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Oestrogen receptor mutations and their influence on breast cancer growth

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2012-03-12
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REFERENCES

Aakvaag A., Utaaker E., Thorsen T., Lea O.A. and Laland S.G. Growth and metastatic potential of human mammary cancer cells (MCF-7) in culture: effect of estradiol, growth factors and conditioning medium. Cancer Res. 50: 7807-7810, 1990.

Ali S. and Coombes C.R. Endocrine-responsive breast cancer and strategies for combating resistance. Nat. Rev. Cancer 2: 101-112, 2002.

Allred D.C., Clark G.M., Tandon A.K., Molina R., Tormey D.C., Gilchrist K.W., Mansour E.G., Abeloff M.D., Eudey L., Ravdin R.M., Levitt S.H. and McGuire W.L. HER-2/neu in node-negative breast cancer: prognostic significance of overexpression influenced by the presence of in situ carcinoma. J. Clin. Oncol. 10: 599-605, 1992.

Allred D.C., Mohsin S.K. and Fuqua S.A.W. Histological and biological evolution of human premalignant breast disease. Endocr. Related Cancer 8: 47-61, 2001.

Alroy I. and Yarden Y. The ErbB signalling network in embryogenesis and oncogenesis: signal diversification through combinatorial ligand-receptor interactions. FEBS Lett. 410: 83-86, 1997.

Al Saati T., Clamens-Kaufmann S., Chen C., Faye J.C., Prats H., Coindre J.M., Wafflart J., Crave P., Vial-Bayard F. and Delsol G. Production of monoclonal antibodies to human estrogen receptor protein (ER) using recombinant ER (RER). Int. J. Cancer 55: 651-654, 1993.

Anders C.K., Hsu D.S., Broadwater G., Acharya C.R., Foe
Wang Y., Marcom P.K., Marks J.R., Febbo P.G., Nevins
Blackwell Young age at diagnosis correlates with worse
defines a subset of breast cancers with shared patterns of
Clin. Oncol. 26: 3324-3330, 2008.

Anderson E. The role of oestrogen and progesterone re
mammary development and tumorigenesis. Breast Cancer Res. 4: 197-201, 2002.

Archey W.B., McEachern K.A., Robson M., Offit K., Vaziri S
and Arrick B.A. Increased CpG methylation of the estrog
BRCA1-linked estrogen-receptor negative breast cancers. Cancer Res. 21: 7034-
7041, 2002.

Arnold A., Cossman J., Bakhshi A., Jaffe E.S., Waldmann T.A.
S.J. Immunoglobin gene rearrangements as unique clonal
lymphoid neoplasms. N. Engl. J. Med. 309: 1593-1599, 1983.

Bakas P., Liapis A., Vlahopoulos S., Grigoriadis A., Logothetopoulos A.
A.K., Alexis M.N. and Zoumpourlis V. Estrogen receptor ± and ² in uterine
a basis for altered estrogen responsiveness. Int. J. Mol. Med. 21: 787-795,
2008.

Balakrishnan A., Yang J., Beattie C.W., Gupta T.K.D. and Nand
receptor in dissociated and cultured fibroadenoma epithelial
Cancer Lett. 34 233-242, 1987.

Balslev I., Christensen I.J., Rasmussen B.B., Larsen J.
Thorpe S.M., Rose C., Briand P. and Mouridsen H.T. Flow
defines patients with poor prognosis in node-negative breast
56 1-6, 1994.

Barlogie B., Drewinko B., Schumann J., Gohde W., Dosik G
D. and Freireich E. Cellular DNA content as a marker of ne
Med. 69 195-203, 1098

Baselga J., Seidman A.D., Rosen P.P. and Norton L. HER2
paclitaxel sensitivity in breast cancer: an
48, 1997.

Baselga J., Perez E.A., Pandiella A. and Rubin S. Adjuvant Trastuzumab:
milestone in the treatment of HER-2-positive early breast cancer.
11: 4-12, 2006.

Beato M. Gene regulation by steroid hormones. Cell 56 335-344, 1989.

Beato M., Herrlich P. and Schutz G. Steroid hormone rece
search of a cell. 83 851-857, 1995.

Beatson G.T. On the treatment of inoperable cases of carc
suggestions for a new method of treatment, with illustrative
107, 1896.

Beekman J.M., Allan G.F., Tsai S.Y., Tsai M.J. and O'Malley B.W. Transcriptional
activation by the estrogen receptor requires a conformation
binding domain. Mol. Endocrinol. 7: 1266-1274, 1993.

Beerman H., Kluin P.M., Hermans J., van De Velde C.J.H.
Prognostic significance of DNA ploidy in a series of 690 primary brea
patients. Int. J. Cancer 45: 847-849, 1990.

Bertelli G., Gamucci T., Merlano M., Occelli M., Bertolotti L., Castiglion
F., Fusco O., Del Mastro L. and Leonard R.C. Sequent
exemestane and steroidal aromatase inhibitors in advanced b
Oncology 69: 474-477, 2005.

Berthois Y., Katzenellenbogen J.A. and Katzenellenbogen
tissue culture media is a weak estrogen: implications co
estrogen responsive cells. Proc. Natl. Acad. Sci. U. S. A. 83: 2496-2500,
1986.

Blenkiron C., Goldstein L.D., Thorne N.P., Spiteri I., Chi
Barbosa Morais N.L., Teschendorff A.E., Green A.R., Ellis
C. and Miska E.A. MicroRNA expression profiling of huma

identifies new markers of Genome Biology 2: 1-4, 2007.

Boccardo F., Rubagotti A., Puntoni M., Guglielmini P., A
Paladini G., Mesiti M., Romeo D., Scarsi P., Saldi S., Pronzato P., Miglia M., Bene
C., Restuccia N., Buzzi F., Franchi R., Massidda B., Distan
Sismondi P.: Switching to anastrozole versus continued tamoxif
early breast cancer: Preliminary results of the Italian Tamo
J. Clin. Oncol. 23: 5133-5147, 2005.

Bonneterre J., Thürlimann B., Robertson J.F., Krzakowsk
Koralewski P., Vergote I., Webster A., Steinberg M., Von Min
versus tamoxifen first-line therapy for advanced breast cancer in
postmenopausal women: results of the Tamoxifen or Arimide
Efficacy and Tolerability Study. J. Clin. Oncol. 18: 3748-3757, 2000.

Bowler J., Lilley T.J., Pittam J.D. and Wakeling A.E. N
antiestrogens. Steroids 54: 71-99, 1989.

Boyd M., Hildebrandt R.H. and Bartow S.A. Expression of
gene in developing and adult mouse tissues. Breast Cancer Res. Treat.
251, 1996.

Bronson F.H., Dagg C.P. and Snell G.D. Reproduction: An
Reproduction. 187-204, 1975.

Bronzert D.A., Greene G.L. and Lippman M.E. Selection and
breast cancer cell line resistant to the Endocrinology LY 117
140-1417, 1985.

Brooks S.C., Locker ESR Rule Ehrlich Dogen receptor in a human ce
(MCF) from breast can J. Biol. Chem. 248: 6251253, 1973.

Brueggemeier R.W., Hackett Cui C. Aromatase Inhibitors in t
Treatment of Breast Cancer. Endocr. Rev. 26: 331345, 2005.

Brunner N., Clarke R., Lippman M.E. and Dickson R.B. Mo
progression from dependent to independent growth in hum
breast cancer. In: Growth Regulation of Lippman M.E., Dickson R.
(eds). Alans R. Liss, New York, pp. 99115.

Bryant W., Snowhite Rae L.W and Shupnik M.A. Estrogen receptor (E
± variant 5 exhibits dominant positive regulation of activity on ERs in
endometrial carcinoma cells. Endocrinology 146: 7577592005.

Buzdar A.U., Marcus C., Holmes F., Hug V. and Hortobagyi
of LY156758 in metastatic breast cancer. Cancer 61: 3439345, 1988.

Buzdar A. and Howell A. Advances in aromatase inhibition
tolerability in the treatment of breast cancer. Clin. Cancer Res. 7: 2622635,
2001.

Cairns J. Mutations and the natural history of cancer. Nature (London) 255: 197-200, 1975.

Calin G.A., Sevignani C., Dumitru C.D., Hyslop T., Noch Shimizu M., Rattan S., Bullrich F., Negrini M. and Croce C genes are frequently located in fragile sites and genomic regions cancer. Proc. Natl. Acad. Sci. USA 101: 2999-3004, 2004.

Calin G.A. and Croce C.M. MicroRNA signatures in human Cancer 6: 857-866, 2006.

Cameron G. and Chambers R. Neoplasm. Studies on the growth of cells human tumours in tissue culture. Am. J. Cancer 30: 1-29, 1937.

Campb-Thompson M., Lynch J. and Bhat Expression of estroger receptor (ER) subtypes and ERβ isoforms in colon cancer. Cancer Res. 61: 632-640, 2001.

Camplejohn R.S., Ash C.M., Rakha E., Barnes D.M., Gregor W.M., Richards M.A. and Theil Prognostic significance of DNA flow cytometry in breast cancer: results from 881 patients treat J. Cancer 74: 1041-1045, 1995.

Carrel A. On the permanent life of tissues outside the organ
516-528, 1912.

Carruba G. Estrogen and prostate cancer: an eclipsed truth in an
dominated scenario. J Cell Biochem 102: 1081-1087, 2007.

Carter A.C. Diethylstilbestrol: recommended dosages for
breast cancer prevention. JAMA 237: 2077-2085, 1977.

Castles C.G., Fuqua S.A., Klotz D.M. and Hill S.M. Expres
constitutively active estrogen receptor variant in the
BT-20 human breast cancer cell line. Cancer Res 53: 5934-5939, 1993.

Cepa M., Tavares da Silva E., Correia da Silva G., Teixeira N.
Structure-activity relationships of new 4-hydroxylated steroids as arom
inhibitors. Design, synthesis and biological evaluation. J Med Chem 48:
637-6385, 2005.

Cepa M., Correia da Silva G., Tavares da Silva E., Teixeira F.M.F., Borges
and Teixeira N.A. New steroidal aromatase inhibitors: suppression of
dependent breast cancer cell proliferation and induction of
Biol 9: 4-54, 2008.

Chalbos D., Vignon F., Keydar I., Rochefort H. and Rochefort H. Estrogens stimulate proliferation and induce secretory proteins in a human b (T47D). Clin. Endocrinol. (Oxf.) 17, 487-494, 1982.

Chambraud B., Berry M., Redeuilh G. Chambon P. and Ba regions of human estrogen receptor are involved in the formation shock protein 90 complex. J. Biol. Chem. 265, 20686-20691, 1990.

Chang E.C., Frasor J., Komm B. and Katzenellenbogen B.S receptor ² on gene networks by estrogen receptor ± in breast ca cells. Endocrinology 147, 4831-4842, 2006.

Chappell S.A., Johnson S.M., Shaw J.A. and Walker R.A. Ex receptor alpha variants in non-malignant breast and early invasive carcinoma. J. Pathol. 191, 159-165, 2000.

Cheng A.M., Byrom M.W., Shelton J., Ford L.P. Antisense miRNAs and indicators for an involvement of miRNA in cell Nucleic Acids Res. 33, 1290-1297, 2005

Cheng G., Li Y., Omoto Y., Warner M., Eriksson H., Gustafsson Y-S. and Gustafsson J-Å. Differential regulation of estrogen receptor and ER {beta} in primate mammary gland. J. Clin. Endocrinol. Metab. 90, 4361-4369, 2005

Chetrite G.S., Pasqualini J.R., Pasqualini C., Philippe J., Wright F. and Pasqualini J.C. Comparison of estrogen concentrations, estrone sulfatase activities in normal, and in cancerous, human breast tissues. J. Steroid Biochem. Mol. Biol. 72: 23-27, 2000.

Chung Y.L., Sheu M.L., Yang S.C., Lin C.H., Yen S.H. Resistance to tamoxifen-induced apoptosis is associated with direct interaction of her-2/neu and cell membrane estrogen receptor-alpha in breast cancer. Int. J. Cancer 96: 306-312, 2002.

Clark G.M., McGuire W.L., Hubay C.A., Pearson O.H., Marshall J.S. and Levitt S.H. Progesterone receptors as a prognostic factor in stage II breast cancer. N. Engl. J. Med. 309: 1343-1347, 1983.

Clark G.M., Osborne C.K. and McGuire W.L. Correlations between estrogen receptor, progesterone receptor, and patient characteristics in human breast cancer. J. Clin. Oncol. 2: 1101-1109, 1984.

Clark G.M. and McGuire W.L. Steroid receptors and other prognostic factors in primary breast cancers. Semin. Oncol. 15: 12-20, 1988.

Clarke R., Dickson R.B. and Brunner N. The progression from breast hyperplasia to human breast cancer. Ann. Oncol. 1: 401-407, 1990.

Clemens J.A., Bennett D.R., Black L.J. and Jones C.D. antiestrogen, keoxifene (LY156758), on growth of mammary tumors and on LH and prolactin secretion. Steroids 42: 629-643, 1983.

Cocconi G. First generation aromatase inhibitors and testolactone. Breast Cancer Res. Treat. 30: 57-70, 1994.

Cohen B.D., Siegall C.B., Foy B., Lau S., Green J.M., Hellstrom I., H K.E. and Fell H.P. Role of epidermal growth factor receptor fami growth and differentiation of breast carcinoma. Semin. Oncol. 25: 10-21, 1998.

Cole M.P., Jones C.T.A. and Todd I.D.H. A new anti-estrogen in lat breast cancer. Br. J. Cancer 25: 270-275, 1971.

Cooke T., George D., Shields R., Maynard P.V. and Gri receptors and prognosis in early breast cancer. Lancet 1: 97-99, 1979.

Coombes R.C., Hall E., Gibson L.J., Paridaens R., Jassem S.E., Alvarez I., Bertelli G., Ortmann O., Coates A.S., B Coleman R.E., Fallowfield L.J., Mickiewicz E., Andersen J. G., Stewart A., Stuart N., Snowdon C.F., Carpentieri M., J.MA randomized trial of exemestane after two to three yea therapy in postmenopausal women with primary breast cancer. N. Engl. J. Med. 350: 1081-1092, 2004.

Cooper A.: The principles and practice of surgery, vol. 1. London: pp 335, 1836.

Coulson P.B., Thornthwaite J.T., Woolley T.W., Sugarbaker Prognostic indicators including DNA histogram type, recept related to human breast cancer. Cancer Res. 44: 4187-4196, 1984.

Cowley S.M., Hoare S., Mosselman S. and Parker M.G. Estrog ðb form heterodimers. J. Biol. Chem. 272: 19858-19862, 1997.

Crandall D.L., Busler D.E., Novak T.J., Weber R.V. and Kr estrogen receptor ² RNA in human breast and abdominal su tissue. Biochem. Biophys. Res. Commun. 248: 532-536, 1998.

Critchley H.O., Henderson T.A., Kelly R.W., Scobie G.S., N.P. and Saunders P.T. Wild-type estrogen receptor (ER²1) and the splice v (ER²cx/²2) are both expressed within the human endometr normal menstrual cycle. J. Clin. Endocrinol. Metab. 87: 5265-5273, 2002.

Cui X., Schiff R., Arpino G., Osborne C.K. and Lee A.V. B Receptor Loss in Breast Cancer and Its Implications for E Clin. Oncol. 23(30): 7721-7735, 2005.

Daffada A.A., Johnston S.R., Smith I.E., Detre S., King N. deletion variant estrogen receptor mRNA expression in relation tamoxifen resistance and progesterone receptor/pS2 stat cancer. Cancer Res. 55: 2828-2833, 1995.

De Sombre E.R., Carbone P.P., Jensen E.V., McGuire W.L., J.L. and Lipsett M.B. Steroid receptors in breast cancer. Surg. Gynecol. Obstet. 148: 1001-1012, 1979.

Desai A.J., Luqmani Y.A., Walters J.E., Coope R.C., Dagg P.E., Rees C.N., Thirunavukkarasu V., Shousha S., Groom and Ali S. Presence of deleted oestrogen receptor in human breast functional analysis and clinical significance. Br. J. Cancer 75: 1177-1184, 1997.

De Vivo I., Hankinson S.E., Colditz G.A., Hunter D.J. polymorphism in the progesterone gene is associated with cancer risk. Cancer Res. 63: 5235-5238, 2003.

Dobrzycka, K.M., Townson S.M., Jiang S., Oesterreich S. corepressors: A role in human breast cancer? Endocr. Relat. Cancer 10: 517-536, 2003.

Dodds E.C. and Lawson W. Synthetic estrogenic agents without a ph nucleus. Nature (Lond.) 137: 996, 1936.

Don R.H., Cox P.T., Wainwright B.J., Baker K. and Mattick
to circumvent spurious priming during gene amplification. Nucleic Acids Res.
4008, 199

Dotzlaw H., Alkhalaf M. and Murphy L.C. Characterization
variant mRNAs from human breast cancers. Mol. Endocrinol. 6: 773-785, 1992.

Dotzlaw H., Leygue E., Watson P.H. and Murphy L.C. Exp
receptor beta in human breast tumors. J. Clin. Endocrinol. Metab. 82: 2371-2374,
1997.

Dotzlaw H., Leygue E., Watson P.H. and Murphy L.C. E
messenger RNA expression in human breast tumor biops
steroid receptor status and regulation by tamoxifen. Cancer Res. 59: 2925-2932,
1999.

Dupont S., Krust A., Gansmuller A., Dierich A., Chambon P
single and compound knockouts of estrogen receptors alp
(ER²) on mouse reproductive phenotypes. Development 127: 4277-4291, 2000

Dupont W.D. and Page D.L. Risk factors for breast can
proliferative breast disease. N. Engl. J. Med. 312: 146-151, 1985.

Duval D., Durand B., Balaguer P., Lumbroso S. and Homburger A. Genomic effects of steroi
Interactions of steroid with cell membrane structures and fu
Biochim. Biophys. Acta 737: 401-412, 1983.

Earle W.R., Schilling E.L., Stark T.H., Straus N.P., Brown
Production of malignancy in vitro. The mouse fibroblast cultures and
seen in the living cell. J. Natl. Cancer Inst. 4: 165-212, 1943.

Elledge R.M., Green S., Pugh R., Allred D.C., Clark G.M., Hill J., R
Martino S. and Osborne C.K. Estrogen receptor (ER) and p
(PgR), by ligand binding assay compared with ER, PgR and pS2, by immun
histochemistry in predicting response to tamoxifen in metastatic breast
Southwest Oncology Group. J. Clin. Oncol. 18: 1745-1751, 2000.

Ellis L., Atadja P.W. and Johnstone R.W. Epigenetics i
chromatin modifications. Mol. Cancer Ther. 8: 1409-1420, 2009.

Encarnacion C.A., Ciocca D.R., McGuire W.L., Clark G.M.
Osborne C.K. Measurement of steroid hormone receptors
patients on tamoxifen. Breast Cancer Res. Treat. 26: 237-246, 1993.

Engel L.W. and Young N.A. Human breast carcinoma cells in continuous cultu
review. Cancer Res. 38: 4327-4339, 1978.

Enmark E., Pelto-Huikko M., Grandien K., Lagercrantz S., Lagercr
Nordenskjold M. and Gustafsson J.A. Human estrogen receptor structure,
chromosomal localization, and expression pattern. J. Clin. Endocrinol. Metab.
425-4265, 1997.

Erenburg I., Schachter B., Mira y Lopez R. and Ossowski L
receptor isoform (ER beta) in breast cancer and the consequences
reexpression: interference with tamoxifen stimulatory properties of mali
transformation. Endocrinology 138, 2010-2015, 1997.

Esber H., Payne I. and Bogden A. Variability of hormone co
in commercial sera used for clinical laboratories. Clin. Chem. 19, 1951-1956, 1973.

Faber L.E., Sandmann M.L. and Stavely H.E. Progesterone
rat and rabbit. Biol. Reprod. 27, 645-649, 1978.

Fan S., Wang J., Yuan R., Ma Y., Meng Q., Erdos M.R., Pestell R.G.,
Auborn K.J., Goldberg I.D. and Rosen E.M. BRCA1 inhibition of estrogen re
signalling in transfected cells. Science 284, 1354-1356, 1999.

Fasco M.J., Hurteau G.J., Spivack S.D., Gould V.E., Kaufman D.G. Down-regulation of
alpha and beta estrogen receptors in human nontumor and t
Endocrinol. 188, 125-140, 2002

Ferguson A.T. and Davidson N.E. Estrogen Receptor ± Func
Breast Cancer. Crit. Rev. in Oncogenesis, 8: 249-279, 1997.

Fernandez P., Wilson C., Hoivik D. and Safe S.H. A
characteristics of T47d human breast cancer cells after
estrogen-deficient medium. Cell Biol Int Rep, 12: 263-273, 1988.

Fernö M., Baldetorp B., Olsson H., Sigurdsson H. and Killand
cytometric DNA index and S-phase fraction in breast cancer in relat
prognostic variables and to adjuvant chemotherapy. Acta Oncol, 31: 765-775, 1992.

Fialkow P. Clonal origin of human tumors. Annu. Rev. Med., 30: 135-143, 1979.

Filipowicz W., Bhattacharyya S.N. and Sonenberg N. Me
transcriptional regulation by microRNAs: are the answers in sight? Nat. Rev. Genet., 9: 102-114, 2008.

Fisher B., Gunduz N., Constantino J., Fisher E.R., Redmon
and Siderits R. DNA flow cytometry and prognosis of primary operable breast
Cancer (Phila.), 68: 1466-1475, 1991.

Fisher B., Constantino J.P., Wickerham D.L., Redmond C.K., Kavanah M.
W.M., Vogel V., Robidoux A., Dimitrov N., Atkins J., Daly M
E., Ford L. and Wolmark N. Tamoxifen for prevention of breast cance

the National Surgical Adjuvant Breast and Bowel Project. J Natl Cancer Inst 90: 1371-1388, 1998.

Fisher B. From Halsted to prevention and beyond: advances in the treatment of breast cancer during the twentieth century. Eur J Cancer 35: 1963-1973, 1999.

Fitzpatrick S.L., La Chasse Schaum M.Z., Lippman M.E. and Characterization of epidermal growth factor receptor and action on human breast cancer cells. Cancer Res 44: 3442-3447, 1984.

Focan C., Beauduin M., Camerini T., Mauriac L.F., Cusumano G., Fargeot P., Focan C., and Lobelle J.P.: Breast Cancer Project, Hepato-Gastroenterological medroxyprogesterone acetate or tamoxifen as adjuvant hormonal therapy in negative-stage breast cancer: randomized 7-year trial with 7 years of follow-up. Breast Cancer Res Treat 85: 131-141, 2004.

Foulds L. Neoplastic Development, Vol. 2. New York: Academic Press, 1975.

Fu X.D., Giretti M.S., Goglia L., Flamini M.I., Sanchez A.M., Yang S., Simoncini T., Wakade R., Genazzani A.R. and Simoncini T. Comparative effects of progesterone, medroxyprogesterone acetate, dydrogesterone and nestorone on breast cancer cell migration. Mol Cell Endocrinol 286: 167-178, 2008.

Fujimura T., Takahashi S., Urano T., Ogawa T., Muramatsu M., Kitamura Y., Kambe M. and Inoue S. Differential expression of estrogen receptor beta (ERbeta) mRNA isofo

C-terminal truncated splice variant ERbetacx as prognostic
prostatic cancer. Biochem. Biophys. Res. Commun. 289, 1629-1634, 2001

Fuqua S.A., Fitzgerald S.D., Chamness G.C., Tandon A.K
Nawaz Z., O Malley B.W. and McGuire W.L. Variant human breast t
receptor with constitutive transcriptional activity. Cancer Res. 51, 105-109, 1991.

Fuqua S.A., Fitzgerald S.D., Allred D.C., Elledge R.M., Nav
O Malley B.W., Greene G.L., McGuire W.L. Inhibition of estrogen
action by a naturally occurring variant in human breast tumors. Cancer Res. 52,
483-486, 1992.

Fuqua S.A., Allred D.C. and Auchus R.J. Expression of estr
J. Cell Biochem. 17 Suppl, 141-149, 1993.

Fuqua S., Wiltschke C., Castles C.G., Wolf D.C. and All
estrogen receptor variants in endocrine resistant cancer. Endocr. Rev. 16 Suppl 1,
1995.

Fuqua S.A.W., Wiltschke C., Zhang Q.X., Borg A., Castles C.G., Friedrichs W
Hopp T., Hilsenbeck S., Mohsin S., O Connel P. and Allred
estrogen receptor mutation in premalignant breast disease. Cancer Res. 60,
4026-4029, 2000.

Fuqua S., Schiff R., Parra I., Moore J.T., Mohsin S.K., Osborne C.K., Allred D.C., Clark G.M., Hilsenbeck S.G. and Wong H. Estrogen receptor β protein in human breast cancer cell lines and in breast tumors. Cancer Res. 63: 2434-2439, 2003.

Furberg A.S., Veierød M.B., Wilsgaard T., Bernstein L. and Thune I. Physical activity, body size, estrogen receptor status and breast cancer risk. Int. J. Cancer 104: 669-676, 2003.

Garcia Pedrero J.M., Zuazua Villar P., Martinez Campa C., Lazo P.S. and Ramos Mazo M. Human tumour necrosis factor induces retinoic acid receptor beta 2 and activates a beta 2-dependent pathway in breast cancer cells. Endocrinology 144: 2962-2970, 2003.

Garinis G.A., Patrinos G.P., Spanakis N.E. and Menounos P.G. DNA hypermethylation: when tumour suppressor genes go silent. Hum. Genet. 111: 115-127, 2002.

Gaub M.P., Bellard M., Scheuer I., Chambon P. and Sassone-Corsi P. Activation of the ovalbumin gene by the estrogen receptor involves the fos-jun complex. Cell 63: 1267-1276, 1990.

Gazic B., Pizem J., Bracko M., Cufer-Marinsek M., Besic N., Zgajnar J., Pohar-Krasovec J. and Skaleric U. S-phase fraction determined on fine needle aspirates is an independent prognostic factor in a multivariate study of 70 patients with breast cancer. Cytopathology 19: 393-402, 2008.

German J. (ed.). Chromosome Mutation and Neoplasia, Alan R. Liss, New 1983.

Gey G.O., Coffman W.D. and Kubicek M.T. Tissue culture studies of the proliferative capacity of cervical carcinoma and normal epithelium. Cancer Res. 12 364-365, 1952.

Ghatge R.P., Jacobsen B.M., Schittone S.A. and Horwitz K.B. The progestational and androgenic properties of medroxyprogesterone acetate: human breast cancer cells have progestin-specific and androgen receptors but no detectable 5alpha-reductase activity. Endocr. Relat. Cancer 12: 1025-1050, 2005.

Giacinti L., Claudio P.P., Lopez M. and Giordano A. Epigenetic information and estrogen receptor alpha expression in breast cancer. Oncol. Rep. 15: 1483-1486, 2006.

Glauber J.G. and King D.T. The changing role of hormonal therapy in breast cancer. Semin. Oncol. 19: 303-316, 1992.

Glover J.F., Irwin J.T., Pandya D.P. and Dare D. Interaction of phenol red with estrogenic and antiestrogenic action on growth of human breast cancer cells MCF-7, T-47D. Cancer Res. 48: 3693-3697, 1988.

Gooch J.L. and Yee D. Tissue-specific differences in formation of apoptotic bodies in MCF-7 breast cancer cells. Life Sci. 64: 1-13, 1999.

Graham M.L. II., Dalquist K.E. and Horwitz K.B. Simultan
progesterone receptors and DNA indices by flow cytometry
cancer cell mixtures and ability of the T47D clone R-5
394-399, 1989.

Graham M.L., Krett N.L., Miller L.A., Leslie K.K., Gordon
L.L. and Horwitz K.B. T47D cells genetically unstable and containi
receptor mutations, a model for progression of breast cancers to
resistance. Cancer Res. 50, 6206-6217, 1990.

Green S., Walter P., Kumar V., Krust A., Bornert J.M., Arg
Human oestrogen receptor cDNA: sequence, expression and
Nature (London) 320, 134-139, 1986.

Green S. and Chambon P. Oestradiol induction of a glucocorticoid
gene by a chimaeric receptor. Nature 325, 75-78, 1987.

Greene G.L., Nolan C., Engler J.P. and Jensen E.V. Monoc
human estrogen receptor. Proc. Natl. Acad. Sci. USA 77, 5115-5119, 1980.

Greene G.L. and Jensen E.V. Monoclonal antibodies as p
receptor detection and characterization. J. Steroid Biochem. 16, 353-359, 1982.

Greene G.L., Gilna P., Waterfield M., Baker A., Hort Y. and Shine J. Sequ
and expression of human oestrogen receptor cDNA. Science (Washington D.C.), 231:1150-1154, 1986.

Gross G.E., Clark G.M., Chamness G.C. and McGuire W.L. Multiple estrogen receptor assays in human breast cancer. Cancer Res., 43:3836-3840, 1984.

Gullick W.J. and Srinivasan R. The type 1 growth factor ligands and receptors and their role in breast cancer. Endocr. Relat. Cancer Ther. Treat., 5:243-253, 1998.

Haddow A., Watkinson J.M. and Paterson E. Influence of synthetic oestro upon advanced malignant disease. Br. Med. J., 2:393-398, 1944.

Han F., Miksicek R., Clarke R. and Conrad S.E. Expression of a receptor variant lacking exon 3 in -7 derivatives of MCF-7 cells with estrogen independence or tamoxifen resistance. J. Steroid Biochem. Mol. Biol., 92:935-945, 2004.

Harrison R.G. Observations on the living developing nerve fiber. Proc. Soc. Exp. Biol. Med., 4:140-143, 1907.

Hemsell D.L., Grodin J., Brenner P.F., Siiteri P.K. and MacDonald P.C. Plasma precursors of estrogen. II. Correlation of the extent of

androstenedione to estrone. J. Clin. Endocrinol. Metab. 38: 744-749, 1974.

Henderson B.E., Ross R.K., Pike M.C. and Casagrande J.T. Endogenous hormones as a major factor in human cancer. Cancer Res. 42: 3232-3239, 1982.

Henderson B.E., Ross R. and Bernstein L. Estrogens as a cause of human cancer: the Richard and Hilda Rosenthal Foundation Award lecture. Cancer Res. 48: 246-253, 1988.

Henderson I.C. Cytotoxic therapy in metastatic breast cancer. In: Breast Diseases, Harris J.R., Hellman S., Henderson I.C and Kinne D.W. (eds.), Lippincott Co., Philadelphia, pp. 387-398, 1987.

Henry J.A., Piccini P., Nicholson S., Farndon J.R., Westley B.R., Angus B., Meaney M. and Lennard T.W.J. Expression of oestrogen mRNA levels in human breast cancer. Br. J. Cancer 58: 603-605, 1988.

Herynk M.H. and Fuqua S.A. Estrogen receptor mutations in human disease. Endocr. Rev. 25: 869-898, 2004.

Herynk M.H. and Fuqua S.A. Estrogen receptor mutations in human disease. Adv. Exp. Med. Biol. 608: 1-17, 2007.

Holbro T., Civenni G. and Hynes N.E. The ErbB receptors a
progressExp. Cell Res. 284:99-110, 2003.

Hopp T.A., Weiss H.L., Hilsenbeck S.G., Cui Y., Allred D.C., Horwitz K.
Fuqua SBreast cancer patients with progesterone receptor
have poorer disease-free survival rates. Clin. Cancer Res. 10:2735-2760, 2004.

Horvath G., Leslie K., Grin M. and Hendrickson M. Extensive and variant
human progesterone receptor mRNA in endometrial hyperplasia and
Int. J. Gynecol. Cancer 10:223-236, 2000.

Horwitz K.B., McGuire W.L., Pearson O.H. and Segaloff A.
to endocrine therapy in human breast cancer. Science 189:726-727, thesis.
1975.

Horwitz K.B., Costlow M.E. and McGuire W.L. MCF-7: a human breast cancer
line with estrogen, androgen, progesterone and glucocorticoid
26:785-795, 1975.

Horwitz K.B and McGuire W.L. Estrogen control of progesterone receptor in
human breast cancer. J. Biol. Chem. 253:2223-2228, 1978.

Horwitz K.B., Mockus M.B. and Lessey B.A. Variant T47D cells with high progesterone receptor levels despite estro
resistant. Cell 18:633-642, 1982.

Howell A., Barnes D.M., Harland R.N., Redford J., Blamey R.W., Wilkinson M.J., Swindell R., Crowther D. and Sellwood R.A. Steroid hormone receptors and survival after relapse in breast cancer. Lancet 1: 581-584, 1984.

Huang Q., Gumireddy K., Schrier M., le Sage C., Nagel R., Nair S.A., Huang G., Shi Y., Kaneko A.J., Gimotty P.A., Katsaros D., Coukos G., Puré E. and Agami R. microRNA-373 and -520c promote tumour invasion and metastasis. Nat. Genet. 40: 1502-1510, 2008.

Huggins C. and Hodges C.V. Studies on prostatic cancer. I. The effect of castration, of estrogen and of androgen injection on serum phosphatases in metastatic carcinoma of the prostate. Cancer Res. 1: 293-297, 1941.

Hutcheson I.R., Knowlden J.M., Madden T.A., Barrow D., Gee J.M., Wakeling A.E. and Nicholson R.I. Oestrogen-mediated modulation of the EGFR/erbB-3 pathway in tamoxifen-resistant MCF-7 cells. Breast Cancer Res. Treat. 81: 81-93, 2003.

Huynh H.T. and Pollak M. Insulin-like growth factor I gene expression in the uterus is stimulated by tamoxifen and inhibited by the pure antiestrogen ICI 182780. Cancer Res. 53: 5583-5588, 1993.

Ingram D., Nottage E., Ng S., Sparrow L., Roberts A. and Wilson R. Tamoxifen in breast cancer. Cancer 64: 1049, 1989.

Inoue S., Ogawa S., Horie K., Hoshino S., Goto W., Hos
Muramatsu M. and Ando T. Novel estrogen receptor ² isoform that lacks
dominant negative activity on both BioEcRhemandBioEpRhys. Res
Commun. 279 814-819, 2000.

Iorio M.V., Ferracin M., Liu C.G., Veronese A., Spizzo R.,
Pedriali M., Fabbri M., Negrini M., Menard S., Palazzo J.P., Rosenberg
Musiani P., Volinia S., Nenci I., Calin G.A., Querzoli P., Negrini M. and Croce C.M
MicroRNA gene expression deregulation in human breast cancer. Cancer Res.
706-7070, 2005.

Iwao K., Miyoshi Y., Egawa C., Ikeda N. and Nogushi S. Quantitati
estrogen receptor mRNA and its variants in human breast cancer. Int. J.
Cancer 88 737-736, 2000a.

Iwao K., Miyoshi Y., Egawa C., Ikeda N., Tsukamoto F
Quantitative analysis of estrogen receptor and messenger RNA expression
breast carcinoma by polymerase chain reaction. Cancer Lett. 151 731-738,
2000b.

Jacquemier J.D., Hassoun J., Torrente M., Martin P.M. Distribution of estrog
and progesterone receptors in tissue adjacent to breast lesions at
stages: immunohistochemical study. Breast Cancer Res. Treat.
109-117, 1990.

Jarvinen T.A., Pelto-Huikko M., Holli K. Estrogen receptor β is coexpressed with ERα and PR and associated with nodal status, grade and proliferation rate in breast cancer. Am. J. Pathol. 156: 29-35, 2000.

Jolly D.J., Okayama H., Berg P., Esty A.C., Filpula D., Bohnlein E., Shively J.E., Hunkapillar T. and Friedmann T. Isolation and characterization of a full-length expressible cDNA for human hypoxanthine phosphoribosyltransferase. Proc. Natl. Acad. Sci. USA 80: 477-481, 1983.

Jones C., Payne J., Wells D., Delhanty J.D., Lakhani S.R. Comparative genomic hybridization reveals extensive variation among clones of the MCF-7 cell strain. Cancer Genet. Cytogenet. 117: 153-158, 2000.

Jordan V.C. Selective estrogen receptor modulation: concept and consequences in cancer. Cancer Cell 5: 207-213, 2004.

Jordan V.C. and Dowsett M. Toremifene as an antitumour agent: effect on oestrogen binding. J. Endocrinol. 68: 297-303, 1976.

Jordan V.C., Jacobson H.I. and Koch H. Determination of estrogen receptor in breast cancer using monoclonal antibody technology: results in the United States. Recent Results Cancer Res. 146: 123-128, 1986.

Kalhert S., Nuedling S., van Eickels M., Vetter H., Mey
Estrogen receptor alpha rapidly-activates the IGF-1 receptor pathway. J. Biol.
Chem. 275 18447-18453, 2000.

Karnik S.P., Kulkami S., Liu X.P., Buxton G.T. and Bukowski R.M. E
receptor mutations in tamoxifen-resistant breast cancer. Cancer Res. 54 3043-3053,
1994.

Kastner P., Krust A., Turcotte B., Stropp U., Tora L., Gronemeyer H.,
Chambon P. Two distinct estrogen-regulated promoters generate tran
encoding the two functionally different human progesterone
B. EMBO J. 9 1603-1614, 1990.

Katzenellenbogen B.S., Montano M.M., Ekena K., Herman M.E., Mc
E.M. William L. McGuire Memorial Lecture. Antiestrogens: mechanism
and resistance in breast cancer. Breast Cancer Res. Treat. 51 227-238, 1997.

Keeling J.W., Ozer E., King G. and Walker F. Oestrogen re
fetal, infant, and child mammary tissue. J. Pathol. 191 441-451, 2000.

Keydar I., Chen L., Karbey S., Weiss F.R., Delarea J., Ra
Brenner H.J. Establishment and characterization of a cell
carcinoma of the breast. Eur. J. Cancer 15 659-670, 1979.

Khan S.A., Rogers M.A., Obando J.A. and Tamsen A. Estroge
expression of benign breast epithelium and its associatio
Cancer Res. 54: 993-997, 1994.

Kim S. H., Moores J.C., David D., Respess J.G., Jolly D.J.
organization of the human HPRT gene. Nucleic Acids Res. 14: 3103-3118, 1986.

King W.L and Green G.L. Monoclonal antibodies localize es
nuclei of target cells. Nature 307: 293-304, 1984.

Klapper L.N., Kirschbaum M.H., Sela M. and Yarden Y. Biol
implications of the ErbB/HER signalling network. Adv. growth
Cancer Res. 77: 25-79, 2000.

Klein G. Lymphoma development in mice and humans: div
followed by convergent cytogenetic evolution. Proc. Natl. Acad. Sci. USA.
244-2446, 1979.

Klein-Hitpass L., Tsai S.Y., Greene G.L., Clark J.M., Hall, Tsai M.J.
Specific binding of estrogen receptor to the estrogen response
Biol. 9: 43-49, 1989.

Klotz D.M., Castles C.G., Curtis S.A., Spriggs L.L., Hilsenbeck S.M.
expression of wild type and variant ER mRNAs by breast cancers. MCF

cells may account for differences in estrogen responsiveness. Biochem. Biophys. Res. Commun. 210, 909-915, 1995.

Knight W.B., Livingstone R.B., Gregory E.J. and McGuire W.L. Estrogen receptor as an independent prognostic factor for early recurrence in breast cancer. Cancer Res. 37, 4669-4671, 1977.

Koehorst S.G., Cox J.J., Donker G.H., Lopes da Silva S., Blankenstein M.A. Functional analysis of an alternative estrogen receptor lacking exon 4 isolated from MCF-7 cells and normal tissue. Mol. Cell Endocrinol. 104, 119-125, 1994.

Koenders P.G., Beex L.V., Klijn J.G., Smals A.G., Benraad T.J., Human breast cancer: Survival from first metastasis. Breast Cancer Res. Treat. 21, 173-180, 1992.

Korenman S.G. Radioligand binding assay of specific estrogen in uterine macromolecules. J. Clin. Endocrinol. Metab. 28, 1127-1130, 1968.

Kraus W.L., McInerney E.M. and Katzenellenbogen B.S. Estrogen-dependent, transcriptionally productive association of hormone and steroid hormone receptors in regions of a steroid hormone-responsive gene. Proc. Natl. Acad. Sci. USA 92, 12314-12318, 1995.

Kuiper G., Enmark E., Pelto-Huikko M., Nilsson S. and Gustafsson J.A
a novel estrogen receptor expressed in Proc. Natl. Acad. Sci. USA 93: 5925-5930, 1996.

Kuiper G.G.J.M., Carlsson B., Grandien K., Enmark E., Haggblad I., Nilsson S. and Gustafsson J.A. Comparison of the ligand binding specificity and tissue distribution of estrogen receptors alpha and beta. Endocrinology 138: 863-870, 1997.

Kumar V., Green S., Stack G., Berry M., Jin J.R. and Chambon P. Functional domains of the human estrogen receptor. Cell 51: 941-951, 1987.

Kushner P.J., Agard D.A., Greene G.L., Scanlan T.S., Shiau A.K., Uht R.K. and Webb P. Estrogen receptor pathways to AP-1. J. Steroid Biochem. Mol. Biol. 74: 311-317, 2000.

Kute T.E., Muss H.B., Anderson D., Crumb K., Miller B., Blackwood A. Relationship of steroid receptor, cell kinetics, and clinical breast cancer. Cancer Res. 41: 3523-3529, 1981.

Lacroix M. and Leclercq G. Relevance of breast cancer cell lines as models for breast tumours: an update. Breast Cancer Res. Treat. 83: 249-289, 2004.

Laidlaw I.J., Clarke R.B., Howell A., Owen O.W.M.C., Potten C.S. and Wilson E. The proliferation of normal human breast tissue in vitro: the effect of

mice, is stimulated by oestrogen but not by progesterone. Endocrinology 136, 164-171, 1995.

Lake D.E. and Hudis C. Aromatase Inhibitors in Breast Cancer Control 9, 94-98, 2002.

Lakshmanaswamy R., Guzman R.C., Thordarson G., Talamantes F., Yamagni J.R., Nandi S. Prevention of mammary carcinogenesis by short-term estrogen and progestin treatments. Cancer Res. 64, 8231-8237, 2004.

Lasfargues E.Y. and Ozzello L. Cultivation of human mammary carcinoma. J. Natl. Cancer Inst. 21, 1131-1147, 1958.

Lazennec G., Bresson D., Lucas A., Chauveau C., Vignon F. ER beta inhibits proliferation and invasion of breast cancer cells. Endocrinology 142, 4120-4130, 2001.

Leav I., Lau K.M., Adams J.Y., McNeal J.E., Taplin M.E., Wang J., Singh H., Ho S.M. Comparative studies of the estrogen receptors beta and alpha and the androgen receptor in normal human prostate glands, dysplasia, and in primary and metastatic carcinoma. Am. J. Pathol. 159, 79-92, 2001

Levenson A.S. and Jordan V.C. Selective oestrogen receptor modulation: molecular pharmacology for the millennium. Eur. J. Cancer 35, 1971-1985, 1999.

Levin ER. Cellular functions of the plasma membrane estrogen
Endocrinol. Metab. 77, 1999.

Levin ER. Cellular functions of plasma membrane estrogen re
67: 471-475, 2002.

Leygue E., Huan Murphy L.C. and Watson P.H. Prevalenc
receptor variant messenger RNAs in human breast cancer.
4327, 1996

Leygue E.R., Watson P.H. and Murphy L.C. Estrogen recep
human mammary tissue. J. Natl. Cancer Inst. 88: 1282-1290, 1996b.

Leygue E., Dotzlaw H., Watson P.H. and Murphy L.C. Altere
and messenger RNA expression during human breast tumo
Res. 58: 3197-3201, 1998.

Lindberg M.K., Moverare S., Skrtic S., Gao H., Dahlman-Wright K., Gustafsson J
Å. And Ohlsson C. Estrogen receptor (ER)-beta reduces ERalpha-regulated gene
transcription, supporting a "Ying Yang" relationship betw
mice. Mol. Endocrinol. 17: 203-208, 2003.

Lindgren P.R., Cajander S., Backman A., Gustafsson J.-Å., Mäkelä S. and
Olofsson J.I. Estrogen and progesterone receptors in ova
Mol. Cell. Endocrinol. 219: 1-7, 2004

Ling V., Chambers A.F., Harris J.F and Hill R.P. Quantitat
tumour progression. Cancer Metastasis Rev., 4: 179-194, 1985.

Lippman M.E. and Bolan G. Oestrogen-responsive human breast cancer i
term tissue culture. Nature (Lond.), 256: 592-593, 1975.

Lippman M.E., Bolan G., Thenen S., Huff K. Hormonal responsiveness of
hormone responsive human breast cancer tissues. Cancer Treat. Rep.,
Res. 36: 459-460, 1976.

Lippman M.E., Dickson R.B., Gelman E.P., Rosen N., Kn
Bronzert D., Huff K. and Knabbe C. Growth regulation of human breas
occurs through regulated growth factor production. J. Cell. Biochem.,

Liu M.M., Albanese C., Anderson C.M., Hilty K., Webb P., U
Pestell R.G. and Kushner P.J. Opposing action of estrogen receptors
cyclin D1 gene expression. J. Biol. Chem., 277: 24353-24360, 2002.

Lonning P.E. Aromatase inhibitors in breast cancer. Endocr. Rel. Rev
Cancer, 11: 177-189, 2004.

Lonning P.E., Bajetta E., Murray R., Thiesen P.D., Mick
E., Celio L., Pitt P., Mita M., Aaronson N.K., Fowst C., Ark
Polli A and Massa G. Activity of exemestane in metastatic breas

failure of nonsteroidal aromatase inhibitors. J. Clin. Oncol. 18: 2334-2340, 2000.

Lowery A.J., Miller N., Devaney A., McNeill R.E., Davoren P.A., Lemetre C., Benes V., Schmidt S., Blake J., Ball G., Kerin M.J.: MicroRNA signature of tumorigenesis predict oestrogen receptor, progesterone receptor and HER2/neu receptor status in breast cancer. Breast Cancer Res. 11: R27, 2009.

Lu B., Leygue E., Dotzlaw H., Murphy L.J., Murphy L.C.: Estrogen receptor-beta mRNA variants in human and murine tissues. Mol. Cell. Endocrinol. 138: 199-203, 1998.

Mader S., Chambon P. and White J.H.: Defining estrogen receptor binding domain. Nucleic Acids Res. 21: 1249-1258, 1993.

Madsen M.W., Reiter B.E., Larsen S.S., Briand P. and Lykkesfeldt A.E.: Estrogen receptor messenger RNA splice variants are not involved in tamoxifen resistance in sublines of the human breast cancer cell line MCF-7. Cancer Res. 57: 585-589, 1997.

Mann S., Laucirica R., Carlson N., Younes P.S., Ali N., Younes M.: Estrogen receptor ² expression in invasive breast cancer. Hum. Pathol. 32: 113-118, 2001.

Markopoulos C., Berger U., Wilson P., Gazet J.C., Coo
receptor content of normal breast cells and breast carcin
menstrual cycle. Br. Med. J. (Clin. Res. Ed.) 296, 1345-1348, 1988.

Mattie M.D., Benz C.C., Bowers J., Sensinger K., Wong L.,
Ginzinger D., Getts R. and Haqq C. Optimized high throughput microRNA
expression profiling provides novel biomarker assessment of clinical prostate
breast cancer biopsies. Mol. Cancer 5, 24, 2006.

Maynard P.V., Blamey R.W., Elston C.W., Haybittle J.L. and
receptor assay in primary breast cancer and early recurr
Cancer Res. 38, 4294-4295, 1978.

McCormack O., Harrison M., Kerin M.J. and McCann A. Rol
receptor (PR) and the PR isoforms in breast cancer. Crit. Rev. Oncol. Hematol. 63, 293-
302, 2007.

McDonnell D.P., Connor C.E., Wijayaratne A., Chang C.
Definition of the molecular and cellular mechanisms underlying the selective
agonist/antagonist activities of selective estrogen receptor modulators. Recent Prog. Horm. Res. 57, 295-316, 2002.

McEwen B.S., Alves S.E., Bulloch K., Weiland N.G. Ovarian steroids and the
brain: implications for cognition and aging. Neurology 48, S8-15, 1997

McGuire W.L. Steroid hormone receptors in breast cance
Recent Prog. Horm. Res. 36, 155-186, 1980.

McGuire W.L., Carbone P.P., and Sears M.E. Estrogen re
human breast cancer: an overview. In: Estrogen Receptors in Human B
Cancer. McGuire W.L., Carbone P.P. and Vollmer E.P. (eds).
York: pp 1, 1975.

McGuire W.L., Horwitz K.B., Pearson O.H. and Segaloff A. Current status
estrogen and progesterone receptors in breast cancer. Cancer Res. 39: 2934-2943,
1977.

McGuire W.L., Chamness G.C. and Fuqua S.A. Estrogen r
clinical breast cancer. Mol. Endocrinol. 5: 1571-1577, 1991.

McPherson S.J., Ellem S.J. and Risbridger G.P. Estrogen-regulated develop
and differentiation of the prostate gland. Differentiation 76: 660-670, 2008

Merkel D.E., Winchester D.J., Goldschmidt R.A., August C
Rademaker A.W. DNA flow cytometric and morphologic grading as prognosti
in axillary lymph node negative breast cancer. Cancer (Phila.) 71: 2109-2132,
1993.

Miller W.R. Antiaromatase agents: preclinical data and neo
Breast Cancer 1: S-8-S14, 2000.

Miller W.R., O'Neill J.S. The relevance of local oestrogen meta
breast. Proc. R. Soc. Edinb. [B] 93: 203-217, 1989.

Miller W.R., Mullen P., Sourdaine P., Watson C., Dixon
Regulation of aromatase activity. J. Steroid Biochem. Mol. Biol.
61: 193-202, 1997.

Miyoshi Y., Ando A., Shiba E., Taguchi T., Tamaki Y. and N
of up-regulation of 17beta-hydroxysteroid dehydrogenase type I in ma
intratumoral high estradiol levels in postmenopausal breast cancer.
94: 685-689, 2001.

Montano M.M., Muller V., Trobaugh A. and Katzenellenbogen B.S
terminal F domain of the human estrogen receptor: role
activity of the receptor and the effectiveness of estrogen
antagonists. Mol. Endocrinol. 9: 814-825, 1995.

Morris C. and Wakeling A. Fulvestrant ("Faslodex"): treatment option f
patients progressing on prior endocrine therapy. Expert Rev. Anticancer
276, 2002.

Mosselman S., Polman J. and Dijkema R. ERbeta: identification an
characterization of a novel human estrogen receptor. FEBS Lett. 392: 49-53,
1996.

Mote P.A., Bartow S., Tran N. and Clarke C.L. Loss of co-expression of progesterone receptors A and B in breast cancer. Breast Cancer Res. Treat. 72: 163-172, 2002.

Mouridsen H., Gershanovich M., Sun Y., Perez-Carrion R., Boni C., Monnier Apffelstaedt J., Smith R., Sleeboom H.P., Janicke F., Pluzanska Becquart D., Palmer M.J., Ravdin P., Lang I., Salminen E., Snyder R., Lassus M., Von Staffler B., Chaudri H.A. and Dugardyn J.L. Superior efficacy of letrozole tamoxifen as first-line therapy for postmenopausal women with ad cancer: results of a phase III study of the International Letrozole Breast Group. J. Clin. Oncol. 19: 2596-2606, 2001.

Muddawa L. and Liyanage T. Immunohistochemical assess receptor status of breast carcinoma: interobserver variati Indian J. Med. Sci. 63: 217-227, 2009.

Murphy L.C., Wang M., Coutt A. and Dotzlaw H. Novel muta receptor messenger RNA in human breast cancers. J. Clin. Endocrinol. Metab. 142-1427, 1996.

Murphy L.C., Dotzlaw H., Leygue E., Coutts A. and Wa pathophysiological role of estrogen receptor variants in hu Steroid Biochem. Mol. Biol. 65: 165-171, 1998.

Murr S.M., Bradford G.E. and Geschwind I.I. Plasma leutin
stimulating hormone and prolactin during pregnancy in the Endocrinology
94: 1211-1216, 1974.

Nabholtz M.J. Long-term safety of aromatase inhibitors in the trea
cancer. Ther. Clin. Risk Manag. 4: 1381-1394, 2008.

Nabholtz J.M., Buzdar A., Pollack M., Harwin W., Burto
Steinberg M., Webster A. and Anastrozole is superior to tamox
first-line therapy for advanced breast cancer in postmenopaus
a North American multicenter randomized trial. J. Clin. Oncol.
Oncol. 18: 3758-3767, 2000.

Narbaitz K., Stumpf W.E. and Sar M. Estrogen receptors
primordia of fetal mouse ovary. J. Embryol. Exp. Morph. 59: 161-166, 1980.

Nathanson I.T. Clinical investigative experience with stero
cancer. Cancer 5: 754-762, 1952.

Nawata H., Bronzert D. and Lippman M.E. Isolation and
tamoxifen resistant cell line derived from a MCF-7 breast cancer cells
Biol. Chem. 256: 5015-5021, 1981.

Nemere I., Pietras R.J and Blackmore P.F. Membrane steroid hormones: Signal transduction and physiological significance. J. Cell. Biochem. Suppl. 38: 438-445, 2003.

Netto G.J., Cheek J.H., Zachariah N.Y., Romer J.C., Lee C. Chakmakjian Z.H. Steroid receptors in benign prostatic tissue. Am. J. Clin. Pathol. 94: 1-7, 1990.

Nicolson G. and Milas L. Cancer Invasion and Metastasis: Therapeutic Aspects (eds.). New York: Raven Press, 1984.

Norris J.D., Fan D., Kerner S. A. and McDonnell D.P. Identification of a second autonomous activation domain within the human estrogen receptor. Mol. Endocrinol. 11: 747-754, 1997.

Nowell P. The clonal evolution of tumor cell populations. Science (Wash. D.C.) 194: 23-28, 1976.

Nowell P. Cytogenetics. In F. Becker (ed.) Cancer: A Comprehensive Treatise, Ed. 2, Vol 1, pp. 1-16. New York: Plenum Publishing Corp., 1982.

Nowell P.C. Mechanisms of tumor progression. Cancer Res. 46: 2203-2207, 1986.

Nugoli M., Chuchana P., Vendrell J., Orsetti B., Ursule L. D., Douzery E., Cohen P. and Theillet C. Genetic variability in MCF-7 sublines: Evidence of rapid genomic and phenotypic changes in breast cancer cell lines. Int. J. Cancer 89: 258-266, 2000.

evidence of rapid genomic and RNA expression. BMC Cancer 3: 13, 2003.

Ogawa S., Inoue S., Watanabe T., Hiroi H., Orimo A., Hosoi T., Ouchi Y., Muramatsu M. The complete primary structure of human estrogen receptor beta (hER beta) and its heterodimerization with ER in vitro and in vivo. Biochem Biophys. Res. Commun. 243: 122-126, 1998a.

Ogawa S., Inoue S., Watanabe T., Orimo A., Hosoi T., Ouchi Y., Muramatsu M. Molecular cloning and characterization of human estrogen receptor beta cDNA: potential inhibitor of estrogen action in human. Nucleic Acids Res. 26: 3505-3512, 1998b.

Omoto Y., Inoue S., Ogawa S., Toyama T., Yamashita H., Muramatsu M., Kobayashi S. and Gustafsson J.A. Clinical significance of estrogen receptor beta wild-type and variant expression in breast cancer. Clin. Cancer Lett. 16: 3207-3212, 2001.

Omoto Y., Kobayashi S., Inoue S., Ogawa S., Toyama T., Yamashita H., Muramatsu M., Gustafsson J.A. Evaluation of estrogen receptor beta wild-type and variant protein expression, and relationship with clinicopathological factors in breast cancer. Int. J. Cancer 98: 83-86, 2002.

Ormerod M.G. Analysis of Flow Cytometry: A Practical Approach. 1st edition. IRL Press, New York: pp 69, 1990.

Osborne C.K., Yochmowitz M.G., Knight W.A. and McGuire
estrogen and progesterone receptors in the treatment of bre
288-2888, 1980.

Osborne C.K., Hobbs K. and Trent J.M. Biological differences amo-g MCF
human breast cancer cell lines from different laboratories.
Treat. 9: 111-121, 1987.

Osborne C.K., Jarman M., McCague R., Coronado E.B., H
Wakeling A.E. The importance of tamoxifen metabolism in tamoxifen-stimulated
breast cancer growth. J. Steroid Biochem. Molec. Biol. 34: 89-95, 1994.

Osborne C. Tamoxifen in the treatment of breast cancer. N. Engl. J. Med.
160-1618, 1998.

Ottoviano Y.L., Issa J.P., Parl F.F., Smithyman B.L., Hudson E.A., Nay
Methylation of the estrogen receptor gene CpG island ma
receptor expression in human breast cancer cells. Cancer Res. 54: 2552-2555,
1994.

Pace P., Taylor J., Suntharalingam S., Coombes R.C. and A
receptor binds DNA in a manner similar to and dimerizes with
ða J. Biol. Chem. 272: 25832-25838, 1997.

Paech K., Webb P., Kuiper G.G., Nilsson S., Gustafsson J.A., Kos M., Graham J.D. and Scanlan T.S. Differential ligand activation of estrogen receptors ERalpha and ERbeta at AP1 sites. Science (Washington DC) 277(5331):1508-1510, 1997.

Page M.J., Field J.K., Everett N.P. and Green C.D. Serum-stimulated growth and estrogen responsiveness of the human breast cancer cell line MCF-7. Cancer Res. 43(12 Pt 1):5244-5250, 1983.

Paik S., Bryant J., Park C., Fisher E., Tan-Chiu E., Tyang G., Fisher B., Wolmark N., Lippman M.E., Wickerham D.L. and Redmond C. erbB-2 and response to doxorubicin in patients with axillary lymph node-positive, hormone receptor-negative breast cancer. J. Natl. Cancer Inst. 90(18):1361-1370, 1998.

Palmieri C., Cheng G.J., Saji S., Zelada-Hedman M., Warri A., Weihua Z., Lindh J., Noorden S., Wahlstrom T., Coombes R.C., Warner M. and Gustafsson J.A. Estrogen receptor beta in breast cancer. Endocr. Relat. Cancer 9(1):1-13, 2002.

Pandey D.P. and Picard D. Direct inhibition of estrogen signalling by direct binding of the estrogen receptor to the Ras activator R-Ras1. Mol. Cell. Biol. 29(13):3783-3790, 2009.

Parazzini F., Colli E.M., Sandri M.T. and Torri V. Treatment with tamoxifen and progestins for metastatic breast cancer in postmenopausal women: a meta-analysis of the published randomized controlled trials. Gynecol. Oncol. 48(3):339-343, 1993.

Park W., Choi J.J., Sho and Lee J. Identification of a variant estro
receptor lacking exon 4 and its co-expression with wild-typ
ovarian carcinomas. Cancer Res. 56: 2290-2295, 1996.

Parshad R., Sanford K.K., Tarone R.E., Jones G.M and B
susceptibility of mouse cells to fluorescent chromosome damag
after long-term culture and malignant transformation. Cancer Res. 39: 2289-2293,
1979.

Patel P.I., Framson P.E., Caskey C.T. and Chinault A.C.
Human Hypoxanthine Phosphoribosyltransferase. Mol. Cell. Biol. 6: 393-403,
1986.

Pedram A., Razandi M., Aitkenhead M., Hughes C.C. and Le
the non-genomic and genomic actions of estrogen: integrated linea
by steroid to transcription. J. Biol. Chem. 277: 50768-50775, 2002.

Pedram A., Razandi M. and Levin E.R. Nature of functional
the plasma membrane. Mol. Endocrinol. 20: 1996-2009, 2006.

Peng B., Lu B., Leygue E. and Murphy L.C. Putative functi
human estrogen receptor-1 isoforms. J. Mol. Endocrinol. 30: 11-19, 2003.

Perry R.R., Kang Y. and Greaves B. Effects of tamoxifen on
of estrogen-dependent and -independent human breast cancer cells. Ann. Surg.
Oncol. 2: 238–245, 1995.

Petersen O.W., Hoyer P.E. and van Deurs B. Frequency and distribution of
estrogen receptor-positive cells in normal, nonlactating human breasts.
Cancer Res. 47: 5748–5751, 1987.

Pfeffer U., Fecarotta E., Castagnetta L. et al. Estrogen receptor mRNA variant
messenger RNA lacking exon 4 in estrogen receptor-positive human breast cancer
lines. Cancer Res. 53: 1743–1747, 1993.

Pfeffer U., Fecarotta E. and Vidali G. Coexpression of multiple estrogen receptor
variant messenger RNAs and neoplastic breast tissues and
cells. Cancer Res. 55: 2158–2165, 1995.

Pfeffer U. Estrogen receptor mRNA variants. Do they have a role? Ann. N.Y. Acad. Sci. 784: 303–313, 1996.

Pichon M.F., Pallud C., Brunet M. et al. Relationship of presence of estrogen and
progesterone receptors to prognosis in early breast cancer. Cancer Res. 40: 3355–
3360, 1980.

Pike M.C., Krailo M.D., Henderson B.E., Casagrande J. Hormonal risk factors, breast tissue age and the age-incidence of breast cancer. Nature 303 767-770, 1983.

Pink J.J., Jiang S.Y., Fritsch M., Adamson J., Rhodes M., Jordan V.C. Establishment of a tamoxifen-dependent MCF-7 breast cancer cell line which contains a novel ER gene mutation and displays altered ER protein characteristics. Breast Cancer Res. Treat. 34 259-275, 1995.

Pink J.J. and Jordan V.C. Models of estrogen receptor regulation by estrogen and antiestrogens in breast cancer cells. Cancer Res. 56 2133-2143, 1996.

Pink J.J., Bilimoria M.M., Assikis J. and Jordan V.C. Irreversible inactivation of oestrogen receptor-mediated responses in T47D human breast cancer cells following prolonged deprivation of oestrogen. Br. J. Cancer 74 1227-1236, 1996.

Pink J.J., Wu S.Q., Wolf D.M., Bilimoria M.M., Assikis V. and Jordan V.C. Variant forms of human estrogen receptor containing a duplication of nucleic acid sequences encoding exons 4 and 5. Nucleic Acids Res. 24 962-969, 1996.

Pinto A.E., Saudade A. and Soares J. Short term significance of cell proliferation in breast carcinoma: a multivariate analysis in a series of 308 patients. Pathol. Res. Pract. 195 601-611, 1999.

Ponglikitmongkol M., Green S. and Chambon P. Genomic organization of the human oestrogen receptor gene. EMBO J. 7 3385-3388, 1988.

Poola I., Koduri S., Chatra S. and Clarke R. Identification
spliced estrogen mRNAs in breast cancer cell lines and tu
slice targeted primer-PCR. J. Steroid Biochem. Mol. Biol. 72 (2000) 241-253, 2000.

Poola I. and Speirs V. Expression of alternatively spliced
mRNAs is increased in breast cancer tissues. J. Steroid Biochem. Mol. Biol
459-469, 2001.

Poola I., Abraham J. and Baldwin K. Identification of te
mRNAs in human ovary, breast, uterus and bone tissues: al
of estrogen receptor ² mRNA is distinct from that of estro
Lett. 5.16 1331-1338, 2002a.

Poola I., Abraham J. Estrogen receptor ² splice variant mR
differentially altered during breast carcinogenesis. Mol. Biol. Rep.
82 1961-1979, 2002b.

Poola I., Clarke R., DeWitty R. and Leffall L. Estrogen receptor
receptor isoform profiles in the breast tumors of African
different from the profiles in breast tumors of Caucasian w
Cancer Detect. Prev. 26 (2002) 615-625, 2002c.

Press M.F., Bernstein L., Thomas P.A., Meisner L.F., Zhou J.Y., Ma Y., H
Robinson R.A., Hanna C., Yu E., Slamon D.J., Phillips R.N.,
Wolman S.R and Flom-Weiss K., Lu Y., Henry H.E. Her-2/neu gene amplification characteriz

fluorescence in situ: poor prognostic indicator in breast cancer. J Clin Oncol 15(8): 2899-2904, 1997.

Ravdin P.M., Green S., Dorr T.M., McGuire W.L., Fabian C., Pu R.T., Rivkin S.E., Borst J.R., Abeloff M.D., Porter P.L., Osborne C.K., Hendricks C.B., Tormey D.C., Knight W.A., Ravdin R.G., Jones S.E., Mansour E.G., Ramsey J., Lippman M.E., Clark G.M., Allred D.C., Elledge R., Hilsenbeck S.G., Ciocca D.R., Wong F.L., Osborne K., Chamness G.C., Langone K.C., Lee A.V., Wiebe V.J., Bissell M.J., McCarty K.S., Jr., Yates J., Jr., Horwitz K.B., Wolfman W., Allegra J., Wittliff J., Fuqua S., Chamness G., Bock F., Desombre E.R., Jensen E.V., Brown A.M., Kenemore A., Wang H.Y., Shiurba R., Eisenberg P., Gorski J., Lippman M.E., Dickson R.B., Knabbe C., Bronzert D., Kasid A., Huff K., Kute T., Zava D., Haagensen D., Jr., Lawton P., Lykkesfeldt A., Sorensen B., Rasmussen B.B., Moller S., Rose C., Mouridsen H.T., Andersen J., Dowsett M., Houghton J., Kelly P., Angus B., Skilleter D., Gelber R.D., Rose C., Mouridsen H.T., Andersen J., Colombo N., Veronesi U., Rotmensz N., Bonadonna G., Borgen P.I., Wong G.Y., Lewis J., Lincoln T., Katrych D., Saigo P.E., Lee A.K., Kinne D., Strax P., Kim U., Matasar R., Adler I., Lesser M.L., Segaloff A., Dao T.L., Heuson J.C., Legros N., Paridaens R., Wildiers J., Bruning P.F., Hart A.A., Portengen H., Ravdin P.M., Clark G.M., Elledge R., Allred D.C., Hilsenbeck S., Ciocca D., Rosenquist C., Knight W.A., Ravdin R.G., Clemens M.R., Taylor C.W., Nicholson R.I., Gee J., Harper M.E., Hayes D.F., Trock B., Buzdar A., Hortobagyi G.N., Arteaga C.L., Prognostic significance progesterone receptor levels in estrogen receptor positive patients with metas breast cancer treated with tamoxifen: Results of a pros Oncology Group study. J Clin Oncol 10(8): 1282-1291, 1992.

Razandi M., Pedram A., Park S.T. and Levin E.R. Proximal events in plasma membrane estrogen signaling and interaction from activated estrogen receptor alpha and beta with cell communication and survival pathways. Mol Endocrinol 17(5): 879-895, 2003.

Razandi M., Alton G., Pedram A., Ghonshani S., Webb Identification of a structural determinant necessary for the of estrogen receptor alpha at the plasma membrane. J Biol Chem 278(3): 2071-2076, 2003b.

Read L.D., Greene G.L. and Katzenellenbogen B.S. Regulation of estrogen receptor messenger ribonucleic acid and protein levels in cell lines by sex steroid hormones, their antagonists, and Mol Endocrinol 3(2): 295-304, 1989.

Reddel R.R., Murphy L.C. and Sutherland R.L. Factors affe T-47D human breast cancer cells. Cancer Res 44(1): 273-278, 1984.

Reddel R.R., Murphy L.C., Hall R.E and Sutherland R.L. D
human breast cell lines to the growth inhibitory effects of ta
Res 45 1521-1531, 1985.

Reddel R.E., Alexander I.E., Koga M., Shine J. and Suth
instability and the development of steroid hormone insensitiv
human breast cancer cell lines. Int. J. Cancer 41 343-347, 1988.

Reed W., Hannisdal E., Boehler P.J., Host H. and Mart
Prognostic value of p53-2 immunostaining is overrated for
with lymph node negative breast carcinoma. Cancer 88(4) 804-813, 2000.

Resnicoff M., Medrano E.E., Podhajcer O.L., Bravo A.I., B
Subpopulations of MCF7 cells separated by Percoll gradi
model to analyze the heterogeneity of hormone. Proc. Natl. Acad. Sci
USA 84 7297-7299, 1987.

Rich M.A., Furmanski P. and Brooks S.C. Prognostic value
determinations in patients with breast cancer. Cancer 42 1462-1468, 1978.

Ricketts D., Turnbull L., Barakat R., Rawson N.S., Gazet J.C
and Coombes R.C. Oestrogen and progesterone receptors in the
breast. Cancer Res 51 1817-1822, 1991.

Rilke F., Colnaghi M.I., Cascinelli N., Andreola S., Baldini
Porta G., Menard S., Pierotti M. A. and Testori A. Prognost
2/neu expression in breast cancer and its relationship to c
Int. J. Cancer, 49: 44-49, 1991.

Robertson J.F., Howell A., Gorbunova V., Vakhlu A., Wakeling
Lichinitser M.R. Sensitivity to further endocrine therapy
progression-bimefirstvestrant. Breast Cancer Res. Treat., 92: 167-174, 2005.

Rody A., Holtrich U., Solbach C., Kourtis K., von Minckwitz
S., Gatje R., Karn T. and Kaufmann M. Down-regulation of estrogen recep
promoter correlates with loss of ER-positivity in mammary carcinoma a
early indication marker in premalignant breast lesions? Breast Cancer
Res., 7: R911-916, 2005.

Roger P., Sahla M.E., Makela S., Gustafsson J.A., Baldet
Decreased expression of estrogen receptor β protein in pr
mammary tumors. Clin. Cancer Res., 7: 2537-2541, 2001.

Roos W., Fabbro D., Kung W., Costarge S.D. and Eppenberger
between hormone dependency and the regulation of epide
receptor by tumour promoters in human mammary carcinom
Acad. Sci. USA, 83: 9191-9195, 1986.

Rose C., Thorpe S.M., Anderson K.W., Mouridsen H.T., Blichert-Toft M. and Rasmussen B.B. Beneficial effect of tamoxifen in breast cancer patients with high estrogen receptor values. Lancet 1: 16-19, 1985.

Rosen P.P., Lesser M.L., Arrango H.G., Borgen P. and Norton D. Immunohistochemical detection of hormone receptors in patients with axillary lymph node negative breast cancer. A study of epidemiological risk factors, features, and prognosis. Cancer 75(6): 1327-1336, 1995.

Rosenberg L.U., Magnusson C., Adami H.O., Wolk A., Hall P. and Dickman P.W. Menopausal hormone therapy and other breast cancer risk factors in relation to the risk of different histological subtypes: a population-based case-control study. Breast Cancer Res. 8: R14-R24, 2006.

Rowley J.D. Philadelphia-positive leukaemia, including chronic myelogenous leukaemia. Clin. Haematol. 9: 465-486, 1980.

Saez S., Pichon M.F., Chalbos D., Lacarrière J., Milgrom E. Progesterone receptors and progestins in early breast cancer. The experience of the European Organization for Research and Treatment of Cancer. In: Baulieu E.E., Segaloff A., Robel P. (eds). Breast Cancer and Hormones. Ciba Foundation Symposium 105. Pitman, London: pp. 155-169, 1984.

Safe S. Transcriptional activation of genes by 17beta-estradiol through multiple pathways involving the estrogen receptor and specificity protein 1 interactions. Vitam. Horm. 63: 233-252, 2001.

Sager R. Genetic instability, suppression, and human cancer. In: Sager R. (ed.), Gene Regulation in the Expression of Malignancy. London Press, 1985.

Sainsbury J.R., Farndon J.R., Needham G.K., Malcolm A. Epidermal growth factor receptor status as predictor of early recurrence of death from breast cancer. Lancet 1(8554-7):1398-1402, 1987.

Saji S., Omoto Y., Shimizu C., Warner M., Hayashi Y., Horiguchi S., Hayashi S., Gustafsson J.A. Expression of estrogen receptor (²)cx in ER(+) breast cancer: specific correlation with receptor. Cancer Res. 62:4844-4853, 2002a.

Saji S., Omoto Y., Shimizu C., Watanabe T., Hayashi S.N., Gustafsson J.A. and Toi M. Clinical impact of estrogen receptor ²cx breast cancer. Breast Cancer 9:203-207, 2002.

Sartorius C. A., Melville M.Y., Hovland A.R., Tung L., Takimoto G.S., Horwitz K.B. A third transactivation function (AF3) of human progesterone receptors located in the unique N-terminal segment of the B-type receptor. Endocrinol. 134-1360, 1994.

Sartorius C.A., Groshong S.D., Miller L.A., Powell L.T., Tarwater P.M., Horwitz K.B. New T47D breast cancer cell lines for the independent study

B- and -Aecetprs: only antiprocgueptiveinde Beptors are switched t
transcriptional agonisCanbcyerc AR4sP38638877, 1b994

Schetter A.J., Leung S.Y., Sohn J.J., Zanetti K.A., Bowma
Yuen S.T., Chan T.L., Kwong DC.LG., ,ACiaGinKG, ,Aiu Croce C.M.
Harris CMCicroRNA expression profiles associated with
therapeutic outcome in colon JaAMm2Ca9c4a2-4536m, 2008.

Schiff R., Massarweh S., Shou J. and Osborne C.K. Brea
resiasntce: how growth factor signalling and estrogen rec
modulate respCoinsieal Cancer R:e4s4e7a4rSch4S, 2003.

Sedlacek S.M. and Horwitz K.B. The role of progestins
receptors in the treatment of bresaetr oaAdcs 4e6:7R8e, v1984.

Sempere L.F., Christensen M., Silahtaroglu A., Bak M., He
Wells W., Kauppinen S. AnldeCodemCicNroRNA expression conf
specific epithelial cell subpopulatiCoannsiesrR7a:t1i1o6n2cer.
11620, 2007.

Sengupta S. andV.JCo.rdSaenlective estrogen modulators as an ar
mechanisms of efficiency aAnd.vr.eEsxpt.aMnedd6i3c,i2n0e1,9,
2008.

Shackney S.E., Smith C.A., Miller B.W., Borst H.R., Gri
Ketterer D.M. and Pollice A.A. Model for the genetic evo
tumor. Cancer Res., 49: 3344-3354, 1989.

Shaw J.A., Udokang K., Mosquera J.M., Chauhan H., Jones
Oestrogen receptors α and β differ in human breast
carcinoma. J. Pathol., 198: 450-457, 2002.

Shek L.L. and Godolphin W. Survival with breast cancer:
estrogen receptor. Equal. Cancer Clin. Trials, 2: 245-250, 1989.

Sherman M.R., Corvol P.L., Bruns W.F., Mayer M.E.
of chick oviduct. J. Biol. Chem., 245: 6085-6096, 1972.

Singh L., Wilson A.J., Hall M.E., Baum M., Birch I.H., Jackson I.M
C. and Palmer M.K. The relationship between histological grad
receptor status, events and survival at 8 years in the Nolvadex trial. Br. J. Cancer, 57: 611-614, 1988.

Slater T.F., Sawyer B. and Strauli U. Studies on succinate-te
systems. III. Points of coupling of four different types of
Acta, 77: 383, 1963.

Slattery M.L., Potter J.D., Curtin K., Edwards S., Ma
D. and Samowitz W.S. Estrogens reduce and withdrawal o

risk of microsatellite instability. J. Natl. Cancer Inst. 93: 1126-1130, 2001.

Smith C.L. and O'Malley B.W. Coregulator function: a key to tissue specificity of selective receptor modulators. Endocr. Rev. 25: 45-71, 2004.

Soto A.M. and Sonnenschein C. The role of estrogens on the proliferation of human breast tumor cells (MCF-7). J. Steroid Biochem. 23: 79-278, 1985.

Sotoca A.M., van den Berg H., Vervoort J., van der Saag P., Sonneveld E., Murk A.J., Rietjens I.M., Ariese F., Somsen G.W., Gooijer C., Bovee T.F., Schoonen W.G. and Vervoort J. Influence of cellular ER±/ER agonist induced proliferation of human T47D breast cancer cells. Toxicol. Sci. 105: 303-311, 2008.

Soule H.D., Vazquez J., Long A., Albert S. and Brennan M. A human cell line from a pleural effusion derived from a breast carcinoma. J. Natl. Cancer Inst. 51: 1409-1413, 1973.

Speirs V., Parkes A.T., Kerin M.J., Walton D.S., Carleton P.J., Fox J.N. and Atkin S.L. Co-expression of estrogen and progesterone receptor prognostic factors in human breast cancer. Cancer Res. 59: 525-528, 1999.

Spyratos F. DNA content and cell cycle analysis by flow cytometry in human breast cancer samples: application in prognosis. Breast Cancer Res. Treat. 27: 61-72, 1993.

Stål O., Dufmats M., Hatschek T., Carstensen J., Klintenb
Skoog L., Sullivan S., Wingren S. an-phase Nordenskjöld B. aS
prognostic factor in stage I breast cancer. J. Clin. Oncol. 11: 707-717, 1993.

Stendahl M., Rydén L., Nordenskjöld B., Jönsson P.E., Landberg G. and Jir
K. High progesterone receptor expression correlates to t
tamoxifen in premenopausal breast cancer. Clin. Cancer Res. 12: 4610-4
4618, 2006.

Ström A., Hartman J., Foster J.S., Kietz S., Wimalasena J. an
Estrogen receptor beta inhibits 17beta-estradiol-stimulated proliferation of
breast cancer cells. Proc. Natl. Acad. Sci. U S A 101: 1566-1571, 2004.

Suzuki T., Miki Y., Nakamura J., Moriya T., Ito K., Ohuchi N. and Sasa
steroid-producing enzymes in human breast cancer. Endocr. Relat. Cancer
701-720, 2005.

Suzuki T., Miki Y., Moriya T., Akahira J., Hirakawa H., Ohu
situ production of sex steroids in breast cancer. Mol. Cell. Endocrinol.
121-127, 2007.

Szyczak J., Milewicz A., Thijssen J.H.H., Blankenstein M.
Concentration of sex steroids in adipose tissue after men
319-321, 1998.

Takahashi K., Kadoya M., Ozaki T., Kurioka H., Manabe A., Kan
Miyazaki K. Safety and efficacy of oestriol for symptoms
induced menopause. Horm. Res. 54 Suppl 1: 10-18, 2000.

Tartter P.I., Papatestas A.E., Mullooly J., Smith J.K. and Aufses
A.H. Jr. Cholesterol and obesity as prognostic factors in breas
222-224, 1981.

Taylor S.E., Martin-Hirsch P.L. and Martin F.L. Oestrogen receptor
in the pathogenesis of ovarian cancer. Curr. Med. Chem. 17: 3133-3148, 2010.

Thiebaud D. and Secrest R.J. Selective estrogen receptor m
of action and clinical experience. Prog. Drug Res. 57: 1-32, 2001.

Thorpe S.M., Rose C., Rasmussen B.B., Mouridsen H.T., Blu
Prognostic value of steroid hormone receptors in multivariate analysis
systemically untreated patients with node negative primary
Res. Treat. 7: 133-136, 1987.

Toi M., Akihko O., Yamada H. and Toge T. Epidermal Growth Factor Receptor
expression as a prognostic indicator. Eur. J. Cancer Clin. Oncol. 27: 1307-1308,
1991.

Toikkanen S., Joensuu H. and Klemi P. The prognostic si
DNA content in invasive bre ast cancer with long follow-up. Br J.
Cancer 60 697-700, 1989.

Tremblay G., Tremblay A., Copeland N., Gilbert D., Jenki
Giguere V. Cloning, chromosomal localization and funct
murine estrogen receptor. Mol Endocrinol 11 353-365, 1997.

Twentyman P.R. and Luscombe M. A study of some variables in a
(MTT) based assay for cell growth and chemosensitivity. Br. J. Cancer 56 279-
285, 1987.

Umayahara Y., Kawamori R., Watada H., Imano E., Iwama
Yamasaki Y., Kajimoto Y. and Yamata T. Estrogen regulation of th
growth factor I gene transcription in human aortic smooth muscle cells. J Biol. Chem.
1643-136442, 1994.

Utsumi T., Harada N., Maruta M. and Takagi Y. Presence o
transcripts of aromatase gene in human breast cancer. J Clin. Endocrinol. Meta
81 1234-1239, 1996.

van Landegham A.A.J., Portman J. and Nabauurs M. Endog
and subcellular distribution of estrogens in normal and m
tissue. Cancers Res. 45 2900-2906, 1985

Van Netten J.P., Armstrong J.R., Goodall S., Thornton I
Brigden M.L., Coy P. and Fletcher E. Estrogen receptor distribution
peripheral, intermediate and central regions of breast cancer.
Oncol 14: 1881-1888, 1988.

Verghese E.T., Hanby A.M., Speirs V. and Hughes T.A.
microRNAs and breast cancer: we know what we don't know.
2008.

Vergote I., Robertson J.F.R., Kleeberg U.K., Rudling M., Gil T., Ols
Postmenopausal women who progress on fulvestrant (Faslo
to further endocrine treatment. Res. 9: 7-11, 2003.

Vladusic E.A., Hornby A.E., Guerra-Vladusic F.K. and Lupu R. Expres
estrogen receptor messenger RNA variant in breast cancer.
58: 210-214, 1998.

Vogel V.G., Constantino J.P., Wickerham D.L., Cronin W.M.
J.N., Bevers T.B., Fehrenbacher L., Pajon E.R., Wade J., Robidoux A.,
Margolese R.G., James J., Lippman S.M., Runowicz C.D., Ganz
McCaskill-Stevens W., Ford L.G., Jordan V.C. and Wolmark
tamoxifen vs raloxifene on the risk of developing invasive
disease outcomes: the Study of Tamoxifen and Raloxifene (STA
Trial. JAMA 295: 2727-2741, 2006.

Wada-Hiraike O., Imamov O., Hiraike H., Hultenby K., Schw
Warner M. and Gustafsson J.A. Role of estrogen receptor ² in colonic
PNAS 103 295-296, 2006

Wakeling A.E., Dukes M. and Bowler J. A potent specific
clinical potential. Cancer Res. 51: 3867-3873, 1991.

Wakeling A.E. Similarities and distinctions in modes of action of diff
classes of antiestrogens. Endocr. Relat. Cancer 7: 17-28, 2000.

Walker A.R., Adam F.I. and Walker B.F. Breast cancer in b
changing situation. J. Roy. Soc. Promot. Health 124: 185-188, 2004

Walter P., Green S., Greene G., Krust A., Bornert J.M., Jeltsch J.M., Staub
Jensen E., Scrace G., Waterfield M. and Chambon P. Cloning of the human
estrogen receptor cDNA. Proc. Natl. Acad. Sci. U.S.A. 82: 7889-7893, 1985

Wang Y. and Miksicek R.J. Identification of a negative form of
human estrogen receptor. Mol. Endocrinol. 5: 1707-1715, 1991.

Ward H.W.C. Anti-oestrogen therapy for breast cancer: a trial of two dose leve
Br. Med. J. 1: 13-14, 1973.

Warner M.R. Effect of perinatal treatment on the estrogen required for mo
mammalian vaginal cornification. J. Endocrinol. 77: 11-20, 1978.

Watanabe T., Inoue s., Ogawa S., Ishii Y., Hiroi H., Ike
Muramatsu M. Agonistic effect of tamoxifen is d-ependen
promoter context, and estrogen receptor subtype: functional
estrogen receptor. Biochem. Biophys. Res. Commun., 236: 140-145, 1997.

Webb P., Lopez G.N., Uht R.M. and Kushner P.J. Tamoxif
estrogen receptor-1 protein. A potential origin for tissue-specific estrogen
effects of antiestrogens. Mol. Endocrinol., 9: 443-456, 1995.

Wells A. The epidermal growth factor receptor (EGFR) in cancer
therapy. Signal, 1: 41-51, 2000.

Westley B., May F.E.B., Barrett C., Krust A. and Chambon P. Evidence for
antiestrogens on three estrogen-regulated pS2 RNA 52kDa and 160kDa p
MCF-7 cells and two tamoxifen resistant sub-lines. Cancer Res., 44: 1030-1035, 1984.

Wienand U., Schwarz Z. and Feix G. Electrophoretic separation of nucleic acids
gels adapted for subsequent biological tests: Application
from maize endosperm. Electrophoresis, 18: 1913-1923, 1997.

Wiseman L.R. and McTavish D. Formestane. A review of it
and pharmacokinetic properties and therapeutic potential in the
breast cancer and prostate cancer. Drugs, 45: 604-624, 1993.

Wittliff J.L. Steroid hormone receptors in breast cancer. Cancer 53: 630-643, 1984.

Wolf D.M., Lehman S.M., Parker S.J., McCue M., Jordan V.C. Investigation of the mechanism of tamoxifen stimulated bre non-isomerizable analogues of tamoxifen. Mol. Cell. Endocrinol. 85: 805-812, 1993.

Wolf D.M. and Jordan V.C. Characterization of tamoxifen-stimulated MCF-7 variants grown in athymic mice. Cancer Res. 51: 1227-1234, 1994.

Woodburn J.R. The epidermal growth factor receptor and i therapy. Pharmacol. Ther. 82: 241-250, 1999.

Xing W. and Archer T.K. Unique temporary factors mediate estroge activation of the cathepsin D promoter. Mol. Endocrinol. 12: 1103-1121, 1998.

Yap O.W.S., Bhat G., Liu L. and Tollefsbol T.O. Epigenetic estrogen receptor ² gene in epithelial ovarian cancer cells. cell 139-144, 2009

Yamamoto R. Steroid receptor regulated transcription of s gene network. Annu. Rev. Genet. 19: 209-252, 1985

Zaucha R., Sinska M., Mielcarek K. and Jassem J. Survival of a patie
with primarily chemoresistant metastatic breast canc
medroxyprogesterone acetate. Breast 13: 321-324, 2004.

Zhang Q.X., Hilsenbeck S.G., Fuqua S.A. and Barrios M. Multi
the estrogen receptor are present in individual human breast
Biochem. Mol. Biol. 59: 251-260, 1996.

Zhao C., Lam E.W., Sunters A., Enmark E., De Bella M.
Gustafsson J.A. and Dahlman K. Expression of estrogen receptor
isoforms in normal breast epithelial cells and breast c
methylation. Oncogene 22: 7697-7706, 2003.

Zwijsen R.M., Wientjens E., Klompmaker R., van der Sman J.,
Michalides C.R. CRABP-independent activation of estrogen receptor by cy
Cell 88: 405-415, 1997.