

Basic science (April 2005)

Articles in this list have been selected from material published since April 2005. They represent recommended reading only.

When available the citations are linked to the abstract held on PubMed (Medline) and CrossRef.

1. Adebamowo CA, Cho E, Sampson L, Katan MB, Spiegelman D, Willett WC, Holmes MD. Dietary flavonols and flavonol-rich foods intake and the risk of breast cancer [Abstract]. *Int J Cancer* 2005; **114**: 628–633.
2. Allen NE, Roddam AW, Allen DS, Fentiman IS, Silva ID, Peto J, Holly JMP, Key TJ. A prospective study of serum insulin-like growth factor-I (IGF-I), IGF-II, IGF-binding protein-3 and breast cancer risk [Abstract]. *Br J Cancer* 2005; **92**: 1283–1287.
3. Arturi F, Ferretti E, Presta I, Mattei T, Scipioni A, Scarpelli D, Bruno R, Lacroix L, Tosi E, Gulino A, Russo D, Filetti S. Regulation of iodide uptake and sodium/iodide symporter expression in the MCF-7 human breast cancer cell line [Abstract]. *J Clin Endocrinol Metab* 2005; **90**: 2321–2326.
4. Astolfi A, Landuzzi L, Nicoletti G, De Giovanni C, Croci S, Palladini A, Ferrini S, Iezzi M, Musiani P, Cavallo F, Forni G, Nanni P, Lollini PL. Gene expression analysis of immune-mediated arrest of tumorigenesis in a transgenic mouse model of HER-2/neu-positive basal-like mammary carcinoma [Abstract]. *Am J Pathol* 2005; **166**: 1205–1216.
5. Barnes CJ, Li F, Talukder AH, Kumar R. Growth factor regulation of a 26S proteasomal subunit in breast cancer [Abstract]. *Clin Cancer Res* 2005; **11**: 2868–2874.
6. Barre B, Vigneron A, Coqueret O. The STAT3 transcription factor is a target for the Myc and riboblastoma proteins on the Cdc25A promoter [Abstract]. *J Biol Chem* 2005; **280**: 15673–15681.
7. Bean GR, Scott V, Yee L, Ratliff-Daniel B, Troch MM, Seo P, Bowie ML, Marcom PK, Slade J, Kimler BF, Fabian CJ, Zalles CM, Broadwater G, Baker JC, Wilke LG, Seewaldt VL. Retinoic acid receptor-beta 2 promoter methylation in random periareolar fine needle aspiration [Abstract]. *Cancer Epidemiol Biomark Prev* 2005; **14**: 790–798.
8. Beckers J, Herrmann F, Rieger S, Drobyshev AL, Horsch M, de Angelis MH, Seliger B. Identification and validation of novel ERBB2 (HER2, NEU) targets including genes involved in angiogenesis [Abstract]. *Int J Cancer* 2005; **114**: 590–597.
9. Berquin IM, Pang B, Dziubinski ML, Scott LM, Chen YQ, Nolan GP, Ethier SP. Y-box-binding protein 1 confers EGF independence to human mammary epithelial cells [Abstract]. *Oncogene* 2005; **24**: 3177–3186.
10. Bjornstrom L, Sjoberg M. Mechanisms of estrogen receptor signaling: convergence of genomic and nongenomic actions on target genes [Abstract]. *Mol Endocrinol* 2005; **19**: 833–842.
11. Bosetti C, Spertini L, Parpinel M, Gnagnarella P, Lagiou P, Negri E, Franceschi S, Montella M, Peterson J, Dwyer J, Giacosa A, La Vecchia C. Flavonoids and breast cancer risk in Italy [Abstract]. *Cancer Epidemiol Biomark Prev* 2005; **14**: 805–808.
12. Chavez-MacGregor M, Elias SG, Onland-Moret NC, van der Schouw YT, Van Gils CH, Monnikhof E, Grobbee DE, Peeters PHM. Postmenopausal breast cancer risk and cumulative number of menstrual cycles [Abstract]. *Cancer Epidemiol Biomark Prev* 2005; **14**: 799–804.
13. Colditz GA. Epidemiology and prevention of breast cancer [Abstract]. *Cancer Epidemiol Biomark Prev* 2005; **14**: 768–772.
14. Diermeier S, Horvath G, Knuechel-Clarke R, Hofstaedter F, Szollosi J, Brockhoff G. Epidermal growth factor receptor coexpression modulates susceptibility to Herceptin in HER2/neu overexpressing breast cancer cells via specific

- erbB-receptor interaction and activation [Abstract]. *Exp Cell Res* 2005; **304**: 604–619.
15. Dowsett M, Ebbs SR, Dixon JM, Skene A, Griffith C, Boeddinghaus I, Salter J, Detre S, Hills M, Ashley S, Francis S, Walsh G, Smith IE. Biomarker changes during neoadjuvant anastrozole, tamoxifen, or the combination: influence of hormonal status and HER-2 in breast cancer – a study from the IMPACT trialists [Abstract]. *J Clin Oncol* 2005; **23**: 2477–2492.
 16. Gomez-Garcia EB, Ambergen T, Blok MJ, van den Wijngaard A. Patients with an unclassified genetic variant in the BRCA1 or BRCA2 genes show different clinical features from those with a mutation [Abstract]. *J Clin Oncol* 2005; **23**: 2185–2190.
 17. Gordon AH, O’Keefe RJ, Schwarz EM, Rosier RN, Puzas JE. Nuclear factor-kappa B-dependent mechanisms in breast cancer cells regulate tumor burden and osteolysis in bone [Abstract]. *Cancer Res* 2005; **65**: 3209–3217.
 18. Guo SC, Hakimi MA, Baillat D, Chen XW, Farber MJ, Klein-Szanto AJP, Cooch NS, Godwin AK, Shiekhhattar R. Linking transcriptional elongation and messenger RNA export to metastatic breast cancers [Abstract]. *Cancer Res* 2005; **65**: 3011–3016.
 19. Gutierrez MC, Detre S, Johnston S, Mohsin SK, Shou JN, Allred DC, Schiff R, Osborne CK, Dowsett M. Molecular changes in tamoxifen-resistant breast cancer: relationship between estrogen receptor, HER-2, and p38 mitogen-activated protein kinase [Abstract]. *J Clin Oncol* 2005; **23**: 2469–2476.
 20. Huang JW, Shiau CW, Yang YT, Kulp SK, Chen KF, Brueggemeier RW, Shapiro CL, Chen CS. Peroxisome proliferator-activated receptor gamma-independent ablation of cyclin D1 by thiazolidinediones and their derivatives in breast cancer cells [Abstract]. *Mol Pharmacol* 2005; **67**: 1342–1348.
 21. Irie A, Yamauchi A, Kontani K, Kihara M, Liu D, Shirato Y, Seki M, Nishi N, Nakamura T, Yokomise H, Hirashima M. Galectin-9 as a prognostic factor with antimetastatic potential in breast cancer [Abstract]. *Clin Cancer Res* 2005; **11**: 2962–2968.
 22. Itoh T, Karlsberg K, Kijima I, Yuan YC, Smith D, Ye JJ, Chen S. Letrozole-, anastrozole-, and tamoxifen-responsive genes in MCF-7aro cells: a microarray approach [Abstract]. *Mol Cancer Res* 2005; **3**: 203–218.
 23. Johansson EM, Kannius-Janson M, Gritli-Linde A, Bjursell G, Nilsson J. Nuclear factor 1-C2 is regulated by prolactin and shows a distinct expression pattern in the mouse mammary epithelial cells during development [Abstract]. *Mol Endocrinol* 2005; **19**: 992–1003.
 24. Kaklamani VG, Baddi L, Liu JJ, Rosman D, Phuka’n S, Bradley C, Hegarty C, McDaniel B, Rademaker A, Oddoux C, Ostrer H, Michel LS, Huang H, Chen Y, Ahsan H, Offit K, Pasche B. Combined genetic assessment of transforming growth factor-beta signaling pathway variants may predict breast cancer risk [Abstract]. *Cancer Res* 2005; **65**: 3454–3461.
 25. Kim K, Barhoumi R, Burghardt R, Safe S. Analysis of estrogen receptor alpha-Sp1 interactions in breast cancer cells by fluorescence resonance energy transfer [Abstract]. *Mol Endocrinol* 2005; **19**: 843–854.
 26. Kong G, Kim HT, Wu K, DeNardo D, Hilsenbeck SG, Xu XC, Lamph WW, Bissonnette R, Dannenberg AJ, Brown PH. The retinoid X receptor-selective retinoid, LGD1069, downregulates cyclooxygenase-2 expression in human breast cells through transcription factor crosstalk: implications for molecular-based chemoprevention [Abstract]. *Cancer Res* 2005; **65**: 3462–3469.
 27. Lee BC, Lee TH, Zagozdzon R, Avraham S, Usheva A, Avraham HK. Carboxyl-terminal Src kinase homologous kinase negatively regulates the chemokine receptor CXCR4 through YY1 and impairs CXCR4/CXCL12 (SDF-1 alpha)-mediated breast cancer cell migration [Abstract]. *Cancer Res* 2005; **65**: 2840–2845.
 28. Lee KM, Choi JY, Park SK, Chung HW, Ahn B, Yoo KY, Han W, Noh DY, Ahn SH, Kim H, Wei QY, Kang DH. Genetic polymorphisms of ataxia telangiectasia mutated and breast cancer risk [Abstract]. *Cancer Epidemiol Biomark Prev* 2005; **14**: 821–825.
 29. Lee KW, Ma LQ, Yan XM, Liu BR, Zhang XK, Cohen P. Rapid apoptosis induction by IGFBP-3 involves an insulin-like growth factor-independent nucleomitochondrial translocation of RXR alpha/Nur77 [Abstract]. *J Biol Chem* 2005; **280**: 16942–16948.
 30. Lee SA, Ndisang D, Patel C, Dennis JH, Faulkes DJ, D’Arrigo C, Samady L, Farooqui-Kabir S, Heads RJ, Latchman DS, Budhram-Mahadeo VS. Expression of the Brn-3b transcription factor correlates with expression of HSP-27 in breast cancer biopsies and is required for maximal activation of the HSP-27 promoter [Abstract]. *Cancer Res* 2005; **65**: 3072–3080.
 31. Lee SO, Nadiminty N, Wu XX, Lou W, Dong Y, Ip C, Onate SA, Gao AC. Selenium disrupts estrogen signaling by altering estrogen receptor expression and ligand binding in human breast cancer cells [Abstract]. *Cancer Res* 2005; **65**: 3487–3492.

32. Ling XY, Arlinghaus RB. Knockdown of STAT3 expression by RNA interference inhibits the induction of breast tumors in immunocompetent mice [Abstract]. *Cancer Res* 2005; **65**: 2532–2536.
33. Medina D, Kittrell FS, Hill J, Shepard A, Thordarson G, Brown P. Tamoxifen inhibition of estrogen receptor-alpha-negative mouse mammary tumorigenesis [Abstract]. *Cancer Res* 2005; **65**: 3493–3496.
34. Moggs JG, Murphy TC, Lim FL, Moore DJ, Stuckey R, Antrobus K, Kimber I, Orphanides G. Anti-proliferative effect of estrogen in breast cancer cells that re-express ER alpha is mediated by aberrant regulation of cell cycle genes [Abstract]. *J Mol Endocrinol* 2005; **34**: 535–551.
35. Murphy LC, Peng B, Lewis A, Davie JR, Leygue E, Kemp A, Ung K, Vendetti M, Shiu R. Inducible upregulation of oestrogen receptor-beta 1 affects oestrogen and tamoxifen responsiveness in MCF7 human breast cancer cells [Abstract]. *J Mol Endocrinol* 2005; **34**: 553–566.
36. Nabha SM, Glaros S, Hong M, Lykkesfeldt AE, Schiff R, Osborne K, Reddy KB. Upregulation of PKC-delta contributes to antiestrogen resistance in mammary tumor cells [Abstract]. *Oncogene* 2005; **24**: 3166–3176.
37. Narayanan R, Edwards DP, Weigel NL. Human progesterone receptor displays cell cycle-dependent changes in transcriptional activity [Abstract]. *Mol Cell Biol* 2005; **25**: 2885–2898.
38. Park KJ, Krishnan V, O'Malley BW, Yamamoto Y, Gaynor RB. Formation of an IKK alpha-dependent transcription complex is required for estrogen receptor-mediated gene activation [Abstract]. *Mol Cell* 2005; **18**: 71–82.
39. Silvera SAN, Jain M, Howe GR, Miller AB, Rohan TE. Dietary carbohydrates and breast cancer risk: a prospective study of the roles of overall glycemic index and glycemic load [Abstract]. *Int J Cancer* 2005; **114**: 653–658.
40. Timpson P, Lynch DK, Schramek D, Walker F, Daly RJ [Abstract]. Cortactin overexpression inhibits ligand-induced down-regulation of the epidermal growth factor receptor. *Cancer Res* 2005; **65**: 3273–3280.
41. Tripathi MK, Misra S, Khedkar SV, Hamilton N, Irvin-Wilson C, Sharan C, Sealy L, Chaudhuri G. Regulation of BRCA2 gene expression by the SLUG repressor protein in human breast cells [Abstract]. *J Biol Chem* 2005; **280**: 17163–17171.
42. Tworoger SS, Missmer SA, Barbieri RL, Willett WC, Colditz GA, Hankinson SE. Plasma sex hormone concentrations and subsequent risk of breast cancer among women using postmenopausal hormones [Abstract]. *J Natl Cancer Inst* 2005; **97**: 595–602.
43. Valabrega G, Montemurro F, Sarotto I, Petrelli A, Rubini P, Tacchetti C, Aglietta M, Comoglio PM, Giordano S. TGF alpha expression impairs trastuzumab-induced HER2 downregulation [Abstract]. *Oncogene* 2005; **24**: 3002–3010.
44. Wang W, Huper G, Guo YQ, Murphy SK, Olson JA, Marks JR. Analysis of methylation-sensitive transcriptome identifies GADD45a as a frequently methylated gene in breast cancer [Abstract]. *Oncogene* 2005; **24**: 2705–2714.
45. Webster LR, Bilous AM, Willis L, Byth K, Burgemeister FC, Salisbury ELC, Clarke CL, Balleine RL. Histopathologic indicators of breast cancer biology: insights from population mammographic screening. *Br J Cancer* 2005; **92**: 1366–1371.
46. Wu Q, Ding W, Mirza A, Van Arsdale T, Wei I, Bishop WR, Basso A, McClanahan T, Luo L, Kirschmeier P, Gustafson E, Hernandez M, Liu SX. Integrative Genomics revealed RAI3 is a cell growth-promoting gene and a novel p53 transcriptional target [Abstract]. *J Biol Chem* 2005; **280**: 12935–12943.
47. Zheng ZY, Bay BH, Aw SE, Lin VCL. A novel antiestrogenic mechanism in progesterone receptor-transfected breast cancer cells [Abstract]. *J Biol Chem* 2005; **280**: 17480–17487.

Prepared by
R. Sutherland, J. Scorer
Cancer Research Program
Garvan Institute of Medical Research
Darlinghurst, NSW, Australia