

Basic science: (December 2007)

1. Antoniou AC, Sinilnikova OM, Simard J, Leone M, Dumont M, Neuhausen SL, Struewing JP, Stoppa-Lyonnet D, Barjhoux L, Hughes DJ, Coupier I, Belotti M, Lasset C, Rebbeck TR, Wagner T, Lynch HT, Domchek SM, Nathanson KL, Garber JE, Weitzel J, Narod SA, Tomlinson G, Olopade OI, Godwin A, Isaacs C, Jakubowska A, Lubinski J, Gronwald J, Gorski B, Byrski T, Huzarski T, Peock S, Cook M, Baynes C, Murray A, Rogers M, Daly PA, Dorkins H, Schmutzler RK, Versmold B, Engel C, Meindl A, Arnold N, Niederacher D, Deissler H, Spurdle AB, Chen XQ, Waddell N, Cloonan N, Kirchhoff T, Offit K, Friedman E, Kaufmann B, Laitman Y, Galore G, Rennert G, Lejbkowitz F, Raskin L, Andrulis IL, Ilyushik E, Ozcelik H, Devilee P, Vreeswijk MPG, Greene MH, Prindiville SA, Osorio A, Benitez J, Zikan M, Szabo CI, Kilpivaara O, Nevanlinna H, Hamann U, Durocher F, Arason A, Couch FJ, Easton DF, Chenevix-Trench G. RADS1 135G -> C modifies breast cancer risk among BRCA2 mutation carriers: results from a combined analysis of 19 studies. *Am J Hum Genet* 2007; **81**: 1186–1200.
2. Bayliss J, Hilger A, Vishnu P, Diehl K, El Ashry D. Reversal of the estrogen receptor-negative phenotype in breast cancer and restoration of antiestrogen response. *Clin Cancer Res* 2007; **13**: 7029–7036.
3. Belguise K, Sonenshein GE. PKC θ promotes c-Rel-driven mammary tumorigenesis in mice and humans by repressing estrogen receptor α synthesis. *J Clin Invest* 2007; **117**: 4009–4021.
4. Bell DW, Kim SH, Godwin AK, Schiripo TA, Harris PL, Haserlat SM, Wahrer DCR, Haiman CA, Daly MB, Niendorf KB, Smith MR, Sgroi DC, Garber JE, Olopade OI, Le Marchand L, Henderson BE, Altshuler D, Haber DA, Freedman ML. Genetic and functional analysis of CHEK2 (CHK2) variants in multiethnic cohorts. *Int J Cancer* 2007; **121**: 2661–2667.
5. Croucher DR, Saunders DN, Stillfried GE, Ranson M. A structural basis for differential cell signalling by PAI-1 and PAI-2 in breast cancer cells. *Biochem J* 2007; **408**: 203–210.
6. Daniel AR, Faivre EJ, Lange CA. Phosphorylation-dependent antagonism of sumoylation derepresses progesterone receptor action in breast cancer cells. *Mol Endocrinol* 2007; **21**: 2890–2906.
7. Dhasarathy A, Kajita M, Wade PA. The transcription factor snail mediates epithelial to mesenchymal transitions by repression of estrogen receptor- α . *Mol Endocrinol* 2007; **21**: 2907–2918.
8. Dillon RL, Brown ST, Ling C, Shioda T, Muller WJ. An EGR2/CITED1 transcription factor complex and the 14-3-3 σ tumor suppressor are involved in regulating ErbB2 expression in a transgenic-mouse model of human breast cancer. *Mol Cell Biol* 2007; **27**: 8648–8657.
9. Gail MH, Costantino JP, Pee D, Bondy M, Newman L, Selvan M, Anderson GL, Malone KE, Marchbanks PA, McCaskill-Stevens W, Norman SA, Simon MS, Spirtas R, Ursin G, Bernstein L. Projecting individualized absolute invasive breast cancer risk in African American women. *J Natl Cancer Inst* 2007; **99**: 1782–1792.
10. Gomez BP, Riggins RB, Shajahan AN, Klimach U, Wang A, Crawford AC, Zhu Y, Zwart A, Wang M, Clarke R. Human X-Box binding protein-1 confers both estrogen independence and antiestrogen resistance in breast cancer cell lines. *FASEB J* 2007; **21**: 4013–4027.
11. Gupta GP, Perk J, Acharyya S, de Candia P, Mittal V, Todorova-Manova K, Gerald WL, Brogi E, Benezra R, Massague J. ID genes mediate tumor reinitiation during breast cancer lung metastasis. *Proc Natl Acad Sci USA* 2007; **104**: 19506–19511.
12. Heaphy CM, Baumgartner KB, Bisoffi M, Baumgartner RN, Griffith JK. Telomere DNA content predicts breast cancer-free survival interval. *Clin Cancer Res* 2007; **13**: 7037–7043.
13. Heinonen M, Fagerholm R, Aaltonen K, Kilpivaara O, Aittomaki K, Blomqvist C, Heikkila P, Haglund C, Nevanlinna H, Ristimaki A. Prognostic role of

- HuR in hereditary breast cancer. *Clin Cancer Res* 2007; **13**: 6959–6963.
14. Huang Y, Fernandez SV, Goodwin S, Russo PA, Russo IH, Sutter TR, Russo J. Epithelial to mesenchymal transition in human breast epithelial cells transformed by 17 β -estradiol. *Cancer Res* 2007; **67**: 11147–11157.
 15. John EM, Miron A, Gong G, Phipps AI, Felberg A, Li FP, West DW, Whittemore AS. Prevalence of pathogenic BRCA1 mutation carriers in 5 US racial/ethnic groups. *JAMA* 2007; **298**: 2869–2876.
 16. John EM, Schwartz GG, Koo J, Wang W, Ingles SA. Sun exposure, vitamin D receptor gene polymorphisms, and breast cancer risk in a multiethnic population. *Am J Epidemiol* 2007; **166**: 1409–1419.
 17. Lin J, Manson JE, Selhub J, Buring JE, Zhang SMM. Plasma cysteinylglycine levels and breast cancer risk in women. *Cancer Res* 2007; **67**: 11123–11127.
 18. MacAusland SG, Hepel JT, Chong FK, Galper SL, Gass JS, Ruthazer R, Wazer DE. An attempt to independently verify the utility of the Van Nuys Prognostic Index for ductal carcinoma in situ. *Cancer* 2007; **110**: 2648–2653.
 19. Mori N, Glunde K, Takagi T, Raman V, Bhujwala ZM. Choline kinase down-regulation increases the effect of 5-fluorouracil in breast cancer cells. *Cancer Res* 2007; **67**: 11284–11290.
 20. Naiki-Ito A, Asamoto M, Hokaiwado N, Takahashi S, Yamashita H, Tsuda H, Ogawa K, Shirai T. Gpx2 is an overexpressed gene in rat breast cancers induced by three different chemical carcinogens. *Cancer Res* 2007; **67**: 11353–11358.
 21. Palmer CP, Mahen R, Schnell E, Djamgoz MBA, Aydar E. Sigma-1 receptors bind cholesterol and remodel lipid rafts in breast cancer cell lines. *Cancer Res* 2007; **67**: 11166–11175.
 22. Patocs A, Zhang L, Xu YM, Weber F, Caldes T, Mutter GL, Platzer P, Eng C. Breast-cancer stromal cells with TP53 mutations and nodal metastases. *N Engl J Med* 2007; **357**: 2543–2551.
 23. Ruhe JE, Streit S, Hart S, Wong CH, Specht K, Knyazev P, Knyazeva T, Tay LS, Loo HL, Foo P, Wong W, Pok S, Lim SJ, Ong H, Luo M, Ho HV, Peng K, Lee TC, Bezler M, Mann C, Gaertner S, Hoefler H, Iacobelli S, Peter S, Tay A, Brenner S, Venkatesh B, Ullrich A. Genetic alterations in the tyrosine kinase transcriptome of human cancer cell lines. *Cancer Res* 2007; **67**: 11368–11376.
 24. Sankaran S, Crone DE, Palazzo RE, Parvin JD. Aurora – a kinase regulates breast cancer-associated gene 1 inhibition of centrosome-dependent microtubule nucleation. *Cancer Res* 2007; **67**: 11186–11194.
 25. Sansone P, Storci G, Tavolari S, Guarnieri T, Giovannini C, Taffurelli M, Ceccarelli C, Santini D, Paterini P, Marcu KB, Chieco P, Bonafe M. IL-6 triggers malignant features in mammospheres from human ductal breast carcinoma and normal mammary gland. *J Clin Invest* 2007; **117**: 3988–4002.
 26. Wang H, Teske D, Tess A, Kohlhepp R, Choi Y, Kendzioriski C, Moser AR. Identification of novel modifier loci of Apc^{Min} affecting mammary tumor development. *Cancer Res* 2007; **67**: 11226–11233.
 27. Westbrook L, Manuvakhova M, Kern FG, Estes NR, Ramanathan HN, Thottassery JV. Cks1 regulates cdk1 expression: a novel role during mitotic entry in breast cancer cells. *Cancer Res* 2007; **67**: 11393–11401.
 28. Yokota T, Bui TY, Liu YN, Yi M, Hunt KK, Keyomarsi K. Differential regulation of elafin in normal and tumor-derived mammary epithelial cells is mediated by CCAAT/Enhancer binding protein β . *Cancer Res* 2007; **67**: 11272–11283.
 29. Yokoyama S, Chen CJ, Nguyen T, Shively JE. Role of CEACAM1 isoforms in an in vivo model of mammary morphogenesis: mutational analysis of the cytoplasmic domain of CEACAM1-4S reveals key residues involved in lumen formation. *Oncogene* 2007; **26**: 7637–7646.
 30. Zuo T, Liu RH, Zhang HM, Chang X, Liu Y, Wang LZ, Zheng P, Liu Y. FOXP3 is a novel transcriptional repressor for the breast cancer oncogene SKP2. *J Clin Invest* 2007; **117**: 3765–3773.

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