PTEN Reference List

1. **PLoS Biol. 2003 Dec; 1(3):E59. Epub 2003 Oct 27**.

Pten dose dictates cancer progression in the prostate.

Trotman LC, Niki M, Dotan ZA, Koutcher JA, Di Cristofano A, Xiao A, Khoo AS, Roy-Burman P, Greenberg NM, Van Dyke T, Cordon-Cardo C, Pandolfi PP.

PMID: 14691534 [PubMed - indexed for MEDLINE] PMCID: PMC270016

2. **Urol Oncol. 2004 Jul-Aug; 22(4):307-12**.

The assessment of PTEN tumor suppressor gene in combination with Gleason scoring and serum PSA to evaluate progression of prostate carcinoma.

Koksal IT, Dirice E, Yasar D, Sanlioglu AD, Ciftcioglu A, Gulkesen KH, Ozes NO, Baykara M, Luleci G, Sanlioglu S.

3. **Int J Cancer. 2007 Mar 15; 120(6):1284-92.**

Complete loss of PTEN expression as a possible early prognostic marker for prostate cancer metastasis.

Schmitz M, Grignard G, Margue C, Dippel W, Capesius C, Mossong J, Nathan M, Giacchi S, Scheiden R, Kieffer N.

4. **Cancer Res. 2006 Aug 15; 66(16):7929-33**.

Emergence of androgen independence at early

stages of prostate cancer progression in Nkx3.1; Pten mice.

Gao H, Ouyang X, Banach-Petrosky WA, Shen MM, Abate-Shen C.

PMID: 16912166 [PubMed - indexed for MEDLINE]

5. **Cancer Res. 2007 Jul 1; 67(13): 6083-91**.

Murine cell lines derived from Pten null prostate cancer show the critical role of PTEN in hormone refractory prostate cancer development.

Jiao J, Wang S, Qiao R, Vivanco I, Watson PA, Sawyers CL, Wu H.

PMID: 17616663 [PubMed - indexed for MEDLINE]

6. **Cancer Res. 2007 Jul 15; 67(14): 6535-8.**

Pten inactivation and the emergence of androgen-independent prostate cancer.

Shen MM, Abate-Shen C.

PMID: 17638861 [PubMed - indexed for MEDLINE]

7. **Prostate. 2006 Jun 15; 66(9): 895-902.**

Loss of PTEN is associated with progression to androgen independence.

Bertram J, Peacock JW, Fazli L, Mui AL, Chung SW, Cox ME, Monia B, Gleave ME, Ong CJ.

PMID: 16496415 [PubMed - indexed for MEDLINE]

8. **Cancer Cell. 2004 Aug; 6(2):117-27.**

PTEN activation contributes to tumor inhibition by trastuzumab, and loss of PTEN predicts trastuzumab resistance in patients.

Nagata Y, Lan KH, Zhou X, Tan M, Esteva FJ, Sahin AA, Klos KS, Li P, Monia BP, Nguyen NT, Hortobagyi GN, Hung MC, Yu D.

PMID: 15324695 [PubMed - indexed for MEDLINE]

9. **Br J Cancer. 2006 Jan 30; 94(2):247-52.**

PTEN activity could be a predictive marker of trastuzumab efficacy in the treatment of ErbB2-overexpressing breast cancer.

Fujita T, Doihara H, Kawasaki K, Takabatake D, Takahashi H, Washio K, Tsukuda K, Ogasawara Y, Shimizu N.

PMID: 16404430 [PubMed - indexed for MEDLINE]

10. **Breast. 2005 Apr; 14(2):175; author reply 176**.

PTEN activation may contribute to exquisite antitumor response to trastuzumab.

Altundag K, Altundag O, Morandi P, Gunduz M.

PMID: 15767191 [PubMed - indexed for MEDLINE]

11. **Cell Oncol. 2007; 29(1):25-35**.

Comparing the prognostic value of PTEN and Akt expression with the Mitotic Activity Index in adjuvant chemotherapy-treated node-negative breast cancer patients aged <55 years.

Janssen EA, Søiland H, Skaland I, Gudlaugson E, Kjellevold KH, Nysted A, Søreide JA, Baak JP.

PMID: 17429139 [PubMed - indexed for MEDLINE]

12. **Cancer Cell. 2006 Mar; 9(3):157-73**.

Molecular subclasses of high-grade glioma predict prognosis, delineate a pattern of disease progression, and resemble stages in neurogenesis.

Phillips HS, Kharbanda S, Chen R, Forrest WF, Soriano RH, Wu TD, Misra A, Nigro JM, Colman H, Soroceanu L, Williams PM, Modrusan Z, Feuerstein BG, Aldape K.

PMID: 16530701 [PubMed - indexed for MEDLINE]

13. **Neuro Oncol. 2005 Oct; 7(4):485-94.**

Modeling prognosis for patients with malignant astrocytic gliomas: quantifying the expression of multiple genetic markers and clinical variables.

Zhou YH, Hess KR, Liu L, Linskey ME, Yung WK.

PMID: 16212813 [PubMed - indexed for MEDLINE] PMCID: PMC1871729

14. **Biochem Biophys Res Commun. 2005 Nov 4; 336(4):1056-61**.

PTEN-induction in U251 glioma cells decreases the expression of insulin-like growth factor binding protein-2.

Levitt RJ, Georgescu MM, Pollak M.

PMID: 16154532 [PubMed - indexed for MEDLINE]

15. **Cancer.** **2005 Aug 15; 104(4):825-32.**

The prognostic relevance of molecular alterations in glioblastomas for patients age < 50 years.

Korshunov A, Sycheva R, Golanov A.

PMID: 15981281 [PubMed - indexed for MEDLINE]

16. **N Engl J Med.** **2005 Nov 10; 353(19):2012-24**.

Molecular determinants of the response of glioblastomas to EGFR kinase inhibitors.

Mellinghoff IK, Wang MY, Vivanco I, Haas-Kogan DA, Zhu S, Dia EQ, Lu KV, Yoshimoto K, Huang JH, Chute DJ, Riggs BL, Horvath S, Liau LM, Cavenee WK, Rao PN, Beroukhim R, Peck TC, Lee JC, Sellers WR, Stokoe D, Prados M, Cloughesy TF, Sawyers CL, Mischel PS.

PMID: 16282176 [PubMed - indexed for MEDLINE]

17. **Cancer Res.** **2007 May 1; 67(9):4467-73**.

Phosphatase and tensin homologue deficiency in glioblastoma confers resistance to radiation and temozolomide that is reversed by the protease inhibitor nelfinavir.

Jiang Z, Pore N, Cerniglia GJ, Mick R, Georgescu MM, Bernhard EJ, Hahn SM, Gupta AK, Maity A.

PMID: 17483362 [PubMed - indexed for MEDLINE]

18. **Clin Cancer Res.** **2006 Apr 1; 12(7 Pt 1):2264-71**.

Use of an orthotopic xenograft model for

assessing the effect of epidermal growth factor receptor amplification on glioblastoma radiation response.

Sarkaria JN, Carlson BL, Schroeder MA, Grogan P, Brown PD, Giannini C, Ballman KV, Kitange GJ, Guha A, Pandita A, James CD.

PMID: 16609043 [PubMed - indexed for MEDLINE]

19. **Oncol Rep. 2007 Apr; 17(4):853-7.**

PTEN and phosphorylated AKT expression and prognosis in early- and late-stage non-small cell lung cancer.

Lim WT, Zhang WH, Miller CR, Watters JW, Gao F, Viswanathan A, Govindan R, McLeod HL.

PMID: 17342327 [PubMed - indexed for MEDLINE]

20. **Lung Cancer. 2006 Feb; 51(2):181-91**.

Phosphorylated Akt overexpression and loss of PTEN expression in non-small cell lung cancer confers poor prognosis.

Tang JM, He QY, Guo RX, Chang XJ.

PMID: 16324768 [PubMed - indexed for MEDLINE]

21. **J Clin Oncol. 2005 Mar 20; 23(9):1921-6**.

EGR1 predicts PTEN and survival in patients with non-small-cell lung cancer.

Ferraro B, Bepler G, Sharma S, Cantor A, Haura EB.

PMID: 15774784 [PubMed - indexed for MEDLINE]

22. **Hum Pathol. 2005 Jul; 36(7):768-76**.

PTEN expression in non-small-cell lung cancer: evaluating its relation to tumor characteristics, allelic loss, and epigenetic alteration.

Marsit CJ, Zheng S, Aldape K, Hinds PW, Nelson HH, Wiencke JK, Kelsey KT.

PMID: 16084946 [PubMed - indexed for MEDLINE]

23. **Anticancer Res. 2003 Nov-Dec; 23(6C):4885-90.**

Loss of PTEN expression is not uncommon, but lacks prognostic value in stage I NSCLC.

Olaussen KA, Soria JC, Morat L, Martin A, Sabatier L, Morere JF, Khayat D, Spano JP.

PMID: 14981940 [PubMed - indexed for MEDLINE

24. **Br J Cancer. 2005 May 9; 92(9):1711-9.**

Reduction of PTEN protein and loss of epidermal growth factor receptor gene mutation in lung cancer with natural resistance to gefitinib (IRESSA).

Kokubo Y, Gemma A, Noro R, Seike M, Kataoka K, Matsuda K, Okano T, Minegishi Y, Yoshimura A, Shibuya M, Kudoh S.

PMID: 15870831 [PubMed - indexed for MEDLINE]

25. **Cancer Res. 2006 May 15; 66(10):5346-53**.

PTEN/Akt signaling through epidermal growth factor receptor is prerequisite for angiogenesis by

hepatocellular carcinoma cells that is susceptible to inhibition by gefitinib.

Ueda S, Basaki Y, Yoshie M, Ogawa K, Sakisaka S, Kuwano M, Ono M.

PMID: 16707461 [PubMed - indexed for MEDLINE]

26. **Cancer Res. 2007 Jun 15; 67(12):5779-88.**

Acquired resistance to erlotinib in A-431 epidermoid cancer cells requires down-regulation of MMAC1/PTEN and up-regulation of phosphorylated Akt.

Yamasaki F, Johansen MJ, Zhang D, Krishnamurthy S, Felix E, Bartholomeusz C, Aguilar RJ, Kurisu K, Mills GB, Hortobagyi GN, Ueno NT.

PMID: 17575145 [PubMed - indexed for MEDLINE]

27. **Br J Cancer. 2007 Sep 3; 97(5):678-85. Epub 2007 Aug 14.**

FISH analysis of 107 prostate cancers shows that PTEN genomic deletion is associated with poor clinical outcome.

Yoshimoto M, Cunha IW, Coudry RA, Fonseca FP, Torres CH, Soares FA, Squire JA.

PMID: 17700571 [PubMed - indexed for MEDLINE]

28. **Cancer Cell. 2007 Oct; 12(4):395-402.**

A functional genetic approach identifies the PI3K pathway as a major determinant of trastuzumab resistance in breast cancer.

Berns K, Horlings HM, Hennessy BT, Madiredjo M, Hijmans EM, Beelen K, Linn SC, Gonzalez-Angulo AM, Stemke-Hale K, Hauptmann M, Beijersbergen RL, Mills GB, van de Vijver MJ, Bernards R.

PMID: 17936563 [PubMed - indexed for MEDLINE]

29. **Cancer Res. 2008 Apr 1; 68(7):2122-31**

Phosphatase and Tensin Homologue Deleted on Chromosome 10 Deficiency Accelerates Tumor Induction in a Mouse Model of ErbB-2 Mammary Tumorigenesis

Nathalie Dourdin[1], Babette Schade[1], Robert Lesurf[2], Michael Hallett[2], Robert J. Munn[3], Robert D. Cardiff[3] and William J. Muller[1]

30. **Clinical Cancer Research Vol. 7, 4049-4053, December 2001**

Colorectal Carcinomas and *PTEN/MMAC1* Gene Mutations

Giordano Dicuonzo, Silvia Angeletti, Jesus Garcia-Foncillas, Antonio Brugarolas, Yuri Okrouzhnov, Daniele Santini[1], Giuseppe Tonini, Giulia Lorino, Marina De Cesaris and Alfonso Baldi

31. **J Thorac Oncol. 2007 May; 2(5):414-22.**

The prognostic value of chromosome 7 polysomy in non-small cell lung cancer patients treated with gefitinib.

Buckingham LE, Coon JS, Morrison LE, Jacobson KK, Jewell SS, Kaiser KA, Mauer AM, Muzzafar T, Polowy C, Basu S, Gale M, Villaflor VM, Bonomi P.

32. **Eur J Cardiothorac Surg. 2008 Mar; 33(3):502-6. Epub 2008 Jan 8.**

PTEN expression is a strong predictor of survival in mesothelioma patients.

Opitz I, Soltermann A, Abaecherli M, Hinterberger M, Probst-Hensch N, Stahel R, Moch H, Weder W.

PMID: 18248818 [PubMed - in process]

33. **Cancer Research 68, 1119-1127, February 15, 2008. doi: 10.1158/0008-5472.CAN-07-3117**

Pten Inactivation Accelerates Oncogenic *K-ras*–Initiated Tumorigenesis in a Mouse Model of Lung Cancer

Kentaro Iwanaga[1], Yanan Yang[1], Maria Gabriela Raso[1,2], Lijiang Ma[1], Amy E. Hanna[1], Nishan Thilaganathan[1], Seyed Moghaddam[3], Christopher M. Evans[3], Huaiguang Li[4], Wei-Wen Cai[5], Mitsuo Sato[7], John D. Minna[7], Hong Wu[8], Chad J. Creighton[6], Francesco J. Demayo[3,4], Ignacio I. Wistuba[1,2] and Jonathan M. Kurie[1]

34. **Science 1 February 2008: Vol 319. No. 5863, pp. 611-613. DOI:10.1126/science.1152257**

Oocyte-Specific Deletion of *Pten* Causes Premature Activation of the Primordial Follicle Pool

Pradeep Reddy,[1] Lian Liu,[1,2*] Deepak Adhikari,[1*] Krishna Jagarlamudi,[1*] Singareddy Rajareddy,[1*] Yan Shen,[1] Chun Du,[1] Wenli Tang,[1] Tuula Hämäläinen,[3] Stanford L. Peng,[4] Zi-Jian Lan,[5] Austin J. Cooney,[6] Ilpo Huhtaniemi,[3,7] Kui Liu[1 †]

35. **J Clin Invest. 2007 Oct; 117(10):2929-40**.

Pten controls lung morphogenesis, bronchioalveolar stem cells, and onset of lung adenocarcinomas in mice.

Yanagi S, Kishimoto H, Kawahara K, Sasaki T, Sasaki M, Nishio M, Yajima N, Hamada K, Horie Y, Kubo H, Whitsett JA, Mak TW, Nakano T, Nakazato M, Suzuki A.

PMID: 17909629 [PubMed - indexed for MEDLINE]

36. **Lung Cancer. 2007 Aug; 57(2):201-6. Epub 2007 Apr 23**.

Up-regulation of PTEN at the transcriptional level is an adverse prognostic factor in female lung adenocarcinomas.

Inamura K, Togashi Y, Nomura K, Ninomiya H, Hiramatsu M, Okui M, Satoh Y, Okumura S, Nakagawa K, Tsuchiya E, Ishikawa Y.

PMID: 17452061 [PubMed - indexed for MEDLINE]

37. **J Thorac Oncol. 2006 Sep; 1(7):629-34.**

PTEN and PIK3CA expression is associated with prolonged survival after gefitinib treatment in EGFR-mutated lung cancer patients.

Endoh H, Yatabe Y, Kosaka T, Kuwano H, Mitsudomi T.

PMID: 17409929 [PubMed - indexed for MEDLINE]

38. **Cancer Res. 2004 May 1; 64(9):3014-21.**

Frequent inactivation of PTEN by promoter hypermethylation in microsatellite instability-high sporadic colorectal cancers.

Goel A, Arnold CN, Niedzwiecki D, Carethers JM, Dowell JM, Wasserman L, Compton C, Mayer RJ, Bertagnolli MM, Boland CR.

PMID: 15126336 [PubMed - indexed for MEDLINE]

39. **Modern Pathology (2006) 19, 238–245. doi:10.1038/modpathol.3800525; published online 2 December 2005**

The Akt pathway in human breast cancer: a tissue-array-based analysis

Shikha Bose[1,3], Sindhu Chandran[1], James M Mirocha[2] and Namrata Bose[1]

40. **Nature Genetics: Received 30 July; accepted 16 October; published online 9 December 2007; doi:10.1038/ng.2007.39**

Recurrent gross mutations of the PTEN tumor suppressor gene in breast cancers with deficient DSB repair

Lao H Saal1,2, Sofia K Gruvberger-Saal1, Camilla Persson3, Kristina Lo¨vgren3, Mervi Jumppanen4,5, Johan Staaf3, Goran Jonsson3, Maira M Pires6, Matthew Maurer1,7, Karolina Holm3, Susan Koujak1, Shivakumar Subramaniyam8, Johan Vallon-Christersson3, Hakan Olsson3, Tao Su9, Lorenzo Memeo10, Thomas Ludwig1,8, Stephen P Ethier11, Morten Krogh12, Matthias Szabolcs8, Vundavalli VVS Murty1,8, Jorma Isola5, Hanina Hibshoosh8,9, Ramon Parsons1,7–9,14 & Ake Borg3,13,14

41. **VOLUME 13, NUMBER 1, JANUARY 2007 NATURE MEDICINE**

Loss of tumor suppressor PTEN function increases B7-H1 expression and immunoresistance in glioma

Andrew T Parsa1, James S Waldron1, Amith Panner1, Courtney A Crane1, Ian F

Parney1, Jeffrey J Barry1, Kristine E Cachola1, Joseph C Murray1, Tarik Tihan1, Michael C Jensen2, Paul S Mischel3, David Stokoe1 & Russell O Pieper1

42. **British Journal of Cancer (2007) 97, 1139 – 1145**

PTEN loss of expression predicts cetuximab efficacy in metastatic colorectal cancer patients

M Frattini*,1,3, P Saletti2,3, E Romagnani2,4, V Martin1, F Molinari1, M Ghisletta1, A Camponovo1, LL Etienne1, F Cavalli2 and L Mazzucchelli1 1Institute of Pathology, via in Selva 24, CH-6600 Locarno, Switzerland; 2Oncology Institute of Southern Switzerland, Ospedale San Giovanni, CH-6500 Bellinzona, Switzerland

43. **Cancer Cell 12, 395–402, October 2007**

A Functional Genetic Approach Identifies the PI3K Pathway as a Major Determinant of Trastuzumab Resistance in Breast Cancer

Katrien Berns,1,6 Hugo M. Horlings,2,6 Bryan T. Hennessy,5 Mandy Madiredjo,1 E. Marielle Hijmans,1 Karin Beelen,3 Sabine C. Linn,3 Ana Maria Gonzalez-Angulo,5 Katherine Stemke-Hale,5 Michael Hauptmann,4 Roderick L. Beijersbergen,1 Gordon B. Mills,5 Marc J. van de Vijver,2 and Rene´ Bernards1,*

44. **Cancer Research 68, 1953-1961, March 15, 2008. doi: 10.1158/0008-5472.CAN-07-5659**

PIK3CA Mutation/PTEN Expression Status Predicts Response of Colon Cancer Cells to the Epidermal Growth Factor Receptor Inhibitor Cetuximab

Minaxi Jhawer[1], Sanjay Goel[1,2], Andrew J. Wilson[1], Cristina Montagna[2], Yi-He Ling[2],

Do-Sun Byun[1], Shannon Nasser[1], Diego Arango[3], Joongho Shin[1], Lidija Klampfer[1], Leonard H. Augenlicht[1,2], Roman Perez Soler[1,2] and John M. Mariadason[1,2]

45. **ASCO Annual Meeting 2008**

[4003] Evaluation of PTEN expression in colorectal cancer (CRC) metastases (mets) and in primary tumors as predictors of activity of cetuximab plus irinotecan treatment

F. Loupakis, L. Pollina, I. Stasi, G. Masi, N. Funel, M. Scartozzi, I. Petrini, D. Santini, S. Cascinu, A. Falcone. Azienda USL 6, Livorno, Italy

46. **ASCO Annual Meeting 2008**

[11075] Analysis of Epidermal Growth Factor Receptor (EGFR) downstream proteins in metastatic colorectal cancer patients: comparison between primary tumor and related metastatic sites

P. Saletti, F. Molinari, V. Martin, A. Bordoni, S. Crippa, L. Mazzucchelli, M. Frattini. Oncology Institute of Southern Switzerland, Bellinzona, Switzerland

47. **Int J Oncol. 2007 Nov; 31(5):1157-63**

PTEN inactivation in lung cancer cells and the effect of its recovery on treatment with epidermal growth factor receptor tyrosine kinase inhibitors.

Noro R, Gemma A, Miyanaga A, Kosaihira S, Minegishi Y, Nara M, Kokubo Y, Seike M,

Kataoka K, Matsuda K, Okano T, Yoshimura A, Kudoh S.

PMID: 17912443 [PubMed - indexed for MEDLINE]

48. **Neuro Oncol. 2007 Jul; 9(3):271-9. Epub 2007 May 15**.

Methylation of the PTEN promoter defines low-grade gliomas and secondary glioblastoma.

Wiencke JK, Zheng S, Jelluma N, Tihan T, Vandenberg S, Tamgüney T, Baumber R, Parsons R, Lamborn KR, Berger MS, Wrensch MR, Haas-Kogan DA, Stokoe D.

PMID: 17504928 [PubMed - indexed for MEDLINE]

49. **Hepatol Res. 2007 May; 37(5):389-396.**

Epigenetic and genetic alterations of PTEN in hepatocellular carcinoma.

Wang L, Wang WL, Zhang Y, Guo SP, Zhang J, Li QL.

PMID: 17441812 [PubMed - as supplied by publisher]

50. **Leuk Res. 2008 May; 32(5):709-16. Epub 2007 Oct 17.**

Resistance to Imatinib Mesylate-induced apoptosis in acute lymphoblastic leukemia is associated with PTEN down-regulation due to promoter hypermethylation.

Montiel-Duarte C, Cordeu L, Agirre X, Román-Gómez J, Jiménez-Velasco A, José-Eneriz ES, Gárate L, Andreu EJ, Calasanz MJ, Heiniger A, Torres A, Prósper F.

PMID: 17942153 [PubMed - in process]

51. **ASCO Annual Meeting 2008**

[16016] Reverse-phase protein array marker

evaluation of protein expression patterns related to anti- angiogenesis treatment in renal cell carcinoma.

D. Tsavachidou, N. M. Tannir, C. Thomas, G. B. Mills, E. Jonasch. University of Texas M. D. Anderson Cancer Center, Houston, TX

52. **AACR Annual Meeting 2008**

[2773] PTEN LOH induces proliferation and migration of mammary epithelial cells.

Michele I. Vitolo, Michele B. Weiss, Khola Tahir, Ben H. Park, Kurtis E. Bachman, David J. Weber

53. **Breast Cancer Res Treat. 2008 Aug; 110(3):477-83. Epub 2007 Sep 6.**

Activation of the mTOR signaling pathway in breast cancer and its correlation with the clinicopathologic variables.

Noh WC, Kim YH, Kim MS, Koh JS, Kim HA, Moon NM, Paik NS.

PMID: 17805960 [PubMed - in process]

54. **Cancer Lett. 2008 Jul 25. [Epub ahead of print]**

Effect of tumor suppressor gene PTEN on the resistance to cisplatin in human ovarian cancer cell lines and related mechanisms.

Wu H, Cao Y, Weng D, Xing H, Song X, Zhou J, Xu G, Lu Y, Wang S, Ma D.

PMID: 18657898 [PubMed - as supplied by publisher]

55. **Br J Cancer. 2008 Jul 22; 99(2):341-9**.

The ErbB signalling pathway: protein expression and prognostic value in epithelial ovarian cancer.

de Graeff P, Crijns AP, Ten Hoor KA, Klip HG, Hollema H, Oien K, Bartlett JM, Wisman GB, de Bock GH, de Vries EG, de Jong S, van der Zee AG.

PMID: 18628764 [PubMed - in process]

56. **Mol Endocrinol. 2008 Jul 17. [Epub ahead of print]**

Targeted Disruption of Pten in Ovarian Granulosa Cells Enhances Ovulation and Extends the Life Span of Luteal Cells.

Fan HY, Liu Z, Cahill N, Richards JS.

PMID: 18606860 [PubMed - as supplied by publisher]

57. **Oncogene. 2008 Jul 3; 27(29):4086-95. Epub 2008 Mar 10**.

Suppression of PTEN function increases breast cancer chemotherapeutic drug resistance while conferring sensitivity to mTOR inhibitors.

Steelman LS, Navolanic PM, Sokolosky ML, Taylor JR, Lehmann BD, Chappell WH, Abrams SL, Wong EW, Stadelman KM, Terrian DM, Leslie NR, Martelli AM, Stivala F, Libra M, Franklin RA, McCubrey JA.

PMID: 18332865 [PubMed - in process]

58. **Cancer Research 68, 6084-6091, August 1, 2008. doi: 10.1158/0008-5472.CAN-07-6854**

An Integrative Genomic and Proteomic Analysis of PIK3CA, PTEN, and AKT Mutations in Breast Cancer

Katherine Stemke-Hale[1,7], Ana Maria Gonzalez-Angulo[1,2,7], Ana Lluch[8], Richard M. Neve[9], Wen-Lin Kuo[9], Michael Davies[1,3,7], Mark Carey[1,7], Zhi Hu[9], Yinghui Guan[9], Aysegul Sahin[4], W. Fraser Symmans[4], Lajos Pusztai[2], Laura K. Nolden[1], Hugo Horlings[10], Katrien Berns[11], Mien-Chie Hung[5], Marc J. van de Vijver[10], Vicente Valero[2], Joe W. Gray[9], René Bernards[11], Gordon B. Mills[1,7] and Bryan T. Hennessy[1,6,7]

59. **Cancer Genet Cytogenet. 2006 Sep; 169(2):128-37**.

Interphase FISH analysis of PTEN in histologic sections shows genomic deletions in 68% of primary prostate cancer and 23% of high-grade prostatic intra-epithelial neoplasias.

Yoshimoto M, Cutz JC, Nuin PA, Joshua AM, Bayani J, Evans AJ, Zielenska M, Squire JA.

PMID: 16938570 [PubMed - indexed for MEDLINE]

60. **Am J Surg. 2008 Jun;195(6):719-25. Epub 2008 Apr 28.**

Clinicopathological significance of PTEN loss and the phosphoinositide 3-kinase/Akt pathway in sporadic colorectal neoplasms: is PTEN loss predictor of local recurrence?

Colakoglu T, Yildirim S, Kayaselcuk F, Nursal TZ, Ezer A, Noyan T, Karakayali H, Haberal M.

PMID: 18440486 [PubMed - indexed for MEDLINE

61. **Nat Genet. 1997 Apr; 15(4):356-62**.

Identification of a candidate tumour suppressor gene, MMAC1, at chromosome 10q23.3 that is mutated in multiple advanced cancers.

Steck PA, Pershouse MA, Jasser SA, Yung WK, Lin H, Ligon AH, Langford LA, Baumgard ML, Hattier T, Davis T, Frye C, Hu R, Swedlund B, Teng DH, Tavtigian SV.

PMID: 9090379 [PubMed - indexed for MEDLINE]

62. **Proc Natl Acad Sci U S A. 1999 Apr 13;96(8):4240-5**.

New insights into tumor suppression: PTEN suppresses tumor formation by restraining the phosphoinositide 3-kinase/AKT pathway.

Cantley LC, Neel BG.

PMID: 10200246 [PubMed - indexed for MEDLINE]

63. **Proc Natl Acad Sci U S A. 1998 Dec 22;95(26):15587-91**.

The PTEN/MMAC1 tumor suppressor phosphatase functions as a negative regulator of the phosphoinositide 3-kinase/Akt pathway.

Wu X, Senechal K, Neshat MS, Whang YE, Sawyers CL.

PMID: 9861013 [PubMed - indexed for MEDLINE] PMCID: PMC28087

64. **Curr Opin Genet Dev. 1998 Feb; 8(1):49-54**.

Ras signaling and apoptosis.

Downward J.

PMID: 9529605 [PubMed - indexed for MEDLINE]

65. **Proc Natl Acad Sci U S A. 1997 Apr 15;94(8):3627-32**.

Transduction of interleukin-2 antiapoptotic and proliferative signals via Akt protein kinase.

Ahmed NN, Grimes HL, Bellacosa A, Chan TO, Tsichlis PN.

PMID: 9108028 [PubMed - indexed for MEDLINE] PMCID: PMC20491

66. **J Clin Oncol. 2004 Jul 15; 22(14):2954-63**.

The biology and clinical relevance of the PTEN tumor suppressor pathway.

Sansal I, Sellers WR.

PMID: 15254063 [PubMed - indexed for MEDLINE]

67. **Ann Oncol. 2004 Oct; 15(10):1510-6.**

Reduced PTEN expression in breast cancer cells confers susceptibility to inhibitors of the PI3 kinase/Akt pathway.

DeGraffenried LA, Fulcher L, Friedrichs WE, Grünwald V, Ray RB, Hidalgo M.

PMID: 15367412 [PubMed - indexed for MEDLINE]

68. **Mod Pathol. 2008 May 23. [Epub ahead of print]**

Absence of TMPRSS2: ERG fusions and PTEN losses in prostate cancer is associated with a favorable outcome.

Yoshimoto M, Joshua AM, Cunha IW, Coudry RA, Fonseca FP, Ludkovski O, Zielenska M, Soares FA, Squire JA.

PMID: 18500259 [PubMed - as supplied by publisher]

69. **Prostate. 2008 Jun 15; 68(9):935-44**.

Restoration of PTEN expression alters the

sensitivity of prostate cancer cells to EGFR inhibitors.

Wu Z, Gioeli D, Conaway M, Weber MJ, Theodorescu D.

PMID: 18386291 [PubMed - indexed for MEDLINE]

70. **Proc Natl Acad Sci USA 98:10314-10319, 2001**

Enhanced sensitivity of PTEN-deficient tumors to inhibition of FRAP/mTOR

Mehran S. Neshat*,†, Ingo K. Mellinghoff*, Chris Tran*, Bangyan Stiles‡, George Thomas§, Roseann Petersen¶, Philip Frost¶, James J. Gibbons¶, Hong Wu‡, and Charles L. Sawyers*,†,**

71. **Proc Natl Acad Sci USA 98:10320-10325, 2001**

An inhibitor of mTOR reduces neoplasia and normalizes p70/S6 kinase activity in *Pten*$^{+/-}$ mice

Katrina Podsypanina*, Richard T. Lee*, Chris Politis*, Ian Hennessy*, Allison Crane*, Janusz Puc*, Mehran Neshat†, Hong Wang‡, Lin Yang*, Jay Gibbons§, Phil Frost§, Valley Dreisbach¶, John Blenis¶, Zbigniew Gaciong , Peter Fisher*, Charles Sawyers†, Lora Hedrick-Ellenson‡, and Ramon Parsons*,**

73. **Clin Cancer Res. 2007 Jun 15;13(12):3577-84.**

PIK3CA mutations and PTEN loss correlate with similar prognostic factors and are not mutually exclusive in breast cancer.

Pérez-Tenorio G, Alkhori L, Olsson B, Waltersson MA, Nordenskjöld B, Rutqvist LE, Skoog L, Stål O.

PMID: 17575221

74. **J Neurooncol.** **2008 Jun 26. [Epub ahead of print]**

Phase II study of carboplatin and erlotinib (Tarceva, OSI-774) in patients with recurrent glioblastoma.

de Groot JF, Gilbert MR, Aldape K, Hess KR, Hanna TA, Ictech S, Groves MD, Conrad C, Colman H, Puduvalli VK, Levin V, Yung WK.

PMID: 18581057

75. **Clin Cancer Res.** **2008 Jun 15;14(12):3993-4001**.

PTEN loss does not predict for response to RAD001 (Everolimus) in a glioblastoma orthotopic xenograft test panel.

Yang L, Clarke MJ, Carlson BL, Mladek AC, Schroeder MA, Decker P, Wu W, Kitange GJ, Grogan PT, Goble JM, Uhm J, Galanis E, Giannini C, Lane HA, James CD, Sarkaria JN.

PMID: 18559622

76. **PLoS Med.** **2008 Jan 22; 5(1):e8.**

Antitumor activity of rapamycin in a Phase I trial for patients with recurrent PTEN-deficient glioblastoma.

Cloughesy TF, Yoshimoto K, Nghiemphu P, Brown K, Dang J, Zhu S, Hsueh T, Chen Y, Wang W, Youngkin D, Liau L, Martin N, Becker D, Bergsneider M, Lai A, Green R, Oglesby T, Koleto M, Trent J, Horvath S, Mischel PS, Mellinghoff IK, Sawyers CL.

PMID: 18215105

77. **Cancer.** **2008 Aug 14. [Epub ahead of print]**

Copy number gains in EGFR and copy number losses in PTEN are common events in osteosarcoma tumors.

Freeman SS, Allen SW, Ganti R, Wu J, Ma J, Su X, Neale G, Dome JS, Daw NC, Khoury JD.

PMID: 18704985 [PubMed - as supplied by publisher]

78. **J Invest Dermatol.** **2000 Feb; 114(2):277-80**.

Mutation and allelic loss of the PTEN/MMAC1 gene in primary and metastatic melanoma biopsies.

Birck A, Ahrenkiel V, Zeuthen J, Hou-Jensen K, Guldberg P.

PMID: 10651986 [PubMed - indexed for MEDLINE]

79. **Int J Cancer.** **2002 May 1; 99(1):63-7**.

Nuclear PTEN expression and clinicopathologic features in a population-based series of primary cutaneous melanoma.

Whiteman DC, Zhou XP, Cummings MC, Pavey S, Hayward NK, Eng C.

PMID: 11948493 [PubMed - indexed for MEDLINE]

80. **Cancer Res.** **2003 Jun 1;63(11):2881-90**.

Loss of PTEN promotes tumor development in malignant melanoma.

Stahl JM, Cheung M, Sharma A, Trivedi NR, Shanmugam S, Robertson GP.

PMID: 12782594 [PubMed - indexed for MEDLINE

81. **Clin Cancer Res. 2005 Jul 15;11(14):5153-7**.

PTEN expression in melanoma: relationship with patient survival, Bcl-2 expression, and proliferation.

Mikhail M, Velazquez E, Shapiro R, Berman R, Pavlick A, Sorhaindo L, Spira J, Mir C, Panageas KS, Polsky D, Osman I.

PMID: 16033830 [PubMed - indexed for MEDLINE]

82. **Cancer Res. 2006 Jul 1;66(13):6546-52**.

Epigenetic silencing of the PTEN gene in melanoma.

Mirmohammadsadegh A, Marini A, Nambiar S, Hassan M, Tannapfel A, Ruzicka T, Hengge UR.

PMID: 16818626 [PubMed - indexed for MEDLINE

83. **Cancer Res. 2007 Mar 15; 67(6):2632-42**.

Genome-wide loss of heterozygosity and copy number analysis in melanoma using high-density single-nucleotide polymorphism arrays.

Stark M, Hayward N.

PMID: 17363583 [PubMed - indexed for MEDLINE]

84. **Oncogene. 2007 Jul 12; 26(32):4738-48. Epub 2007 Jan 29**.

Genomic profiling of malignant melanoma using tiling-resolution array CGH.

Jönsson G, Dahl C, Staaf J, Sandberg T, Bendahl PO, Ringnér M, Guldberg P, Borg A.

PMID: 17260012 [PubMed - indexed for MEDLINE]

85. **Cancer Res. 1997 Sep 15; 57(18):3935-40.**

Mutations in PTEN are frequent in endometrial carcinoma but rare in other common gynecological malignancies.

Tashiro H, Blazes MS, Wu R, Cho KR, Bose S, Wang SI, Li J, Parsons R, Ellenson LH.

PMID: 9307275 [PubMed - indexed for MEDLINE]

86. **Cancer Res. 1998 Aug 1;58(15):3254-8**.

PTEN mutations and microsatellite instability in complex atypical hyperplasia, a precursor lesion to uterine endometrioid carcinoma.

Levine RL, Cargile CB, Blazes MS, van Rees B, Kurman RJ, Ellenson LH.

PMID: 9699651 [PubMed - indexed for MEDLINE]

87. **Clin Cancer Res. 1998 Dec;4(12):3005-10.**

PTEN mutation in endometrial cancers is associated with favorable clinical and pathologic characteristics.

Risinger JI, Hayes K, Maxwell GL, Carney ME, Dodge RK, Barrett JC, Berchuck A.

PMID: 9865913 [PubMed - indexed for MEDLINE]

88. **J Natl Cancer Inst. 2000 Jun 7; 92(11):924-30.**

Altered PTEN expression as a diagnostic marker

for the earliest endometrial precancers.

Mutter GL, Lin MC, Fitzgerald JT, Kum JB, Baak JP, Lees JA, Weng LP, Eng C.

PMID: 10841828 [PubMed - indexed for MEDLINE]

89. **Int J Cancer. 2001 Jan 1; 91(1):22-6.**

PTEN methylation is associated with advanced stage and microsatellite instability in endometrial carcinoma.

Salvesen HB, MacDonald N, Ryan A, Jacobs IJ, Lynch ED, Akslen LA, Das S.

PMID: 11149415 [PubMed - indexed for MEDLINE]

90. **Clin Cancer Res. 2001 Sep;7(9):2636-42.**

PTEN mutation located only outside exons 5, 6, and 7 is an independent predictor of favorable survival in endometrial carcinomas.

Minaguchi T, Yoshikawa H, Oda K, Ishino T, Yasugi T, Onda T, Nakagawa S, Matsumoto K, Kawana K, Taketani Y.

PMID: 11555573 [PubMed - indexed for MEDLINE

91. **Int J Cancer. 2002 Aug 20; 100(6):686-9.**

PTEN expression is associated with prognosis for patients with advanced endometrial carcinoma undergoing postoperative chemotherapy.

Kanamori Y, Kigawa J, Itamochi H, Sultana H, Suzuki M, Ohwada M, Kamura T, Sugiyama T, Kikuchi Y, Kita T, Fujiwara K, Terakawa N.

PMID: 12209607 [PubMed - indexed for MEDLINE]

92. **Int J Oncol. 2004 Dec; 25(6):1615-23**.

Significance of PTEN alterations in endometrial carcinoma: a population-based study of mutations, promoter methylation and PTEN protein expression.

Salvesen HB, Stefansson I, Kretzschmar EI, Gruber P, MacDonald ND, Ryan A, Jacobs IJ, Akslen LA, Das S.

PMID: 15547698 [PubMed - indexed for MEDLINE]

93. **Hum Pathol. 2005 May; 36(5):555-61**.

Lack of PTEN expression in endometrial intraepithelial neoplasia is correlated with cancer progression.

Baak JP, Van Diermen B, Steinbakk A, Janssen E, Skaland I, Mutter GL, Fiane B, Løvslett K.

PMID: 15948123 [PubMed - indexed for MEDLINE]

94. **Cancer Res. 2005 Dec 1;65(23):10669-73**.

High frequency of coexistent mutations of PIK3CA and PTEN genes in endometrial carcinoma.

Oda K, Stokoe D, Taketani Y, McCormick F.

PMID: 16322209 [PubMed - indexed for MEDLINE]

95. **Int J Cancer. 2006 Aug 1; 119(3):563-70**.

The relationship between microsatellite

instability and PTEN gene mutations in endometrial cancer.

Bilbao C, Rodríguez G, Ramírez R, Falcón O, León L, Chirino R, Rivero JF, Falcón O Jr, Díaz-Chico BN, Díaz-Chico JC, Perucho M.

PMID: 16506206 [PubMed - indexed for MEDLINE]

96. **Hum Pathol. 2006 Nov; 37(11):1465-72. Epub 2006 Jul 26**.

PIK3CA gene mutations in endometrial carcinoma: correlation with PTEN and K-RAS alterations.

Velasco A, Bussaglia E, Pallares J, Dolcet X, Llobet D, Encinas M, Llecha N, Palacios J, Prat J, Matias-Guiu X.

PMID: 16949921 [PubMed - indexed for MEDLINE]

97. **Int J Gynecol Cancer. 2008 Jan-Feb; 18(1):146-51. Epub 2007 Apr 26.**

Loss of phosphatase and tensin homologue deleted on chromosome 10 and phosphorylation of mammalian target of rapamycin are associated with progesterone refractory endometrial hyperplasia.

Milam MR, Soliman PT, Chung LH, Schmeler KM, Bassett RL Jr, Broaddus RR, Lu KH.

PMID: 17466036 [PubMed - indexed for MEDLINE

98. **Gynecol Oncol. 2007 Jul; 106(1):94-104. Epub 2007 May 8**.

Consequences of the loss of p53, RB1, and PTEN: relationship to gefitinib resistance in endometrial cancer.

Albitar L, Carter MB, Davies S, Leslie KK.

PMID: 17490733 [PubMed - indexed for MEDLINE]

99. **Int J Gynecol Cancer. 2007 May-Jun; 17(3):697-704**.

The prognostic value of PTEN, p53, and beta-catenin in endometrial carcinoma: a prospective immunocytochemical study.

Athanassiadou P, Athanassiades P, Grapsa D, Gonidi M, Athanassiadou AM, Stamati PN, Patsouris E.

PMID: 17504383 [PubMed - indexed for MEDLINE]

100. **Ann Oncol. 2008 Jul 31. [Epub ahead of print]**

PI3KCA/PTEN deregulation contributes to impaired responses to cetuximab in metastatic colorectal cancer patients.

Perrone F, Lampis A, Orsenigo M, Di Bartolomeo M, Gevorgyan A, Losa M, Frattini M, Riva C, Andreola S, Bajetta E, Bertario L, Leo E, Pierotti MA, Pilotti S.

PMID: 18669866 [PubMed - as supplied by publisher]

101. **Neoplasia. 2008 Sep; 10(9):949-53.**

Predictive value of PTEN and AR coexpression of sustained responsiveness to hormonal therapy in prostate cancer--a pilot study.

El Sheikh SS, Romanska HM, Abel P, Domin J, Lalani el-N.

PMID: 18714395 [PubMed - in process]

102. **Oncogene. 1999 May 20; 18(20):3181-5**.

PTEN/MMAC1 mutations in hepatocellular carcinomas.

Yao YJ, Ping XL, Zhang H, Chen FF, Lee PK, Ahsan H, Chen CJ, Lee PH, Peacocke M, Santella RM, Tsou HC.

PMID: 10340391 [PubMed - indexed for MEDLINE

103. **Cancer. 2003 Apr 15; 97(8):1929-40.**

Expression and prognostic role of tumor suppressor gene PTEN/MMAC1/TEP1 in hepatocellular carcinoma.

Hu TH, Huang CC, Lin PR, Chang HW, Ger LP, Lin YW, Changchien CS, Lee CM, Tai MH.

PMID: 12673720 [PubMed - indexed for MEDLINE]

104. **J Cell Mol Med. 2003 Jan-Mar;7(1):67-71**.

Expression and significance of new tumor suppressor gene PTEN in primary liver cancer.

Dong-Dong L, Xi-Ran Z, Xiang-Rong C.

PMID: 12767263 [PubMed - indexed for MEDLINE

105. **J Clin Invest. 2004 Jun; 113(12):1774-83**.

Hepatocyte-specific Pten deficiency results in steatohepatitis and hepatocellular carcinomas.

Horie Y, Suzuki A, Kataoka E, Sasaki T, Hamada K, Sasaki J, Mizuno K, Hasegawa G, Kishimoto H, Iizuka M, Naito M, Enomoto K, Watanabe S, Mak TW, Nakano T.

PMID: 15199412 [PubMed - indexed for MEDLINE], PMCID: PMC420505

106. Gastroenterology. 2007 Aug; 133(2):647-58. Epub 2007 May 21.

MicroRNA-21 regulates expression of the PTEN tumor suppressor gene in human hepatocellular cancer.

Meng F, Henson R, Wehbe-Janek H, Ghoshal K, Jacob ST, Patel T.

107. J Gastroenterol Hepatol. 2007 Jun; 22 Suppl 1:S96-S100.

Non-alcoholic steatohepatitis and hepatocellular carcinoma: lessons from hepatocyte-specific phosphatase and tensin homolog (PTEN)-deficient mice.

Watanabe S, Horie Y, Kataoka E, Sato W, Dohmen T, Ohshima S, Goto T, Suzuki A.

PMID: 17567478 [PubMed - indexed for MEDLINE]

108. World J Gastroenterol. 2007 Sep 14; 13(34):4554-9.

Expression of PTEN, PPM1A and P-Smad2 in hepatocellular carcinomas and adjacent liver tissues.

Wu SK, Wang BJ, Yang Y, Feng XH, Zhao XP, Yang DL.

PMID: 17729405 [PubMed - indexed for MEDLINE]

109. Oncol Rep. 2007 Dec; 18(6):1417-26.

Down-regulation of tumor suppressor gene PTEN, overexpression of p53, plus high proliferating cell nuclear antigen index predict poor patient outcome of hepatocellular carcinoma after

resection.

Hu TH, Wang CC, Huang CC, Chen CL, Hung CH, Chen CH, Wang JH, Lu SN, Lee CM, Changchien CS, Tai MH.

PMID: 17982625 [PubMed - indexed for MEDLINE]

110. **Cancer Res. 2008 Jan 15; 68(2):425-33.**

MicroRNA expression profiling in human ovarian cancer: miR-214 induces cell survival and cisplatin resistance by targeting PTEN.

Yang H, Kong W, He L, Zhao JJ, O'Donnell JD, Wang J, Wenham RM, Coppola D, Kruk PA, Nicosia SV, Cheng JQ.

PMID: 18199536 [PubMed - indexed for MEDLINE]

111. **Hum Pathol. 2007 Apr; 38(4):607-13. Epub 2007 Jan 29.**

Alternate molecular genetic pathways in ovarian carcinomas of common histological types.

Willner J, Wurz K, Allison KH, Galic V, Garcia RL, Goff BA, Swisher EM.

PMID: 17258789 [PubMed - indexed for MEDLINE

112. **Gynecol Oncol. 2006 Aug; 102(2):348-55. Epub 2006 Mar 20.**

Over-expression of PTEN sensitizes human ovarian cancer cells to cisplatin-induced apoptosis in a p53-dependent manner.

Yan X, Fraser M, Qiu Q, Tsang BK.

PMID: 16545436 [PubMed - indexed for MEDLINE

113. **Int J Gynecol Cancer. 2006 Jan-Feb; 16 Suppl 1:254-8**.

PTEN and p53 expression in primary ovarian carcinomas: immunohistochemical study and discussion of pathogenetic mechanisms.

Gomes CP, Andrade LA.

PMID: 16515600 [PubMed - indexed for MEDLINE]

114. **Gynecol Oncol. 2005 Apr; 97(1):26-34.**

Activation of PI3K/Akt pathway by PTEN reduction and PIK3CA mRNA amplification contributes to cisplatin resistance in an ovarian cancer cell line.

Lee S, Choi EJ, Jin C, Kim DH.

PMID: 15790433 [PubMed - indexed for MEDLINE]

115. **Clin Cancer Res. 2002 May;8(5):1248-52.**

Overexpression of PTEN increases sensitivity to SN-38, an active metabolite of the topoisomerase I inhibitor irinotecan, in ovarian cancer cells.

Saga Y, Mizukami H, Suzuki M, Kohno T, Urabe M, Ozawa K, Sato I.

PMID: 12006545 [PubMed - indexed for MEDLINE

116. **Br J Haematol. 2003 Apr; 121(1):97-100.**

Disparate expression of the PTEN gene: a novel finding in B-cell chronic lymphocytic leukaemia (B-CLL).

Leupin N, Cenni B, Novak U, Hügli B, Graber HU, Tobler A, Fey MF.

PMID: 12670337 [PubMed - indexed for MEDLINE]

117. **Br J Haematol. 2003 Aug; 122(3):454-6.**

Phosphatase and tensin homologue phosphorylation in the C-terminal regulatory domain is frequently observed in acute myeloid leukaemia and associated with poor clinical outcome.

Cheong JW, Eom JI, Maeng HY, Lee ST, Hahn JS, Ko YW, Min YH.

PMID: 12877673 [PubMed - indexed for MEDLINE]

118. **Cancer Res. 2003 Oct 1;63(19):6357-62**.

PTEN reverses MDM2-mediated chemotherapy resistance by interacting with p53 in acute lymphoblastic leukemia cells.

Zhou M, Gu L, Findley HW, Jiang R, Woods WG.

PMID: 14559824 [PubMed - indexed for MEDLINE

119. **Nature. 2006 May 25; 441(7092):475-82. Epub 2006 Apr 5.**

Pten dependence distinguishes haematopoietic stem cells from leukaemia-initiating cells.

Yilmaz OH, Valdez R, Theisen BK, Guo W, Ferguson DO, Wu H, Morrison SJ.

PMID: 16598206 [PubMed - indexed for MEDLINE

120. **Nature. 2006 May 25; 441(7092):518-22. Epub 2006 Apr 23**.

PTEN maintains haematopoietic stem cells and acts in lineage choice and leukaemia prevention.

Zhang J, Grindley JC, Yin T, Jayasinghe S, He XC, Ross JT, Haug JS, Rupp D, Porter-Westpfahl KS, Wiedemann LM, Wu H, Li L.

PMID: 16633340 [PubMed - indexed for MEDLINE]

121. **Cell Cycle. 2008 Apr; 7(8):965-70. Epub 2008 Feb 19**.

The role of the PTEN/AKT Pathway in NOTCH1-induced leukemia.

Palomero T, Dominguez M, Ferrando AA.

PMID: 18414037 [PubMed - in process]

122. **Mod Pathol. 2002 May; 15(5):479-85**.

Intragenic PTEN/MMAC1 loss of heterozygosity in conventional (clear-cell) renal cell carcinoma is associated with poor patient prognosis.

Velickovic M, Delahunt B, McIver B, Grebe SK.

PMID: 12011252 [PubMed - indexed for MEDLINE]

123. **J Urol. 2005 May; 173(5):1496-501**.

Using tumor markers to predict the survival of patients with metastatic renal cell carcinoma.

Kim HL, Seligson D, Liu X, Janzen N, Bui MH, Yu H, Shi T, Belldegrun AS, Horvath S, Figlin RA.

PMID: 1582

124. **Cancer. 2007 Jun 1; 109(11):2257-67**.

Prognostic relevance of the mTOR pathway in renal cell carcinoma: implications for molecular

patient selection for targeted therapy.

Pantuck AJ, Seligson DB, Klatte T, Yu H, Leppert JT, Moore L, O'Toole T, Gibbons J, Belldegrun AS, Figlin RA.

PMID: 17440983 [PubMed - indexed for MEDLINE]

125. **Oncol Rep. 2008 May; 19(5):1141-7.**

PTEN and p27Kip1 are not downregulated in the majority of renal cell carcinomas--implications for Akt activation.

Hennenlotter J, Ohneseit PA, Simon P, Merseburger AS, Serth J, Kuehs U, Kramer M, Hartmann JT, Stenzl A, Kuczyk MA.

PMID: 18425369 [PubMed - indexed for MEDLINE]

126. **Biochim Biophys Acta. 2007 Oct; 1772(10):1134-42. Epub 2007 Jul**

Co-existence of high levels of the PTEN protein with enhanced Akt activation in renal cell carcinoma.

He L, Fan C, Gillis A, Feng X, Sanatani M, Hotte S, Kapoor A, Tang D.

PMID: 17681738 [PubMed - indexed for MEDLINE]

127. **Pathology. 2007 Oct; 39(5):482-5.**

PTEN expression in renal cell carcinoma and oncocytoma and prognosis.

Hager M, Haufe H, Kemmerling R, Mikuz G, Kolbitsch C, Moser PL.

PMID: 17886097 [PubMed - indexed for MEDLINE]

128. **PNAS September 2, 2008 Vol. 105, No. 35, 13057-13062. doi:**

10.1073/pnas.0802655105

PTEN-deficient cancers depend on PIK3CB

Susan Wee*,[†]Dmitri Wiederschain*,[†],[‡], Sauveur-Michel Maira[†],[§], Alice Loo*, Christine Miller*, Rosalie deBeaumont*, Frank Stegmeier*, Yung-Mae Yao*, and Christoph Lengauer*,[¶]

129. **Annu Rev Biochem. 2001;70: 247-79**.

PTEN and myotubularin: novel phosphoinositide phosphatases.

Maehama T, Taylor GS, Dixon JE.

PMID: 11395408 [PubMed - indexed for MEDLINE

130. **Science. 1998 Jun 5; 280(5369):1614-7**.

Inhibition of cell migration, spreading, and focal adhesions by tumor suppressor PTEN.

Tamura M, Gu J, Matsumoto K, Aota S, Parsons R, Yamada KM.

PMID: 9616126 [PubMed - indexed for MEDLINE]

131. **Mol Cell Biol. 2000 Jul; 20(14):5010-8**.

Phosphorylation of the PTEN tail regulates protein stability and function.

Vazquez F, Ramaswamy S, Nakamura N, Sellers WR.

PMID: 10866658 [PubMed - indexed for MEDLINE] PMCID: PMC85951

132. **Cell. 1999 Oct 29; 99(3):323-34**.

Crystal structure of the PTEN tumor suppressor:

implications for its phosphoinositide phosphatase activity and membrane association.

Lee JO, Yang H, Georgescu MM, Di Cristofano A, Maehama T, Shi Y, Dixon JE, Pandolfi P, Pavletich NP.

PMID: 10555148 [PubMed - indexed for MEDLINE]

133. **Cancer Research 68, 6902-6907, September 1, 2008. doi: 10.1158/0008-5472.CAN-08-0770**

Inhibition of Activated Fibroblast Growth Factor Receptor 2 in Endometrial Cancer Cells Induces Cell Death Despite PTEN Abrogation

Sara A. Byron[1], Michael G. Gartside[1], Candice L. Wellens[1], Mary A. Mallon[3], Jack B. Keenan[1], Matthew A. Powell[2], Paul J. Goodfellow[2,3] and Pamela M. Pollock[1]

134. **BMC Cancer. 2008 Aug 13; 8(1):234**.

Potential value of PTEN in predicting cetuximab response in colorectal cancer: an exploratory study.

Razis E, Briasoulis E, Vrettou E, Skarlos DV, Papamichael D, Kostopoulos I, Samantas E, Xanthakis I, Bobos M, Galanidi E, Bai M, Gikonti I, Koukouma A, Kafiri G, Papakostas P, Kalogeras KT, Kosmidis P, Fountzilas G.

PMID: 18700047 [PubMed - in process] PMCID: PMC2527615

135. **Science 12 September 2008: Vol. 321, no. 5895, pp. 1499-1502. DOI: 10.126/science.1162981.**

FBXW7 Targets mTOR for Degradation and Cooperates with PTEN in Tumor Suppression

Jian-Hua Mao,[1*] Il-Jin Kim,[1*] Di Wu,[1] Joan Climent,[1] Hio Chung Kang,[1] Reyno DelRosario,[1] Allan Balmain[1,2 †]

136. **Brain Res.** **2008 Sep 4. [Epub ahead of print]**

Differential sensitivity of human glioblastoma LN18 (PTEN-positive) and A172 (PTEN-negative) cells to Taxol for apoptosis.

Zhang R, Banik NL, Ray SK

137. **J Neurooncol.** **2008 Oct; 90(1):9-17. Epub 2008 Jun 20.**

Lovastatin enhances gefitinib activity in glioblastoma cells irrespective of EGFRvIII and PTEN status.

Cemeus C, Zhao TT, Barrett GM, Lorimer IA, Dimitroulakos J.

138. **J. Clin. Invest. doi:10.1172/JCI34616.**

PTEN posttranslational inactivation and hyperactivation of the PI3K/Akt pathway sustain primary T cell leukemia viability

Ana Silva[1], J. Andrés Yunes[2], Bruno A. Cardoso[1], Leila R. Martins[1], Patrícia Y. Jotta[2], Miguel Abecasis[3], Alexandre E. Nowill[4], Nick R. Leslie[5], Angelo A. Cardoso[6] and Joao T. Barata[1]

139. **Cancer. 2008 Oct 2 Epub**

Association of PTEN gene methylation with genetic alterations in the phosphatidylinositol 3-kinase/ AKT signaling pathway in thyroid tumors.

Hou P, Ji M, Xing M.

140. **Clinical Cancer Research 14, 6867-6876, November 1, 2008. doi: 10.1158/1078-0432.CCR-08-0093**

Reduced Erlotinib Sensitivity of Epidermal Growth Factor Receptor-Mutant Non–Small Cell Lung Cancer following Cisplatin Exposure: A Cell Culture Model of Second-line Erlotinib Treatment

Tan Min Chin, Margaret P. Quinlan, Anurag Singh, Lecia V. Sequist, Thomas J. Lynch, Daniel A. Haber, Sreenath V. Sharma and Jeffrey Settleman

141. **Cancer Res 2008; 68: (22). November 15, 2008**

Phosphatidylinositol 3-Kinase Hyperactivation Results in Lapatinib Resistance that Is Reversed by the mTOR/Phosphatidylinositol 3-Kinase Inhibitor NVP-BEZ235

Pieter J.A. Eichhorn,1 Magu¨i Gili,1 Maurizio Scaltriti,1 Violeta Serra,1 Marta Guzman,1 Wouter Nijkamp,2 Roderick L. Beijersbergen,2 Vanesa Valero,1 Joan Seoane,1,3,4Rene´ Bernards,2 and Jose´ Baselga1,3

142. **J. Clin. Oncol. 26: 1066-1072.**

Phase II Study of Predictive Biomarker Profiles for Response Targeting Human Epidermal Growth Factor Receptor 2 (HER-2) in Advanced Inflammatory Breast Cancer With Lapatinib Monotherapy

Stephen Johnston, Maureen Trudeau, Bella Kaufman, Hamouda Boussen, Kimberley Blackwell, Patricia LoRusso, Donald P. Lombardi, Slim Ben Ahmed, Dennis L. Citrin,

Michelle L. DeSilvio, Jennifer Harris, Ron E. Westlund, Vanessa Salazar, Tal Z. Zaks, Neil L. Spector

---

143. **Cancer Res.** **2007 Feb 1;67(3):1170-5.**

Lapatinib antitimor activity is not dependent upon phosphatase and tensi homologue deleted on chromosome 10 in ErbB2 overexpressing breast cancers.

Xia W, Husain I, Liu L, Bacus S, Saini S, Spohn J, Pry K, Westlund R, Stein SH, Spector NL.

144. **San Antonio Breast Cancer Symposium Dec. 2008 abstract 34**

PI3 kinase activation and response to trastuzumab or lapatinib in HER-2 overexpressing locally advanced breast cancer (LABC).

Migliaccio I, Gutierrez MC, Wu M-F, Wong H, Pavlick A, Hilsenbeck SG, Horlings HM, Rimawi M, Berns K, Bernards R, Osborne CK, Arteaga CL, Chang JC Baylor College of Medicine, Houston, TX; Vanderbilt University, Nashville, TN; Netherlands

---

145. **Gynecol Oncol.** **2009 Jan 14. [Epub ahead of print]**

Prognostic value and clinicopathological significance of p53 and PTEN in epithelial ovarian cancers.

Lee YK, Park NH.

146. **Cancer Research 69, 1851, March 1, 2009. Published Online First February 17, 2009; doi: 10.1158/0008-5472.CAN-08-2466**

PIK3CA Mutations in Colorectal Cancer Are Associated with Clinical Resistance to EGFR-Targeted Monoclonal Antibodies

Andrea Sartore-Bianchi[1], Miriam Martini[5], Francesca Molinari[6], Silvio Veronese[2], Michele Nichelatti[3], Salvatore Artale[1], Federica Di Nicolantonio[5], Piercarlo Saletti[7], Sara De Dosso[7], Luca Mazzucchelli[6], Milo Frattini[6], Salvatore Siena[1] and Alberto Bardelli[4,5]

---

147. **Cancer Res. 2009 Apr 7. [Epub ahead of print]**

PTEN Loss Contributes to Erlotinib Resistance in EGFR Mutant Lung Cancer by Activation of Akt and EGFR.

Sos ML, Koker M, Weir BA, Heynck S, Rabinovsky R, Zander T, Seeger JM, Weiss J, Fischer F, Frommolt P, Michel K, Peifer M, Mermel C, Girard L, Peyton M, Gazdar AF, Minna JD, Garraway LA, Kashkar H, Pao W, Meyerson M, Thomas RK.

PMID: 19351834 [PubMed - as supplied by publisher]

148. **Cancer Res 2009; 69: (10). May 15, 2009**

PI3K Pathway Activation Mediates Resistance to MEK Inhibitors in KRAS Mutant Cancers

Susan Wee, Zainab Jagani, Kay Xiaoqin Xiang, Alice Loo, Marion Dorsch, Yung-Mae Yao, William R. Sellers, Christoph Lengauer, and Frank Stegmeier

149. **J Pathol. 2009 Mar 20. [Epub ahead of print]**

PTEN genomic deletion is associated with p-Akt and AR signaling in poorer outcome hormone refractory prostate cancer.

Sircar K, Yoshimoto M, Monzon FA, Koumakpayi IH, Katz RL, Khanna A, Alvarez K, Chen G, Darnel AD, Aprikian AG, Saad F, Bismar TA, Squire JA.

150. **Nat Genet.** **2009 May;41(5):619-24. Epub 2009 Apr 26.**

Aberrant ERG expression cooperates with loss of PTEN to promote cancer progression in the prostate.

Carver BS, Tran J, Gopalan A, Chen Z, Shaikh S, Carracedo A, Alimonti A, Nardella C, Varmeh S, Scardino PT, Cordon-Cardo C, Gerald W, Pandolfi PP.

151. **Nat Genet.** **2009 May;41(5):524-6. Epub 2009 Apr 26**

Cooperativity of TMPRSS2-ERG with PI3-kinase pathway activation in prostate oncogenesis.

King JC, Xu J, Wongvipat J, Hieronymus H, Carver BS, Leung DH, Taylor BS, Sander C, Cardiff RD, Couto SS, Gerald WL, Sawyers CL.