

**Additional file 3: Excluded articles and reason for decision.**

AUTHOR	YEAR	TITLE	EXPLANATION
Tarney CM et al.	2019	Biomarker Panel for Early Detection of Endometrial Cancer in the Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial	Does not fit the proposed theme
Byzia E et al.	2018	Recurrent transcriptional loss of the PCDH17 tumor suppressor in laryngeal squamous cell carcinoma is partially mediated by aberrant promoter DNA methylation.	Laboratory study without clinical and pathological data
Parenti S et al.	2018	KLF4 Mediates the Effect of 5-ASA on the $\beta$ -Catenin Pathway in Colon Cancer Cells.	Does not fit the proposed theme
Weng J et al.	2018	PCDHGA9 acts as a tumor suppressor to induce tumor cell apoptosis and autophagy and inhibit the EMT process in human gastric cancer	Another lesion
Horimasu Y et al.	2017	Gene expression profiling of idiopathic interstitial pneumonias (IIPs): identification of potential diagnostic markers and therapeutic targets	Laboratory study without clinical and pathological data
Joosten SC et al.	2017	Prognostic DNA methylation markers for renal cell carcinoma: a systematic review	Systematic review
Lv J et al.	2017	PCDH9 acts as a tumor suppressor inducing tumor cell arrest at G0/G1 phase and is frequently methylated in hepatocellular carcinoma.	Laboratory study without clinical and pathological data
Shi, C., Zhang, Z.	2017	Screening of potentially crucial genes and regulatory factors involved in epithelial ovarian cancer using microarray analysis	Does not fit the proposed theme
Zhou X et al	2017	PROTOCADHERIN 7 Acts through SET and PP2A to Potentiate MAPK Signaling by EGFR and KRAS during Lung Tumorigenesis	Does not fit the proposed theme
Zong Z et al.	2017	PCDH8 inhibits glioma cell proliferation by negatively regulating the AKT/GSK beta/beta-catenin signaling pathway	Another lesion
Montorsi L et al.	2016	Expression of mu-protocadherin is negatively regulated by the activation of the beta-catenin signaling pathway in normal and cancer colorectal enterocytes	Laboratory study without clinical and pathological data
Qiu C et al.	2016	Protocadherin-10 acts as a tumor suppressor gene, and is frequently downregulated by promoter methylation in pancreatic cancer cells	Laboratory study without clinical and pathological data
Shan M et al.	2016	Aberrant expression and functions of protocadherins in human malignant tumors	Laboratory study without clinical and pathological data
Xue J et al.	2016	miR-182-5p Induced by STAT3 Activation Promotes Glioma Tumorigenesis	Another lesion
Yin X et al.	2016	Protocadherin 17 functions as a tumor suppressor suppressing Wnt/beta-catenin signaling and cell metastasis and is frequently methylated in breast cancer	Laboratory study without clinical and pathological data

Puppo F et al.	2015	Identification of Variants in the 4q35 Gene FAT1 in Patients with a Facioscapulohumeral Dystrophy-Like Phenotype	Does not fit the proposed theme
Wang KH et al..	2015	Global methylation silencing of clustered proto-cadherin genes in cervical cancer: serving as diagnostic markers comparable to HPV	Does not fit the proposed theme
Woo YM et al.	2015	Epigenetic silencing of the MUPCDH gene as a possible prognostic biomarker for cyst growth in ADPKD	Does not fit the proposed theme
Zhou LN et al.	2015	PCDH10 Interacts With hTERT and Negatively Regulates Telomerase Activity	Laboratory study without clinical and pathological data
Crawley SW et al.	2014	Intestinal brush border assembly driven by protocadherin-based intermicrovillar adhesion	Laboratory study without clinical and pathological data
Heitzer E et al.	2014	Differential survival trends of stage II colorectal cancer patients relate to promoter methylation status of PCDH10, SPARC, and UCHL1	Laboratory study without clinical and pathological data
Jao TM et al.	2014	Protocadherin 10 suppresses tumorigenesis and metastasis colorectal cancer and its genetic loss predicts adverse prognosis	Does not fit the proposed theme
Wojtalewicz N et al.	2014	A Soluble Form of the Giant Cadherin Fat1 Is Released from Pancreatic Cancer Cells by ADAM10 Mediated Ectodomain Shedding	Does not fit the proposed theme
Hu X et al.	2013	Protocadherin 17 acts as a tumour suppressor inducing tumour cell apoptosis and autophagy, and is frequently methylated in gastric and colorectal cancers	Laboratory study without clinical and pathological data
Ismat A et al.	2013	The secreted AdamTS-A metalloprotease is required for collective cell migration	Another lesion
Takagi D et al.	2013	Novel adaptor protein Shf interacts with ALK receptor and negatively regulates its downstream signals in neuroblastoma	Another lesion
Zhong X et al.	2013	Frequent epigenetic silencing of PCDH10 by methylation in human colorectal cancer	Laboratory study without clinical and pathological data
Dalosso AR et al.	2012	Long-range epigenetic silencing of chromosome 5q31 protocadherins is involved in early and late stages of colorectal tumorigenesis through modulation of oncogenic pathways	Laboratory study without clinical and pathological data
Hinkel I et al.	2012	Cdx2 controls expression of the protocadherin Mucdhl, an inhibitor of growth and beta-catenin activity in colon cancer cells	Laboratory study without clinical and pathological data
Li Z et al.	2012	Role of PCDH10 and its hypermethylation in human gastric cancer	Laboratory study without clinical and pathological data

Sood A et al.	2012	Methylated Genes in Sputum Among Older Smokers With Asthma	Another lesion
Bertrand KC et al.	2011	PCDH10 is a candidate tumour suppressor gene in medulloblastoma	Another lesion
Bouillot S et al.	2011	Protocadherin-12 Cleavage Is a Regulated Process Mediated by ADAM10 protein evidence of shedding up-regulation in pre-eclampsia	Another lesion
Giefing M et al.	2011	High resolution ArrayCGH and expression profiling identifies PTPRD and PCDH17/PCH68 as tumor suppressor gene candidates in laryngeal squamous cell carcinoma	Laboratory study without clinical and pathological data
Li Z et al.	2011	Epigenetic inactivation of PCDH10 in human prostate cancer cell lines	Laboratory study without clinical and pathological data
McGowan PO et al.	2011	Broad Epigenetic Signature of Maternal Care in the Brain of Adult Rats	Animal study
Narayan G et al.	2011	Promoter methylation-mediated inactivation of PCDH10 in acute lymphoblastic leukemia contributes to chemotherapy resistance	Another lesion
Lp BK et al.	2010	Investigating gradients of gene expression involved in early human cortical development	Another lesion
Dalosso AR et al.	2009	Frequent Long-Range Epigenetic Silencing of Protocadherin Gene Clusters on Chromosome 5q31 in Wilms' Tumor	Another lesion
de Tayrac M et al.	2009	Integrative genome-wide analysis reveals a robust genomic glioblastoma signature associated with copy number driving changes in gene expression	Another lesion
Ding K et al.	2009	Inhibition of apoptosis by downregulation of hBex1, a novel mechanism, contributes to the chemoresistance of Bcr/Abl(+) leukemic cells	Another lesion
Huang YT et al.	2009	Genome-Wide Analysis of Survival in Early-Stage Non-Small-Cell Lung Cancer	Does not fit the proposed theme
Lal-Nag M et al.	2009	The claudins	Does not fit the proposed theme
Wang KH et al..	2009	Field methylation silencing of the protocadherin 10 gene in cervical carcinogenesis as a potential specific diagnostic test from cervical scrapings	Laboratory study without clinical and pathological data
Novak P et al.	2008	Agglomerative Epigenetic Aberrations Are a Common Event in Human Breast Cancer	Another lesion
Yu JS et al.	2008	PCDH8, the human homolog of PAPC, is a candidate tumor suppressor of breast cancer	Laboratory study without clinical and pathological data
Oliveira, SS., Morgado-Diaz JA.	2007	Claudins: multifunctional players in epithelial tight junctions and their role in cancer	Does not fit the proposed theme

Ying J et al.	2007	Frequent epigenetic silencing of protocadherin 10 by methylation in multiple haematologic malignancies	Another lesion
Ying J et al.	2006	Functional epigenetics identifies a protocadherin PCDH10 as a candidate tumor suppressor for nasopharyngeal, esophageal and multiple other carcinomas with frequent methylation.	Laboratory study without clinical and pathological data
Redies C et al.	2005	delta-Protocadherins: unique structures and functions	Review
Crott JW et al.	2004	Effects of dietary folate and aging on gene expression in the colonic mucosa of rats: implications for carcinogenesis	Animal study
Moeller MJ et al.	2004	Protocadherin FAT1 binds Ena/VASP proteins and is necessary for actin dynamics and cell polarization	Does not fit the proposed theme
Moulton DE et al.	2004	Expression of a novel cadherin in the mouse and human intestine	Animal study
Goldberg M et al.	2003	Biallelic expression of HRAS and MUCDHL in human and mouse	Animal study
Goldberg M et al.	2002	Identification and expression analysis of the human mu-protocadherin gene in fetal and adult kidneys	Laboratory study without clinical and pathological data
Okazaki N et al.	2002	Protocadherin LKC, a new candidate for a tumor suppressor of colon and liver cancers, its association with contact inhibition of cell proliferation	Laboratory study without clinical and pathological data
Fletcher ST et al.	2001	Gene expression analysis of EpiDerm (TM) following exposure to SLS using cDNA microarrays	Does not fit the proposed theme
Zhang Z., DuBois RN.	2001	Detection of differentially expressed genes in human colon carcinoma cells treated with a selective COX-2 inhibitor	Does not fit the proposed theme
Nollet F et al.	2000	Phylogenetic analysis of the cadherin superfamily allows identification of six major subfamilies besides several solitary members	Does not fit the proposed theme
Ponassi M et al.	1999	Expression of the rat homologue of the Drosophila fat tumour suppressor gene	Animal study
Yoshida K et al.	1998	Cloning, expression analysis, and chromosomal localization of BH-protocadherin (PCDH7), a novel member of the cadherin superfamily	Another lesion