 69, 354-62		13
1078	Effects of camptothecin on double-strand break repair by non-homologous end-joining in DNA mismatch repair-deficient human colorectal cancer cell lines. *Nucleic Acids Research*, **2005**, 33, 106-13	20.1	15
1077	Two modes of microsatellite instability in human cancer: differential connection of defective DNA mismatch repair to dinucleotide repeat instability. *Nucleic Acids Research*, **2005**, 33, 1628-36	20.1	48
1076	SMAD4 as a prognostic marker in colorectal cancer. **2005**, 11, 2606-11		149
1075	The Role of Genetic Instability in the Pathogenesis and Progression of Urothelial Carcinoma. **2005**, 3, 180-188		
1074	Epigenetic therapy of cancer with 5-aza-2'-deoxycytidine (decitabine). **2005**, 32, 443-51		129

1073	Overview of cancer epigenetics. **2005**, 42, S3-8	69
1072	Decitabine in myelodysplastic syndromes. **2005**, 42, S23-31	22
1071	Tumor microsatellite instability in early onset gastric cancer. **2005**, 7, 465-77	50
1070	Analysis of promoter methylation in stool: a novel method for the detection of colorectal cancer. **2005**, 3, 142-9	98
1069	Microsatellite instability and DNA mismatch repair deficiency testing in hereditary and sporadic gastrointestinal cancers. **2005**, 25, 179-96	48
1068	Mechanisms and markers of carcinogenesis and neoplastic progression. **2005**, 5, 1317-32	3
1067	DNA methyltransferase inhibitors and the development of epigenetic cancer therapies. **2005**, 97, 1498-506	385
1066	DNA methylation and gene silencing in cancer. **2005**, 2 Suppl 1, S4-11	835
1065	Cancer epigenetics. **2005**, 14 Spec No 1, R65-76	384
1064	Screening for the Lynch syndrome (hereditary nonpolyposis colorectal cancer). **2005**, 352, 1851-60	1050
1063	Support for hMLH1 and MGMT silencing as a mechanism of tumorigenesis in the hyperplastic-adenoma-carcinoma (serrated) carcinogenic pathway in the colon. **2005**, 36, 101-11	75
1062	Promoter hypermethylation is a major event of hMLH1 gene inactivation in liver fluke related cholangiocarcinoma. **2005**, 217, 213-9	29
1061	Roles of mismatch repair proteins hMSH2 and hMLH1 in the development of sporadic breast cancer. **2005**, 223, 143-50	40
1060	Downregulated mRNA expression of ASPP and the hypermethylation of the 5'-untranslated region in cancer cell lines retaining wild-type p53. **2005**, 579, 1587-90	38
1059	PRR5 encodes a conserved proline-rich protein predominant in kidney: analysis of genomic organization, expression, and mutation status in breast and colorectal carcinomas. **2005**, 85, 338-51	23
1058	[HNPCC syndrome (hereditary non polyposis colon cancer): identification and management]. **2005**, 26, 109-18	3
1057	The immunogenicity of colorectal cancers with high-degree microsatellite instability. **2005**, 3, 26	44
1056	Gene expression signatures for colorectal cancer microsatellite status and HNPCC. **2005**, 92, 2240-8	62

1055	Immunohistochemical analysis reveals high frequency of PMS2 defects in colorectal cancer. **2005**, 128, 1160-71		149
1054	Defective DNA mismatch repair determines a characteristic transcriptional profile in proximal colon cancers. **2005**, 129, 1047-59		43
1053	MLH1 germline epimutations as a factor in hereditary nonpolyposis colorectal cancer. **2005**, 129, 1392-9		158
1052	Methyl-CpG-binding proteins in cancer: blaming the DNA methylation messenger. **2005**, 83, 374-84		58
1051	PARP Inhibitors and Cancer Therapy. **2006**, 218-233		4
1050	Cancer Drug Resistance. **2006**,		17
1049	Screening for Lynch syndrome (hereditary nonpolyposis colorectal cancer) among endometrial cancer patients. **2006**, 66, 7810-7		464
1048	Multifocal urothelial cancers with the mutator phenotype are of monoclonal origin and require panurothelial treatment for tumor clearance. **2006**, 175, 2323-30		51
1047	Aberrant methylation of the eyes absent 4 gene in ulcerative colitis-associated dysplasia. **2006**, 4, 212-8		38
1046	Association of JC virus T-antigen expression with the methylator phenotype in sporadic colorectal cancers. **2006**, 130, 1950-61		85
1045	Silenced tumor suppressor genes reactivated by DNA demethylation do not return to a fully euchromatic chromatin state. **2006**, 66, 3541-9		249
1044	[Promoter hypermethylation status of the mismatch repair gene hMLH1 in patients with sporadic renal cell carcinoma]. **2006**, 126, 452-4		1
1043	Mutually exclusive promoter hypermethylation patterns of hMLH1 and O6-methylguanine DNA methyltransferase in colorectal cancer. **2006**, 8, 68-75		33
1042	Mismatch repair polymorphisms and colorectal polyps: hMLH1-93G>A variant modifies risk associated with smoking. **2006**, 101, 1313-9		34
1041	New insights into the molecular pathogenesis of colorectal cancer. **2006**, 3, 439		6
1040	Right-side shift of colorectal adenomas with aging. **2006**, 63, 453-8; quiz 464		35
1039	Immunohistochemical test for MLH1 and MSH2 expression predicts clinical outcome in stage II and III colorectal cancer patients. *Journal of Clinical Oncology*, **2006**, 24, 2359-67	2.2	170
1038	Detection of aberrant methylation of four genes in plasma DNA for the detection of breast cancer. *Journal of Clinical Oncology*, **2006**, 24, 4262-9	2.2	205

1037	Regulation of hMSH2 and hMLH1 expression in the human colon cancer cell line SW1116 by DNA methyltransferase 1. **2006**, 233, 124-30	22
1036	No evidence for epigenetic inactivation of fumarate hydratase in leiomyomas and leiomyosarcomas. **2006**, 235, 136-40	20
1035	Overexpression of the DNA mismatch repair factor, PMS2, confers hypermutability and DNA damage tolerance. **2006**, 244, 195-202	28
1034	Generation of mutator mutants during carcinogenesis. **2006**, 5, 294-302	41
1033	Histologic features distinguish microsatellite-high from microsatellite-low and microsatellite-stable colorectal carcinomas, but do not differentiate germline mutations from methylation of the MLH1 promoter. **2006**, 37, 831-8	43
1032	L'instabilit'des´microsatellites dans´les´cancers du´c□on. **2006**, 21, 211-222	
1031	The length of CpG islands is associated with the distribution of Alu and L1 retroelements. **2006**, 87, 580-90	29
1030	[Identification and management of HNPCC syndrome (hereditary non polyposis colon cancer), hereditary predisposition to colorectal and endometrial adenocarcinomas]. **2006**, 54, 215-29	1
1029	New aspects in molecular diagnosis of Lynch syndrome (HNPCC). **2006**, 2, 37-49	10
1028	Chemotherapeutic implications in microsatellite unstable colorectal cancer. **2006**, 2, 51-60	62
1027	Alterations of tumor suppressor and tumor-related genes in the development and progression of gastric cancer. **2006**, 12, 192-8	172
1026	Epigenetic Mechanisms in Tumorigenesis. **2006**,	
1025	ADAMTS1, CRABP1, and NR3C1 identified as epigenetically deregulated genes in colorectal tumorigenesis. **2006**, 28, 259-72	73
1024	Epidemiology of Colorectal Cancer. **2006**, 42-76	1
1023	Epimutations, inheritance and causes of aberrant DNA methylation in cancer. **2006**, 4, 75-80	3
1022	Comparison of microsatellite instability, CpG island methylation phenotype, BRAF and KRAS status in serrated polyps and traditional adenomas indicates separate pathways to distinct colorectal carcinoma end points. **2006**, 30, 1491-501	406
1021	Hypermethylation of the MLH1 promoter with concomitant absence of transcript and protein occurs in small patches of crypt cells in unaffected mucosa from sporadic colorectal carcinoma. **2006**, 15, 17-23	16
1020	Effect of methylation-associated silencing of the death-associated protein kinase gene on nasopharyngeal carcinoma. **2006**, 17, 251-9	22

1019	Muir-torre syndrome with intriguing squamous lesions: a case report and review of the literature. **2006**, 28, 56-9		10
1018	Evidence for the early onset of aberrant promoter methylation in urothelial carcinoma. **2006**, 209, 336-43		66
1017	Birt-Hogg-Dub˜gene mutations in human endometrial carcinomas with microsatellite instability. **2006**, 209, 328-35		7
1016	Immunohistochemistry detects mismatch repair gene defects in colorectal cancer. **2006**, 8, 411-7		9
1015	A framework for the molecular classification of circulating tumor markers. **2001**, 945, 8-21		12
1014	The epigenetics of colorectal cancer. **2000**, 910, 140-53; discussion 153-5		81
1013	CIMPle origin for promoter hypermethylation in colorectal cancer?. **2006**, 38, 738-40		25
1012	Monkey see, monkey do. **2006**, 38, 740-1		1
1011	A truncating mutation of HDAC2 in human cancers confers resistance to histone deacetylase inhibition. **2006**, 38, 566-9		228
1010	Heritable germline epimutation of MSH2 in a family with hereditary nonpolyposis colorectal cancer. **2006**, 38, 1178-83		271
1009	Epigenetic gene silencing in cancer - a mechanism for early oncogenic pathway addiction?. **2006**, 6, 107-16		1372
1008	hMLH1 and MGMT inactivation as a mechanism of tumorigenesis in monoclonal gammopathies. **2006**, 19, 914-21		14
1007	Epigenetic inactivation of the candidate tumor suppressor gene HOXB13 in human renal cell carcinoma. **2006**, 25, 1733-42		66
1006	Microsatellite instability and mutation analysis of candidate genes in urothelial cell carcinomas of upper urinary tract. **2006**, 25, 2113-8		34
1005	Dual role of LOH at MMR loci in hereditary non-polyposis colorectal cancer?. **2006**, 25, 2124-30		22
1004	The fundamental role of epigenetics in hematopoietic malignancies. **2006**, 20, 1-13		174
1003	Microarray-based molecular margin methylation pattern analysis in colorectal carcinoma. **2006**, 355, 117-24		17
1002	Epigenetic inactivation of the premature aging Werner syndrome gene in human cancer. *Proceedings of the National Academy of Sciences of the United States of America*, **2006**, 103, 8822-7	11.5	213

1001	Molecular screening for hereditary nonpolyposis colorectal cancer in Bulgaria. **2006**, 1, 128-135		1
1000	Genomic instability in the offspring of irradiated parents: Facts and interpretations. **2006**, 42, 1116-1126		14
999	Discovery of two novel, small-molecule inhibitors of DNA methylation. **2006**, 49, 678-83		119
998	Demonstration and characterization of mutations induced by Helicobacter pylori organisms in gastric epithelial cells. **2006**, 11, 272-86		54
997	Frequency of immunohistochemical loss of mismatch repair protein in double primary cancers of the colorectum and stomach in Japan. **2006**, 49, S23-9		11
996	Microsatellite instability did not predict individual survival of unselected patients with colorectal cancer. **2007**, 22, 145-52		50
995	Hypermethylation of p14ARF promoter region and expresion of p14ARF gene product in non-small cell lung cancer. **2006**, 18, 276-281		
994	Detection of frameshift mutations of the transforming growth factor receptor II in gastric cancers with microsatellite instability. **2006**, 3, 267-272		
993	Analysis of inactivation of hMLH1 by promoter hypermethylation and microsatellite instability in gastric carcinogenesis. **2006**, 3, 102-109		1
992	hMLH1 promoter methylation and silencing in primary endometrial cancers are associated with specific alterations in MBDs occupancy and histone modifications. **2006**, 103, 321-8		11
991	Chromatin control and cancer-drug discovery: realizing the promise. **2006**, 11, 97-109		65
990	Benzopyrene exposure disrupts DNA methylation and growth dynamics in breast cancer cells. **2006**, 216, 458-68		101
989	Mlh1-dependent suppression of specific mutations induced in vivo by the food-borne carcinogen 2-amino-1-methyl-6-phenylimidazo [4,5-b] pyridine (PhIP). **2006**, 594, 101-12		7
988	The 5'-end transitional CpGs between the CpG islands and retroelements are hypomethylated in association with loss of heterozygosity in gastric cancers. **2006**, 6, 180		13
987	Microsatellite instability in colorectal cancer. **2006**, 93, 395-406		193
986	Multiple genetic and epigenetic interacting mechanisms contribute to clonally selection of drug-resistant tumors: current views and new therapeutic prospective. **2006**, 207, 571-81		77
985	Promoter methylation of the secreted frizzled-related protein 1 gene SFRP1 is frequent in hepatocellular carcinoma. **2006**, 107, 579-90		95
984	BRAF mutation, CpG island methylator phenotype and microsatellite instability occur more frequently and concordantly in mucinous than non-mucinous colorectal cancer. *International Journal of Cancer*, **2006**, 118, 2765-71	7.5	111

983	Regional DNA hypermethylation and DNA methyltransferase (DNMT) 1 protein overexpression in both renal tumors and corresponding nontumorous renal tissues. *International Journal of Cancer*, **2006**, 119, 288-96	7.5	94
982	Structure and function of the components of the human DNA mismatch repair system. *International Journal of Cancer*, **2006**, 119, 2030-5	7.5	80
981	DNA mismatch repair as an effector for promoting phorbol ester-induced apoptotic DNA damage and cell killing: implications in tumor promotion. *International Journal of Cancer*, **2006**, 119, 1776-84	7.5	11
980	The expression of metastasis suppressor MIM/MTSS1 is regulated by DNA methylation. *International Journal of Cancer*, **2006**, 119, 2287-93	7.5	40
979	DNA hypermethylation and partial gene silencing of human thymine- DNA glycosylase in multiple myeloma cell lines. **2006**, 1, 138-45		37
978	Reactivation of epigenetically silenced genes by DNA methyltransferase inhibitors: basic concepts and clinical applications. **2006**, 1, 7-13		69
977	DNA methylation and histone modifications in patients with cancer: potential prognostic and therapeutic targets. **2007**, 361, 25-62		50
976	Methods for Analysis of DNA Methylation. **2006**, 149-160		3
975	Identification and survival of carriers of mutations in DNA mismatch-repair genes in colon cancer. **2006**, 354, 2751-63		361
974	Key issues in the modes of action and effects of trichloroethylene metabolites for liver and kidney tumorigenesis. **2006**, 114, 1457-63		61
973	Inhibition of SIRT1 reactivates silenced cancer genes without loss of promoter DNA hypermethylation. **2006**, 2, e40		320
972	Inhibition of poly(ADP-ribose) polymerase prevents irinotecan-induced intestinal damage and enhances irinotecan/temozolomide efficacy against colon carcinoma. **2006**, 20, 1709-11		84
971	Poly(ADP-Ribosyl)ation. **2006**,		6
970	Epigenetic modification of SOCS-1 differentially regulates STAT3 activation in response to interleukin-6 receptor and epidermal growth factor receptor signaling through JAK and/or MEK in head and neck squamous cell carcinomas. **2006**, 5, 8-19		109
969	Accumulation of promoter methylation suggests epigenetic progression in squamous cell carcinoma of the esophagus. **2006**, 12, 4515-22		89
968	Microsatellite instability in aberrant crypt foci from patients without concurrent colon cancer. **2007**, 28, 769-76		29
967	The high frequency of de novo promoter methylation in synchronous primary endometrial and ovarian carcinomas. **2006**, 12, 3329-36		54
966	A Cost-Effective Algorithm for Hereditary Nonpolyposis Colorectal Cancer Detection. **2006**, 125, 823-831		13

965	Predicting and preventing hereditary colorectal cancer. **2006**, 296, 1521-3		16
964	The malignant potential of freshly developed colorectal polyps according to age. *Cancer Epidemiology Biomarkers and Prevention*, **2006**, 15, 2418-21	4	11
963	Quantitation of promoter methylation of multiple genes in urine DNA and bladder cancer detection. **2006**, 98, 996-1004		210
962	Genetics and Epigenetics in Cancer Biology. **2006**, 25-56		1
961	CpG island methylation and histone modifications: biology and clinical significance. **2006**, 115-26		19
960	Target Discovery and Validation Reviews and Protocols. **2006**,		1
959	Methylation of serum DNA is an independent prognostic marker in colorectal cancer. **2006**, 12, 7347-52		154
958	BRAF mutations and phosphorylation status of mitogen-activated protein kinases in the development of flat and depressed-type colorectal neoplasias. **2006**, 94, 311-7		12
957	Characterisation of the GRAF gene promoter and its methylation in patients with acute myeloid leukaemia and myelodysplastic syndrome. **2006**, 94, 323-32		20
956	Microsatellite instability markers for identifying early-onset colorectal cancers caused by germ-line mutations in DNA mismatch repair genes. **2007**, 13, 2865-9		26
955	Inhibition of lysine-specific demethylase 1 by polyamine analogues results in reexpression of aberrantly silenced genes. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 8023-8	11.5	252
954	Epigenetics and cancer: towards an evaluation of the impact of environmental and dietary factors. **2007**, 22, 91-103		271
953	CpG island methylation in a mouse model of lymphoma is driven by the genetic configuration of tumor cells. **2007**, 3, 1757-69		34
952	Comparing the DNA hypermethylome with gene mutations in human colorectal cancer. **2007**, 3, 1709-23		272
951	Mutator pathways unleashed by epigenetic silencing in human cancer. **2007**, 22, 247-53		110
950	Molecular Biology of Colon Cancer. **2007**, 1-31		
949	Priorities in colorectal cancer research: recommendations from the Gastrointestinal Scientific Leadership Council of the Coalition of Cancer Cooperative Groups. *Journal of Clinical Oncology*, **2007**, 25, 2313-21	2.2	19
948	Functional characterization of pathogenic human MSH2 missense mutations in Saccharomyces cerevisiae. **2007**, 177, 707-21		73

947	EHA scientific workshop report: the role of epigenetics in hematological malignancies. **2007**, 2, 71-9		10
946	Identification of DNA methylation in 3' genomic regions that are associated with upregulation of gene expression in colorectal cancer. **2007**, 2, 161-72		33
945	Epigenetic aberrations in malignant gliomas: an open door leading to better understanding and treatment. **2007**, 2, 147-50		22
944	Microsatellite instability and compromised mismatch repair gene expression during in vitro passaging of monoclonal human T lymphocytes. **2007**, 10, 145-56		16
943	Aberrant DNA methylation in non-neoplastic gastric mucosa of H. Pylori infected patients and effect of eradication. **2007**, 102, 1361-71		151
942	Reduced likelihood of metastases in patients with microsatellite-unstable colorectal cancer. **2007**, 13, 3831-9		185
941	Distinction of hereditary nonpolyposis colorectal cancer and sporadic microsatellite-unstable colorectal cancer through quantification of MLH1 methylation by real-time PCR. **2007**, 13, 3221-8		86
940	Influence of methylenetetrahydrofolate reductase gene polymorphisms C677T and A1298C on age-associated risk for colorectal cancer in a caucasian lynch syndrome population. *Cancer Epidemiology Biomarkers and Prevention*, **2007**, 16, 1753-9	4	17
939	Epigenetic inactivation of a cluster of genes flanking MLH1 in microsatellite-unstable colorectal cancer. **2007**, 67, 9107-16		58
938	Colon Cancer Family Registry: an international resource for studies of the genetic epidemiology of colon cancer. *Cancer Epidemiology Biomarkers and Prevention*, **2007**, 16, 2331-43	4	279
937	Specific clinical and biological features characterize inflammatory bowel disease associated colorectal cancers showing microsatellite instability. *Journal of Clinical Oncology*, **2007**, 25, 4231-8	2.2	57
936	Explaining the familial colorectal cancer risk associated with mismatch repair (MMR)-deficient and MMR-stable tumors. **2007**, 13, 356-61		145
935	Identification and validation of colorectal neoplasia-specific methylation markers for accurate classification of disease. **2007**, 5, 153-63		50
934	Dietary folate intake, MTHFR genetic polymorphisms, and the risk of endometrial cancer among Chinese women. *Cancer Epidemiology Biomarkers and Prevention*, **2007**, 16, 281-7	4	55
933	Endometrial carcinoma: pathology and genetics. **2007**, 39, 72-87		143
932	hTERT is expressed in cancer cell lines despite promoter DNA methylation by preservation of unmethylated DNA and active chromatin around the transcription start site. **2007**, 67, 194-201		167
931	Clinicopathologic and pedigree differences in amsterdam I-positive hereditary nonpolyposis colorectal cancer families according to tumor microsatellite instability status. *Journal of Clinical Oncology*, **2007**, 25, 781-6	2.2	62
930	Cecal adenocarcinoma with prominent rhabdoid feature: report of a case with immunohistochemical, ultrastructural, and molecular analyses. **2007**, 15, 414-20		19

929	Genome-epigenome interactions in cancer. **2007**, 16 Spec No 1, R96-105		50
928	Highly methylated genes in colorectal neoplasia: implications for screening. *Cancer Epidemiology Biomarkers and Prevention*, **2007**, 16, 2686-96	4	105
927	PRDM5 identified as a target of epigenetic silencing in colorectal and gastric cancer. **2007**, 13, 4786-94		78
926	DNA methyltransferases as targets for cancer therapy. **2007**, 43, 395-422		105
925	The Role of Epigenetic Alterations in Cancer. **2007**,		
924	Epigenetic inactivation of the hMLH1 gene in progression of gliomas. **2007**, 16, 104-7		14
923	Carcinogenèse colique, donnèes fondamentales. **2007**, 2, 1-13		
922	Frequent epigenetic inactivation of chromosome 3p candidate tumor suppressor genes in gallbladder carcinoma. **2007**, 250, 100-6		42
921	Minimally invasive biomarkers for detection and staging of colorectal cancer. **2007**, 249, 87-96		50
920	Colorectal Cancer. **2007**,		1
919	Heterogeneous staining for mismatch repair proteins during population-based prescreening for hereditary nonpolyposis colorectal cancer. **2007**, 9, 472-8		59
918	Colorectal cancer: a model for epigenetic tumorigenesis. **2007**, 56, 140-8		125
917	Inheritance of a cancer-associated MLH1 germ-line epimutation. **2007**, 356, 697-705		334
916	Therapeutic potential of drugs to modulate DNA repair in cancer. **2007**, 11, 783-99		25
915	Hyperplastic and serrated polyps of the colorectum. **2007**, 36, 947-68, viii		131
914	MLH1 -93G>A promoter polymorphism and the risk of microsatellite-unstable colorectal cancer. **2007**, 99, 463-74		107
913	Genetic and epigenetic alterations as biomarkers for cancer detection, diagnosis and prognosis. **2007**, 1, 26-41		134
912	mRNA/microRNA gene expression profile in microsatellite unstable colorectal cancer. **2007**, 6, 54		215

911	Epigenetic and genetic alterations in Netrin-1 receptors UNC5C and DCC in human colon cancer. **2007**, 133, 1849-57		82
910	Colorectal cancer epigenetics: the role of environmental factors and the search for molecular biomarkers. **2007**, 25, 101-54		15
909	DNA methylation in colorectal cancer--impact on screening and therapy monitoring modalities?. **2007**, 23, 51-71		47
908	Microsatellite instability and clinicopathological features in esophageal squamous cell cancer. **2007**,		
907	Decreased expression of hMLH1 correlates with reduced 5-fluorouracil-mediated apoptosis in colon cancer cells. **2007**,		
906	Genetic and epigenetic markers to identify high risk patients for multiple early gastric cancers after treatment with endoscopic mucosal resection. **2007**, 40, 203-9		7
905	Epigenetic control of tumor suppression. **2007**, 17, 295-316		29
904	Correlation between hypermethylation of the RASSF2A promoter and K-ras/BRAF mutations in microsatellite-stable colorectal cancers. *International Journal of Cancer*, **2007**, 120, 7-12	7.5	37
903	Evidence for the role of aberrant DNA methylation in the pathogenesis of Lynch syndrome adenomas. *International Journal of Cancer*, **2007**, 120, 1922-9	7.5	26
902	SFRP1 suppressed hepatoma cells growth through Wnt canonical signaling pathway. *International Journal of Cancer*, **2007**, 121, 1028-35	7.5	79
901	Novel approach for detecting global epigenetic alterations associated with tumor cell aneuploidy. *International Journal of Cancer*, **2007**, 121, 1487-93	7.5	18
900	Epigenetic drugs as pleiotropic agents in cancer treatment: biomolecular aspects and clinical applications. **2007**, 212, 330-44		107
899	Inactivation of human mutL homolog 1 and mutS homolog 2 genes in head and neck squamous cell carcinoma tumors and leukoplakia samples by promoter hypermethylation and its relation with microsatellite instability phenotype. **2007**, 109, 703-12		38
898	Left-Sided microsatellite unstable colorectal cancers show less frequent methylation of hMLH1 and CpG island methylator phenotype than right-sided ones. **2007**, 96, 611-8		12
897	Role of BRAF-V600E in the serrated pathway of colorectal tumourigenesis. **2007**, 212, 124-33		76
896	5-Aza-2'-deoxycytidine-mediated reductions in G9A histone methyltransferase and histone H3 K9 di-methylation levels are linked to tumor suppressor gene reactivation. **2007**, 26, 77-90		167
895	No evidence for dual role of loss of heterozygosity in hereditary non-polyposis colorectal cancer. **2007**, 26, 2513-7		16
894	Characterization of promoter regulatory elements involved in downexpression of the DNA polymerase kappa in colorectal cancer. **2007**, 26, 3387-94		32

893	Mechanisms of inactivation of MLH1 in hereditary nonpolyposis colorectal carcinoma: a novel approach. **2007**, 26, 4541-9	49
892	Assessment of MLH1 promoter methylation in relation to gene expression requires specific analysis. **2007**, 26, 7596-600	47
891	Hypermethylation of multiple genes as clonal markers in multicentric hepatocellular carcinoma. **2007**, 97, 1260-5	77
890	MLH1 germline epimutations in selected patients with early-onset non-polyposis colorectal cancer. **2007**, 71, 232-7	45
889	Hypermethylation of the COX-2 gene is a potential prognostic marker for cervical cancer. **2007**, 33, 236-41	19
888	Phenotypes of invasion in sporadic colorectal carcinomas related to aberrations of the adenomatous polyposis coli (APC) gene. **2007**, 50, 318-30	29
887	Epigenetic DNA hypermethylation in cholangiocarcinoma: potential roles in pathogenesis, diagnosis and identification of treatment targets. **2008**, 28, 12-27	37
886	Dual targeting of epigenetic therapy in cancer. **2007**, 1775, 76-91	60
885	Role of nucleosomal occupancy in the epigenetic silencing of the MLH1 CpG island. **2007**, 12, 432-44	168
884	DNA methylation profiling of myelodysplastic syndrome hematopoietic progenitor cells during in vitro lineage-specific differentiation. **2007**, 35, 712-23	30
883	Epigenetic considerations for endometrial cancer prevention, diagnosis and treatment. **2007**, 107, 143-53	43
882	Differences between familial and sporadic forms of colorectal cancer with DNA microsatellite instability. **2007**, 16 Suppl 1, S37-42	5
881	Very high incidence of familial colorectal cancer in Newfoundland: a comparison with Ontario and 13 other population-based studies. **2007**, 6, 53-62	61
880	A single nucleotide substitution (-107C-->G) in the hMLH1 promoter found in colorectal cancer population reduces transcriptional activity. **2007**, 45, 671-81	3
879	The role of chemotherapy in microsatellite unstable (MSI-H) colorectal cancer. **2007**, 22, 739-48	38
878	Subclassification of microsatellite-unstable tumors in colorectal cancer. **2007**, 3, 212-219	2
877	Age-related methylation in normal colon mucosa differs between the proximal and distal colon in patients who underwent colonoscopy. **2008**, 41, 1440-8	21
876	Estrogen receptor alpha, BRCA1, and FANCF promoter methylation occur in distinct subsets of sporadic breast cancers. **2008**, 111, 113-20	74

875	Candidate diagnostic markers and tumor suppressor genes for adrenocortical carcinoma by expression profile of genes on chromosome 11q13. **2008**, 32, 873-81		32
874	Significance of serrated polyps of the colon. **2008**, 10, 490-8		43
873	Identifying Lynch syndrome: we are all responsible. **2008**, 51, 1750-6		20
872	Proximal colon cancer in patients aged 51-60 years of age should be tested for microsatellites instability. A comment on the Revised Bethesda Guidelines. **2008**, 23, 801-6		13
871	Predictive and prognostic value of microsatellite instability in patients with advanced colorectal cancer treated with a fluoropyrimidine and oxaliplatin containing first-line chemotherapy. A report of the AIO Colorectal Study Group. **2008**, 23, 1033-9		58
870	Constitutional mismatch repair-deficiency syndrome: have we so far seen only the tip of an iceberg?. **2008**, 124, 105-22		220
869	Coexisting somatic promoter hypermethylation and pathogenic MLH1 germline mutation in Lynch syndrome. **2008**, 214, 10-6		56
868	Hypermethylation status of APC inversely correlates with the presence of submucosal invasion in laterally spreading colorectal tumors. **2008**, 47, 1-8		11
867	Poorly differentiated colorectal adenocarcinomas show higher rates of microsatellite instability and promoter methylation of p16 and hMLH1: a study matched for T classification and tumor location. **2008**, 97, 278-83		10
866	Expression of mismatch repair proteins, hMLH1/hMSH2, in non-small cell lung cancer tissues and its clinical significance. **2008**, 98, 377-83		13
865	Classification of ambiguous mutations in DNA mismatch repair genes identified in a population-based study of colorectal cancer. **2008**, 29, 367-74		61
864	MLH1 -93G>A promoter polymorphism and risk of mismatch repair deficient colorectal cancer. *International Journal of Cancer*, **2008**, 123, 2456-9	7.5	43
863	Tandem repeat mutation, global DNA methylation, and regulation of DNA methyltransferases in cultured mouse embryonic fibroblast cells chronically exposed to chemicals with different modes of action. **2008**, 49, 26-35		30
862	Redundant DNA methylation in colorectal cancers of Lynch-syndrome patients. **2008**, 47, 906-14		15
861	Cost analysis of biomarker testing for mismatch repair deficiency in node-positive colorectal cancer. **2008**, 95, 868-75		17
860	Frequent microsatellite instability in non-Hodgkin lymphomas irresponsive to chemotherapy. **2008**, 32, 1183-95		13
859	DNA methylation: its role in cancer development and therapy. **2008**, 32, 187-235		47
858	A methylation-specific and SYBR-green-based quantitative polymerase chain reaction technique for O6-methylguanine DNA methyltransferase promoter methylation analysis. **2008**, 377, 62-71		45

857	Hypoxia causes downregulation of mismatch repair system and genomic instability in stem cells. **2008**, 26, 2052-62	70
856	Mechanisms and functions of DNA mismatch repair. **2008**, 18, 85-98	832
855	Preferential loss of mismatch repair function in refractory and relapsed acute myeloid leukemia: potential contribution to AML progression. **2008**, 18, 281-9	26
854	Features of trinucleotide repeat instability in vivo. **2008**, 18, 198-213	114
853	Further evidence for heritability of an epimutation in one of 12 cases with MLH1 promoter methylation in blood cells clinically displaying HNPCC. **2008**, 16, 804-11	85
852	MethyQESD, a robust and fast method for quantitative methylation analyses in HNPCC diagnostics using formalin-fixed and paraffin-embedded tissue samples. **2008**, 88, 1367-75	24
851	Differences and evolution of the methods for the assessment of microsatellite instability. **2008**, 27, 6313-21	83
850	Microsatellite instability due to hMLH1 deficiency is associated with increased cytotoxicity to irinotecan in human colorectal cancer cell lines. **2008**, 99, 1607-12	70
849	Genetic and epigenetic changes in aberrant crypt foci and serrated polyps. **2008**, 99, 1071-6	26
848	Ovarian cancer risk is associated with a common variant in the promoter sequence of the mismatch repair gene MLH1. **2008**, 109, 384-7	20
847	Promoter methylation inhibits BRD7 expression in human nasopharyngeal carcinoma cells. **2008**, 8, 253	33
846	Common germline MDR1/ABCB1 functional polymorphisms and haplotypes modify susceptibility to colorectal cancers with high microsatellite instability. **2008**, 183, 28-34	29
845	Epigenetic drivers and genetic passengers on the road to cancer. **2008**, 642, 1-13	114
844	DNA methylation reprogramming in the germ line. **2008**, 626, 1-15	28
843	Epigenetic gene regulation in cancer. **2008**, 61, 247-67	69
842	Systems biotechnology of mammalian cell factories. **2008**, 7, 95-110	67
841	Hypermethylated MAL gene - a silent marker of early colon tumorigenesis. **2008**, 6, 13	38
840	Genomic and epigenetic instability in colorectal cancer pathogenesis. **2008**, 135, 1079-99	666

839	An inactivating mutation in HDAC2 leads to dysregulation of apoptosis mediated by APAF1. **2008**, 135, 1654-1664.e2		42
838	Immunohistochemistry versus microsatellite instability testing for screening colorectal cancer patients at risk for hereditary nonpolyposis colorectal cancer syndrome. Part II. The utility of microsatellite instability testing. **2008**, 10, 301-7		141
837	Hypermethylation analysis of mismatch repair genes (hmlh1 and hmsh2) in locally advanced breast cancers in Indian women. **2008**, 39, 672-80		15
836	Germinal center B-cell-associated DNA hypomethylation at transcriptional regions of the AID gene. **2008**, 45, 1712-9		20
835	A microRNA DNA methylation signature for human cancer metastasis. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 13556-61	11.5	890
834	Associations of dietary methyl donor intake with MLH1 promoter hypermethylation and related molecular phenotypes in sporadic colorectal cancer. **2008**, 29, 1765-73		74
833	A prospective, multicenter, population-based study of BRAF mutational analysis for Lynch syndrome screening. **2008**, 6, 206-14		71
832	A Phase II Clinical Trial of Oral Valproic Acid in Patients with Castration-Resistant Prostate Cancers Using an Intensive Biomarker Sampling Strategy. **2008**, 1, 141-7		28
831	Syndromic colon cancer: lynch syndrome and familial adenomatous polyposis. **2008**, 37, 47-72, vi		25
830	Microsatellite instability and the association with plasma homocysteine and thymidylate synthase in colorectal cancer. **2008**, 26, 583-9		10
829	Senescence-dependent MutS alpha dysfunction attenuates mismatch repair. **2008**, 6, 978-89		17
828	Integrated analysis of chromosomal, microsatellite and epigenetic instability in colorectal cancer identifies specific associations between promoter methylation of pivotal tumour suppressor and DNA repair genes and specific chromosomal alterations. **2008**, 29, 434-9		54
827	MLH1 promoter germline-methylation in selected probands of Chinese hereditary non-polyposis colorectal cancer families. **2008**, 14, 7329-34		17
826	Expression of the hMLH1 gene is a possible predictor for the clinical response to 5-fluorouracil after a surgical resection in colorectal cancer. **2008**,		
825	Epigenetics of cancer progression. **2008**, 9, 215-34		73
824	Application of DNA methylation biomarkers for endometrial cancer management. **2008**, 8, 607-16		23
823	Molecular characterization of MSI-H colorectal cancer by MLHI promoter methylation, immunohistochemistry, and mismatch repair germline mutation screening. *Cancer Epidemiology Biomarkers and Prevention*, **2008**, 17, 3208-15	4	171
822	High prevalence of Foxp3 and IL17 in MMR-proficient colorectal carcinomas. **2008**, 57, 772-9		159

821	[Lynch syndrome I: a case report]. **2008**, 61, 79-82		
820	Principles of Molecular Oncology. **2008**,		1
819	ESR1 promoter hypermethylation does not predict atypia in RPFNA nor persistent atypia after 12 months tamoxifen chemoprevention. *Cancer Epidemiology Biomarkers and Prevention*, **2008**, 17, 1884-90[4]		10
818	Genetic instability caused by loss of MutS homologue 3 in human colorectal cancer. **2008**, 68, 8465-72		118
817	Innovative Leukemia and Lymphoma Therapy. **2008**,		
816	Genetic clustering of clear cell renal cell carcinoma based on array-comparative genomic hybridization: its association with DNA methylation alteration and patient outcome. **2008**, 14, 5531-9		44
815	Hereditary Gynecologic Cancer. **2008**,		2
814	Epigenetic markers in human gliomas: prospects for therapeutic intervention. **2008**, 8, 1475-96		4
813	[Hereditary nonpolyposis colorectal carcinoma: state of the art]. **2008**, 133, 1690-5		2
812	Genetic classification of ovarian carcinoma based on microsatellite analysis: Relationship to clinicopathological features and patient survival. **2008**,		1
811	Chromatin remodeling agents for cancer therapy. **2008**, 3, 192-203		16
810	Colorectal Cancer â□Increased Multidimensional Understanding of the Molecular Genesis. **2008**, 4, 243-252		1
809	Cancer Genomics. **2008**, 267-282		
808	Mutation rates of TGFBR2 and ACVR2 coding microsatellites in human cells with defective DNA mismatch repair. *PLoS ONE*, **2008**, 3, e3463	3.7	22
807	Inhibition of DNA repair as a therapeutic target. **2008**, 284-304		
806	Loss of Heterozygosity Combined with Promoter Hypermethylation, the Main Mechanism of Human MutL Homolog (hMLH1) Gene Inactivation in Non-Small Cell Lung Cancer in a Chinese Population. **2009**, 95, 488-494		9
805	Analysis of candidate target genes for mononucleotide repeat mutation in microsatellite instability-high (MSI-H) endometrial cancer. **2009**, 35, 977-82		13
804	Azacitidine: A Review of its Use in the Management of Myelodysplastic Syndromes. **2009**, 1, CMT.S1163		

803	Avaliação da expressão tecidual do gene de reparo MLH1 e dos níveis de dano oxidativo ao DNA em doentes com cáncer colorretal. **2009**, 29, 303-313		3
802	Distinct high-profile methylated genes in colorectal cancer. *PLoS ONE*, **2009**, 4, e7012	3.7	111
801	Microsatellite instability at tetranucleotide repeats in sporadic colorectal cancer in Japan. **2009**, 23,		1
800	Label-free analysis of DNA methylation using optofluidic ring resonators. **2009**, 2009, 2760-2		
799	Differential antineoplastic effects of butyrate in cells with and without a functioning DNA mismatch repair. **2010**, 62, 105-15		13
798	Distinct BRAF (V600E) and KRAS mutations in high microsatellite instability sporadic colorectal cancer in African Americans. **2009**, 15, 1155-61		57
797	A tumor-protective role for human kallikrein-related peptidase 6 in breast cancer mediated by inhibition of epithelial-to-mesenchymal transition. **2009**, 69, 3779-87		73
796	Pharmacologic unmasking of epigenetically silenced genes in breast cancer. **2009**, 15, 1184-91		54
795	Chromosomally and microsatellite stable colorectal carcinomas without the CpG island methylator phenotype in a molecular classification. **2009**,		6
794	Epigenetic downregulation of the DNA repair gene MED1/MBD4 in colorectal and ovarian cancer. **2009**, 8, 94-100		34
793	Immunohistochemistry staining for the mismatch repair proteins in the clinical care of patients with colorectal cancer. **2009**, 11, 812-7		41
792	Clinical implications of microsatellite instability and MLH1 gene inactivation in sporadic insulinomas. **2009**, 94, 3448-57		38
791	Implications of familial colorectal cancer risk profiles and microsatellite instability status. *Journal of Clinical Oncology*, **2009**, 27, 2238-44	2.2	27
790	DNA Methylation in Colorectal Cancer: Multiple Facets of Tumorigenesis. **2009**, 73-95		
789	Comprehensive molecular analysis of mismatch repair gene defects in suspected Lynch syndrome (hereditary nonpolyposis colorectal cancer) cases. **2009**, 69, 7053-61		35
788	Gene expression patterns in mismatch repair-deficient colorectal cancers highlight the potential therapeutic role of inhibitors of the phosphatidylinositol 3-kinase-AKT-mammalian target of rapamycin pathway. **2009**, 15, 2829-39		52
787	Epigenetic deregulation of DNA repair and its potential for therapy. **2009**, 15, 5026-31		49
786	Inactivation of RASSF1A, RARbeta2 and DAP-kinase by promoter methylation correlates with lymph node metastasis in nasopharyngeal carcinoma. **2009**, 8, 444-51		46

785	An interstitial deletion at 3p21.3 results in the genetic fusion of MLH1 and ITGA9 in a Lynch syndrome family. **2009**, 15, 762-9	12
784	DNA mismatch binding and antiproliferative activity of rhodium metalloinsertors. **2009**, 131, 2359-66	64
783	Microsatellite instability-low colorectal cancer acquires a KRAS mutation during the progression from Dukes' A to Dukes' B. **2009**, 30, 494-9	58
782	Microsatellite instability in colorectal cancer and association with thymidylate synthase and dihydropyrimidine dehydrogenase expression. **2009**, 9, 25	26
781	Promoter methylation of SFRPs gene family in cervical cancer. **2009**, 112, 301-6	51
780	Current and emerging trends in Lynch syndrome identification in women with endometrial cancer. **2009**, 114, 128-34	75
779	A MLH1 polymorphism that increases cancer risk is associated with better outcome in sporadic colorectal cancer. **2009**, 193, 71-7	21
778	Epigenetics and cancer treatment. **2009**, 625, 131-42	167
777	Microsatellite instability, MLH1 promoter methylation, and BRAF mutation analysis in sporadic colorectal cancers of different ethnic groups in Israel. **2009**, 115, 760-9	31
776	Prognostic implications of CpG island hypermethylator phenotype in colorectal cancers. **2009**, 455, 485-94	111
775	Recent advances in colorectal cancer genetics and diagnostics. **2009**, 69, 45-55	39
774	Screening for germline mutations of MLH1, MSH2, MSH6 and PMS2 genes in Slovenian colorectal cancer patients: implications for a population specific detection strategy of Lynch syndrome. **2009**, 8, 421-9	19
773	Methylation of estrogen receptor 1 in colorectal adenomas is not age-dependent, but is correlated with K-ras mutation. **2009**, 100, 1005-11	6
772	Plenary lectures. **2009**, 32, 1-10	35
771	Tumor-infiltrating lymphocytes in colorectal cancers with microsatellite instability are correlated with the number and spectrum of frameshift mutations. **2009**, 22, 1186-95	115
770	Heritable somatic methylation and inactivation of MSH2 in families with Lynch syndrome due to deletion of the 3' exons of TACSTD1. **2009**, 41, 112-7	563
769	A TARBP2 mutation in human cancer impairs microRNA processing and DICER1 function. **2009**, 41, 365-70	317
768	Genetic prognostic and predictive markers in colorectal cancer. **2009**, 9, 489-99	517

767	DLEC1 is a functional 3p22.3 tumour suppressor silenced by promoter CpG methylation in colon and gastric cancers. **2009**, 100, 663-9	50
766	The context and potential of epigenetics in oncology. **2009**, 100, 571-7	84
765	Differential expression of hMLH1 in sporadic human colorectal cancer tumors and distant metastases. **2009**, 117, 839-48	2
764	MGMT and MLH1 promoter methylation versus APC, KRAS and BRAF gene mutations in colorectal cancer: indications for distinct pathways and sequence of events. **2009**, 20, 1216-22	46
763	Enzymatic methylation of DNA in cultured human cells studied by stable isotope incorporation and mass spectrometry. **2009**, 22, 1060-8	12
762	Constitutional (germline) MLH1 epimutation as an aetiological mechanism for hereditary non-polyposis colorectal cancer. **2009**, 46, 793-802	98
761	Sebaceous lesions and their associated syndromes: part II. **2009**, 61, 563-78; quiz 579-80	54
760	Molecular origins of cancer: Molecular basis of colorectal cancer. **2009**, 361, 2449-60	1331
759	DNA methylation changes in prostate cancer: current developments and future clinical implementation. **2009**, 9, 243-57	53
758	Alteration of transcriptional profile in human bronchial epithelial cells induced by cigarette smoke condensate. **2009**, 190, 23-31	13
757	Methylation and protein expression of DNA repair genes: association with chemotherapy exposure and survival in sporadic ovarian and peritoneal carcinomas. **2009**, 8, 48	77
756	Molecular, Clinical and Environmental Toxicology. **2009**,	10
755	Utility of gene promoter methylation in prediction of response to platinum-based chemotherapy in epithelial ovarian cancer (EOC). **2009**, 27, 877-84	38
754	Genetics of Colorectal Cancer. **2009**,	4
753	WITHDRAWN: Classification of colorectal carcinoma obtained from the combination of DNA ploidy and genetic alterations serves as a significant prognostic factor. **2009**, 1	1
752	Effect of DNA repair host factors on temozolomide or dacarbazine melanoma treatment in Caucasians. **2009**, 19, 760-9	5
751	Label-free DNA methylation analysis using the optofluidic ring resonator sensor. **2009**,	
750	Colon cancer in a 16-year-old girl: signet-ring cell carcinoma without microsatellite instability--an unusual suspect. **2009**, 48, 110-4	2

749	Evolving views of DNA replication (in)fidelity. **2009**, 74, 91-101	115
748	Analysis of a correlation between the BRAF V600E mutation and abnormal DNA mismatch repair in patients with sporadic endometrial cancer. **2009**, 34, 1541-7	19
747	Efficient molecular screening of Lynch syndrome by specific 3' promoter methylation of the MLH1 or BRAF mutation in colorectal cancer with high-frequency microsatellite instability. **2009**, 21, 1577-83	20
746	Colorectal cancer susceptibility associated with the hMLH1 V384D variant. **2009**, 2, 887-91	11
745	Colorectal cancer due to deficiency in DNA mismatch repair function: a review. **2009**, 16, 405-17	110
744	The 10q25.3-26.1 G protein-coupled receptor gene GPR26 is epigenetically silenced in human gliomas. **2009**, 35, 1123-31	8
743	Aberrant DNA methylation in malignant melanoma. **2010**, 20, 253-65	63
742	Cytosine methyltransferases as tumor markers. **2010**, 11, 568-77	3
741	Strategies for detecting genomic DNA methylation: a survey of US patents. **2010**, 4, 79-85	3
740	hMLH1 promoter methylation and JC virus T antigen presence in the tumor tissue of colorectal cancer Israeli patients of different ethnic groups. **2010**, 22, 938-41	10
739	Absence of hMLH1 or hMSH2 expression as a stage-dependent prognostic factor in sporadic colorectal cancers. **2010**, 17, 2839-46	10
738	Clinical impact of microsatellite instability in colon cancer following adjuvant FOLFOX therapy. **2010**, 66, 659-67	67
737	Association of polymorphisms MTHFR C677T and A1298C with risk of colorectal cancer, genetic and epigenetic characteristic of tumors, and response to chemotherapy. **2010**, 25, 141-51	45
736	Microsatellite instability of the colorectal carcinoma can be predicted in the conventional pathologic examination. A prospective multicentric study and the statistical analysis of 615 cases consolidate our previously proposed logistic regression model. **2010**, 456, 533-41	14
735	The effect of DNA mismatch repair (MMR) status on oxaliplatin-based first-line chemotherapy as in recurrent or metastatic colon cancer. **2010**, 27, 1277-85	22
734	DNA methylation markers in colorectal cancer. **2010**, 29, 181-206	224
733	Selection of patients with germline MLH1 mutated Lynch syndrome by determination of MLH1 methylation and BRAF mutation. **2010**, 9, 167-72	42
732	Mismatch repair protein expression and colorectal cancer in Hispanics from Puerto Rico. **2010**, 9, 155-66	29

731	MYH biallelic mutation can inactivate the two genetic pathways of colorectal cancer by APC or MLH1 transversions. **2010**, 9, 589-94	29
730	Genotype to phenotype: analyzing the effects of inherited mutations in colorectal cancer families. **2010**, 693, 32-45	44
729	Methods for genome-wide analysis of DNA methylation in intestinal tumors. **2010**, 693, 77-83	8
728	Detection of genetic alterations in hereditary colorectal cancer screening. **2010**, 693, 19-31	29
727	Epigenetic inheritance in mammals: evidence for the impact of adverse environmental effects. **2010**, 39, 61-5	117
726	Taiwan hospital-based detection of Lynch syndrome distinguishes 2 types of microsatellite instabilities in colorectal cancers. **2010**, 147, 720-8	24
725	Molecular targets of epigenetic regulation and effectors of environmental influences. **2010**, 245, 378-93	94
724	A review on the molecular diagnostics of Lynch syndrome: a central role for the pathology laboratory. **2010**, 14, 181-97	54
723	Simulated microgravity-induced epigenetic changes in human lymphocytes. **2010**, 111, 123-9	42
722	Epigenetics and Tumorigenesis. **2010**, 179-194	0
721	What an epigenome remembers. **2010**, 32, 659-68	46
720	Aberrant methylation of DNA mismatch repair genes in elderly patients with sporadic gastric carcinoma: A comparison with younger patients. **2010**, 101, 28-35	26
719	Adenoma incidence after resection of sporadic colorectal cancer with microsatellite instability. **2010**, 101, 577-81	5
718	Aberrant DNA methylation occurs in colon neoplasms arising in the azoxymethane colon cancer model. **2010**, 49, 94-103	33
717	Epigenetic modifications in AML and MDS. **2010**, 34, 139-40	5
716	Mismatch repair and the downstream target genes, PAX5 and Ikaros, in childhood acute lymphoblastic leukemia. **2010**, 34, 1098-102	5
715	Label-free DNA methylation analysis using opto-fluidic ring resonators. **2010**, 26, 1016-20	45
714	Immunoprecipitation of nucleosomal DNA is a novel procedure to improve the sensitivity of serum screening for the p16 hypermethylation associated with colon cancer. **2010**, 34, 194-9	13

713	Expression of DNA mismatch repair proteins and MSH2 polymorphisms in nonmelanoma skin cancers of organ transplant recipients. **2010**, 162, 732-42		10
712	Flanking sequence specificity determines coding microsatellite heteroduplex and mutation rates with defective DNA mismatch repair (MMR). **2010**, 29, 2172-80		13
711	CpG island hypermethylation-associated silencing of non-coding RNAs transcribed from ultraconserved regions in human cancer. **2010**, 29, 6390-401		158
710	Semiquantitative assessment of immunohistochemistry for mismatch repair proteins in Lynch syndrome. **2010**, 56, 331-44		24
709	Structural and functional features of the 5-methylcytosine distribution in the eukaryotic genome. **2010**, 44, 171-185		9
708	Hypermethylation downregulates Runx3 gene expression and its restoration suppresses gastric epithelial cell growth by inducing p27 and caspase3 in human gastric cancer. **2010**, 25, 823-31		41
707	Epigenomics in cancer management. **2010**, 255		38
706	Current concepts in the pathology and epigenetics of endometrial carcinoma. **2010**, 42, 613-7		15
705	Somatic hypermethylation of MSH2 is a frequent event in Lynch Syndrome colorectal cancers. **2010**, 70, 3098-108		146
704	Case-control study of overweight, obesity, and colorectal cancer risk, overall and by tumor microsatellite instability status. **2010**, 102, 391-400		133
703	Hereditary Colorectal Cancer. **2010**,		
702	DNA mismatch repair and adjuvant chemotherapy in sporadic colon cancer. **2010**, 7, 174-7		55
701	Clinical relevance of microsatellite instability in colorectal cancer. *Journal of Clinical Oncology*, **2010**, 28, 3380-7	2.2	220
700	Inheritance of epigenetic aberrations (constitutional epimutations) in cancer susceptibility. **2010**, 70, 201-43		40
699	Modulation of mismatch repair and genomic stability by miR-155. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 6982-7	11.5	267
698	Current hypotheses on how microsatellite instability leads to enhanced survival of Lynch Syndrome patients. **2010**, 2010, 170432		46
697	A ten markers panel provides a more accurate and complete microsatellite instability analysis in mismatch repair-deficient colorectal tumors. **2010**, 6, 49-61		19
696	Role of histone modifications and DNA methylation in the regulation of O6-methylguanine-DNA methyltransferase gene expression in human stomach cancer cells. **2010**, 28, 331-9		11

695	Oxidative stress and DNA methylation in prostate cancer. **2010**, 2010, 302051	105
694	DNA methylation in endometrial cancer. **2010**, 5, 491-8	64
693	DNA demethylating antineoplastic strategies: a comparative point of view. **2010**, 1, 197-209	28
692	Characterization of rectal, proximal and distal colon cancers based on clinicopathological, molecular and protein profiles. **2010**, 37, 707-18	138
691	Enhanced growth inhibition by combined DNA methylation/HDAC inhibitors in lung tumor cells with silenced CDKN2A. **2010**, 37, 963-71	10
690	Cyclin E and histone H3 levels are regulated by 5-fluorouracil in a DNA mismatch repair-dependent manner. **2010**, 10, 1147-56	9
689	A novel and rapid method of determining the effect of unclassified MLH1 genetic variants on differential allelic expression. **2010**, 12, 757-64	8
688	Molecular Testing in Colorectal Carcinoma. **2010**, 3, 429-45	1
687	Epigenetic drivers of genetic alterations. **2010**, 70, 309-23	47
686	Epigenetic alterations as cancer diagnostic, prognostic, and predictive biomarkers. **2010**, 71, 125-76	69
685	Polymorphisms in genes involved in folate metabolism and plasma DNA methylation in colorectal cancer patients. **2010**, 25,	4
684	Epigenetics of Colorectal Cancer. **2010**, 101-125	
683	Novel methylation panel for the early detection of colorectal tumors in stool DNA. **2010**, 9, 168-76	52
682	The Role of the Epigenome in Human Cancers. **2010**, 471-486	
681	Microsatellite instability with promoter methylation and silencing of hMLH1 can regionally occur during progression of gastric carcinoma. **2010**, 297, 244-51	30
680	Microsatellite instability in colorectal cancer-the stable evidence. **2010**, 7, 153-62	522
679	Molecular markers to individualize adjuvant therapy for colon cancer. **2010**, 7, 318-25	54
678	Development of sporadic microsatellite instability in colorectal tumors involves hypermethylation at methylated-in-tumor loci in adenoma. **2010**, 177, 2347-56	12

677	Methylation analysis of MLH1 improves the selection of patients for genetic testing in Lynch syndrome. **2010**, 12, 498-504		52
676	Epigenetic changes in the myelodysplastic syndrome. **2010**, 24, 317-30		80
675	Epigenetics of Aging. **2010**,		4
674	KRAS signaling pathway alterations in microsatellite unstable gastrointestinal cancers. **2010**, 109, 123-43		10
673	DNA methylation profiling in acute myeloid leukemia: from recent technological advances to biological and clinical insights. **2010**, 6, 1415-31		15
672	Capillary Electrophoresis. **2010**, 59-73		
671	Insights into the role of DNA methylation in disease through the use of mouse models. **2010**, 3, 290-7		28
670	Role of Histone Modifications and DNA Methylation in the Regulation of O6-Methylguanine-DNA Methyltransferase Gene Expression in Human Stomach Cancer Cells. **2010**, 28, 331-339		19
669	Adjuvant Treatment and Predictors of Response in Colon Cancer. **2011**, 22, 131-136		
668	Selected Topics in the Molecular Pathology of Endometrial Carcinoma. **2011**, 4, 131-47		1
667	Colorectal cancer epigenetics: complex simplicity. *Journal of Clinical Oncology*, **2011**, 29, 1382-91	2.2	158
666	Cancer epigenetics: linking basic biology to clinical medicine. **2011**, 21, 502-17		223
665	Genome-wide epigenetic modifications in cancer. **2011**, 67, 25-49		35
664	DNA methylation changes in cancer. **2011**, 101, 447-57		15
663	Epigenetic Alteration by DNA Promoter Hypermethylation of Genes Related to Transforming Growth Factor-[TGF-]Signaling in Cancer. *Cancers*, **2011**, 3, 982-93	6.6	11
662	Genetic Epidemiology. **2011**,		2
661	Unraveling the genetics of cancer: genome sequencing and beyond. **2011**, 12, 407-30		73
660	Genetic instability in cancer. **2011**,		1

659	Stool and Blood Sampling for Early Detection of Colorectal Cancer. **2011**, 93-105		
658	Hyperplastic polyps are innocuous lesions in hereditary nonpolyposis colorectal cancers. **2011**, 2011, 653163		2
657	Chromosome 3 anomalies investigated by genome wide SNP analysis of benign, low malignant potential and low grade ovarian serous tumours. *PLoS ONE*, **2011**, 6, e28250	3.7	69
656	Clinical significance of UNC5B expression in colorectal cancer. **2012**, 40, 209-16		32
655	Effect of classification based on combination of mutation and methylation in colorectal cancer prognosis. **2011**, 25, 789-94		42
654	Identification of GABRA1 and LAMA2 as new DNA methylation markers in colorectal cancer. **2012**, 40, 889-98		16
653	Interpretation of genetic testing for lynch syndrome in patients with putative familial colorectal cancer. **2011**, 9, 1311-20		7
652	Epigenetic mechanisms in senescence, immortalisation and cancer. **2011**, 86, 443-55		13
651	Body mass index in early adulthood and colorectal cancer risk for carriers and non-carriers of germline mutations in DNA mismatch repair genes. **2011**, 105, 162-9		40
650	Reactive oxygen species (ROS)--induced genetic and epigenetic alterations in human carcinogenesis. **2011**, 711, 167-73		361
649	Dissecting DNA hypermethylation in cancer. **2011**, 585, 2078-86		58
648	Dominantly inherited constitutional epigenetic silencing of MLH1 in a cancer-affected family is linked to a single nucleotide variant within the 5'UTR. **2011**, 20, 200-13		136
647	MLH1 promoter methylation, diet, and lifestyle factors in mismatch repair deficient colorectal cancer patients from EPIC-Norfolk. **2011**, 63, 1000-10		26
646	Epigenomic analysis of aberrantly methylated genes in colorectal cancer identifies genes commonly affected by epigenetic alterations. **2011**, 18, 2338-47		121
645	Epigenetic variation. **2011**, 713, 185-97		
644	Promoter methylation status of hMLH1, hMSH2, and MGMT genes in colorectal cancer associated with adenoma-carcinoma sequence. **2011**, 396, 1017-26		27
643	Microsatellite instability in colorectal cancer: from molecular oncogenic mechanisms to clinical implications. **2011**, 34, 155-76		42
642	Association between hMLH1 hypermethylation and JC virus (JCV) infection in human colorectal cancer (CRC). *Clinical Epigenetics*, **2011**, 2, 1-5	7.7	8

641	Gene expression of the mismatch repair gene MSH2 in primary colorectal cancer. **2011**, 32, 977-83		6
640	Distinct DNA methylation epigenotypes in bladder cancer from different Chinese sub-populations and its implication in cancer detection using voided urine. **2011**, 4, 45		34
639	Epigenetics, Nutrition, and Cancer. **2011**, 127-143		
638	Preinvasive colorectal lesion transcriptomes correlate with endoscopic morphology (polypoid vs. nonpolypoid). **2011**, 3, 334-47		28
637	Intensity-dependent constitutional MLH1 promoter methylation leads to early onset of colorectal cancer by affecting both alleles. **2011**, 50, 178-85		18
636	Evidence for an hMSH3 defect in familial hamartomatous polyps. **2011**, 117, 492-500		19
635	The role of epigenetic transcription repression and DNA methyltransferases in cancer. **2011**, 117, 677-87		78
634	Relative role of methylator and tumor suppressor pathways in ulcerative colitis-associated colon cancer. **2011**, 17, 1966-70		29
633	De novo constitutional MLH1 epimutations confer early-onset colorectal cancer in two new sporadic Lynch syndrome cases, with derivation of the epimutation on the paternal allele in one. *International Journal of Cancer*, **2011**, 128, 869-78	7.5	68
632	MSI phenotype and MMR alterations in familial and sporadic gastric cancer. *International Journal of Cancer*, **2011**, 128, 1606-13	7.5	46
631	Sessile serrated adenomas and classical adenomas: an epigenetic perspective on premalignant neoplastic lesions of the gastrointestinal tract. *International Journal of Cancer*, **2011**, 129, 1889-98	7.5	41
630	Prognostic and predictive impact of DNA mismatch repair in the management of colorectal cancer. **2011**, 7, 467-74		18
629	Moving closer to a prognostic DNA methylation signature in colon cancer. **2011**, 17, 1215-7		13
628	Alterations of copy number of methylation pattern in mismatch repair genes by methylation specific-multiplex ligation-dependent probe amplification in cases of colon cancer. **2011**, 14, 25-34		
627	Epigenetics of kidney cancer and bladder cancer. **2011**, 3, 19-34		45
626	[HNPCC (hereditary non-polyposis colorectal cancer) or Lynch syndrome: a syndrome related to a failure of DNA repair system]. **2011**, 98, 323-36		4
625	The association between MLH1 -93 G>A polymorphism of DNA mismatch repair and cancer susceptibility: a meta-analysis. **2011**, 26, 667-73		13
624	Epigenetic changes of DNA repair genes in cancer. **2011**, 3, 51-8		134

623	Hypoxia-induced epigenetic regulation and silencing of the BRCA1 promoter. **2011**, 31, 3339-50		102
622	Lynch syndrome. **2011**, 54, 199-214		22
621	DNMT1 deficiency triggers mismatch repair defects in human cells through depletion of repair protein levels in a process involving the DNA damage response. **2011**, 20, 3241-55		50
620	Inactivation of COX-2, HMLH1 and CDKN2A gene by promoter methylation in gastric cancer: relationship with histological subtype, tumor location and Helicobacter pylori genotype. **2011**, 78, 266-76		27
619	Organomegaly and tumors in transgenic mice with targeted expression of HpaII methyltransferase in smooth muscle cells. **2011**, 6, 333-43		6
618	DNA methylation in cancer development, diagnosis and therapy--multiple opportunities for genotoxic agents to act as methylome disruptors or remediators. **2011**, 26, 475-87		68
617	Transcriptionally repressed genes become aberrantly methylated and distinguish tumors of different lineages in breast cancer. *Proceedings of the National Academy of Sciences of the United States of America*, **2011**, 108, 4364-9	11.5	131
616	Distinct association between aberrant methylation of Wnt inhibitors and genetic alterations in acute myeloid leukaemia. **2011**, 105, 1927-33		25
615	Predictive and prognostic factors in colorectal cancer: a personalized approach. *Cancers*, **2011**, 3, 1622-38	8.6	26
614	Methylation of the 3p22 region encompassing MLH1 is representative of the CpG island methylator phenotype in colorectal cancer. **2011**, 24, 396-411		33
613	General aspects of colorectal cancer. **2012**, 2012, 139268		32
612	Genes and Cancer. **2012**, 561-596.e6		
611	Microsatellite instability in sarcoma: fact or fiction?. **2012**, 2012, 473146		11
610	CDK1 regulates mediator of DNA damage checkpoint 1 during mitotic DNA damage. **2012**, 72, 5448-53		12
609	Relative distribution of folate species is associated with global DNA methylation in human colorectal mucosa. **2012**, 5, 921-9		18
608	Methylation variable position profiles of hMLH1 promoter CpG islands in human sporadic colorectal carcinoma. **2012**, 21, 24-33		6
607	Proximal colon cancers and the serrated pathway: a systematic analysis of precursor histology and BRAF mutation status. **2012**, 25, 1423-31		36
606	Role of the microenvironment in the tumourigenesis of microsatellite unstable and MUTYH-associated polyposis colorectal cancers. **2012**, 27, 247-53		8

605	Age-associated DNA methylation in pediatric populations. **2012**, 22, 623-32		262
604	DNA methylation profiles delineate epigenetic heterogeneity in seminoma and non-seminoma. **2012**, 106, 414-23		42
603	Colon cancer-associated DNA polymerase δ variant induces genomic instability and cellular transformation. **2012**, 287, 23840-9		35
602	CpG island methylator phenotype-positive tumors in the absence of MLH1 methylation constitute a distinct subset of duodenal adenocarcinomas and are associated with poor prognosis. **2012**, 18, 4743-52		41
601	Circulating cell-free DNA: a promising marker of regional lymphonode metastasis in breast cancer patients. **2012**, 11, 89-98		57
600	Association of obesity with DNA mismatch repair status and clinical outcome in patients with stage II or III colon carcinoma participating in NCCTG and NSABP adjuvant chemotherapy trials. *Journal of Clinical Oncology*, **2012**, 30, 406-12	2.2	38
599	Cancer risks for the relatives of colorectal cancer cases with a methylated MLH1 promoter region: data from the Colorectal Cancer Family Registry. **2012**, 5, 328-35		9
598	Epigenetic regulation of kallikrein-related peptidases: there is a whole new world out there. **2012**, 393, 319-30		30
597	Asymptomatic synchronous quintuple primary cancers. **2012**, 74, 324-8		7
596	Human POLB gene is mutated in high percentage of colorectal tumors. **2012**, 287, 23830-9		62
595	Short-term folate supplementation in physiological doses has no effect on ESR1 and MLH1 methylation in colonic mucosa of individuals with adenoma. **2012**, 5, 327-38		11
594	DNA mismatch repair deficiency in breast carcinoma: a pilot study of triple-negative and non-triple-negative tumors. **2012**, 36, 1700-8		27
593	Epigenetic regulation and colorectal cancer. **2012**, 55, 96-104		34
592	Humans accumulate microsatellite instability with acquired loss of MLH1 protein in hematopoietic stem and progenitor cells as a function of age. **2012**, 120, 3229-36		25
591	DNA methylation biomarkers and their utility for solid cancer diagnostics. **2012**, 50, 1707-21		59
590	Epigenetic drug discovery: targeting DNA methyltransferases. **2012**, 17, 2-17		121
589	Methylation of the polycomb group target genes is a possible biomarker for favorable prognosis in colorectal cancer. *Cancer Epidemiology Biomarkers and Prevention*, **2012**, 21, 2069-75	4	23
588	DNA methylation pattern of the SLC25A43 gene in breast cancer. **2012**, 7, 300-6		13

587	Tissue of origin determines cancer-associated CpG island promoter hypermethylation patterns. **2012**, 13, R84	121
586	Das Lynch-Syndrom. **2012**, 34, 329-340	
585	Implication of the 2-microglobulin gene in the generation of tumor escape phenotypes. **2012**, 61, 1359-71	84
584	Application of Immunohistochemistry and Molecular Diagnostics to Clinically Relevant Problems in Endometrial Cancer Bojana Djordjevic, Shannon Westin, Russell R. Broaddus. **2012**, 5, 859-878	5
583	Relevance, pathogenesis, and testing algorithm for mismatch repair-defective colorectal carcinomas: a report of the association for molecular pathology. **2012**, 14, 91-103	131
582	Mechanism of mismatch recognition revealed by human MutS bound to unpaired DNA loops. **2011**, 19, 72-8	94
581	hMLH1 promoter hypermethylation and MSI status in human endometrial carcinomas with and without metastases. **2012**, 29, 889-900	18
580	Effects of environmental stressors on histone modifications and their relevance to carcinogenesis: a systematic review. **2012**, 42, 491-500	10
579	Molecular pathways: microsatellite instability in colorectal cancer: prognostic, predictive, and therapeutic implications. **2012**, 18, 1506-12	176
578	MSH3 protein expression and nodal status in MLH1-deficient colorectal cancers. **2012**, 18, 3142-53	17
577	Histone modifications as a pathogenic mechanism of colorectal tumorigenesis. **2012**, 44, 1276-89	36
576	DNA demethylation by 5-aza-2-deoxycytidine treatment abrogates 17 beta-estradiol-induced cell growth and restores expression of DNA repair genes in human breast cancer cells. **2012**, 316, 62-9	48
575	A systems biology approach to the global analysis of transcription factors in colorectal cancer. **2012**, 12, 331	21
574	Biomarkers in early-stage colorectal cancer: ready for prime time?. **2012**, 30 Suppl 2, 27-33	24
573	Smoking increases the risk for colorectal adenomas in patients with Lynch syndrome. **2012**, 142, 241-7	36
572	[DNA methylation defects in sporadic and hereditary colorectal cancer]. **2012**, 35, 480-7	3
571	The Epigenetics of Gastrointestinal Malignancies. **2012**, 8, 254-262	2
570	Epigenetic Modifications in Chemical Carcinogenesis. **2012**, 631-643	3

569	Association of genomic instability, and the methylation status of imprinted genes and mismatch-repair genes, with neural tube defects. **2012**, 20, 516-20		25
568	Frequent epigenetic silencing of the folate-metabolising gene cystathionine-beta-synthase in gastrointestinal cancer. *PLoS ONE*, **2012**, 7, e49683	3.7	38
567	Avaliaõ da expresso do gene MGMT nos tecidos normal e neoplsico de doentes com cncer colorretal. **2012**, 39, 48-53		4
566	Promoter CpG island methylation in colorectal cancer:. 306-322		
565	Mechanisms of GI Malignancies. **2012**, 2129-2155		1
564	Analysis of the role of hMLH1 hypermethylation and microsatellite instability in meningioma progression. **2012**, 11, 3933-41		4
563	Yield of routine molecular analyses in colorectal cancer patients â70 years to detect underlying Lynch syndrome. **2012**, 226, 764-74		52
562	Curcumin causes promoter hypomethylation and increased expression of FANCF gene in SiHa cell line. **2012**, 365, 29-35		33
561	Externalization of saw-tooth architecture in small serrated polyps implies the presence of methylation of IGFBP7. **2012**, 57, 1261-70		13
560	Lynch syndrome diagnostics: decision-making process for germ-line testing. **2012**, 14, 254-62		2
559	Lynch syndrome: clinical, pathological, and genetic insights. **2012**, 397, 513-25		13
558	The CpG island methylator phenotype in colorectal cancer: progress and problems. **2012**, 1825, 77-85		70
557	Increased promoter methylation of the immune regulatory gene SHP-1 in leukocytes of multiple sclerosis subjects. **2012**, 246, 51-7		53
556	Prdx1 deficiency in mice promotes tissue specific loss of heterozygosity mediated by deficiency in DNA repair and increased oxidative stress. **2012**, 735, 39-45		16
555	Interpretation of genome-wide infinium methylation data from ligated DNA in formalin-fixed, paraffin-embedded paired tumor and normal tissue. **2012**, 5, 117		26
554	Detection of DNA hypermethylation in remote media of patients with colorectal cancer: new biomarkers for colorectal carcinoma. **2012**, 33, 297-305		15
553	Pharmacokinetic and pharmacodynamic analysis of 5-aza-2'-deoxycytidine (decitabine) in the design of its dose-schedule for cancer therapy. *Clinical Epigenetics*, **2013**, 5, 3	7.7	143
552	Cancer of the Colon and Gastrointestinal Tract. **2013**, 1-35		

551	Correlation of MLH1 and MGMT expression and promoter methylation with genomic instability in patients with thyroid carcinoma. **2013**, 13, 79		18
550	Basic mechanics of DNA methylation and the unique landscape of the DNA methylome in metal-induced carcinogenesis. **2013**, 43, 493-514		95
549	Contributions of molecular analysis to the diagnosis and treatment of gastrointestinal neoplasms. **2013**, 30, 329-61		10
548	The hMLH1 promoter polymorphisms and cancer susceptibility in Asian populations: a meta-analysis. **2013**, 523, 199-204		6
547	Genomic insights into cancer-associated aberrant CpG island hypermethylation. **2013**, 12, 174-90		92
546	The CpG island methylator phenotype: what's in a name?. **2013**, 73, 5858-68		123
545	Prognostic impact of deficient DNA mismatch repair in patients with stage III colon cancer from a randomized trial of FOLFOX-based adjuvant chemotherapy. *Journal of Clinical Oncology*, **2013**, 31, 3664-72	2.2	192
544	BRAF V600E mutation analysis simplifies the testing algorithm for Lynch syndrome. **2013**, 140, 177-83		37
543	The landscape of microsatellite instability in colorectal and endometrial cancer genomes. **2013**, 155, 858-68		247
542	A Study of Cancer Heterogeneity: From Genetic Instability to Epigenetic Diversity in Colorectal Cancer. **2013**, 363-388		3
541	Epigenetic alterations in oncogenesis. Preface. **2013**, 754, v-vii		7
540	DNA Alterations in Lynch Syndrome. **2013**,		
539	Molecular Pathology of Neoplastic Gastrointestinal Diseases. **2013**,		2
538	Maintaining the unmethylated state. *Clinical Epigenetics*, **2013**, 5, 17	7.7	1
537	DNA methyltransferases, DNA damage repair, and cancer. **2013**, 754, 3-29		279
536	Diagnostic utility of MS-MLPA in DNA methylation profiling of adenocarcinomas and neuroendocrine carcinomas of the colon-rectum. **2013**, 462, 47-56		34
535	A multifactorial likelihood model for MMR gene variant classification incorporating probabilities based on sequence bioinformatics and tumor characteristics: a report from the Colon Cancer Family Registry. **2013**, 34, 200-9		70
534	SP1 mediates the link between methylation of the tumour suppressor miR-149 and outcome in colorectal cancer. **2013**, 229, 12-24		104

533	Deciphering the epigenetic network in colorectal cancer. **2013**, 229, 1-3	4
532	Molecular underpinning of extranodal NK/T-cell lymphoma. **2013**, 26, 57-74	54
531	Microsatellite instability status affects gene expression profiles in early onset colorectal cancer patients. **2013**, 185, 626-37	6
530	Genomic instability in pre-neoplastic colonic lesions. **2013**, 32, 5331-2	
529	Environmental toxicants, epigenetics, and cancer. **2013**, 754, 215-32	87
528	Therapeutic applications of PARP inhibitors: anticancer therapy and beyond. **2013**, 34, 1217-56	265
527	Interplay between the cancer genome and epigenome. **2013**, 153, 38-55	588
526	Mechanisms of Gastrointestinal Carcinogenesis. **2013**, 3-29	
525	DNA methylation and cancer development: molecular mechanism. **2013**, 67, 501-13	98
524	Predictive and Prognostic Biomarkers for Colorectal Cancer. **2013**, 131-162	2
523	The Role of Epimutations of the Mismatch Repair Genes in the Development of Lynch Syndrome Related Cancers. **2013**, 101-133	
522	Molecular Mechanisms and Functions of DNA Mismatch Repair. **2013**, 25-45	1
521	Mutations in Non-MMR Genes Modifying or Mimicking Lynch Syndrome Phenotype. **2013**, 135-169	
520	DNA methylome alterations in chemical carcinogenesis. **2013**, 334, 39-45	36
519	Aberrant promoter hypermethylation of PBRM1, BAP1, SETD2, KDM6A and other chromatin-modifying genes is absent or rare in clear cell RCC. **2013**, 8, 486-93	43
518	Promoter methylation status of the tumor suppressor gene SOX11 is associated with cell growth and invasion in nasopharyngeal carcinoma. **2013**, 13, 109	20
517	Regulation of MLH1 mRNA and protein expression by promoter methylation in primary colorectal cancer: a descriptive and prognostic cancer marker study. **2013**, 36, 411-9	17
516	The role of anti-inflammatory drugs in colorectal cancer. **2013**, 64, 131-44	87

515	Functional heterogeneity and heritability in CHO cell populations. **2013**, 110, 260-74		81
514	Therapeutic implications of DNA mismatch repair in adjuvant colorectal cancer chemotherapy. **2013**, 2, 51-59		1
513	Subsets of microsatellite-unstable colorectal cancers exhibit discordance between the CpG island methylator phenotype and MLH1 methylation status. **2013**, 26, 1013-22		19
512	Molecular pathways involved in colorectal cancer: implications for disease behavior and prevention. **2013**, 14, 16365-85		294
511	Clinicopathologic features of synchronous colorectal carcinoma: A distinct subset arising from multiple sessile serrated adenomas and associated with high levels of microsatellite instability and favorable prognosis. **2013**, 37, 1660-70		32
510	Population-based molecular screening for Lynch syndrome: implications for personalized medicine. *Journal of Clinical Oncology*, **2013**, 31, 2554-62	2.2	63
509	Molecular and clinical characteristics of MSH6 germline variants detected in colorectal cancer patients. **2013**, 30, 2909-16		14
508	Stool DNA testing for cancer surveillance in inflammatory bowel disease: an early view. **2013**, 6, 371-80		11
507	Epigenetic changes in colorectal cancer. **2013**, 32, 21-30		42
506	MLH1 promoter methylation frequency in colorectal cancer patients and related clinicopathological and molecular features. *PLoS ONE*, **2013**, 8, e59064	3.7	59
505	Translating mismatch repair mechanism into cancer care. **2014**, 15, 53-64		11
504	Clinical problems of colorectal cancer and endometrial cancer cases with unknown cause of tumor mismatch repair deficiency (suspected Lynch syndrome). **2014**, 7, 183-93		53
503	Inflammatory colonic carcinogenesis: a review on pathogenesis and immunosurveillance mechanisms in ulcerative colitis. **2014**, 20, 6774-85		63
502	Underexpression of miR-126 and miR-20b in hereditary and nonhereditary colorectal tumors. **2014**, 87, 58-66		27
501	Haplotype defined by the MLH1-93G/A polymorphism is associated with MLH1 promoter hypermethylation in sporadic colorectal cancers. **2014**, 7, 835		13
500	TFAP2E hypermethylation was associated with survival advantage in patients with colorectal cancer. **2014**, 140, 2119-27		11
499	Summary of microsatellite instability test results from laboratories participating in proficiency surveys: proficiency survey results from 2005 to 2012. **2014**, 138, 363-70		11
498	Molecular markers of carcinogenesis for risk stratification of individuals with colorectal polyps: a case-control study. **2014**, 7, 1023-34		3

497	Colorectal cancer: from the laboratory to the patient, a now indispensable step. **2014**, 79, 71-2		0
496	CHFR silencing or microsatellite instability is associated with increased antitumor activity of docetaxel or gemcitabine in colorectal cancer. *International Journal of Cancer*, **2014**, 134, 596-605	7.5	18
495	MLH1 constitutional and somatic methylation in patients with MLH1 negative tumors fulfilling the revised Bethesda criteria. **2014**, 9, 1431-8		19
494	Molecular Predictive and Prognostic Markers of Colorectal Carcinoma. **2014**, 19, 252-255		
493	Isocitrate dehydrogenase-1 is mutated in inflammatory bowel disease-associated intestinal adenocarcinoma with low-grade tubuloglandular histology but not in sporadic intestinal adenocarcinoma. **2014**, 38, 1147-56		26
492	Helicobacter pylori associated chronic gastritis, clinical syndromes, precancerous lesions, and pathogenesis of gastric cancer development. **2014**, 20, 5461-73		134
491	Epigenetic biomarkers: potential applications in gastrointestinal cancers. **2014**, 2014, 464015		21
490	The epigenome and cancer prevention: A complex story of dietary supplementation. **2014**, 342, 275-84		18
489	Serrated lesions of the appendix frequently harbor KRAS mutations and not BRAF mutations indicating a distinctly different serrated neoplastic pathway in the appendix. **2014**, 45, 227-35		43
488	A dual-fluorescent reporter facilitates identification of thiol compounds that suppress microsatellite instability induced by oxidative stress. **2014**, 69, 86-95		2
487	Inter-individual variation in DNA repair capacity: a need for multi-pathway functional assays to promote translational DNA repair research. **2014**, 19, 199-213		60
486	Role of the clinical pathology laboratory in the evaluation of endometrial carcinomas for Lynch syndrome. **2014**, 31, 195-204		6
485	Current Lynch syndrome tumor screening practices: a survey of genetic counselors. **2014**, 23, 38-47		40
484	Promoter methylation and immunohistochemical expression of hMLH1 and hMSH2 in sporadic colorectal cancer: a study from India. **2014**, 35, 3679-87		16
483	Epigenetic alterations in sporadic basal cell carcinomas. **2014**, 306, 561-9		7
482	Reduced migration of MLH1 deficient colon cancer cells depends on SPTAN1. **2014**, 13, 11		20
481	Utility of MS-MLPA in DNA methylation profiling in primary laryngeal squamous cell carcinoma. **2014**, 50, 291-7		11
480	The multifaceted role of the intestinal microbiota in colon cancer. **2014**, 54, 309-20		215

479	Inhibition of DNA Repair as a Therapeutic Target. **2014**, 193-237	
478	Genomics of Colorectal Cancer. **2014**, 247-264	2
477	Colorectal cancer. **2014**, 383, 1490-1502	1879
476	Epigenetic primer for diagnostic applications: a window into personalized medicine. **2014**, 11, 323-337	2
475	Prognostic Impact of Deficient DNA Mismatch Repair and Mutations in , and in Patients with Lymph Node-Positive Colon Cancer. **2014**, 10, 346-353	6
474	DNA damage response genes and the development of cancer metastasis. **2014**, 181, 111-30	170
473	Evaluating the sensitivity of hybridization-based epigenotyping using a methyl binding domain protein. **2014**, 139, 3695-701	19
472	DNA Methylation and Colorectal Cancer. **2014**, 10, 425-430	33
471	Induction of complete and mosaic sex-linked recessive lethal mutations by cigarette smoke filtrate in Drosophila melanogaster. **2014**, 37, 163-8	2
470	Silencing of the DNA mismatch repair gene MLH1 induced by hypoxic stress in a pathway dependent on the histone demethylase LSD1. **2014**, 8, 501-13	46
469	Epigenetic regulation in cancer progression. **2014**, 4, 45	78
468	Prognostic value of CpG island methylator phenotype among colorectal cancer patients: a systematic review and meta-analysis. **2014**, 25, 2314-2327	118
467	Cancer: evolution within a lifetime. **2014**, 48, 215-36	146
466	Establishing a biological profile for interval colorectal cancers. **2014**, 59, 2390-402	12
465	Genetics, biomarkers, hereditary cancer syndrome diagnosis, heterogeneity and treatment: a review. **2014**, 15, 429-42	16
464	Environmental Exposure and Tumor Heterogeneity in Colorectal Cancer Risk and Outcomes. **2014**, 10, 94-104	10
463	Promoter methylation status of MGMT, hMSH2, and hMLH1 and its relationship to corresponding protein expression and TP53 mutations in human esophageal squamous cell carcinoma. **2014**, 31, 784	18
462	Aberrant DNA methylation of integrin 4 in human breast cancer. **2014**, 35, 7079-84	6

461	Differentiating Lynch-like from Lynch syndrome. **2014**, 146, 602-4		81
460	Clinicopathologic characteristics of colorectal cancer with microsatellite instability. **2014**, 210, 98-104		11
459	A Phase I Protocol of Hydralazine and Valproic Acid in Advanced, Previously Treated Solid Cancers. **2014**, 7, 349-349		23
458	Harnessing the potential of epigenetic therapy to target solid tumors. **2014**, 124, 56-63		106
457	Should mismatch repair status be determined in all stage II and III colon cancer patients?. **2014**, 3, 321-329		
456	Epigenetic changes of TIMP-3, GSTP-1 and 14-3-3 sigma genes as indication of status of chronic inflammation and cancer. **2014**, 29, e208-14		8
455	ACOG Practice Bulletin No. 147: Lynch syndrome. **2014**, 124, 1042-1054		107
454	Colorectal cancer: From the laboratory to the patient, a now indispensable step. **2014**, 79, 71-72		
453	Cellular Uptake of Decitabine by Equilibrative Nucleoside Transporters in HCT116 Cells. **2015**, 38, 1113-9		12
452	Colorectal Cancers with the Uncommon Findings of KRAS Mutation and Microsatellite Instability. **2015**, 146, 261-7		2
451	Meta-analysis of genome-wide association studies identifies common susceptibility polymorphisms for colorectal and endometrial cancer near SH2B3 and TSHZ1. **2015**, 5, 17369		27
450	Integrative DNA methylation and gene expression analysis to assess the universality of the CpG island methylator phenotype. **2015**, 9, 26		10
449	Microsatellite instability use in mismatch repair gene sequence variant classification. **2015**, 6, 150-62		7
448	DNA mismatch repair-related protein loss as a prognostic factor in endometrial cancers. **2015**, 26, 40-5		54
447	Lynch syndrome and Lynch syndrome mimics: The growing complex landscape of hereditary colon cancer. **2015**, 21, 9253-61		118
446	PD-1 Blockade in Tumors with Mismatch-Repair Deficiency. **2015**, 372, 2509-20		5560
445	Phosphorylation of PCNA by EGFR inhibits mismatch repair and promotes misincorporation during DNA synthesis. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 5667-72	11.5	46
444	Microsatellite instability testing and its role in the management of colorectal cancer. **2015**, 16, 30		219

443	Molecular markers for colorectal cancer screening. **2015**, 64, 1485-94	78
442	MicroRNA Expression Profile Reveals miR-17-92 and miR-143-145 Cluster in Synchronous Colorectal Cancer. **2015**, 94, e1297	20
441	MLH1. **2015**, 1-10	
440	Combined methylation of p16 and hMLH1 (CMETH2) discriminates a subpopulation with better prognosis in colorectal cancer patients with microsatellite instability tumors. **2015**, 36, 3853-61	5
439	DNA methylation of channel-related genes in cancers. **2015**, 1848, 2621-8	38
438	Left-sided early-onset vs late-onset colorectal carcinoma: histologic, clinical, and molecular differences. **2015**, 143, 374-84	7
437	Applying public health screening criteria: how does universal newborn screening compare to universal tumor screening for Lynch syndrome in adults with colorectal cancer?. **2015**, 24, 409-20	6
436	Genetics and Genetic Biomarkers in Sporadic Colorectal Cancer. **2015**, 149, 1177-1190.e3	259
435	Instability of a dinucleotide repeat in the 3'-untranslated region (UTR) of the microsomal prostaglandin E synthase-1 (mPGES-1) gene in microsatellite instability-high (MSI-H) colorectal carcinoma. **2015**, 9, 1252-8	2
434	Transforming growth factor β type II receptor as a marker in diffuse large B cell lymphoma. **2015**, 36, 9903-8	6
433	Lipoic acid inhibits the DNA repair protein O 6-methylguanine-DNA methyltransferase (MGMT) and triggers its depletion in colorectal cancer cells with concomitant autophagy induction. **2015**, 36, 817-31	29
432	Interleukin 6 alters localization of hMSH3, leading to DNA mismatch repair defects in colorectal cancer cells. **2015**, 148, 579-89	64
431	The effects of folic acid on global DNA methylation and colonosphere formation in colon cancer cell lines. **2015**, 26, 818-26	48
430	Translational Considerations on the Outlook of Immunotherapy for Colorectal Cancer. **2015**, 11, 92-97	4
429	Tumor and Patient Characteristics of Individuals with Mismatch Repair Deficient Colorectal Cancer. **2015**, 91, 286-93	7
428	Lynch syndrome: five unanswered questions. **2015**, 87, 503-6	5
427	Characterization and directed evolution of a methyl-binding domain protein for high-sensitivity DNA methylation analysis. **2015**, 28, 543-51	8
426	Prognostic and Predictive Biomarkers in Colorectal Cancer: Implications for the Clinical Surgeon. **2015**, 22, 3433-50	18

425	Epigenetics in breast and prostate cancer. **2015**, 1238, 425-66		60
424	Diagnosis and management of DNA mismatch repair-deficient colorectal cancer. **2015**, 29, 29-41		15
423	Association of high CD4-positive T cell infiltration with mutations in HLA class II-regulatory genes in microsatellite-unstable colorectal cancer. **2015**, 64, 357-66		24
422	Genomic Instability and Cancer Metastasis. **2015**,		1
421	Portrait of the PI3K/AKT pathway in colorectal cancer. **2015**, 1855, 104-21		148
420	Deacetylase inhibitors for the treatment of myelodysplastic syndromes. **2015**, 56, 1205-12		4
419	Higher frequency of isolated PMS2 loss in colorectal tumors in Colombian population: preliminary results. **2016**, Volume 8, 37-41		1
418	The clinicopathological significance of hMLH1 hypermethylation in non-small-cell lung cancer: a meta-analysis and literature review. **2016**, 9, 5081-90		9
417	The clinical value of aberrant epigenetic changes of DNA damage repair genes in human cancer. **2016**, 7, 37331-37346		59
416	Role of Deficient Mismatch Repair in the Personalized Management of Colorectal Cancer. **2016**, 13,		35
415	Regulation of the Telomerase Reverse Transcriptase Subunit through Epigenetic Mechanisms. **2016** , 7, 83		56
414	Methylation Analysis of DNA Mismatch Repair Genes Using DNA Derived from the Peripheral Blood of Patients with Endometrial Cancer: Epimutation in Endometrial Carcinogenesis. **2016**, 7,		6
413	Whole Gene Capture Analysis of 15 CRC Susceptibility Genes in Suspected Lynch Syndrome Patients. *PLoS ONE*, **2016**, 11, e0157381	3.7	9
412	A Practical Approach to the Evaluation of Gastrointestinal Tract Carcinomas for Lynch Syndrome. **2016**, 40, e17-34		35
411	CD80 down-regulation is associated to aberrant DNA methylation in non-inflammatory colon carcinogenesis. **2016**, 16, 388		10
410	Inhibition of DNA Methylation at the Promoter Region Using Pyrrole-Imidazole Polyamide. **2016**, 1, 1164-1172		8
409	Application of Clinical Bioinformatics. **2016**,		8
408	Clinical Epigenetics and Epigenomics. **2016**, 269-293		

407	Recent discoveries in the molecular genetics of Lynch syndrome. **2016**, 15, 395-403	18
406	Epigenetic Determinants of Cancer. **2016**, 8,	501
405	Mismatch repair deficiency concordance between primary colorectal cancer and corresponding metastasis. **2016**, 15, 253-60	25
404	DNA Methylation and Cancer. **2016**, 103-134	2
403	Intratumoral Heterogeneity of the Epigenome. **2016**, 29, 440-451	132
402	The 100 most influential manuscripts in colorectal cancer: A bibliometric analysis. **2016**, 14, 327-336	20
401	Differential DNA methylation patterns of homeobox genes in proximal and distal colon epithelial cells. **2016**, 48, 257-73	4
400	Colorectal Cancer Subtypes: Developmental Origin and Microenvironmental Regulation. **2016**, 2, 505-518	34
399	Sequencing Structural Variants in Cancer for Precision Therapeutics. **2016**, 32, 530-542	55
398	Engineering affinity agents for the detection of hemi-methylated CpG sites in DNA. **2016**, 1, 273-277	2
397	Colorectal Cancer with BRAF D594G Mutation Is Not Associated with Microsatellite Instability or Poor Prognosis. **2016**, 91, 162-70	6
396	Loss of mutL homolog-1 (MLH1) expression promotes acquisition of oncogenic and inhibitor-resistant point mutations in tyrosine kinases. **2016**, 73, 4739-4748	4
395	Emergence of the Noncoding Cancer Genome: A Target of Genetic and Epigenetic Alterations. **2016**, 6, 1215-1229	41
394	Das Tumorepigenom â□von der Genregulation ■er die Tumorklassifikation zum Therapietarget. **2016**, 28, 424-434	
393	Long-lasting reduction in clonogenic potential of colorectal cancer cells by sequential treatments with 5-azanucleosides and topoisomerase inhibitors. **2016**, 16, 893	13
392	MLH1-deficient Colorectal Carcinoma With Wild-type BRAF and MLH1 Promoter Hypermethylation Harbor KRAS Mutations and Arise From Conventional Adenomas. **2016**, 40, 1390-9	19
391	Laboratory Assays in Evaluation of Lynch Syndrome in Patients with Endometrial Carcinoma. **2016**, 9, 289-99	7
390	Molecular pathogenesis of sporadic colorectal cancers. **2016**, 35, 4	67

389	Targeting epigenetic pathways in acute myeloid leukemia and myelodysplastic syndrome: a systematic review of hypomethylating agents trials. *Clinical Epigenetics*, **2016**, 8, 68	7.7	47
388	Review: Clinical aspects of hereditary DNA Mismatch repair gene mutations. **2016**, 38, 155-162		43
387	The genetic prediction of risk for gynecologic cancers. **2016**, 141, 10-6		33
386	A Molecular Perspective on Procedures and Outcomes with Assisted Reproductive Technologies. **2016**, 6, a023416		6
385	Microsatellite Instability as a Biomarker for PD-1 Blockade. **2016**, 22, 813-20		470
384	Patients with colorectal cancer associated with Lynch syndrome and MLH1 promoter hypermethylation have similar prognoses. **2016**, 18, 863-8		24
383	Mechanisms and Consequences of Cancer Genome Instability: Lessons from Genome Sequencing Studies. **2016**, 11, 283-312		72
382	Efficacy of Adjuvant Chemotherapy in Colon Cancer With Microsatellite Instability: A Large Multicenter AGEO Study. **2016**, 108,		84
381	Molecular evolution of colorectal cancer: from multistep carcinogenesis to the big bang. **2016**, 35, 63-74		20
380	Mismatch repair defects and Lynch syndrome: The role of the basic scientist in the battle against cancer. **2016**, 38, 127-134		33
379	Methylation of tumor suppressor gene CDH13 and SHP1 promoters and their epigenetic regulation by the UHRF1/PRMT5 complex in endometrial carcinoma. **2016**, 140, 145-51		34
378	Modal variety of microsatellite instability in human endometrial carcinomas. **2016**, 142, 353-63		9
377	Using nanobiotechnology to increase the prevalence of epigenotyping assays in precision medicine. **2017**, 9, e1407		2
376	Cytological findings of langerhans cell sarcoma in a case of quintuple cancer. **2017**, 45, 441-445		4
375	Expression and promoter DNA methylation of MLH1 in colorectal cancer and lung cancer. **2017**, 213, 333-338		25
374	Microsatellite Instability Pathway and EMAST in Colorectal Cancer. **2017**, 13, 73-80		35
373	Subgroups and prognostication in stage III colon cancer: future perspectives for adjuvant therapy. **2017**, 28, 958-968		53
372	Epigenetics in endometrial carcinogenesis - part 1: DNA methylation. **2017**, 9, 737-755		15

371	A molecular portrait of microsatellite instability across multiple cancers. *Nature Communications*, **2017**, 8, 15180	17.4	288
370	MLH1. **2017**, 893-902		
369	DNA mismatch repair deficiency in surgically resected lung adenocarcinoma: Microsatellite instability analysis using the Promega panel. **2017**, 110, 26-31		44
368	Inflammation-associated DNA methylation patterns in epithelium of ulcerative colitis. **2017**, 12, 591-606		25
367	Changes in DNA methylation of erythroid-specific genes in K562 cells exposed to catechol in long term. **2017**, 43, 21-28		3
366	Subclonal diversity arises early even in small colorectal tumours and contributes to differential growth fates. **2017**, 66, 2132-2140		28
365	GPX3 promoter methylation predicts platinum sensitivity in colorectal cancer. **2017**, 12, 540-550		31
364	Colon Cancer Screening. **2017**, 283-296		
363	Precision Molecular Pathology of Uterine Cancer. **2017**,		2
362	Gene Expression, DNA Methylation and Prognostic Significance of DNA Repair Genes in Human Bladder Cancer. **2017**, 42, 2404-2417		12
361	Epigenetics and Precision Oncology. **2017**, 23, 262-269		40
360	DNA and Histone Methylation in Colon Cancer. **2017**, 461-487		
359	Identification of a novel leukemic-specific splice variant of DNMT3B and its stability. **2017**, 34, 145		2
358	Small Bowel Adenocarcinoma Frequently Exhibits Lynch Syndrome-associated Mismatch Repair Protein Deficiency But Does Not Harbor Sporadic MLH1 Deficiency. **2017**, 25, 399-406		6
357	Genomic markers of ovarian adenocarcinoma and its relevancy to the effectiveness of chemotherapy. **2017**, 14, 3401-3414		5
356	The current value of determining the mismatch repair status of colorectal cancer: A rationale for routine testing. **2017**, 116, 38-57		78
355	Multilevel genomics of colorectal cancers with microsatellite instability-clinical impact of JAK1 mutations and consensus molecular subtype 1. **2017**, 9, 46		53
354	Genomic profiling of colorectal cancers and the future of personalized treatment. **2017**, 6, 11-22		0

353	Shaping functional gut microbiota using dietary bioactives to reduce colon cancer risk. **2017**, 46, 191-204	36
352	A specific mode of microsatellite instability is a crucial biomarker in adult T-cell leukaemia/lymphoma patients. **2017**, 143, 399-408	5
351	Epigenetic Basis of Human Cancer. **2017**, 83-102	1
350	Allele-Specific DNA Methylation and Its Interplay with Repressive Histone Marks at Promoter-Mutant TERT Genes. **2017**, 21, 3700-3707	44
349	Inter-patient and Intra-tumor Heterogeneity in the Sensitivity to Tumor-targeted Immunity in Colorectal Cancer. **2017**, 40, 54-59	10
348	Genetic Profiling of Cancers of the Digestive System: Biological Insights and Clinical Implications. **2017**, 84, 306-322	5
347	Clinical Significance and Prognostic Relevance of Microsatellite Instability in Sporadic Colorectal Cancer Patients. **2017**, 18,	47
346	Simultaneous Methylation-Level Assessment of Hundreds of CpG Sites by Targeted Bisulfite PCR Sequencing (TBPseq). **2017**, 8, 97	4
345	Potential role of radiation therapy in augmenting the activity of immunotherapy for gynecologic cancers. **2017**, 9, 553-563	11
344	Methylation and expression of mismatch repair gene human mutS homolog 2 in myelodysplastic syndromes. **2018**, 15, 500-505	
343	The Impact of Microsatellite Instability Status and Sidedness of the Primary Tumor on the Effect of Cetuximab-Containing Chemotherapy in Patients with Metastatic Colorectal Cancer. **2017**, 8, 2809-2815	10
342	The Response of Cancer Cell Populations to Therapies. **2017**, 137-152	
341	Genomics of peritoneal surface malignancies. **2017**,	1
340	The Heterogeneity Between Lynch-Associated and Sporadic MMR Deficiency in Colorectal Cancers. **2018**, 110, 975-984	15
339	Recent progress in Lynch syndrome and other familial colorectal cancer syndromes. **2018**, 68, 217-231	69
338	DNA mismatch repair in cancer. **2018**, 189, 45-62	171
337	Differential expression of the TWEAK receptor Fn14 in IDH1 wild-type and mutant gliomas. **2018**, 138, 241-250	7
336	Differences in histological features and PD-L1 expression between sporadic microsatellite instability and Lynch-syndrome-associated disease in Japanese patients with colorectal cancer. **2018**, 23, 504-513	9

335	NKX6.1 hypermethylation predicts the outcome of stage II colorectal cancer patients undergoing chemotherapy. **2018**, 57, 268-277		12
334	Gene expression differences among different MSI statuses in colorectal cancer. *International Journal of Cancer*, **2018**, 143, 1731-1740	7.5	68
333	An examination of critical parameters in hybridization-based epigenotyping using magnetic microparticles. **2018**, 34, 1589-1595		1
332	CpG Islands in Cancer: Heads, Tails, and Sides. **2018**, 1766, 49-80		13
331	Comparative Molecular Analysis of Gastrointestinal Adenocarcinomas. **2018**, 33, 721-735.e8		228
330	MLH1-rheMac hereditary nonpolyposis colorectal cancer syndrome in rhesus macaques. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 2806-2811	11.5	4
329	Somatic mutations of the coding microsatellites within the beta-2-microglobulin gene in mismatch repair-deficient colorectal cancers and adenomas. **2018**, 17, 91-100		11
328	Genes and Cancer. **2018**, 493-527.e6		
327	Consequences of testing for mismatch repair deficiency of colorectal cancer in clinical practice. **2018**, 53, 632-636		5
326	Colorectal Cancers Developed from Proximal and Distal Tumor Location Belong to the Distinct Genetic Entity and Show Different Oncologic Behavior. **2018**, 81-91		
325	Molecular Diagnosis and Targeting for Thoracic and Gastrointestinal Malignancy. **2018**,		0
324	Site-specific Differences in Colonic Adenocarcinoma: KRAS Mutations and High Tumor Budding Are More Frequent in Cecal Adenocarcinoma. **2018**, 42, 351-358		11
323	Recent Advances in Lynch Syndrome: Diagnosis, Treatment, and Cancer Prevention. **2018**, 38, 101-109		33
322	Lung cancer early detection and health disparities: the intersection of epigenetics and ethnicity. **2018**, 10, 2498-2507		8
321	Expression and epigenetic regulatory mechanism of BNIP3 in clear cell renal cell carcinoma. **2019**, 54, 348-360		13
320	Updates on immunotherapy for colorectal cancer. **2018**, 9, 160-169		97
319	The proto CpG island methylator phenotype of sessile serrated adenomas/polyps. **2018**, 13, 1088-1105		10
318	Resveratrol epigenetically regulates the expression of zinc finger protein 36 in non-small cell lung cancer cell lines. **2019**, 41, 1377-1386		13

317	and Colorectal Cancer. **2018**, 8, 371		52
316	Application of LC-MS/MS to the searching of methylated exons in colorectal cancer tissues. **2018**, 41, 705-712		
315	Emerging role of precision medicine in biliary tract cancers. **2018**, 2, 21		19
314	Prognostic value of the combination of microsatellite instability and mutation in colorectal cancer. **2018**, 10, 3911-3929		15
313	Identification of key tumorigenesis-related genes and their microRNAs in colon cancer. **2018**, 40, 3551-3560		18
312	Clinicopathological and molecular differences between right-sided and left-sided colorectal cancer in Japanese patients. **2018**, 48, 609-618		18
311	Genomics of Peritoneal Malignancies. **2018**, 27, 463-475		5
310	Mechanisms of Gastrointestinal Malignancies. **2018**, 1615-1642		1
309	Inherent and toxicant-provoked reduction in DNA repair capacity: A key mechanism for personalized risk assessment, cancer prevention and intervention, and response to therapy. **2018**, 221, 993-1006		7
308	Comparison of DNMT1 inhibitors by methylome profiling identifies unique signature of 5-aza-2'deoxycytidine. **2018**, 10, 1085-1101		4
307	Telomere Maintenance Mechanisms in Cancer. **2018**, 9,		56
306	Evaluation of Promoter Methylation of RASSF1A and ATM in Peripheral Blood of Breast Cancer Patients and Healthy Control Individuals. **2018**, 19,		12
305	Is increased colorectal screening effective in preventing distant disease?. *PLoS ONE*, **2018**, 13, e0200462	3.7	2
304	Potential for Mitochondrial DNA Sequencing in the Differential Diagnosis of Gynaecological Malignancies. **2018**, 19,		11
303	Infection in Colorectal Cancer: Linking Inflammation, DNA Mismatch Repair and Genetic and Epigenetic Alterations. **2018**, 2, 37-46		26
302	The Molecular Basis of Lynch-like Syndrome. **2018**, 21-41		1
301	Mismatch repair-deficient status associates with favorable prognosis of Eastern Chinese population with sporadic colorectal cancer. **2018**, 15, 7007-7013		6
300	The therapeutic significance of mutational signatures from DNA repair deficiency in cancer. *Nature Communications*, **2018**, 9, 3292	17.4	96

299	Molecular Basis of Diseases of the Gastrointestinal Tract. **2018**, 387-415		1
298	Targeting Chromatin Remodeling for Cancer Therapy. **2019**, 12, 215-229		16
297	Evaluation of DNA Mismatch Repair Protein Deficiency in Primary Endometrial Carcinoma. **2019**, 35, 177-183		1
296	Aberrant DNA methylation defines isoform usage in cancer, with functional implications. **2019**, 15, e1007095		8
295	Targeted next generation sequencing screening of Lynch syndrome in Tunisian population. **2019**, 18, 343-348		1
294	BRAF Mutation and Its Importance in Colorectal Cancer. **2019**,		5
293	Pitfalls in molecular diagnostics. **2019**, 36, 342-354		7
292	Role of immune checkpoint inhibitors in the treatment of colorectal cancer: focus on nivolumab. **2019**, 19, 1247-1263		19
291	Epigenetic heterogeneity in cancer. **2019**, 7, 23		73
290	Serrated Colorectal Cancer: The Road Less Travelled?. **2019**, 5, 742-754		14
289	Genomic-Destabilization-Associated Mutagenesis and Clonal Evolution of Cells with Mutations in Tumor-Suppressor Genes. *Cancers*, **2019**, 11,	6.6	5
288	DNA Methylation Cancer Biomarkers: Translation to the Clinic. **2019**, 10, 1150		140
287	Molecular mutation characteristics of mismatch and homologous recombination repair genes in gastrointestinal cancer. **2019**, 18, 2789-2798		1
286	The Impact of the Epigenetic Cancer Drug Azacitidine on Host Immunity: The Role of Myelosuppression, Iron Overload and tp53 Mutations in a Zebrafish Model. *Cancers*, **2019**, 11,	6.6	1
285	Enhanced CRISPR-based DNA demethylation by Casilio-ME-mediated RNA-guided coupling of methylcytosine oxidation and DNA repair pathways. *Nature Communications*, **2019**, 10, 4296	17.4	24
284	Transcriptional alterations in glioma result primarily from DNA methylation-independent mechanisms. **2019**, 29, 1605-1621		17
283	Epigenetic Modifications Compromise Mitochondrial DNA Quality Control in the Development of Diabetic Retinopathy. **2019**, 60, 3943-3951		18
282	Immunoexpression of TS, p53, COX2, EGFR, MSH6 and MLH1 biomarkers and its correlation with degree of differentiation, tumor staging and prognostic factors in colorectal adenocarcinoma: a retrospective longitudinal study. **2019**, 137, 33-38		3

281	Insight into the selective binding mechanism of DNMT1 and DNMT3A inhibitors: a molecular simulation study. **2019**, 21, 12931-12947		23
280	Integrative Genome-Scale DNA Methylation Analysis of a Large and Unselected Cohort Reveals 5 Distinct Subtypes of Colorectal Adenocarcinomas. **2019**, 8, 269-290		23
279	Cross-platform Data Analysis Reveals a Generic Gene Expression Signature for Microsatellite Instability in Colorectal Cancer. **2019**, 2019, 6763596		6
278	DNA repair in personalized brain cancer therapy with temozolomide and nitrosoureas. **2019**, 78, 128-141		47
277	Differential regulation of CpG island methylation within divergent and unidirectional promoters in colorectal cancer. **2019**, 110, 1096-1104		5
276	Downregulation of SPTAN1 is related to MLH1 deficiency and metastasis in colorectal cancer. *PLoS ONE*, **2019**, 14, e0213411	3.7	13
275	Molecular Subtypes Are Frequently Discordant Between Lesions in Patients With Synchronous Colorectal Cancer: Molecular Analysis of 59 Patients. **2019**, 39, 1425-1432		2
274	Clinicopathologic Features of Mismatch Repair-Deficient Anaplastic Thyroid Carcinomas. **2019**, 29, 666-673		13
273	Stratification of patients with colorectal cancer without the recorded family history. **2019**, 17, 3649-3656		5
272	The mismatch repair-dependent DNA damage response: Mechanisms and implications. **2019**, 78, 60-69		42
271	Combined prognostic value of CD274 (PD-L1)/PDCDI (PD-1) expression and immune cell infiltration in colorectal cancer as per mismatch repair status. **2019**, 32, 866-883		19
270	HDAC6 regulates DNA damage response via deacetylating MLH1. **2019**, 294, 5813-5826		11
269	Clinical value of MLH1-negative circulating tumor cells in lung cancer patients. **2019**, 98, e15721		2
268	Colon Cancer. **2019**,		2
267	Benzene metabolite 1,2,4-benzenetriol changes DNA methylation and histone acetylation of erythroid-specific genes in K562 cells. **2019**, 93, 137-147		10
266	Universal screening for Lynch syndrome in a large consecutive cohort of Chinese colorectal cancer patients: High prevalence and unique molecular features. *International Journal of Cancer*, **2019**, 144, 2161-2168	7.5	15
265	Fusion Kinases Identified by Genomic Analyses of Sporadic Microsatellite Instability-High Colorectal Cancers. **2019**, 25, 378-389		33
264	Epigenetic regulation of DNA repair genes and implications for tumor therapy. **2019**, 780, 15-28		28

263	Diagnostic Value of Circulating Free DNA Integrity and Global Methylation Status in Gall Bladder Carcinoma. **2019**, 25, 925-936	9
262	The emerging role of epigenetic therapeutics in immuno-oncology. **2020**, 17, 75-90	116
261	Modifications of H3K4 methylation levels are associated with DNA hypermethylation in acute myeloid leukemia. **2020**, 287, 1155-1175	5
260	Pathology, Biomarkers, and Molecular Diagnostics. **2020**, 225-253.e8	3
259	Construction of Novel DNA Methylation-Based Prognostic Model to Predict Survival in Glioblastoma. **2020**, 27, 718-728	7
258	Therapeutic Targeting of the Colorectal Tumor Stroma. **2020**, 158, 303-321	23
257	Reliable Clinical MLH1 Promoter Hypermethylation Assessment Using a High-Throughput Genome-Wide Methylation Array Platform. **2020**, 22, 368-375	8
256	Immunohistochemistry in screening for heritable colorectal cancer: what to do with an abnormal result. **2020**, 90, 702-707	3
255	MLH1 promoter hypermethylation: are you absolutely sure about the absence of MLH1 germline mutation? About a new case. **2020**, 19, 11-14	2
254	Epigenetics of colorectal cancer: biomarker and therapeutic potential. **2020**, 17, 111-130	191
253	Epigenetic based synthetic lethal strategies in human cancers. **2020**, 8, 44	9
252	Development of Oxidation Damage Base-Based Fluorescent Probe for Direct Detection of DNA Methylation. **2020**, 92, 10223-10227	7
251	Duration of FOLFOX Adjuvant Chemotherapy in High-Risk Stage II and Stage III Colon Cancer With Deficient Mismatch Repair. **2020**, 10, 579478	2
250	P53 expression and micro-vessel density in relation with 5-year survival in patients with colorectal cancer. **2020**, 57, 311-314	2
249	Use of DNA methylation profiling in translational oncology. **2020**,	13
248	Are Microsatellite Patterns Specific for Tumor Types? A Pilot Investigation. **2020**, 1, 3-8	
247	Gastrointestinal cancers: current biomarkers in esophageal and gastric adenocarcinoma. **2020**, 5, 55	9
246	Overcoming resistance to anti-PD1 and anti-PD-L1 treatment in gastrointestinal malignancies. **2020**, 8,	15

245	Experience of mismatch repair/microsatellite instability (MMR/MSI) testing among patients with advanced/metastatic colorectal cancer in the US. **2020**, 36, 1355-1361		1
244	Implications of Hereditary Origin on the Immune Phenotype of Mismatch Repair-Deficient Cancers: Systematic Literature Review. **2020**, 9,		8
243	Mismatch Repair-Deficient Rectal Cancer and Resistance to Neoadjuvant Chemotherapy. **2020**, 26, 3271-3279		41
242	Dynamic Signatures of the Epigenome: Friend or Foe?. **2020**, 9,		8
241	Clinical Outcomes in Patients With Colon Cancer With Microsatellite Instability of Sporadic or Familial Origin Treated With Adjuvant FOLFOX With or Without Cetuximab: A Pooled Analysis of the PETACC8 and N0147 Trials. **2020**, 4,		4
240	Targeted sequencing of genes associated with the mismatch repair pathway in patients with endometrial cancer. *PLoS ONE*, **2020**, 15, e0235613	3.7	2
239	The MLH1 polymorphism rs1800734 and risk of endometrial cancer with microsatellite instability. *Clinical Epigenetics*, **2020**, 12, 102	7.7	2
238	Prognostic and therapeutic molecular markers in the clinical management of esophageal cancer. **2020**, 20, 401-411		6
237	Cell-Selective Cytotoxicity of a Fluorescent Rhodium Metalloinsertor Conjugate Results from Irreversible DNA Damage at Base Pair Mismatches. **2020**, 59, 717-726		7
236	A DNA methylation signature to improve survival prediction of gastric cancer. *Clinical Epigenetics*, **2020**, 12, 15	7.7	27
235	Pathology of Peritoneal Metastases. **2020**,		0
234	Spontane, hereditäre und CED-assoziierte Pathogenese des kolorektalen Karzinoms. **2020**, 18, 39-48		
233	Somatic Nonepigenetic Mismatch Repair Gene Aberrations Underly Most Mismatch Repair-Deficient Lynch-Like Tumors. **2021**, 160, 1414-1416.e3		1
232	Characterization and Clinical Outcomes of DNA Mismatch Repair-deficient Small Bowel Adenocarcinoma. **2021**, 27, 1429-1437		9
231	Combination of lysine-specific demethylase 6A (KDM6A) and mismatch repair (MMR) status is a potential prognostic factor in colorectal cancer. **2021**, 10, 317-324		3
230	Hereditary Gynecological Malignancy and Molecular Features. **2021**, 145-165		
229	How Should We Test for Lynch Syndrome? A Review of Current Guidelines and Future Strategies. *Cancers*, **2021**, 13,	6.6	7
228	MLH1/3 variants causing aneuploidy, pregnancy loss, and premature reproductive aging.		

227	Evaluating the utility of tumour mutational signatures for identifying hereditary colorectal cancer and polyposis syndrome carriers. **2021**, 70, 2138-2149		6
226	An "expressionistic" look at serrated precancerous colorectal lesions. **2021**, 16, 4		2
225	Epigenetic regulations in gastrointestine: Implications on sensitivity to ionizing radiation, inflammatory diseases, and cancer development. **2021**, 199-235		
224	Methylation multiplicity and its clinical values in cancer. **2021**, 23, e2		6
223	OTUB1 stabilizes mismatch repair protein MSH2 by blocking ubiquitination. **2021**, 296, 100466		2
222	Dickkopf 1 impairs the tumor response to PD-1 blockade by inactivating CD8+ T cells in deficient mismatch repair colorectal cancer. **2021**, 9,		5
221	Identification of potential candidate genes for lip and oral cavity cancer using network analysis. *Genomics and Informatics*, **2021**, 19, e4	1.9	1
220	Histone deacetylase 2: A potential therapeutic target for cancer and neurodegenerative disorders. **2021**, 216, 113332		5
219	Wedding of Molecular Alterations and Immune Checkpoint Blockade: Genomics as a Matchmaker. **2021**,		6
218	Interspecies cell fusion between mouse embryonic stem cell and porcine pluripotent cell. **2021**, 56, 1095-1103		
217	Mechanisms of Immune Escape and Resistance to Checkpoint Inhibitor Therapies in Mismatch Repair Deficient Metastatic Colorectal Cancers. *Cancers*, **2021**, 13,	6.6	6
216	Heterogeneity of Colorectal Cancer Progression: Molecular Gas and Brakes. **2021**, 22,		4
215	Microsatellite Instability in Colorectal Cancers: Carcinogenesis, Neo-Antigens, Immuno-Resistance and Emerging Therapies. *Cancers*, **2021**, 13,	6.6	5
214	Epigenetic Regulation of Intestinal Stem Cells and Disease: A Balancing Act of DNA and Histone Methylation. **2021**, 160, 2267-2282		6
213	Prevalence and Landscape of Actionable Genomic Alterations in Renal Cell Carcinoma. **2021**, 27, 5595-5606		3
212	Promoter CpG methylation inhibits Krȕppel-like factor 2 (KLF2)-Mediated repression of hTERT gene expression in human T-cells. **2021**, 26, 100984		0
211	Disentangling tumorigenesis-associated DNA methylation changes in colorectal tissues from those associated with ageing. **2021**, 1-18		
210	Human MLH1/3 variants causing aneuploidy, pregnancy loss, and premature reproductive aging. *Nature Communications*, **2021**, 12, 5005	17.4	2

209	DNA methylation as a mediator of associations between the environment and chronic diseases: A scoping review on application of mediation analysis. **2021**, 1-27		3
208	Interaction between Microsatellite Instability (MSI) and Tumor DNA Methylation in the Pathogenesis of Colorectal Carcinoma. *Cancers*, **2021**, 13,	6.6	1
207	Gut Microbiota and Colorectal Cancer. **2022**, 357-357		
206	Genome-Scale Methylation Analysis of Circulating Cell-Free DNA in Gastric Cancer Patients. **2021**,		0
205	De novo DNA methyltransferase activity in colorectal cancer is directed towards H3K36me3 marked CpG islands. *Nature Communications*, **2021**, 12, 694	17.4	7
204	The Role of H3K4 Trimethylation in CpG Islands Hypermethylation in Cancer. **2021**, 11,		2
203	Epigenetic Mechanisms in Cancer Formation and Progression. 253-298		2
202	DNA mismatch repair and colon cancer. **2005**, 570, 85-123		19
201	Molecular mechanisms of human carcinogenesis. **2006**, 321-49		17
200	Getting familiar with familial colon cancer. 27-60		1
199	Mismatch repair competency predicts 5-fluorouracil effectiveness on patient survival. 72-84		1
198	Epigenetic Silencing of Progeroid Syndromes. **2010**, 345-369		1
197	Germline mutation induction at mouse and human tandem repeat DNA loci. **2003**, 518, 115-29		14
196	Cancer epigenetics: DNA methylation and chromatin alterations in human cancer. **2003**, 532, 39-49		94
195	The Role of Genomic Instability in the Development of Human Cancer. **2002**, 115-142		5
194	Hereditary Colorectal Cancer. **2017**, 381-400		2
193	Genomic Instability, DNA Repair Pathways and Cancer. **2008**, 269-279		1
192	Synthetic Genetic Approaches in Colorectal Cancer: Exploiting and Targeting Genome Instability. **2015**, 179-204		1

191	Epigenetic Disturbances in Colorectal Cancer. **2014**, 283-298		1
190	DNA methylation, genomic imprinting and cancer. **2000**, 249, 87-99		43
189	CpG-island methylation in aging and cancer. **2000**, 249, 101-18		215
188	Mapping the epigenome--impact for toxicology. **2009**, 99, 259-88		13
187	Methylation in Colorectal Cancer. **2015**, 373-455		1
186	Biomarkers in the Management of Peritoneal Metastases. **2020**, 251-279		1
185	Molecular Basis of Diseases of the Gastrointestinal Tract. **2009**, 365-393		2
184	CHAPTER 4:Targeting DNA Methylation. **2015**, 68-95		1
183	HPP1: a transmembrane protein-encoding gene commonly methylated in colorectal polyps and cancers. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 265-70	11.5	56
182	Loss of imprinting of the insulin-like growth factor II gene occurs by biallelic methylation in a core region of H19-associated CTCF-binding sites in colorectal cancer. *Proceedings of the National Academy of Sciences of the United States of America*, **2001**, 98, 591-6	11.5	113
181	Genetic Modifiers of Cancer Risk. **2006**, 577-600		1
180	Cancers of the Colon and Rectum. **2006**, 809-829		48
179	Genetic factors affecting the impact of DNA polymerase delta proofreading activity on mutation avoidance in yeast. **1999**, 152, 47-59		42
178	Immunohistochemistry for hMLH1 and hMSH2: a practical test for DNA mismatch repair-deficient tumors. **1999**, 23, 1248-55		209
177	Molecular advances in gynecologic oncology. **1999**, 11, 394-400		3
176	Evaluating the utility of tumour mutational signatures for identifying hereditary colorectal cancer and polyposis syndrome carriers.		1
175	The proto CpG island methylator phenotype of sessile serrated adenomas/polyps.		1
174	Genome Scale Epigenetic Profiling Reveals Five Distinct Subtypes of Colorectal Cancer.		1

173	Inactivation of hMLH1 and hMSH2 by promoter methylation in primary non-small cell lung tumors and matched sputum samples. **2003**, 111, 887-95		110
172	Deficiencies in Chfr and Mlh1 synergistically enhance tumor susceptibility in mice. **2009**, 119, 2714-24		22
171	Epigenetic gene silencing in cancer. **2000**, 105, 401-7		118
170	Hypermethylation of the DAP-Kinase CpG Island Is a Common Alteration in B-Cell Malignancies. **1999**, 93, 4347-4353		24
169	Resistance to 5-aza-2'-deoxycytidine in genic regions compared to non-genic repetitive sequences. **2010**, 56, 86-93		10
168	Hypermethylation of the putative tumor-suppressor genes DCC, p51/63 and O6-methylguanine-DNA methyltransferase (MGMT) and loss of their expressions in cell lines of hematological malignancies. **2005**, 72, 270-7		2
167	An integrative genomic and epigenomic approach for the study of transcriptional regulation. *PLoS ONE*, **2008**, 3, e1882	3.7	72
166	Specific variants in the MLH1 gene region may drive DNA methylation, loss of protein expression, and MSI-H colorectal cancer. *PLoS ONE*, **2010**, 5, e13314	3.7	32
165	Investigating the potential role of genetic and epigenetic variation of DNA methyltransferase genes in hyperplastic polyposis syndrome. *PLoS ONE*, **2011**, 6, e16831	3.7	8
164	Kras gene mutation and RASSF1A, FHIT and MGMT gene promoter hypermethylation: indicators of tumor staging and metastasis in adenocarcinomatous sporadic colorectal cancer in Indian population. *PLoS ONE*, **2013**, 8, e60142	3.7	47
163	Mismatch repair-deficient crypt foci in Lynch syndrome--molecular alterations and association with clinical parameters. *PLoS ONE*, **2015**, 10, e0121980	3.7	37
162	Constitutional Mosaic Epimutations - a hidden cause of cancer?. **2019**, 3, 118-135		10
161	Tumors with unmethylated MLH1 and the CpG island methylator phenotype are associated with a poor prognosis in stage II colorectal cancer patients. **2016**, 7, 86480-86489		14
160	HDAC-4 regulates claudin-2 expression in EGFR-ERK1/2 dependent manner to regulate colonic epithelial cell differentiation. **2017**, 8, 87718-87736		10
159	promoter methylation accelerates colon cancer cell migration. **2018**, 9, 36750-36769		3
158	Aberrant gene methylation in non-neoplastic mucosa as a predictive marker of ulcerative colitis-associated CRC. **2016**, 7, 10322-31		27
157	Epigenomics in cancer management. **2010**, 2, 255-65		20
156	Epigenetic Loss of MLH1 Expression in Normal Human Hematopoietic Stem Cell Clones is Defined by the Promoter CpG Methylation Pattern Observed by High-Throughput Methylation Specific Sequencing. **2016**, 3,		6

155	Colorectal cancer carcinogenesis: a review of mechanisms. **2016**, 13, 120-35	84
154	[DNA methyltransferases: classification, functions and research progress]. **2009**, 31, 903-12	6
153	Immunohistochemical expression of mismatch repair genes: a screening tool for predicting mutator phenotype in liver fluke infection-associated intrahepatic cholangiocarcinoma. **2006**, 12, 3740-5	13
152	Microsatellite instability and MLH1 promoter hypermethylation in colorectal cancer. **2007**, 13, 1767-9	38
151	Re-expression of methylation-induced tumor suppressor gene silencing is associated with the state of histone modification in gastric cancer cell lines. **2007**, 13, 6166-71	28
150	Promoter methylation status of hMLH1, MGMT, and CDKN2A/p16 in colorectal adenomas. **2010**, 16, 3553-60	41
149	Germline promoter hypermethylation of tumor suppressor genes in gastric cancer. **2012**, 18, 70-8	13
148	Clinical applications of next-generation sequencing in colorectal cancers. **2013**, 19, 6784-93	26
147	Comparative study of mutations in SNP loci of K-RAS, hMLH1 and hMSH2 genes in neoplastic intestinal polyps and colorectal cancer. **2014**, 20, 18338-45	4
146	Immune therapies in pancreatic ductal adenocarcinoma: Where are we now?. **2018**, 24, 2137-2151	67
145	Aberrant crypt foci as microscopic precursors of colorectal cancer. **2003**, 9, 2642-9	103
144	Mutation and methylation of hMLH1 in gastric carcinomas with microsatellite instability. **2003**, 9, 655-9	39
143	Colorectal carcinoma: Pathologic aspects. **2012**, 3, 153-73	282
142	Mismatch repair protein expression in colorectal cancer. **2013**, 4, 397-408	33
141	Implications of mismatch repair-deficient status on management of early stage colorectal cancer. **2015**, 6, 676-84	40
140	The significance of genetics for cholangiocarcinoma development. **2013**, 1, 28	16
139	Molecular biology of colorectal cancer: Review of the literature. **2013**, 03, 72-80	20
138	Inflammation-associated microsatellite alterations: Mechanisms and significance in the prognosis of patients with colorectal cancer. **2018**, 10, 1-14	28

137	Clinical significance of / for stage II/III sporadic colorectal cancer. **2019**, 11, 1065-1080	9
136	Molecular approach to genetic and epigenetic pathogenesis of early-onset colorectal cancer. **2016**, 8, 83-98	17
135	CpG island methylator phenotype in adenocarcinomas from the digestive tract: Methods, conclusions, and controversies. **2017**, 9, 105-120	8
134	Epigenetic changes (aberrant DNA methylation) in colorectal neoplasia. **2007**, 1, 1-11	34
133	Colorectal carcinogenesis. **2001**, 47, 1-11	4
132	Prognostic value of hMLH1 and hMSH2 immunohistochemical expression in non-small cell lung cancer. A tissue microarray study. **2006**, 150, 255-9	9
131	Tumor-associated methylation of the putative tumor suppressor AJAP1 gene and association between decreased AJAP1 expression and shorter survival in patients with glioma. **2011**, 30, 247-53	19
130	Colon cancer testing and screening. **1999**, 123, 1027-9	7
129	Performance of the revised Bethesda guidelines for identification of colorectal carcinomas with a high level of microsatellite instability. **2005**, 129, 1390-7	46
128	Molecular diagnostics of colorectal cancer. **2011**, 135, 578-87	41
127	Expression of BMP6 is associated with its methylation status in colorectal cancer tissue but lacks prognostic significance. **2014**, 15, 7091-5	5
126	Werner syndrome helicase is a selective vulnerability of microsatellite instability-high tumor cells. **2019**, 8,	44
125	Construction of a New Tumor Immunity-Related Signature to Assess and Classify the Prognostic Risk of Colorectal Cancer. **2021**, 14, 6661-6676	1
124	Evolutionary patterns of chromosomal instability and mismatch repair deficiency in proximal and distal colorectal cancer. **2021**,	0
123	GENETIC ANALYSIS OF hMLH1 IN TRANSITIONAL CELL CARCINOMA OF THE URINARY TRACT: PROMOTER METHYLATION OR MUTATION. **2001**, 1760-1764	1
122	Pathogenesis of Colorectal Cancer. **2002**, 23-48	
121	Molekulare Pathogenese der Malignome des Genitalbereichs. **2002**, 363-384	
120	Mutator Mutations.	

119 Genetic Instability.

118 Biology and Molecular Genetics of Colorectal Cancer. **2002**, 3-21

117 References. **2003**, 170-236

116 The molecular pathology of inflammatory bowel disease-associated neoplasia and preneoplasia. **2003**, 711-718

115 Role of hMLH1 Gene Hypermethylation in Endometrial Carcinogenesis. **2003**, 232-244

114 Folate and Cancer Chemoprevention. **2004**, 559-582 1

113 Genetische Grundlagen der Kanzerogenese. **2004**, 75-145 1

112 Genomic Instability, DNA Repair Pathways, and Cancer. **2004**, 491-504

111 Genetic testing and surgeon decision. **2004**, 51, 57-60

110 Role of DNA Methylation in Cancer and Chemotherapy. **2004**,

109 Mechanisms of Gastrointestinal Malignancies. **2006**, 477-498

108 Chapter 19:Radiation-induced Transgenerational Instability in Mice. **2007**, 224-234

107 Genes and Cancer. **2007**, 637-667

106 Epigenomics and Cancer. **2008**, 281-291

105 COLORECTAL CANCER: EPIDEMIOLOGY, AETIOLOGY, PATHOLOGY, STAGING SYSTEMS, CLINICAL FEATURES, DIAGNOSIS. **2008**, 979-1027

104 MOLECULAR BIOLOGY OF COLORECTAL CANCER. **2008**, 867-896

103 Molecular Genetics and Cancer Risks in Lynch Syndrome. **2008**, 129-147

102 Genomic Instability in Colorectal Cancer; from Bench to Bed. **2009**, 25, 129

101 Polyposis Syndromes and Colorectal Cancer Predisposition. **2010**, 545-559

100 DNA Mismatch Repair. **2010**, 67-85

99 Epigenetic Changes in Cancer: Role of Environment. **2010**, 153-196 2

98 Mouse Models for Colorectal Cancer. **2012**, 309-329

97 Genetics of Colon Cancer Susceptibility. **2012**, 23-45

96 Colorectal Cancer. **2012**, 245-272

95 Biology and Genetics of Colorectal Cancer and Polyps and Polyposis. 428-437 0

94 Epigenetic Drivers of Genetic Alterations in Cancer.

93 Molecular Pathology of Colon and Small Bowel Cancers: Sporadic Type. **2013**, 131-140

92 Human Cancer Epigenetics. **2013**, 269-293

91 NUCLEOTIDE EXCISION REPAIR (NER). **2013**, 26-38

90 Colorectal Cancer Genome and Its Implications. **2013**, 247-265

89 A case of syncronised hereditery nonpoliposis colorectal tumor with different hystopathological type and k-ras gene mutation: case report. **2013**, 5, 67-9 1

88 DNA IS THE CRITICAL TARGET. **2013**, 113-114

87 Deoxyribonucleic acid (DNA) methylation and its impact in generation of cancer. **2014**, 3, 181

86 Pathology, Biomarkers, and Molecular Diagnostics. **2014**, 226-252.e6

85 Aberrant DNA Methylation. **2014**,

84 Specific type epigenetic changes in cervical cancers. **2015**, 1238, 733-49 5

83	DNA Damage Response Pathways in Cancer Predisposition and Progression. **2015**, 39-74	
82	CHAPTER 10:Dosing â When Less is More. **2015**, 249-266	
81	Neoplasia of the Gastrointestinal Tract. 587-616	
80	Colorectal Cancer. **2016**, 403-417	
79	A molecular portrait of microsatellite instability across multiple cancers.	1
78	Immunohistochemical Markers in Endometrial Carcinoma. **2017**, 43-63	
77	Mismatch Repair System and Aging: Microsatellite Instability in Peripheral Blood Cells of the Elderly. **2018**, 1-22	
76	A molecular inversion probe and sequencing-based microsatellite instability assay for high throughput cancer diagnostics and Lynch syndrome screening.	
75	Most of transcriptional alterations in glioma result from DNA-methylation independent mechanisms.	
74	Werner syndrome helicase is a selective vulnerability of microsatellite instability-high tumor cells.	
73	Molecular Diagnostics and Genomic Profiling in Individualized Therapies of Gastrointestinal Cancers. **2019**, 613-631	
72	Mismatch Repair System and Aging: Microsatellite Instability in Peripheral Blood Cells of the Elderly. **2019**, 483-504	
71	Casilio-ME: Enhanced CRISPR-based DNA demethylation by RNA-guided coupling methylcytosine oxidation and DNA repair pathways.	
70	GEFT protein expression in digestive tract malignant tumors and its clinical significance. **2019**, 18, 5577-5590	2
69	Correlation-based and feature-driven mutation signature analyses to identify genetic features associated with DNA mutagenic processes in cancer genomes.	
68	Syndromic Epithelial Polyps of the Gastrointestinal Tract. **2021**, 367-386	
67	Immune Targets in Colorectal Cancer. **2020**, 205-230	
66	Mechanisms of abnormal gene expression in tumor cells. **2006**, 351-61	3

65	Mismatch Repair System and Aging: Microsatellite Instability in Peripheral Blood Cells of the Elderly and in the T-cell Clone Longitudinal Model. **2009**, 257-276		
64	CpG Island Methylation and Drug Resistance. **2006**, 359-375		
63	Molecular Targeting of Colorectal Cancer. **2008**, 133-163		
62	Genetic Pathways in Pancreatic Tumorigenesis. **2008**, 513-526		
61	Genetic susceptibility to non-polyposis colorectal cancer. **1999**, 36, 801-18		500
60	Epigenetics and epigenetic alterations in pancreatic cancer. *International Journal of Clinical and Experimental Pathology*, **2009**, 2, 310-26	1.4	51
59	Microsatellite instability at tetranucleotide repeats in sporadic colorectal cancer in Japan. **2010**, 23, 551-61		34
58	Messenger RNA expression and methylation of candidate tumor-suppressor genes and risk of ovarian cancer-a case-control analysis. **2010**, 1, 1-10		19
57	Molecular and physiological mechanisms of membrane receptor systems functioning. **2011**, 3, 20-8		
56	Unbalanced replication as a major source of genetic instability in cancer cells. **2012**, 2, 160-9		7
55	Hypoxia and DNA repair. **2013**, 86, 443-51		19
54	HEREDITARY, SPORADIC AND METASTATIC COLORECTAL CANCER ARE COMMONLY DRIVEN BY SPECIFIC SPECTRUMS OF DEFECTIVE DNA MISMATCH REPAIR COMPONENTS. **2016**, 127, 81-97		15
53	Molecular genetic changes in benign colorectal tumors synchronous with microsatellite unstable carcinomas do not support a field defect. **2017**, 8, 27-39		2
52	Hypermethylated and its clinical significance in colorectal cancer. **2018**, 10, 4290-4301		3
51	Microsatellite instability in colorectal cancer: overview of its clinical significance and novel perspectives. **2018**, 16, 735-745		40
50	Translational epigenetics in precision medicine of colorectal cancer. **2022**, 19-41		
49	Molecular and phenotypic profiling of colorectal cancer patients in West Africa reveals biological insights. *Nature Communications*, **2021**, 12, 6821	17.4	2
48	Predictive molecular markers for the treatment with immune checkpoint inhibitors in colorectal cancer. **2021**, 36, e24141		3

47	Biomarkers in Gastrointestinal System Carcinomas. **2022**, 165-199		
46	Beyond the genetic lesions: gene inactivation by promoter hypermethylation in human cancer. **2000**, 2, 61-66		113
45	Pharmacogenomic research and serum DNA analysis in the treatment of non-small cell lung cancer. **2001**, 3, 60-71		2
44	Molecular Analysis of Colorectal Cancers Suggests a High Frequency of Lynch Syndrome in Indonesia.. *Cancers*, **2021**, 13,	6.6	0
43	Appendiceal sessile serrated lesions are distinct from their right-sided colonic counterparts and may be precursors for appendiceal mucinous neoplasms.. **2022**,		0
42	GMMchi: Gene Expression Clustering Using Gaussian Mixture Modeling.		
41	High Expression of Casein Kinase 2 Alpha Is Responsible for Enhanced Phosphorylation of DNA Mismatch Repair Protein MLH1 and Increased Tumor Mutation Rates in Colorectal Cancer.. *Cancers*, **2022**, 14,	6.6	0
40	Global genomic instability caused by reduced expression of DNA polymerase □n yeast.. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119, e2119588119	11.5	1
39	Regulation of micro-RNA, epigenetic factor by natural products for the treatment of cancers: Mechanistic insight and translational association.. **2022**, 29, 103255		0
38	Neoadjuvant Immunotherapy for MSI-H/dMMR Locally Advanced Colorectal Cancer: New Strategies and Unveiled Opportunities.. **2022**, 13, 795972		4
37	Patterns of indolence in prostate cancer (Review).. **2022**, 23, 351		1
36	The Potential Role of Genomic Signature in Stage II Relapsed Colorectal Cancer (CRC) Patients: A Mono-Institutional Study.. **2022**, 14, 1353-1369		0
35	The Two-Hit Hypothesis Meets Epigenetics.. **2022**, 82, 1167-1169		1
34	Somatic Genomic Testing in Patients With Metastatic or Advanced Cancer: ASCO Provisional Clinical Opinion.. *Journal of Clinical Oncology*, **2022**, JCO2102767	2.2	7
33	Correlation-based and feature-driven mutation signature analyses to identify genetic features associated with DNA mutagenic processes in cancer genomes.. *Genomics and Informatics*, **2021**, 19, e40	1.9	0
32	Haploinsufficiency by minute MutL homolog 1 promoter DNA methylation may represent unique phenotypes of microsatellite instability-gastric carcinogenesis.. *PLoS ONE*, **2021**, 16, e0260303	3.7	
31	Protein phosphatase 2A inactivation induces microsatellite instability, neoantigen production and immune response.. *Nature Communications*, **2021**, 12, 7297	17.4	1
30	DNA methylation variation along the cancer epigenome and the identification of novel epigenetic driver events. *Nucleic Acids Research*, **2021**,	20.1	1

29	Defects in MMR Genes as a Seminal Example of Personalized Medicine: From Diagnosis to Therapy.. *Journal of Personalized Medicine*, **2021**, 11,	3.6	1
28	The paradigm of drug resistance in cancer: an epigenetic perspective.. *Bioscience Reports*, **2022**, 42,	4.1	2
27	Table_1.docx. **2020**,		
26	Table_2.docx. **2020**,		
25	Table_3.docx. **2020**,		
24	Combined therapy with cisplatin and 5-AZA-2CdR modifies methylation and expression of DNA repair genes in oral squamous cell carcinoma.. *International Journal of Clinical and Experimental Pathology*, **2022**, 15, 131-144	1.4	
23	Biomarkers of Response and Resistance to Immunotherapy in Microsatellite Stable Colorectal Cancer: Toward a New Personalized Medicine.. *Cancers*, **2022**, 14,	6.6	1
22	Transcriptional Control Leading to Clinical Outcomes in Breast Cancer Cases. **2022**, 281-336		
21	Genomic landscape of microsatellite instability in Chinese tumors: a comparison of Chinese and TCGA cohorts.. *International Journal of Cancer*, **2022**,	7.5	0
20	Clinicopathologic significance of DNA mismatch repair protein status in endometrial cancer. *Taiwanese Journal of Obstetrics and Gynecology*, **2022**, 61, 415-421	1.6	0
19	Targeted genetic and epigenetic profiling of esophageal adenocarcinomas and non-dysplastic Barrettâ esophagus. *Clinical Epigenetics*, **2022**, 14,	7.7	
18	Use of DNA from Human Stools to Detect Aberrant CpG Island Methylation of Genes Implicated in Colorectal Cancer. *Cancer Epidemiology Biomarkers and Prevention*, **2004**, 13, 1495-1501	4	14
17	Developmental Pathways Are Epigenetically Reprogrammed during Lung Cancer Brain Metastasis. **2022**, 82, 2692-2703		1
16	Microsatellite instability and oncological outcomes in Thai patients with endometrial cancer. 1-7		
15	Using empirical biological knowledge to infer regulatory networks from multi-omics data. **2022**, 23,		1
14	Insight into the molecular mechanism of action of anticancer drugs. **2023**, 477-502		0
13	An overview of cancer and the human microbiome. **2022**,		0
12	Genome wide DNA methylation analysis identifies novel molecular subgroups and predicts survival in neuroblastoma.		2

11	DNA methylation regulator-mediated modification pattern defines tumor microenvironment immune infiltration landscape in colon cancer. 13,	0
10	Epigenomic effects of vitamin D in colorectal cancer.	0
9	Genes and cancer: Genetic counselling and clinical management. **2023**, 521-559.e6	0
8	Lynch syndrome, molecular mechanisms and variant classification.	0
7	Recognition of 5-methyl-CG and CG base pairs in duplex DNA with high stability using antiparallel-type triplex-forming oligonucleotides with 2-guanidinoethyl-2?-deoxynebularine. **2022**, 50, 12071-12081	1
6	DNA Mismatch Repair Proteins and BRAF V600E Detection by Immunohistochemistry in Colorectal Cancer Demonstrates Concordance with Next Generation Sequencing. **2022**, 3, 339-354	0
5	Functional characterization of MLH1 missense variants unveils mechanisms of pathogenicity and clarifies role in cancer. **2022**, 17, e0278283	0
4	Role of epigenetics in pancreatic ductal adenocarcinoma.	0
3	Epigenetics in cancer development, diagnosis and therapy. **2023**,	0
2	MLH1-methylated endometrial cancer under 60´years of age as the âSentinelâ cancer in female carriers of high-risk constitutional MLH1 epimutation. **2023**, 171, 129-140	0
1	A robust microsatellite instability detection model for unpaired colorectal cancer tissue samples. Publish Ahead of Print,	0