

Publikationen Prof. Dr. Gisela Keller (Stand März 2022)

Herz AL, Wisser S, Kohlruss M, Slotta-Huspenina J, Jesinghaus M, Grosser B, Steiger K, Novotny A, Hapfelmeier A, Schmidt T, Gaida MM, Weichert W, **Keller G**. Elevated microsatellite instability at selected tetranucleotide (EMAST) repeats in gastric cancer: a distinct microsatellite instability type with potential clinical impact? *J Pathol Clin Res* 2022 Jan 31, online ahead of print

Kohlruss M, Krenauer M, Grosser B, Pfarr N, Jesinghaus M, Slotta-Huspenina J, Novotny A, Hapfelmeier A, Schmidt T, Steiger K, Gaida MM, Reiche M, Bauer L, Ott K, Weichert W, **Keller G**. Diverse 'just-right' levels of chromosomal instability and their clinical implications in neoadjuvant treated gastric cancer. *Br J Cancer*. 2021 Dec;125(12):1621-1631.

Muti HS, Heij LR, **Keller G**, Kohlruss M, Langer R, Dislich B, Cheong JH, Kim YW, Kim H, Kook MC, Cunningham D, Allum WH, Langley RE, Nankivell MG, Quirke P, Hayden JD, West NP, Irvine AJ, Yoshikawa T, Oshima T, Huss R, Grosser B, Roviello F, d'Ignazio A, Quaas A, Alakus H, Quaas, Tan X, Pearson AT, Luedde T, Ebert MP, Jäger D, Trautwein C, Gaisa NT, Grabsch HI, Kather JN. Development and validation of deep learning classifiers to detect Epstein-Barr virus and microsatellite instability status in gastric cancer: a retrospective multicentre cohort study. *Lancet Digit Health* 2021, Oct;3(10):e654-e664.

Kohlruss M, Ott K, Grosser B, Jesinghaus M, Slotta-Huspenina J, Novotny A, Hapfelmeier A, Schmidt T, Gaida M, Weichert W, **Keller G**. Sexual difference matters: females with high microsatellite instability show increased survival after neoadjuvant chemotherapy in gastric cancer. *Cancers* 2021,13:1048.

Gross C, Engleitner T, Lange S, Weber J, Jesinghaus M, Konukiewitz B, Muckenhuber A, Steiger K, Pfarr N, Goepfert B, **Keller G**, Weichert W, Adsay NV, Klöppel G, Rad R, Esposito I, Schlitter AM. Whole Exome Sequencing of Biliary Tubulopapillary Neoplasms Reveals Common Mutations in Chromatin Remodeling Genes. *Cancers* 2021, Jun 1;13(11):2742.

Willvonseder B, Stögbauer F, Steiger K, Jesinghaus M, Kuhn PH, Brambs C, Engel J, Bronger H, Schmidt GP, Haller B, Weichert W, **Keller G**, Noske A, Pfarr N, Boxberg M. The immunologic tumor microenvironment in endometrioid endometrial cancer in the morphomolecular context: mutual correlations and prognostic impact depending on molecular alterations. *Cancer Immunol Immunother* 2021, 70(6):1679-1689.

Grosser B, Kohlruss M, Slotta-Huspenina J, Jesinghaus M, Pfarr N, Steiger K, Novotny A, Gaida M, Schmidt T, Hapfelmeier A, Ott K, Weichert W, **Keller G**. Impact of tumor localization and molecular subtypes on the prognostic and predictive significance of p53 expression in gastric cancer. *Cancers* 2020, 12(6): 1689.

Kohlruss M, Grosser B, Krenauer M, Slotta-Huspenina J, Jesinghaus M, Blank S, Novotny A, Reiche M, Schmidt T, Ismani I, Hapfelmeier A, Mathias D, Meyer P, Gaida M, Bauer L, Ott K, Weichert W, **Keller G**. Prognostic implication of molecular subtypes and response to neoadjuvant chemotherapy in 760 gastric carcinomas: role of Epstein Barr virus infection and high and low microsatellite instability. *J Pathol Clin Res*, 2019 Oct; 5(4):227-239.

Sperlich A, Balmert A, Doll D, Bauer S, Franke F, **Keller G**, Wilhelm D, Mur A, Respondek M, Friess H, Nitsche U, Janssen KP. Genetic and immunological biomarkers predict metastatic disease recurrence in stage III colon cancer. *BMC Cancer*. 2018 Oct 19;18(1):998.

Heinrichs SKM, Hess T, Becker J, Hamann L, Vashist YK, Butterbach K, Schmidt T, Alakus H, Krasniuk I, Höblinger A, Lingohr P, Ludwig M, Hagel AF, Schildberg CW, Veits L, Gyvyte U, Weise K, Schüller V, Böhmer AC, Schröder J, Gehlen J, Kreuser N, Hofer S, Lang H, Lordick F, Malfertheiner P, Moehler M, Pech O, Vassos N, Rodermann E, Izbicki JR, Kruschewski M, Ott K, Schumann RR, Vieth M, Mangold E, Gasenko E, Kupcinkas L, Brenner H, Grimminger P, Bujanda L, Sopeña F, Espinel J, Thomson C, Pérez-Aísa Á, Campo R, Geijo F, Collette D, Bruns C, Messerle K, Gockel I, Nöthen MM, Lippert H, Ridwelski K, Lanás A, **Keller G**, Knapp M, Leja M, Kupcinkas J, García-González MA,

Venerito M, Schumacher J. Evidence for PTGER4, PSCA, and MBOAT7 as risk genes for gastric cancer on the genome and transcriptome level. *Cancer Med.* 2018 Oct;7(10):5057-5065.

Kohlruss M, Reiche M, Jesinghaus M, Grosser B, Slotta-Huspenina J, Hapfelmeier A, Bauer L, Novotny A, Weichert W, **Keller G**. A microsatellite based multiplex PCR method for the detection of chromosomal instability in gastric cancer. *Sci Rep.* 2018 Aug 22;8(1):12551.

Bauer L, Hapfelmeier A, Blank S, Reiche M, Slotta-Huspenina J, Jesinghaus M, Novotny A, Schmidt T, Grosser B, Kohlruss M, Weichert W, Ott K, **Keller G**. A novel pretherapeutic gene expression based risk score for treatment guidance in gastric cancer. *Ann Oncol.* 2018, 29(1):127-132.

Morak M, Ibsler A, **Keller G**, Jessen E, Laner A, Gonzales-Fassrainer D, Locher M, Massdorf T, Nissen AM, Benet-Pagès A, Holinski-Feder E. Comprehensive analysis of the MLH1 promoter region in 480 patients with colorectal cancer and 1150 controls reveals new variants including one with a heritable constitutional MLH1 epimutation. *J Med Genet.* 2018 Apr;55(4):240-248.

Jesinghaus M, Konukiewitz B, **Keller G**, Kloor M, Steiger K, Reiche M, Penzel R, Endris V, Arsenic R, Hermann G, Stenzinger A, Weichert W, Pfarr N, Klöppel G. Colorectal mixed adenoneuroendocrine carcinomas and neuroendocrine carcinomas are genetically closely related to colorectal adenocarcinomas. *Mod Pathol* 2017, 30(4):610-619.

Morak M, Käsbauer S, Kerscher M, Laner A, Nissen AM, Benet-Pagès A, Schackert HK, **Keller G**, Massdorf T, Holinski-Feder E. Loss of MSH2 and MSH6 due to heterozygous germline defects in MSH3 and MSH6. *Fam Cancer.* 2017, 16(4):491-500.

Bauer L, Takacs A, Slotta-Huspenina J, Langer R, Becker K, Novotny A, Ott K, Walch A, Hapfelmeier A, **Keller G**. Clinical significance of NOTCH1 and NOTCH2 expression in gastric carcinomas: an Immunohistochemical study. *Front Oncol* 2015, 5:94.

Hansford S, Kaurah P, Li-Chang H, Woo M, Senz J, Pinheiro H, Schrader KA, Schaeffer DF, Shumansky K, Zogopoulos G, Santos TA, Claro I, Carvalho J, Nielsen C, Padilla S, Lum A, Talhouk A, Baker-Lange K, Richardson S, Lewis I, Lindor NM, Pennell E, MacMillan A, Fernandez B, **Keller G**, Lynch H, Shah SP, Guilford P, Gallinger S, Corso G, Roviello F, Caldas C, Oliveira C, Pharoah PD, Huntsman DG. Hereditary Diffuse Gastric Cancer Syndrome: CDH1 Mutations and Beyond. *JAMA Oncol* 2015;1(1):23-32.

van der Post RS, Vogelaar IP, Carneiro F, Guilford P, Huntsman D, Hoogerbrugge N, Caldas C, Schreiber KE, Hardwick RH, Ausems MG, Bardram L, Benusiglio PR, Bisseling TM, Blair V, Bleiker A, Boussioutas A, Cats A, Coit D, DeGregorio L, Figueiredo J, Ford JM, Heijkoop E, Hermens R, Humar B, Kaurah P, **Keller G**, Lai J, Ligtenberg MJ, O'Donovan M, Oliveira C, Pinheiro H, Ragnunath K, Rasenberg E, Richardson S, Roviello F, Schackert H, Seruca R, Taylor A, Ter Huurne A, Tischkowitz M, Joe ST, van Dijck B, van Grieken NC, van Hillegersberg R, van Sandick JW, Vehof R, van Krieken JH, Fitzgerald RC. Hereditary diffuse gastric cancer: updated clinical guidelines with an emphasis on germline CDH1 mutation carriers. *J Med Genet* 2015 52(6):361-374.

Malinowsky K, Nitsche U, Janssen KP, Bader FG, Späth C, Drecoll E, Keller G, Höfler H, Slotta-Huspenina J, Becker KF. Activation of the PI3K/AKT pathway correlates with prognosis in stage II colon cancer. *Br J Cancer.* 2014, 110(8):2081-9.

Morak M, Heidenreich B, **Keller G**, Hampel H, Laner A, de la Chapelle A, Holinski-Feder E. Biallelic MUTYH mutations can mimic Lynch syndrome. *Eur J Hum Genet* 2014, 22(11):1334-7.

Blank S, Rachakonda S, **Keller G**, Weichert W, Lordick F, Langer R, Springfield C, Bruckner T, Becker K, Kumar R, Ott K. A retrospective comparative exploratory study on two Methylentetrahydrofolate Reductase (MTHFR) polymorphisms in esophagogastric cancer: the A1298C MTHFR polymorphism is an independent prognostic factor only in neoadjuvantly treated gastric cancer patients. *BMC Cancer* 2014, 1471-2407-14-58.

Maak M, Simon I, Nitsche U, Roepman P, Snel M, Glas AM, Schuster T, **Keller G**, Zeestraten E, Goossens I, Janssen KP, Friess H, Rosenberg R. Independent Validation of a Prognostic Genomic Signature (ColoPrint) for Patients With Stage II Colon Cancer. *Ann Surg*. 2013 Jun, 257 (6):1053-8.

Yuan G, Regel I, Lian F, Friedrich T, Hitkova I, Hofheinz RD, Ströbel P, Langer R, **Keller G**, Röcken C, Zimmermann W, Schmid RM, Ebert MP, Burgermeister E. WNT6 is a novel target gene of caveolin-1 promoting chemoresistance to epirubicin in human gastric cancer cells. *Oncogene* 2013, 32:375-387.

Bettstetter M, Berezowska S, **Keller G**, Walch A, Feuchtinger A, Slotta-Huspenina J, Feith M, Drecoll E, Höfler H, Langer R. Epidermal growth factor receptor, phosphatidylinositol-3-kinase catalytic subunit/PTEN, and KRAS/NRAS/BRAF in primary resected esophageal adenocarcinomas: loss of PTEN is associated with worse clinical outcome. *Hum Pathol* 2013, 32:375-387.

Bauer L, Langer R, Becker K, Hapfelmeier A, Ott K, Novotny A, Höfler H, **Keller G**. Expression profiling of stem cell-related genes in neoadjuvant-treated gastric cancer: A *NOTCH2*, *GSK3B* and *β -catenin* gene signature predicts survival. *PLoS ONE* 2012, 7(9): e44566.

Ebert MP, Tänzer M, Balluff B, Burgermeister E, Kretzschmar AK, Hughes DJ, Tetzner R, Lofton-Day C, Rosenberg R, Reinacher-Schick AC, Schulmann K, Tannapfel A, Hofheinz R, Röcken C, **Keller G**, Langer R, Specht K, Porschen R, Stöhlmacher-Williams J, Schuster T, Ströbel P, Schmid RM. TFAP2E-DKK4 and Chemoresistance in Colorectal Cancer. *N Engl J Med*. 2012, 366:44-53.

Kneissl J, Keller S, Lorber T, Heindl S, **Keller G**, Drexler I, Hapfelmeier A, Höfler H, Lubner B. Association of amphiregulin with the cetuximab sensitivity of gastric cancer cell lines. *Int J Oncol* 2012, 41(2):733-44.

Slotta-Huspenina J, Koch I, de Leval L, **Keller G**, Klier M, Bink K, Kremer M, Raffeld M, Fend F, Quintanilla-Martinez L. The impact of cyclin D1 mRNA isoforms, morphology and p53 in mantle cell lymphoma: p53 alterations and blastoid morphology are strong predictors of a high proliferation index. *Haematologica*. 2012 Sep;97(9):1422-30.

Heindl S, Eggenstein E, Keller S, Kneissl J, **Keller G**, Mutze K, Rauser S, Gasteiger G, Drexler I, Hapfelmeier A, Höfler H, Lubner B. Relevance of MET activation and genetic alterations of KRAS and E-cadherin for cetuximab sensitivity of gastric cancer cell lines. *J Cancer Res Clin Oncol*. 2012 Jan 31. [Epub ahead of print]

Mutze K, Langer R, Schumacher F, Becker K, Ott K, Novotny A, Hapfelmeier A, Höfler H, **Keller G**. DNA methyltransferase 1 as a predictive biomarker and potential therapeutic target for chemotherapy in gastric cancer. *Eur J Cancer* 2011, 47:1817-1825.

Lubner B, Deplazes J, **Keller G**, Walch A, Rauser S, Eichmann M, Langer R, Höfler H, Hegewisch-Becker S, Folprecht G, Wöll E, Decker T, Endlicher E, Lorenzen S, Fend F, Peschel C, Lordick F. Biomarker analysis of cetuximab plus oxaliplatin/leucovorin/5-fluorouracil in first-line metastatic gastric and oesophago-gastric junction cancer: results from a phase II trial of the Arbeitsgemeinschaft Internistische Onkologie (AIO). *BMC Cancer* 2011, 11:509.

Ott K, Rachakonda PS, Panzram B, **Keller G**, Lordick F, Becker K, Langer R, Buechler M, Hemminiki K, Kumar R. DNA repair gene and MTHFR gene polymorphisms as prognostic markers in locally advanced adenocarcinoma of the esophagus or stomach treated with cisplatin and 5-fluorouracil-based neoadjuvant chemotherapy. *Ann Surg Oncol* 2011, 18:2688-98.

Langer R, Becker K, Feith M, Friess H, Höfler H, **Keller G**. Genetic aberrations in primary esophageal melanomas: molecular analysis of c-KIT, PDGFR, KRAS, NRAS and BRAF in a series of 10 cases. *Mod Pathol* 2011, 24:495-501.

Lorenzen S, Panzram B, **Keller G**, Lordick F, Herrmann K, Becker K, Langer R, Schwaiger M, Siewert JR, Ott K. Association of the VEGF 936C>T polymorphism with FDG uptake, clinical, histopathological, and metabolic response in patients with adenocarcinomas of the esophagogastric junction. *Mol Imaging Biol* 2011, 13:178-186.

Mutze K, Langer R, Becker K, Ott K, Novotny A, Luber B, Hapfelmeier A, Göttlicher M, Höfler H, **Keller G**. Histone deacetylase (HDAC) 1 and 2 expression and chemotherapy in gastric cancer. *Annals Surg Oncol* 2010, 17:3336-3343.

Nardon E, Glavac D, Benhattar J, Groenen PJ, Höfler G, Höfler H, Jung A, **Keller G**, Kirchner T, Lessi F, Ligtenberg MJ, Mazzant CM, Winter G, Stanta G. A multicenter study to validate the reproducibility of MSI testing with a panel of 5 quasimonomorphic mononucleotide repeats. *Diagn Mol Pathol* 2010, 19:236-242.

Langer R, Mutze K, Becker K, Feith M, Ott K, Höfler H, **Keller G**. Expression of class I histone deacetylase (HDAC1 and HDAC2) in oesophageal adenocarcinomas: an immunohistochemical study. *J Clin Pathol* 2010, 63:994-998.

Lordick F, Luber B, Lorenzen S, Hegewisch-Becker S, Folprecht G, Wöll E, Decker T, Endlicher E, Röthling N, Schuster T, **Keller G**, Fend F, Peschel C. Cetuximab plus oxaliplatin/leucovorin/5-fluorouracil in first-line metastatic gastric cancer: a phase II study of the Arbeitsgemeinschaft Internistische Onkologie (AIO). *Br J Cancer*. 2010, 102:500-505.

Mayrbaeurl B, **Keller G**, Schauer W, Burgstaller S, Czompo M, Hoeblich W, Knoflach P, Duba HC, Hoefler H, Thaler J. Germline mutation of the E-cadherin gene in three sibling cases with advanced gastric cancer: clinical consequences for the other family members. *Eur J Gastroenterol Hepatol*. 2010, 22:306-310.

Stocker G, Ott K, Hennigsen N, Becker K, Hapfelmeier A, Lordick F, Hois S, Plaschke S, Höfler H, **Keller G**. CyclinD1 and interleukin-1 receptor antagonist polymorphisms are associated with prognosis in neoadjuvant-treated gastric carcinoma. *Eur J Cancer* 2009, 45:3326-3335.

Keller G, Geist B, Slotta-Huspenina J, Langer R, Nagl F, Fend F, Höfler H, Perren A. Novel multiple, monoallelic KRAS mutations at codon 12 and 13. *Int J Cancer*. 2009, 125:2744-2745.

Oliveira C, Senz J, Kaurah P, Pinheiro H, Sanges R, Haegert A, Corso G, Schouten J, Fitzgerald R, Vogelsang H, **Keller G**, Dwerryhouse S, Grimmer D, Chin SF, Yang HK, Jackson CE, Seruca R, Roviello F, Stupka E, Caldas C, Huntsman D. Germline CDH1 deletions in hereditary diffuse gastric cancer families. *Hum Mol Genet*. 2009, 8:1545-55.

Brücher B, **Keller G**, Werner M, Müller U, Lassmann S, Cabras AC, Fend F, Busch R, Stein H, Allescher HD, Molls M, Siewert JR, Höfler H, Specht K (2008): Using Q-RT-PCR to measure Cyclin D1, TS, TP, DPD, and Her-2/neu as predictors for response, survival, and recurrence in patients with esophageal squamous cell carcinoma following radiochemotherapy. *Int J Colorectal Dis*, 2009; 24:69-77.

Keller G, Langer R, Höfler H. Therapy related markers and response prediction towards multimodal treatment of carcinomas of the upper gastrointestinal tract. *Current Pharmaco-genomics and Personalized Medicine* 2008; 6:85-96.

Ott K, Lordick F, Becker K, Ulm K, Siewert J, Höfler H, **Keller G**. Glutathione-S-transferase P1, T1 and M1 genetic polymorphisms in neoadjuvant-treated locally advanced gastric cancer: GSTM1-present genotype is associated with better prognosis in completely resected patients. *Int J Colorectal Dis*. 2008, 23:773-82.

Bettstetter M, Dechant S, Ruemmele P, Vogel C, Kurz K, Morak M, **Keller G**, Holinski-Feder E, Hofstaedter F, Dietmaier W. MethyQESD, a robust and fast method for quantitative methylation analyses in HNPCC diagnostics using formalin-fixed and paraffin-embedded tissue samples. *Lab Invest*. 2008,88:1367-75.

Frank B, Burwinkel B, Bermejo JL, Försti A, Hemminiki K, Houlston R, Mangold E, Rahner N, Friedl W, Friedrichs N, Buettner R, Engel C, Loeffler M, Holinski-Feder E, Morak M, **Keller G**, Schackert HK, Krüger S, Goecke T, Moeslein G, Kloor M, Gebert J, Kunstmann E, Schulmann K, Rüschoff J, Propping P; The German HNPCC Consortium. Ten recently identified associations between nsSNPs and colorectal cancer could not be replicated in German families. *Cancer Lett*. 2008, 271:153-7.

Morak M, Schackert HK, Rahner N, Betz B, Ebert M, Walldorf C, Royer-Pokora B, Schulmann K, von Knebel-Doeberitz M, Dietmaier W, **Keller G**, Kerker B, Leitner G, Holinski-Feder E. Further evidence for heritability of an epimutation in one of 12 cases with MLH1 promoter methylation in blood cells clinically displaying HNPCC. *Eur J Hum Genet.* 2008, 16:804-11.

Steinke V, Rahner N, Morak M, **Keller G**, Schackert HK, Görgns H, Schmiegel W, Royer-Pokora B, Dietmaier W, Kloor M, Engel C, Propping P, Aretz S; for the German HNPCC Consortium. No association between MUTYH and MSH6 germline mutations in 64 HNPCC patients. *Eur J Hum Genet.* 2008, 16:587-92.

Bremm A, Walch A, Fuchs G, Mages J, Duyster J, **Keller G**, Herrmannstädter C, Becker KF, Rauser S, Langer R, von Weyern C, Höfler H, Lubber B. Enhanced activation of epidermal growth factor receptor caused by tumor-derived somatic E-cadherin mutations. *Cancer Res*, 2008, 68(3):707-14.

Napieralski R, Ott K, Kremer M, Becker M, Boulesteix AL, Lordick F, Siewert JR, Höfler H, **Keller G**. Methylation of tumor related genes in neoadjuvant treated gastric cancer: relationship to therapy response, clinicopathological and molecular features. *Clin Cancer Res.* 2007, 13(17):5095-5102.

Pellegata N, Quintanilla-Martinez L, **Keller G**, Liyanarachchi S, Höfler H, Atkinson M, Fend F. Human pheochromocytomas show reduced p27Kip1 expression that is not associated with somatic gene mutations and rarely with deletions. *Virchows Arch.* 2007, 451:37-46.

Höfler H, Langer R, Ott K, **Keller G**. Prediction of response to neoadjuvant chemotherapy in carcinomas of the upper gastrointestinal tract. *Recent Results Cancer Res* 2007, 176:33-36.

Mateus AR, Seruca R, Machado JC, **Keller G**, Oliveira MJ, Suriano G, Lubber B. EGFR regulates Rho-GTP dependent cell motility in E-cadherin mutant cells. *Hum Mol Genet.* 2007, 16:1639-47.

Bettstetter M, Dechant S, Ruemmele P, Grabowski M, **Keller G**, Holinski-Feder E, Hartmann A, Hofstaedter F, Dietmaier W. Distinction of hereditary nonpolyposis colorectal cancer and sporadic microsatellite-unstable colorectal cancer through quantification of MLH1 methylation by real time PCR. *Clin Cancer Res* 2007, 13:3221-3228.

Davalos V, Dopeso H, Velho S, Ferreira AM, Cirnes L, Diaz-Chico N, Bilbao C, Ramirez R, Rodriguez G, Falcon O, Leon L, Niessen RC, **Keller G**, Dallenbach-Hellweg G, Espin E, Armengol M, Plaja A, Perucho M, Imai K, Yamamoto H, Gebert JF, Diaz-Chico JC, Hofstra RM, Woerner SM, Seruca R, Schwartz S, Arango D. High EPHB2 mutation rate in gastric but not endometrial tumors with microsatellite instability. *Oncogene* 2007, 26:308-311.

Höfler H, Langer R, Ott K, **Keller G**. Prediction of response to neoadjuvant chemotherapy in carcinomas of the upper gastrointestinal tract. *Adv Exp Med Biol.* 2006;587:115-20.

Ott K, Vogelsang H, Marton N, Becker K, Lordick F, Kobl M, Schuhmacher C, Novotny A, Mueller J, Fink U, Ulm K, Siewert JR, Hofler H, **Keller G**. The thymidylate synthase tandem repeat promoter polymorphism: A predictor for tumor-related survival in neoadjuvant treated locally advanced gastric cancer. *Int J Cancer.* 2006, 119:2885-2894.

Goecke T, Schulmann K, Engel C, Holinski-Feder E, Pagenstecher C, Schackert HK, Kloor M, Kunstmann E, Vogelsang H, **Keller G**, Dietmaier W, Mangold E, Friedrichs N, Propping P, Kruger S, Gebert J, Schmiegel W, Rueschoff J, Loeffler M, Moeslein G; German HNPCC Consortium. Genotype-phenotype comparison of German MLH1 and MSH2 mutation carriers clinically affected with Lynch syndrome: a report by the German HNPCC Consortium. *J Clin Oncol* 2006, 24:4285-92.

Pühringer-Oppermann F, Stahl M, **Keller G**, Sarbia M. Lack of prognostic impact of p53 gene mutation and p53 phosphorylation at serine 15 in multimodally treated adenocarcinomas of the gastroesophageal junction. *J Cancer Res Clin Oncol* 2006, 132:433-438.

Baumann S, **Keller G**, Puhlinger F, Napieralski R, Feith M, Langer R, Hofler H, Stein HJ, Sarbia M. The prognostic impact of O(6)-Methylguanine-DNA Methyltransferase (MGMT) promotor hypermethylation in esophageal adenocarcinoma. *Int J Cancer* 2006, 119:264-268.

Muller A, Beckmann C, Westphal G, Bocker Edmonston T, Friedrichs N, Dietmaier W, Brasch FE, Kloor M, Poremba C, **Keller G**, Aust DE, Fass J, Buttner R, Becker H, Ruschoff J; German HNPCC Consortium. Prevalence of the mismatch-repair-deficient phenotype in colonic adenomas arising in HNPCC patients: results of a 5-year follow-up study. *Int J Colorectal Dis* 2006, 21:632-641.

Krüger S, Engel C, Bier A, Mangold E, Pagenstecher C, von Knebel Doeberitz M, Holinski-Feder E, Möslein G, **Keller G**, Kunstmann E, Friedl W, Plaschke J, Rüschoff J, Schackert HK and the German HNPCC Consortium. Absence of association between cyclin D1 (CCND1) G870A polymorphism and age of onset in hereditary nonpolyposis colorectal cancer. *Cancer Letters* 2006, 236:191-197.

Concetta Fagnoli M, Altobelli E, **Keller G**, Chimenti S, Höfler H, Peris K. Contribution of melanocortin-1 receptor gene variants to sporadic cutaneous melanoma risk in a population in central Italy: a case control study. *Melanoma Res* 2006, 16:175-182.

Engel C, Forberg J, Holinski-Feder E, Pagenstecher C, Plaschke J, Kloor M, Poremba C, Pox CP, Rüschoff J, **Keller G**, Dietmaier W, Rümmele P, Friedrichs N, Mangold E, Büttner R, Schackert HK, Kienle P, Stemmler S, Möslein G, Löffler M, and the German HNPCC Consortium. Novel strategy for optimal sequential application of clinical criteria, immunohistochemistry and microsatellite analysis in the diagnosis of hereditary nonpolyposis colorectal cancer. *Int J Cancer* 2006;118:115-22.

Biedermann K, Vogelsang H, Becker I, Siewert HJ, Höfler H, **Keller G**. Desmoglein 2 shows abnormal expression rather than mutation in familial and sporadic gastric cancer. *J Pathol.* 2005, 207:199-206.

Keller G, Becker KF, Höfler H. Molecular medicine of upper gastric adenocarcinomas. *Expert reviews molecular medicine* 2005, 7:1-13.

Mueller-Koch Y, Vogelsang H, Kopp R, Lohse R, **Keller G**, Aust D, Muders M, Gross M, Daum J, Schiemann U, Grabowski M, Scholz M, Kerker B, Becker I, Henke G, Holinski-Feder E. HNPCC – Clinical and molecular evidence for a new entity of hereditary colorectal cancer. *Gut* 2005, 54:1733-40.

Napieralski R, Ott K, Kremer M, Specht K, Vogelsang H, Becker K, Müller M, Lordick F, Fink U, Siewert RJ, Höfler H, **Keller G**. Combined GADD45A and thymidine phosphorylase expression levels predict response and survival of neoadjuvant-treated gastric cancer patients. *Clin Cancer Res.* 2005, 11:3025-31.

Grabowski M, Mueller-Koch Y, Grabson-Frodl E, Koehler U, **Keller G**, Vogelsang H, Dietmaier W, Kopp R, Siebers U, Schmitt W, Neitzel B, Gruber M, Doerner C, Kerker B, Rümmele P, Henke G, Holinski-Feder E. Deletions account for 17% of pathogenic germline alterations in MLH1 and MSH2 in hereditary nonpolyposis colorectal cancer (HNPCC) families. *Genetic Test* 2005, 9:138-146.

Mangold E, Pagenstecher C, Friedl W, Mathiak M, Büttner R, Engel C, Loeffler M, Holinski-Feder E, Muller-Koch Y, **Keller G**, Schackert HK, Krüger S, Goecke T, Moeslein G, Kloor M, Gebert J, Kunstmann E, Schulmann K, Rüschoff J, Propping P. Spectrum and frequencies of mutations in MSH2 and MLH1 identified in 1,721 German families suspected of hereditary nonpolyposis colorectal cancer. *Int J Cancer* 2005, 116:692-702.

Oliveira C, Suriano G, Ferreira P, Canedo P, Kaurah P, Mateus R, Figueiredo C, Carneiro F, **Keller G**, Huntsman D, Machado JC, Seruca R. Genetic screening for familial gastric cancer. *Hereditary cancer in clinical practice* 2004;2, 51-64.

Fricke E, Hermannstädter C, **Keller G**, Fuchs M, Brunner I, Busch R, Höfler H, Becker KF, Luber B. Effect of wild-type and mutant E-cadherin on cell proliferation and responsiveness to the chemotherapeutic agents cisplatin, etoposide, and 5-fluorouracil. *Oncology* 2004, 66:150-159.

Keller G, Vogelsang H, Becker I, Plaschke S, Ott K, Suriano G, Mateus AR, Seruca R, Biedermann K, Huntsman D, Döring C, Holinski-Feder E, Neutzling A, Siewert JR, Höfler H. Germline mutation of the

E-cadherin (CDH1) and TP53 rather than of RUNX3 and HPP1, contribute to genetic predisposition in German gastric cancer patients. *J Med Genet* 2004, 41(6):e89.

Rüschoff J, Roggendorf B, Brasch F, Mathiak M, Aust DE, Plaschke J, Mueller W, Poremba C, Kloor M, **Keller G**, Muders M, Blasenbrenn-Vogt S, Rümmele P, Müller A, Büttner R; Collaborative German Study Group on hereditary colorectal cancer funded by the German Cancer Aid (Deutsche Krebshilfe). Molecular pathology in hereditary colorectal cancer. Recommendations of the Collaborative German Study Group on hereditary colorectal cancer funded by the German Cancer Aid. *Pathologie* 2004, 25:178-192.

Ott K, Vogelsang H., Mueller J., Becker K, Müller M, Fink U, Siewert JR, Höfler H, **Keller G**. Chromosomal instability rather than p53 mutation is associated with response to neoadjuvant cisplatin-based chemotherapy in gastric cancer. *Clin Cancer Res* 2003, 9:2307-2315.

Woerner SM, Benner A, Sutter C, Yuan YP, **Keller G**, Bork P, Knebel Doeberitz M, Gebert JF: Pathogenesis of DNA repair deficient cancers: a statistical meta-analysis of putative targets. *Oncogene* 2003, 22:2226-2235.

Fargnoli MC, Chimenti S, **Keller G**, Höfler H, Peris K: Identification of four novel melanocortin 1 receptor (MCR) gene variants in a mediterranean population. *Hum Mutat* 2003,21:655.

Fricke E, **Keller G**, Becker I, Rosivatz E, Schott C, Plaschke S, Rudelius M, Hermanstädter C, Busch R, Höfler H, Becker KF, Luber B: Relationship between E-cadherin gene mutation and p53 gene mutation, p53 accumulation, Bcl-2 expression and Ki-67 staining in diffuse-type gastric carcinoma. *Int J Cancer* 2003, 104(1):60-5.

Keller G: Hereditary aspects of gastric cancer. *Pathologica* 2002, 94:229-233

Pharoah P, Olivieira C, Machado JC, **Keller G**, Vogelsang H, Laux H, Becker KF, Hahn H, Caldas C, Huntsman D: CDH1 C-160A promotor polymorphisms is not associated with risk of stomach cancer. *Int J Cancer* 2002, 101:196-197.

Keller G, Hartmann A, Mueller J, Höfler H: Denaturing high pressure liquid chromatography (DHPLC) for the analysis of somatic p53 mutations. *Lab Invest* 2001, 12:1735-1737.

Quintanilla-Martinez L, Kremer M, **Keller G**, Nathrath M, Gamboa-Dominguez A, Meneses A, Luna-Contreras L, Cabras A, Hoefler H, Mohar A, Fend F: p53 mutations in nasal NK/T-cell lymphoma from Mexico: association with large cell morphology and advanced disease. *Am J Pathol* 2001, 159:2095-2105.

Werner M, Becker KF, **Keller G**, Höfler H: Gastric adenocarcinoma: pathomorphology and molecular pathology. *Res Clin Oncol* 2001, 127:207-216.

Holinski-Feder E, Müller-Koch Y, Friedl W, Möslein G, **Keller G**, Plaschke J, Ballhausen W, Gross m, Baldwin-Jedele K, Junck M, Mangold E, Vogelsang H, Schakert H, Lohse P, Murken J, Meitingner T: DHPLC mutation analysis of the hereditary nonpolyposis colon cancer (HNPCC) genes hMLH1 and hMSH2. *J Biochem Biophys Methods* 2001, 47 (1-2). 21-32.

Grundeit T, Vogelsang H, Ott K, Mueller J, Scholz M, Becker K, Fink U, Siewert JR, Höfler H, **Keller G**: Loss of heterozygosity and microsatellite instability as predictive markers for neoadjuvant treatment in gastric carcinoma. *Clin Cancer Res* 2000, 6:4782-4788.

Yanagi M, **Keller G**, Mueller J, Walch A, Werner M, Stein HJ, Siewert JR, Höfler H: Comparison of loss of heterozygosity and microsatellite instability in adenocarcinomas of the distal esophagus and proximal stomach. *Virchows Arch* 2000, 437:605-610.

Becker KF, **Keller G**, Höfler H: The use of molecular biology in diagnosis and prognosis of gastric cancer. *Surg Oncol* 2000, 9: 5-11.

Santoro M, Thomas GA, Vecchio G, Williams GH, Fusco A, Chiappetta G, Pozcharskaya V, Bogdanova TI, Cherstvoy ED, Voscoboinik L, Trinko ND, Carss A, Bunnell H, Tonnachera M, Dumont JE, **Keller G**, Höfler H, Williams ED: Gene rearrangement and Chernobyl related thyroid cancers. *Br J Cancer* 2000, 82:315-22.

Walch A, Zitzelsberger H, Bruch J, **Keller G**, Angermeier D, Aubele M, Mueller J, Stein H, Braselmann H, Siewert JR, Höfler H, Werner M: Chromosomal imbalances in Barrett's adenocarcinoma and metaplasia-dysplasia-carcinoma sequence. *Am J Pathol* 2000, 156:555-566.

Caldas C, Carneiro F, Lynch HT, Wiesner GL, Powell S, Lewis FL, Huntsman D, Pharoah P, Jankowski JA, MacLeod P, Vogelsang H, **Keller G**, Park KM, Richards F, Maher E, Gayther S, Oliveira C, Grehan N, Wight D, Seruca R, Roviello F, Ponder BAJ, Jackson CE: Familial gastric cancer; overview and guidelines for management. *Review. J Med Genet* 1999, 36:873-80.

Keller G, Vogelsang H, Becker I, Hutter J, Ott K, Candidus S, Grundei T, Becker KF, Mueller J, Siewert JR, Höfler H: Diffuse type gastric and lobular breast carcinoma in a familial gastric cancer patient with an E-cadherin germline mutation. *Am J Pathol* 1999, 155:337-342.

D'Adda T, **Keller G**, Bordi C, Höfler H: Loss of heterozygosity at 11q13-14 regions in gastric neuroendocrine tumors not associated with multiple endocrine neoplasia type 1 syndrome. *Lab Invest* 1999, 79:671-677.

Mueller JD, Haegele N, **Keller G**, Mueller E, Saretzky G, Bethke B, Stolte M, Höfler H: Loss of heterozygosity and microsatellite instability in so-called „de novo“ versus ex-adenoma carcinoma of the colorectum. *Am J Pathol* 1998, 153:1977-1984.

Fargnoli MC, Chimenti S, **Keller G**, Soyer HP, dal Pozzo V, Höfler H, Peris K: CDKN2a/p16INK4a mutations and lack of p19 ARF involvement in familial melanoma kindreds. *J Invest Dermatol* 1998, 111:1202-1206.

Keller G, Rudelius M, Vogelsang H, Grimm V, Wilhelm MG, Mueller J, Siewert JR, Höfler H: Microsatellite instability and loss of heterozygosity in gastric carcinoma in comparison to family history. *Am J Pathol* 1998, 152:1281-1289.

Prechtel D, Werenskiold AK, Prechtel K, **Keller G**, Höfler H: Frequent loss of heterozygosity at chromosome 13q12-13 with BRCA2 markers in sporadic male breast cancer. *Diagn Mol Pathol* 1998, 7:57-62.

Höfler H, **Keller G**, Candidus S, Becker KF: New molecular aspects in gastric cancer with possible clinical implication. *Onkologie* 1997, 20:18-24.

Saretzki G, Hoffmann U, Röhlke P, Psille R, Gaigal T, **Keller G**, Höfler H, Löning T, Petersen I, Dietel M: Identification of allelic losses in benign, borderline, and invasive epithelial ovarian tumors and correlation with clinical outcome. *Cancer* 1997, 80:1241-1249.

Peris K, Onorati MT, **Keller G**, Magrini F, Donati P, Muscardin L, Höfler H, Chimenti S: Widespread microsatellite instability in sebaceous tumours of patients with the Muir-Torre syndrome. *British J Dermatol* 1997, 137:356-360.

Peris K, Magrini F, **Keller G**, Manente I, Dalessandro E, Onorate MT, Höfler H, Cimenti S: Analysis of microsatellite instability and loss of heterozygosity in keratocanthoma. *Arch Dermatol Res* 1997, 289:185-188.

Keller G, Grimm V, Vogelsang H, Bischoff P, Mueller J, Siewert JR, Höfler H: Analysis for microsatellite instability and mutations of the DNA mismatch repair gene *hMLH1* in familial gastric cancer. *Int J Cancer* 1996, 68: 571 – 576.

Keller G, Rotter M, Vogelsang H, Bischoff P, Becker KF, Mueller J, Brauch H, Siewert JR, Höfler H: Microsatellite instability in adenocarcinomas of the upper gastrointestinal tract. Relation to clinicopathological data and family history. *Am J Pathol* 1995, 147:593-600.

Peris K, **Keller G**, Chimenti S, Amantea A, Kerl H, Höfler H: Microsatellite instability and loss of heterozygosity in malignant melanoma. *J Invest Dermatol* 1995, 105: 625-628.

Keller G, Ben-Shaul Y, Bacher A: Influence of metabolic inhibitors on the degradation of tight junctions in HT29 cells. *Exp Cell Res* 1992, 200:16-25