

Journals Watch

Basic science (May–June 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. Ahnstrom M, Nordenskjold B, Rutqvist LE, Skoog L, Stal O. Role of cyclin D1 in ErbB2-positive breast cancer and tamoxifen resistance. *Breast Cancer Res Tr* 2005; **91**: 145–151.
2. Brueggemeier RW, Hackett JC, Diaz-Cruz ES. Aromatase inhibitors in the treatment of breast cancer. *Endocr Rev* 2005; **26**: 331–345.
3. Buluwela L, Pike J, Mazhar D, Kamalati T, Hart SM, Al-Jehani R, Yahaya H, Patel N, Sarwarl N, Heathcote DA, Schwickerath O, Phoenix F, Hill R, Aboagye E, Shousha S, Waxman J, Lemoine NR, Zelent A, Coombes RC, Ali S. Inhibiting estrogen responses in breast cancer cells using a fusion protein encoding estrogen receptor-alpha and the transcriptional repressor PLZF. *Gene Ther* 2005; **12**: 862.
4. Carboni JM, Lee AV, Hadsell DL, Rowley BR, Lee FY, Bol DK, Camuso AE, Gottardis M, Greer AF, Ho CP, Hurlburt W, Li AX, Saulnier M, Velaparthi U, Wang C, Wen ML, Westhouse RA, Wittman M, Zimmermann K, Rupnow BA, Wong TW. Tumor development by transgenic expression of a constitutively active insulin-like growth factor I receptor. *Cancer Res* 2005; **65**: 3781–3787.
5. Chappuis PO, Donato E, Goffin JR, Wong N, Begin LR, Kapusta LR, Brunet JS, Porter P, Foulkes WD. Cyclin E expression in breast cancer: predicting germline BRCA1 mutations, prognosis and response to treatment. *Ann Oncol* 2005; **16**: 735–742.
6. Choudhuri T, Pal S, Das T, Sa G. Curcumin selectively induces apoptosis in deregulated cyclin D1-expressed cells at G(2) phase of cell cycle in a p53-dependent manner. *J Biol Chem* 2005; **280**: 20059–20068.
7. Cicek M, Fukuyama R, Welch DR, Sizemore N, Casey G. Breast cancer metastasis suppressor 1 inhibits gene expression by targeting nuclear factor-kappa B activity. *Cancer Res* 2005; **65**: 3586–3595.
8. Collett K, Stefansson IM, Eide J, Braaten A, Wang H, Eide GE, Thoresen SO, Foulkes WD, Akslen LA. A basal epithelial phenotype is more frequent in interval breast cancers compared with screen detected tumors. *Cancer Epidemiol Biomar Prev* 2005; **14**: 1108–1112.
9. Collins LC, Schnitt SJ. HER2 protein overexpression in estrogen receptor-positive ductal carcinoma in situ of the breast: frequency and implications for tamoxifen therapy. *Modern Pathol* 2005; **18**: 615–620.
10. Cui Y, Shu XO, Cai QY, Jin F, Cheng JR, Cai H, Gao YT, Zheng W. Association of breast cancer risk with a common functional polymorphism (Asp327Asn) in the sex hormone-binding globulin gene. *Cancer Epidemiol Biom Prev* 2005; **14**: 1096–1101.
11. Cummings SR, Lee JS, Lui LY, Stone K, Ljung BM, Cauleys JAGAOFRG. Sex hormones, risk factors, and risk of estrogen receptor-positive breast cancer in older women: a long-term prospective study. *Cancer Epidemiol Biom Prev* 2005; **14**: 1047–1051.
12. Dai HY, van't Veer L, Lamb J, He YD, Mao M, Fine BM, Bernards R, de Vijver MV, Deutsch P, Sachs A, Stoughton R, Friend S. A cell proliferation signature is a marker of extremely poor outcome in a subpopulation of breast cancer patients. *Cancer Res* 2005; **65**: 4059–4066.
13. Diaz-Cruz ES, Shapiro CL, Brueggemeier RW. Cyclooxygenase inhibitors suppress aromatase expression and activity in breast cancer cells. *J Clin Endocr Metab* 2005; **90**: 2563–2570.

Received 11/07/05

Accepted 12/07/05

First published online 11/11/05

BCO/488/2005/JW

14. Esslimani-Sahla M, Kramar A, Simony-Lafontaine J, Warner M, Gustafsson JA, Rochefort H. Increased estrogen receptor beta cx expression during mammary carcinogenesis. *Clin Cancer Res* 2005; **11**: 3170–3174.
15. Esteva FJ, Sahin AA, Cristofanilli M, Coombes K, Lee SJ, Baker J, Cronin M, Walker M, Watson D, Shak S, Hortobagyi GN. Prognostic role of a multigene reverse transcriptase-PCR assay in patients with node-negative breast cancer not receiving adjuvant systemic therapy. *Clin Cancer Res* 2005; **11**: 3315–3319.
16. Fabre-Lafay S, Garrido-Urbani S, Reymond N, Goncalves A, Dubreuil P, Lopez M. Nectin-4, a new serological breast cancer marker, is a substrate for tumor necrosis factor-alpha-converting enzyme (TACE)/ADAM-17. *J Biol Chem* 2005; **280**: 19543–19550.
17. Gburcik V, Bot N, Maggiolini M, Picard D. SPBP is a phosphoserine-specific repressor of estrogen receptor alpha. *Mol Cell Biol* 2005; **25**: 3421–3430.
18. Gery S, Tanosaki S, Bose S, Bose N, Vadgama J, Koeffler HP. Down-regulation and growth inhibitory role of C/EBP alpha in breast cancer. *Clin Cancer Res* 2005; **11**: 3184–3190.
19. Gouaze V, Liu YY, Prickett CS, Yu JY, Giuliano AE, Cabot MC. Glucosylceramide synthase blockade down-regulates P-glycoprotein and resensitizes multidrug-resistant breast cancer cells to anti-cancer drugs. *Cancer Res* 2005; **65**: 3861–3867.
20. Hannemann J, Oosterkamp HM, Bosch CAJ, Velds A, Wessels LFA, Loo C, Rutgers EJ, Rodenhuis S, van de Vijver MJ. Changes in gene expression associated with response to neoadjuvant chemotherapy in breast cancer. *J Clin Oncol* 2005; **23**: 3331–3342.
21. Holmes MD, Chen WY, Feskanich D, Kroenke CH, Colditz GA. Physical activity and survival after breast cancer diagnosis. *J Am Med Assoc* 2005; **293**: 2479–2486.
22. Huang XM, Bennett M, Thorpe PE. A monoclonal antibody that binds anionic phospholipids on tumor blood vessels enhances the antitumor effect of docetaxel on human breast tumors in mice. *Cancer Res* 2005; **65**: 4408–4416.
23. Ioannidis P, Mahaira LG, Perez SA, Gritzapis AD, Sotiropoulou PA, Kavalakis GJ, Antsaklis AI, Baxevanis CN, Papamichail M. CRD-BP/IMP1 expression characterizes cord blood CD34(+) stem cells and affects c-myc and IGF-II expression in MCF-7 cancer cells. *J Biol Chem* 2005; **280**: 20086–20093.
24. Jin QR, Hemminki K, Enquist K, Lenner P, Grzybowska E, Klaes R, Henriksson R, Chen BW, Pamula J, Pekala W, Zientek H, Rogozinska-Szczepka J, Utracka-Hutka B, Hallmans G, Forsti A. Vascular endothelial growth factor polymorphisms in relation to breast cancer development and prognosis. *Clin Cancer Res* 2005; **11**: 3647–3653.
25. Johnson MM, Houck J, Chen C. Screening for deleterious nonsynonymous single-nucleotide polymorphisms in genes involved in steroid hormone metabolism and response. *Cancer Epidemiol Biom Prev* 2005; **14**: 1326–1329.
26. Jones LP, Li ML, Halama ED, Ma YX, Lubet R, Grubbs CJ, Deng CX, Rosen EM, Furth PA. Promotion of mammary cancer development by tamoxifen in a mouse model of Brca1-mutation-related breast cancer. *Oncogene* 2005; **24**: 3554–3562.
27. Kavanagh AM, Cawson J, Byrnes GB, Giles GG, Marr G, Tong B, Gertig DM, Hopper JL. Hormone replacement therapy, percent mammographic density, and sensitivity of mammography. *Cancer Epidemiol Biom Prev* 2005; **14**: 1060–1064.
28. Kowalska E, Narod SA, Huzarski T, Zajaczek S, Huzarska J, Gorski B, Lubinski J. Increased rates of chromosome breakage in BRCA1 carriers are normalized by oral selenium supplementation. *Cancer Epidemiol Biom Prev* 2005; **14**: 1302–1306.
29. Kurian AW, Mills MA, Jaffee M, Sigal BM, Chun NM, Kingham KE, Collins LC, Nowels KW, Plevritis SK, Garber JE, Ford JM, Hartman AR. Ductal lavage of fluid-yielding and non-fluid-yielding ducts in BRCA1 and BRCA2 mutation carriers and other women at high inherited breast cancer risk. *Cancer Epidemiol Biom Prev* 2005; **14**: 1082–1089.
30. Lang JY, Chen H, Zhou J, Zhang YX, Zhang XW, Li MH, Lin LP, Zhang JS, Waalkes MP, Ding J. Antimetastatic effect of salvicine on human breast cancer MDA-MB-435 orthotopic xenograft is closely related to Rho-dependent pathway. *Clin Cancer Res* 2005; **11**: 3455–3464.
31. Lanzino M, De Amicis F, McPhaul MJ, Marsico S, Panno ML, Ando S. Endogenous coactivator ARA70 interacts with estrogen receptor alpha (ER alpha) and modulates the functional ER alpha/androgen receptor interplay in MCF-7 cells. *J Biol Chem* 2005; **280**: 20421–20430.
32. Liu D, Rudland PS, Sibson DR, Platt-Higgins A, Barracough R. Human homologue of cement gland protein, a novel metastasis inducer associated with breast carcinomas. *Cancer Res* 2005; **65**: 3796–3805.
33. Martens JWM, Nimmrich I, Koenig T, Look MP, Harbeck N, Model F, Kluth A, Bolt-De Vries J, Sieuwerts AM, Portengen H, Gelder MEM, Piepenbrock C, Olek A, Hofler H, Kiechle M, Klijn JGM, Schmitt M, Maier S, Foekens JA.

- Association of DNA methylation of phosphoserine aminotransferase with response to endocrine therapy in patients with recurrent breast cancer. *Cancer Res* 2005; **65**: 4101–4107.
34. Mikhitarian K, Gillanders WE, Almeida JS, Martin RH, Varela JC, Metcalf JS, Cole DJ, Mitas M. An innovative microarray strategy identifies informative molecular markers for the detection of micrometastatic breast cancer. *Clin Cancer Res* 2005; **11**: 3697–3704.
 35. Mukherjee S, Conrad SE. c-Myc suppresses p21(WAF1/CIP1) expression during estrogen signaling and antiestrogen resistance in human breast cancer cells. *J Biol Chem* 2005; **280**: 17617–17625.
 36. Poola I, DeWitty RL, Marshalleck JJ, Bhatnagar R, Abraham J, Leffall LD. Identification of MMP-1 as a putative breast cancer predictive marker by global gene expression analysis. *Nat Med* 2005; **11**: 481–483.
 37. Radke S, Pirkmaier A, Germain D. Differential expression of the F-box proteins Skp2 and Skp2B in breast cancer. *Oncogene* 2005; **24**: 3448–3458.
 38. Rouanet P, Linares-Cruz G, Dravet F, Poujol S, Gourgou S, Simony-Lafontaine J, Grenier J, Kramar A, Girault J, Le Nestour E, Maudelonde T. Neoadjuvant percutaneous 4-hydroxytamoxifen decreases breast tumoral cell proliferation: a prospective controlled randomized study comparing three doses of 4-hydroxytamoxifen gel to oral tamoxifen. *J Clin Oncol* 2005; **23**: 2980–2987.
 39. Sabnis GJ, Jelovac D, Long B, Brodie A. The role of growth factor receptor pathways in human breast cancer cells adapted to long-term estrogen deprivation. *Cancer Res* 2005; **65**: 3903–3910.
 40. Sesso HD, Buring JE, Zhang SMM, Norkus EP, Gaziano JM. Dietary and plasma lycopene and the risk of breast cancer. *Cancer Epidemiol Biom Prev* 2005; **14**: 1074–1081.
 41. Sum EYM, Segara D, Duscio B, Bath ML, Field AS, Sutherland RL, Lindeman GJ, Visvader JE. Overexpression of LMO4 induces mammary hyperplasia, promotes cell invasion, and is a predictor of poor outcome in breast cancer. *P Natl Acad Sci USA* 2005; **102**: 7659–7664.
 42. Sun HG, Berquin IM, Edwards IJ. Omega-3 polyunsaturated fatty acids regulate syndecan-1 expression in human breast cancer cells. *Cancer Res* 2005; **65**: 4442–4447.
 43. Townsend K, Banwell CM, Guy M, Colston K, Mansi JL, Stewart PM, Campbell M, Hewison M. Autocrine metabolism of vitamin D in normal and malignant breast tissue. *Clin Cancer Res* 2005; **11**: 3579–3586.
 44. Vellon L, Menendez JA, Lupu R. $\alpha(v)\beta(3)$ integrin regulates Heregulin (HRG)-induced cell proliferation and survival in breast cancer. *Oncogene* 2005; **24**: 3759–3773.
 45. Wu YL, Yang XJ, Ren Z, McDonnell DP, Norris JD, Willson TM, Greene GL. Structural basis for an unexpected mode of SERM-mediated ER antagonism. *Mol Cell* 2005; **18**: 413–424.
 46. Yan Y, Spieker RS, Kim M, Stoeger SM, Cowan KH. BRCA1-mediated G2/M cell cycle arrest requires ERK1/2 kinase activation. *Oncogene* 2005; **24**: 3285–3296.
 47. Yin YZ, Russell RG, Dettin LE, Bai R, Wei ZL, Kozikowski AP, Kopleovich L, Glazer RI. Peroxisome proliferator-activated receptor delta and gamma agonists differentially alter tumor differentiation and progression during mammary carcinogenesis. *Cancer Res* 2005; **65**: 3950–3957.

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