

https://dspace.org/

The effect of clomiphene citrate

Thomson, Karren Judith

2006-10-26T08:03:27Z
http://hdl.handle.net/10539/1455

Downloaded from a DSpace repository. https://dspace.org/

REFERENCES

1) Adams, S.M., Gayer, N., Hosie, M.J., and Murphy, C.R., (2002). Human uterodomes (pinopods) do not display pinocytotic function. *Human Reproduction* **17 (8):** 1980-1986
2) Adashi, E.Y., Hsueh, A.J.W., and Yen, S.S.C., (1980). Alterations induced by clomiphene in the concentrations of oestrogen receptors in the uterus, pituitary gland and hypothalamus of female rats. *The Journal of Endocrinology* **87:** 383-392
3) Akbas, G.E., Song, J., and Taylor, H.S., (2004). A HOXA10 estrogen response element (ERE) is differentially regulated by 17 beta-estradiol and diethylstilbestrol (DES). *Journal of Molecular Biology* **340:** 1013-1023
4) Alarid, E.T., Bakopoulos, N., and Solodin, N., (1999) Proteasome-mediated proteolysis of estrogen receptor: a novel component in autologous down-regulation. *Molecular Endocrinology* **13:** 1522-1534
5) Bagot, C.N., Kliman, H.J., and Taylor, H.S., (2001). Maternal Hoxa10 is required for pinopod formation in development of mouse uterine receptivity to embryo implantation. *Developmental Dynamics* **222:** 538-544
6) Bagot, C.N., Troy, P.J., and Taylor, H.S., (2000). Alteration of maternal Hoxa10 expression by *in vivo* gene transfection affects implantation. *Gene Therapy* **7 (16):** 1378-1384
7) Barkai, U., Kidron, T., and Kraicer, P.F., (1992). Inhibition of decidual induction in rats by clomiphene and tamoxifen. *Biology of Reproduction* **46:** 733-739
8) Basak, S., Dhar, R., and Das, C., (2002). Steroids modulate the expression of α_4 integrin in mouse blastocysts and uterus during implantation. *Biology of Reproduction* **66:** 1784-1789
9) Baudendistel, L.J., Ruh, M.F., Nadel, E.M., and Ruh, T.S., (1978). Cytoplasmic oestrogen receptor replenishment: oestrogens versus anti-oestrogens. *Acta Endocrinologica* **89:** 599-611
10) Beato, M., Herrlich, P., and Schutz, G., (1995). Steroid hormone receptors: many actors in search of a plot. *Cell* **83 (6):** 851-857

11) Benson, G.V., Lim, H., Paria, B.C., Satokata, I., Dey, S.K., and Maas, R.L., (1996). Mechanism of reduced fertility in Hoxa-10 mutant mice: uterine homeosis and loss of maternal Hoxa-10 expression. *Development* **122:** 2687-2696

12) Biljan, M.M., Mahutte, N.G., Tulandi, T., and Tan, S.L., (1999). Prospective randomized double-blind trial of the correlation between time of administration and antiestrogenic effects of clomiphene citrate on reproductive end organs. *Fertility and Sterility* **71 (4):** 633-638

13) Birkenfeld, A., Mootz, U., and Beier, H.M., (1985). The effect of clomiphene citrate on blastocyst development and implantation in the rabbit. *Cell and Tissue Research* **241:** 495-503

14) Birkenfeld, A., Navot, D., Levij, I.S., Laufer, N., Beier-Hellwig, K., Goecke, C., Schenker, J.G., and Beier, H.M., (1986). Advanced secretory changes in the proliferative human endometrial epithelium following clomiphene citrate treatment. *Fertility and Sterility* **45 (4):** 462-468

15) Bowman, S.P., Leake, A., Miller, M., and Morris, I.D., (1981). Agonist and antagonist activity of en-clomiphene upon oestrogen-mediated events in the uterus, pituitary gland and brain of the rat. *The Journal of Endocrinology* **88:** 367-374

16) Brown-Grant, K., John, P., and Rogers, A.W., (1972). Analysis of the effects of progesterone on the synthesis of RNA and protein in the uterus of the ovariectomized rat and on the development of an iodide concentrating mechanism. *Journal of Endocrinology* **53 (3):** 363-374

17) Brown, J.L., Byrd, S.J., Mitchell, A.S., Nelson, M.F., Young, R.L., and Chakraborty, P.K., (1991). Comparison of the long-term effects of estrogen and clomiphene citrate on pituitary and uterine function in ovariectomized rats. *Gynecologic and Obstetric Investigation* **31:** 23-29

18) Brzozowski, A.M., Pike, A.C.W., Dauter, Z., Hubbard, R.E., Bonn, T., Engstrom, O., Ohman, L., Greene, G.L., Gustafsson, J., and Carlquist, M., (1997). Molecular basis of agonism and antagonism in the oestrogen receptor. *Nature* **389 (6652):** 753-758

19) Carley, M.E., Rickard, D.J., Gebhart, J.B., Webb, M.J., Podratz, K.C., and Spelsberg, T.C., (2003). Distribution of estrogen receptors α and β mRNA in mouse urogenital tissues and their expression after oophorectomy and estrogen replacement. *International Urogynecology Journal and Pelvic Floor Dysfunction* **14(2):** 141-145

20) Carson, D.D., Lagow, E., Thathiah, A., Al-Shami, R., Farach-Carson, M.C., Vernon, M., Yuan, L., Fritz, M.A., and Lessey, B., (2002). Changes in gene expression during the early to mid-luteal (receptive phase) transition in human endometrium detected by high-density microarray screening. *Molecular Human Reproduction* **8 (9):** 871-879

21) Cermik, D., Karaca, M., and Taylor, H.S., (2001). Hoxa10 expression is repressed by progesterone in the myometrium: differential tissue-specific regulation of Hox gene expression in the reproductive tract. *The Journal of Clinical Endocrinology and Metabolism* **86 (7):** 3387-3392

22) Cermik, D., Selam, B., and Taylor, H.S., (2003). Regulation of HOXA-10 expression by testosterone *in vitro* and in the endometrium of patients with polycystic ovary syndrome. *The Journal of Clinical Endocrinology and Metabolism* **88:** 238-243

23) Chambraud, B., Berry, M., Redeuilh, G., Chambon, P., and Baulieu, E., (1990). Several regions of human estrogen receptor are involved in the formation of receptor-heat shock protein 90 complexes. *The Journal of Biological Chemistry* **265 (33):** 20686-20691

24) Clark, J.H., and Mani, S.K., (1994). Actions of ovarian steroid hormones. In *The Physiology of Reproduction.* Second edition. Ed: Knobil, E., Neill, J.D., Raven Press, Ltd., N.Y. 1011-1059

25) Clark, J.H., and Markaverich, B.M., (1982). The agonistic-antagonistic properties of clomiphene: a review. *Pharmacology & Therapeutics.* **15 (3):** 467-519

26) Clark, J.H., Peck Jr., E.J., and Anderson, J.N., (1974). Oestrogen receptors and antagonism of steroid hormone action. *Nature* **251 (5474):** 446-448

27) Clemm, D.L., Macy, B.L., Santiso-Mere, D., and McDonnell, D.P., (1995). Definition of the critical cellular components which distinguish between hormone and antihormone activated progesterone receptor. *The Journal of Steroid Biochemistry and Molecular Biology* **53 (1-6):** 487-495
28) Cohen, J., (1991). The efficiency and efficacy of IVF and GIFT. *Human Reproduction* **6 (5):** 613-618
29) Cooke, P.S., Buchanan, D.L., Young, P., Setiawan, T., Brody, J., Korach, K.S., Taylor, J., Lubahn, D.B., and Cunha, G.R., (1997). Stromal estrogen receptors mediate mitogenic effects of estradiol on uterine epithelium. *Proceedings of the National Academy of Sciences of the United States of America* **94:** 6535-6540
30) Cummings, A.M., Perreault, S.D., and Harris, S.T., (1991). Validation of protocols for assessing early pregnancy failure in the rat: clomiphene citrate. *Fundamental and Applied Toxicology* **16:** 506-516
31) Curtis, S.W., Clark, J., Myers, P., and Korach, K.S., (1999). Disruption of estrogen signaling does not prevent progesterone action in the estrogen receptor α knockout mouse uterus. *Proceedings of the National Academy of Science of the United States of America* **96:** 3646-3651
32) Daftary, G.S., Troy, P.J., Bagot, C.N., Young, S.L., and Taylor, H.S., (2002). Direct regulation of β_3-integrin subunit gene expression by Hoxa10 in endometrial cells. *Molecular Endocrinology* **16 (3):** 571-579
33) Dallenbach-Hellweg, G., (1988). The endometrium in natural and artificial luteal phases. *Human Reproduction* **3 (2):** 165-168
34) Derman, S.G., and Adashi, E.Y., (1994). Adverse effects of fertility drugs. *Drug Safety* **11 (6):** 408-421
35) Devin-Leclerc, J., Meng, X., Delahaye, F., Leclerc, P., Baulieu, E.E., and Catelli, M.G., (1998). Interaction and dissociation by ligands of estrogen receptor and Hsp90: the antiestrogen RU 58668 induces a protein synthesis dependent clustering of the receptor in the cytoplasm. *Molecular Endocrinology* **12:** 842-854

36) Dickey, R.P., and Holtkamp, D.E., (1996). Development, pharmacology and clinical experience with clomiphene citrate. *Human Reproduction Update* **2 (6):** 483- 506
37) Dutertre, M., and Smith, C.L., (2000). Molecular mechanisms of selective estrogen receptor modulator (SERM) action. *The Journal of Pharmacology and Experimental Therapeutics* **295 (2):** 431-437
38) Dutt, A., Tang, J-P., and Carson, D.D., (1988). Estrogen preferentially stimulates lactosaminoglycan-containing oligosaccharide synthesis in mouse uteri. *The Journal of Biological Chemistry* **263:** 2270-2279
39) Eden, J.A., Place, J., Carter, G.D., Jones, J., Alaghband-Zadeh, J., and Pawson, M.E., (1989). The effect of clomiphene citrate on follicular phase increase in endometrial thickness and uterine volume. *Obstetrics and Gynecology* **73 (2):** 187-190
40) Edwards, R.G., Lobo, R., and Bouchard, P., (1996). Time to revolutionize ovarian stimulation. *Human Reproduction* **11:** 917-919
41) Eley, R.M., Gould, KG., Eley, D.S., Sulemen, M.A., and Tarara, R.P., (1991). Effect of clomiphene citrate upon periovulatory endometrial development in the baboon. *Journal of Medical Primatology* **20 (2):** 49-57
42) Elkind-Hirsch, K.E., Phillips, K., Bello, S.M., McNicho, M., and de Ziegler, D., (2002). Sequential hormonal supplementation with vaginal estradiol and progesterone gel corrects the effect of clomiphene on the endometrium in oligo-ovulatory women. *Human Reproduction* **17 (2):** 295-298
43) Enders, A.C., and Schlafke, S., (1967). A morphological analysis of the early implantation stages in the rat. *The American Journal of Anatomy* **120:** 185-226
44) Finn, C.A., and Porter, D.G., (1975). *The Uterus*. Elek Science, London.
45) Fliss, A.E., Benzeno, S., Rao, J., and Caplan, A.J., (2000). Control of estrogen receptor ligand binding by Hsp90. *The Journal of Steroid Biochemistry and Molecular Biology* **72 (5):** 223-230
46) Fujii, S., Fukui, A., Fukushi, Y., Kagiya, A., Sato, S., and Saito, Y., (1997). The effects of clomiphene citrate on normally ovulatory women. *Fertility and Sterility* **68 (6):** 997-999

47) Gerli, S., Gholami, H., Manna, A., Di Frega, A.S., Vitiello, C., Unfer, V., and Manna, A., (2000). Use of ethinyl estradiol to reverse the antiestrogenic effects of clomiphene citrate in patients undergoing intrauterine insemination: a comparative randomized study. *Fertility and Sterility* **73 (1):** 85-89

48) Gidley-Baird, A.A., (1981). Endocrine control of implantation and delayed implantation in rats and mice. *Journal of Reproduction and Fertility Suppl.* **29:** 97-109

49) González, RR., Palomino, A., Vantman, D., Gabler, F., and Devoto, L., (2001). Abnormal pattern of integrin expression at the implantation window in endometrium from fertile women treated with clomiphene citrate and users of intrauterine device. *Early Pregnancy* **5 (2):** 132-143

50) Graham, J.D., and Clarke, C.L., (1997). Physiological action of progesterone in target tissues. *Endocrine Reviews* **18 (4):** 502-519

51) Grandien, K., Berkenstam, A., and Gustafsson, J.A., (1997). The estrogen receptor gene: promotor organization and expression. *The International Journal of Biochemistry and Cell Biology* **29 (12):** 1343-1369

52) Gui, Y., Zhang, J., Yuan, L., and Lessey, B.A., (1999). Regulation of Hoxa-10 and its expression in normal and abnormal endometrium. *Molecular Human Reproduction* **5 (9):** 866-873

53) Hall, J.M., Couse, J.F., and Korach, K.S., (2001). The multifaceted mechanisms of estradiol and estrogen receptor signaling. *The Journal of Biological Chemistry* **276:** 36869-36872

54) Hammer, R.E., Samarian, R., and Mitchell, J.A., (1978). Alterations in surface morphology of the rat uterus: effects of ovarian steroid hormones. In: Becker, P., and Johani, O., (Eds), *Scanning Electron Microscopy*. **Vol II**; SEM Inc., AMF O'Hare, Il, USA

55) Haritha, S., and Rajagopalan, G., (2003). Follicular growth, endometrial thickness, and serum estradiol levels in spontaneous and clomiphene citrate-induced cycles. *International Journal of Gynecology and Obstetrics* **81 (3):** 287-292

56) Hershko, A., and Ciechanover, A., (1998). The ubiquitin system. *Annual Review of Biochemistry* **67:** 425-479

57) Hewitt, S.C., and Korach, K.S., (2000). Progesterone action and responses in the αERKO mouse. *Steroids* **65:** 551-557

58) Hewitt, S.C., Goulding, E.H., Eddy, E.M., and Korach, K.S., (2002). Studies using the estrogen receptor α knockout uterus demonstrate that implantation but not decidualization-associated signaling is estrogen dependent. *Biology of Reproduction.* **67:** 1268-1277

59) Hild-Petito, S., Verhage, H.G., and Fazleabas, A.T., (1992). Immunocytochemical localization of estrogen and progestin receptors in the baboon (*Papio anubis*) uterus during implantation and pregnancy. *Endocrinology* **130 (4):** 2343-2353

60) Hiroi, H., Inoue, S., Watanabe, T., Goto, W., Orimo, A., Momoeda, M., Tsutsumi, O., Taketani, Y., and Muramatsu, M., (1999). Differential immunolocalization of estrogen receptor α and β in rat ovary and uterus. *Journal of Molecular Endocrinology* **22:** 37-44

61) Horigome, T., Ogata, F., Golding, T.S., and Korach, K.S., (1988). Estradiol-stimulated proteolytic cleavage of the estrogen receptor in mouse uterus. *Endocrinology* **123:** 2540-2548

62) Hosie, M., Terry, V., and Murphy, C., (2003). Expression of glucosamine trisaccharides on the rat uterine surface is altered by clomiphene citrate. III. Relationship with implantation regimes and pregnancy. *Acta Histochemica* **105 (4):** 329-338

63) Hosie, M., Terry, V., Shaw, T., Dwarte, D., and Murphy, C., (2000). Expression of glucosamine trisaccharides on the rat uterine surface is altered by clomiphene citrate. II. Combination with ovarian hormones. *Acta Histochemica* **102 (3):** 309-321

64) Hosie, M.J., (1997). Studies on the effects of clomiphene citrate on the morphology and ultrastructure of the rat uterus. *PhD Thesis* University of Sydney, Australia

65) Hosie, M.J., and Murphy, C.R., (1989). Unmasking of surface negativity on day 6 pregnant rat uterine epithelial cells by trypsin and pronase. *Acta Histochemica* **86 (1):** 33-38

66) Hosie, M.J., and Murphy, C.R., (1992). Clomiphene citrate alters surface ultrastructure of uterine luminal epithelial cells. *Acta Anatomica* **145 (2):** 175-178

67) Hosie, M.J., and Murphy, C.R., (1995). A scanning and light microscope study comparing the effects of clomiphene citrate, estradiol 17-β and progesterone on the structure of uterine luminal epithelial cells. *European Journal of Morphology* **33 (1):** 39-50

68) Hosie, M.J., Murphy, C.R., Rogers, P.A.W., and Dwarte, D.M., (1991). Morphometric comparison of uterine glandular epithelium in the early secretory phase from patients treated with different superovulatory drugs on an *in vitro* fertilization program. *Acta Anatomica* **142 (2):** 174-178

69) Hosie, M.J., Shaw, T.J., Dwarte, D.M., and Murphy, C.R., (1999). Expression of glucosamine trisaccharides on the rat uterine surface is altered by clomiphene citrate. *Acta Histochemica* **101 (4):** 383-396

70) Hubbard, R.E., Pike, A.C.W., Brzozowski, A.M., Walton, J., Bonn, T., Gustafsson, J.A., and Carlquist, M., (2000). Structural insights into the mechanisms of agonism and antagonism in oestrogen receptor isoforms. *European Journal of Cancer* **36 (Suppl. 4):** 17-18

71) Huet, Y.M., and Dey, S.K., (1987). Role of early and late oestrogenic effects on implantation in the mouse. *Journal of Reproduction and Fertility* **81:** 453-458

72) Hughes, E., Collins, J., and Vandekerckhove, P., (2000). Clomiphene citrate for unexplained subfertility in women. *Cochrane Database of Systematic Reviews* **(3):** CD000057

73) Ihionkhan, C.E., Chambliss, K.L., Gibson, L.L., Hahner, L.D., Mendelsohn, M.E., and Shaul, P.W., (2002). Estrogen causes dynamic alterations in endothelial estrogen receptor expression. *Circulation Research* **91:** 814-820

74) Inano, K., Curtis, S.W., Korach, K.S., Omata, S., and Horigome, T., (1994). Heat shock protein 90 strongly stimulates the binding of purified estrogen receptor to its responsive element. *The Journal of Biochemistry* **116 (4):** 759-766

75) Jordan, V.C., (1984). Biochemical pharmacology of antiestrogen action. *Pharmacological Reviews* **36 (4):** 245-276.

76) Jordan, V.C., Gapstur, S., and Morrow, M., (2001). Selective estrogen receptor modulation and reduction in risk of breast cancer, osteoporosis, and coronary heart disease. *Journal of the National Cancer Institute* **93 (19):** 1449-1457

77) Kassis, J.A., and Gorski, J., (1981). Estrogen receptor replenishment. Evidence for receptor recycling. *The Journal of Biological Chemistry* **256 (14):** 7378-7382

78) Klinge, C.M., (2001). Estrogen receptor interaction with estrogen response elements. *Nucleic Acids Research* **29 (14):** 2905-2919

79) Knobil, E., and Neill, J.D., (1994). *The Physiology of Reproduction 2nd edition* Vol 1. Raven Press, Ltd., New York

80) Kokko, E., Jänne, O., Kauppila, A., and Vihko, R., (1981). Cyclic clomiphene citrate treatment lowers cytosol estrogen and progestin receptor concentrations in the endometrium of postmenopausal women on estrogen replacement therapy. *The Journal of Clinical Endocrinology and Metabolism* **52 (2):** 345-349

81) Kong, E.H., Pike, A.C., and Hubbard, R.E., (2003). Structure and mechanism of the oestrogen receptor. *Biochemical Society Transactions* **31 (Pt1):** 56-59

82) Koshiyama, M., Konishi, I., Nanbu, K., Nanbu, Y., Mandai, M., Komatsu, T., Yamamoto, S., Mori, T., and Fujii, S., (1995). Immunohistochemical localization of heat shock proteins Hsp70 and Hsp90 in the human endometrium correlation with sex steroid receptors and Ki-67 antigen expression. *Journal of Clinical Endocrinology and Metabolism* **80 (4):** 1106-1112

83) Krumlauf, R., (1994). Hox genes in vertebrate development. *Cell* **78:** 191-201

84) Kurl, R.N., and Morris, I.D., (1978). Differential depletion of cytoplasmic high affinity oestrogen receptors after the *in vivo* administration of the antioestrogens, clomiphene, MER-25 and tamoxifen. *British Journal of Pharmacology* **62:** 487-493

85) Lee, M.O., Kim, E.O., Kwon, H.J., Kim, Y.M., Kang, H.J., Kang, H., and Lee, J.E., (2002). Radicicol represses the transcriptional function of the estrogen receptor by suppressing the stabilization of the receptor by heat shock protein 90. *Molecular and Cellular Endocrinology* **188 (1-2):** 47-54

86) Lessey, B.A., (2003). Two pathways of progesterone action in the human endometrium: implications for implantation and contraception. *Steroids* **68:** 809-815

87) Lessey, B.A., Damjanovich, L., Coutifaris, C., Castelbaum, A., Albelda, S.M., Buck, C.A., (1992). Integrin adhesion molecules in the human endometrium. Correlation with the normal and abnormal menstrual cycle. *Journal of Clinical Investigation* **90:** 188-195

88) Lim, H., Ma, L., Ma, W., Maas, R.L., and Dey, S.K., (1999). Hoxa-10 regulates uterine stromal cell responsiveness to progesterone during implantation and decidualization in the mouse. *Molecular Endocrinology* **13:** 1005-1017

89) Lim, H., Paria, B.C., Das, S.K., Dinchuk, J.E., Langenbach, R., Trzaskos, J.M., Dey, S.K., (1997). Multiple female reproductive failures in cyclooxygenase-2 deficient mice. *Cell* **91:** 197-208

90) Lindquist, S., (1986). The heat-shock response. *Annual Review of Biochemistry* **55:** 1151-1191

91) Ljungkvist, I., (1971a). Attachment reaction of rat uterine luminal epithelium. I. Gross and fine structure of the endometrium of the spayed, virgin rat. *Acta Societatis Medicorum Upsaliensis* **76 (3-4):** 91-109

92) Ljungkvist, I., (1971b). Attachment reaction of rat uterine luminal epithelium. II. The effect of progesterone on the morphology of the uterine glands and the luminal epithelium of the spayed, virgin rat. *Acta Societatis Medicorum Upsaliensis* **76 (3-4):** 110-126

93) Ljungkvist, I., (1971c). Attachment reaction of rat uterine luminal epithelium. The effect of estradiol, estrone and esteriol on the morphology of the luminal epithelium of the spayed virgin rat. *Acta Societatis Medicorum Upsaliensis* **76 (3-4):** 139-157

94) Ljungkvist, I., (1972). Attachment reaction of rat uterine luminal epithelium. IV. The cellular changes in the attachment reaction and its hormonal regulation. *Fertility and Sterility* **23 (11):** 847-865

95) Lonard, D.M., Nawaz, Z., Smith, C.L., and O'Malley, B.W., (2000). The 26S proteasome is required for estrogen receptor-alpha and coactivator turnover and for efficient estrogen receptor-alpha transactivation. *Molecular Cell* **5 (6):** 939-948

96) Lunan, C.B., and Klopper, A., (1975). Antioestrogens: A review. *Clinical Endocrinology* **4 (5):** 551-572

97) Luxford, K.A., and Murphy, C.R., (1989). Cytoskeletal alterations in the microvilli of uterine epithelial cells during early pregnancy. *Acta Histochemica* **87 (2):** 131-136

98) Ma, L., Benson, G.V., Lim, H., Dey, S.K., and Maas, R.L., (1998). Abdominal B (AbdB) Hoxa genes: regulation in adult uterus by estrogen and progesterone and repression in müllerian duct by the synthetic estrogen diethylstilbestrol (DES). *Developmental Biology* **197 (2):** 141-154

99) Ma, W., Song, H., Das, S.K., Paria, B.C., and Dey, S.K., (2003). Estrogen is a critical determinant that specifies the duration of the window of uterine receptivity for implantation. *Proceedings of the National Academy of Science of the United States of America* **100 (5):** 2963-2968

100) Martel, D., Monier, M.N., Roche, D., Psychoyos, A., (1991). Hormonal dependence of pinopod formation at the uterine luminal surface. *Human Reproduction* **6:** 597-603

101) Martin, M.B., Saceda, M., Garcia-Morales, P., and Gottardis, M.M., (1994). Regulation of estrogen receptor expression. *Breast Cancer Research and Treatment* **31 (2-3):** 183-189

102) Massai, M.R., de Ziegler, D., Lesobre, V., Bergeron, C., Frydman, R., and Bouchard, P., (1993). Clomiphene citrate affects cervical mucus and endometrial morphology independently of the changes in plasma hormonal levels induced by multiple follicular recruitment. *Fertility and Sterility* **59 (6):** 1179-1186

103) McGinnis, W., and Krumlauf, R., (1992). Homeobox genes and axial patterning. *Cell* **68:** 283-302

104) Murphy, C.R., (1995). The cytoskeleton of uterine epithelial cells: a new player in uterine receptivity and the plasma membrane transformation. *Human Reproduction Update* **1 (6):** 567-580

105) Murphy, C.R., and Rogers, A.W., (1981). Effects of ovarian hormones on cell membranes in the rat uterus. III. The surface carbohydrates at the apex of the luminal epithelium. *Cell Biophysics* **3 (4):** 305-320

106) Murphy, C.R., and Turner, V.F., (1991). Glycocalyx carbohydrates of uterine epithelial cells increase during early pregnancy in the rat. *Journal of Anatomy* **177:** 109-115

107) Murphy, C.R., Swift, J.G., Mukherjee, T.M., and Rogers, A.W., (1979). Effects of ovarian hormones on cell membranes in the rat uterus. I. Freeze fracture studies of the apical membrane of the luminal epithelium. *Cell Biophysics* **1 (2):** 181-193

108) Murphy, C.R., Swift, J.G., Mukherjee, T.M., and Rogers, A.W., (1981). Effects of ovarian hormones on cell membranes in the rat uterus. II. Freeze-fracture studies on tight junctions of the lateral plasma membrane of the luminal epithelium. *Cell Biophysics* **3 (1):** 57-69

109) Nakamura, Y., Ono, M., Yoshida, Y., Sugino, N., Ueda, K., Kato, H., (1997). Effects of clomiphene citrate on the endometrial thickness and echogenic pattern of the endometrium. *Fertility and Sterility* **67 (2):** 256-260

110) Navot, D., and Laufer, N., (1989). Assisted reproductive technology. A clinical appraisal. *The Journal of Reproductive Medicine* **34 (1):** 3-9

111) Nawaz, Z., Lonard, D.M., Dennis, A.P., Smith, C.L., and O'Malley, B.W., (1999). Proteasome-dependent degradation of the human estrogen receptor. *Proceedings of the National Academy of Sciences of the United States of America* **96:** 1858-1862

112) Nelson, L.M., Hershlag, A., Kurl, R.S., Hall, J.L., and Stillman, R.J., (1990). Clomiphene citrate directly impairs endometrial receptivity in the mouse. *Fertility and Sterility* **53 (4):** 727-731

113) Nephew, K.P., Long, X., Osborne, E., Burke, K.A., Ahluwalia, A., and Bigsby, R.M., (2000). Effect of estradiol on estrogen receptor expression in rat uterine cell types. *Biology of Reproduction* **62:** 168-177

114) Newberne, J.W., Kuhn, W.L., and Elsea, J.R., (1966). Toxicologic studies on clomiphene. *Toxicology and Applied Pharmacology* **9:** 44-56

115) Nilsson, O., (1967). Attachment of rat and mouse blastocysts onto uterine epithelium. *International Journal of Fertility* **12 (1):** 5-13

116) Novartis, (2004). PDR Drug Information for Vivelle Transdermal System, *In Drugs.com:* Drug Information Online (www.drugs.com/PDR/Vivelle_Transdermal_System)

117) Ogawa, S., Inoue, S., Watanabe, T., Hiroi, H., Orimo, A., Hosoi, T., Ouchi, Y., and Muramatsu, M., (1998). The complete primary structure of human estrogen receptor β (hERβ) and its heterodimerization with ERα *in vivo* and *in vitro*. *Biochemical and Biophysical Research Communications* **243:** 122-126

118) Olazabal, U.E., Pfaff, D.W., and Mobbs, C.V., (1992). Estrogenic regulation of heat shock protein 90kDa in the rat ventromedial hypothalamus and uterus. *Molecular and Cellular Endocrinology* **84 (3):** 175-183

119) Papaconstantinou, A.D., Fisher, B.R., Umbreit, T.H., Goering, P.L., Lappas, N.T., and Brown, K.M., (2001). Effects of β-estradiol and bisphenol A on heat shock protein levels and localization in the mouse uterus are antagonized by the antiestrogen ICI 182,780. *Toxicological Sciences* **63:** 173-180

120) Papaconstantinou, A.D., Fisher, B.R., Umbreit, T.H., and Brown, K.M., (2002). Increases in mouse uterine heat shock protein levels are a sensitive and specific response to uterotrophic agents. *Environmental Health Perspectives* **110 (12):** 1207-1212

121) Paria, B.C., Lim, H., Wang, X.N., Liehr, J., Das, S.K., and Dey, S.K., (1998). Coordination of differential effects of primary estrogen and catecholestrogen on two distinct targets mediates embryo implantation in the mouse. *Endocrinology* **139 (12):** 5235-5246

122) Pastore, G.N., diCola, L.P., Dollahon, N.R., and Gardner, R.M., (1989). The effect of estradiol on collagen structure and organization in the immature rat uterus. *Proceedings of the Society for Experimental Biology and Medicine* **191:** 69-77

123) Paulson, R.J., Sauer, M.V., and Lobo, R.A., (1990). Embryo implantation after human *in vitro* fertilization: importance of endometrial receptivity. *Fertility and Sterility* **53 (5):** 870-874

124) Pike, A.C.W., Brzozowski, A.M., and Hubbard, R.E., (2000). A structural biologist's view of the oestrogen receptor. *The Journal of Steroid Biochemistry and Molecular Biology* **74:** 261-268

125) Pike, A.C.W., Brzozowski, A.M., Hubbard, R.E., Bonn, T., Thorsell, A.G., Engstrom, O., Ljunggren, J., Gustafsson, J.A., and Carlquist, M., (1999). Structure of the ligand-binding domain of oestrogen receptor beta in the presence of a partial agonist and a full antagonist. *The EMBO Journal* **18 (17):** 4608-4618

126) Pike, A.C.W., Brzozowski, A.M., Walton, J., Hubbard, R.E., Thorsell, A.G., Li, Y.L., Gustafsson, J.A., and Carlquist, M., (2001). Structural insights into the mode of action of a pure antiestrogen. *Structure* **9 (2):** 145-153

127) Plouffe, Jr., L., (2000). Selective estrogen receptor modulators (SERMs) in clinical practice. *Journal of the Society for Gynecologic Investigation* **7 (1 Suppl):** S38-46

128) Poteat, W.L., (1977). The effect of clomiphene citrate and estradiol on body weight, vaginal cornification, and uterine weight after chronic treatment of ovariectomized rats. *Experientia* **33 (8):** 1080-1082

129) Poteat, W.L., (1981). Uterine morphology and glycogen deposition of pregnant rats after clomiphene citrate treatment during preimplantation stages. *Experientia* **37 (1):** 84-86

130) Poteat, W.L., and Bo, W.J., (1977). The interaction of clomiphene, estradiol, and progesterone in the control of rat uterine glycogen metabolism. *The American Journal of Anatomy* **149 (2):** 153-163

131) Prasad, M.R.N., and Kalra, S.P., (1967). Mechanism of anti-implantation action of clomiphene. *Journal of Reproduction and Fertility* **13:** 59-66

132) Pratt, W.B., and Toft, D.O., (1997). Steroid receptor interactions with heat shock protein and immunophilin chaperones. *Endocrine Reviews* **18 (3):** 306-360

133) Psychoyos, A., (1961). New research on ovoimplantation. *Comptes rendus hebdomadaires des seances de l'Academie des sciences* **252:** 2306-2307

134) Psychoyos, A., (1966). Recent research on egg implantation. In: Wolstenholm G.E., and O'Connor (Eds), *Ciba foundation study group on egg implantation.* 4-28

135) Psychoyos, A., (1967). The hormonal interplay controlling egg-implantation in the rat. In: McLaren A. (Ed), *Advances in Reproductive Physiology.* **2:** 256. Academic Press, New York

136) Psychoyos, A., (1973). Hormonal control of ovoimplantation. *Vitamins and Hormones* **31:** 201-256

137) Psychoyos, A., (1976). Hormonal control of uterine receptivity for nidation. *Journal of Reproduction and Fertility Suppl* **(25):** 17-28

138) Psychoyos, A., (1986). Uterine receptivity for nidation. *Annals of the New York Academy of Science* **476:** 36-42

139) Psychoyos, A., and Martel, D., (1985). Problems related to the implantation of the human egg after in vitro fertilization. *Acta Europaea Fertilitatis* **16 (2):** 107-109

140) Puri, C.P., Katkam, R.R., Sachdeva, G., Patil, V., Manjramkar, D.D., and Kholkute, S.D., (2000). Endometrial contraception: modulation of molecular determinants of uterine receptivity. *Steroids* **65:** 783-794

141) Ramachandran, C., Catelli, M.G., Schneider, W., and Shyamala, G., (1988). Estrogenic regulation of uterine 90-kilodalton heat shock protein. *Endocrinology* **123:** 956-961

142) Reese, J., Das, S.K., Paria, B.C., Lim, H., Song, H., Matsumoto, H., Knudtson, K.L., DuBois, R.N., and Dey, S.K., (2001). Global gene expression analysis to identify molecular markers of uterine receptivity and embryo implantation. *The Journal of Biological Chemistry* **276 (47):** 44137-44145

143) Roberts, D.K., Walker, N.J., and Lavia, L.A., (1988). Ultrastructural evidence of stromal/epithelial interactions in the human endometrial cycle. *American Journal of Obstetrics and Gynecology* **158 (4):** 854-861

144) Robertson, J.A., Bhattacharyya, S., Ing, N.H., (1998). Tamoxifen up-regulates oestrogen receptor-α, c-fos and glyceraldehyde 3-phosphate-dehydrogenase mRNAs in ovine endometrium. *The Journal of Steroid Biochemistry and Molecular Biology* **67 (4):** 285-292

145) Rockwell, L.C., Pillai, S., Olson, C.E., and Koos, R.D., (2002). Inhibition of vascular endothelial growth factor/vascular permeability factor action blocks estrogen-induced uterine edema and implantation in rodents. *Biology of Reproduction* **67:** 1804-1810

146) Rogers, P.A.W., Polson, D., Murphy, C.R., Hosie, M., Susil, B., and Leoni, M., (1991). Correlation of endometrial histology, morphometry, and ultrasound appearance after different stimulation protocols for in vitro fertilization. *Fertility and Sterility* **55 (3):** 583-587

147) Rosser, M., Chorich, L., Howard, E., Zamorano, P., and Mahesh, V.B., (1993). Changes in rat uterine estrogen receptor messenger ribonucleic acid levels during estrogen- and progesterone-induced estrogen receptor depletion and subsequent replenishment. *Biology of Reproduction* **48:** 89-98

148) Sabbah, M., Radanyi, C., Redeuilh, G., and Baulieu, E.E., (1996). The 90kDa heat-shock protein (hsp90) modulates the binding of the oestrogen receptor to its cognate DNA. *Biochemical Journal* **314:** 205-213

149) Satokata, I., Benson, G., and Maas, R., (1995). Sexually dimorphic sterility phenotypes in Hoxa10-deficient mice. *Nature* **374:** 460-463

150) Schwendt, M., and Jezova, D., (2001). Gene expression of NMDA receptor subunits in rat adrenals under basal and stress conditions. *Journal of Physiology and Pharmacology* **52 (4):** 719-727

151) Segnitz, B., and Gehring, U., (1995). Subunit structure of the nonactivated human estrogen receptor. *Proceedings of the National Academy of Science of the United States of America* **92:** 2179-2183

152) Segnitz, B., and Gehring, U., (1997). The function of steroid hormone receptors is inhibited by the hsp90-specific compound geldanamycin. *The Journal of Biological Chemistry* **272 (30):** 18694-18701

153) Shiau, A.K., Barstad, D., Loria, P.M., Cheng, L., Kushner, P.J., Agard, D.A., and Greene, G.L., (1998). The structural basis of estrogen receptor/coactivator recognition and the antagonism of this interaction by tamoxifen. *Cell* **95 (7):** 927-937

154) Spirov, A.V., (2003). Trans-Clomiphene citrate, *In HAZARD Database:* Chemical Teratogens, Carcinogens, Mutagens (www.evol.nw.ru/labs/lab38/spirov/hazard/trans_clomiphene-citrate)

155) Tan, J., Paria, B.C., Dey, S.K., and Das, S.K., (1999). Differential uterine expression of estrogen and progesterone receptors correlates with uterine preparation for implantation and decidualization in the mouse. *Endocrinology* **140 (11):** 5310-5321

156) Taylor, H.S., (2000). The role of Hox genes in human implantation. *Human Reproduction Update* **6 (1):** 75-79

157) Taylor, H.S., Arici, A., Olive, D., and Igarashi, P., (1998). Hoxa10 is expressed in response to sex steroids at the time of implantation in the human endometrium. *Journal of Clinical Investigation* **101 (7):** 1379-1384

158) Taylor, H.S., Bagot, C., Kardana, A., Olive, D., and Arici, A., (1999). Hox gene expression is altered in the endometrium of women with endometriosis. *Human Reproduction* **14 (5):** 1328-1331

159) Taylor, H.S., Vanden Heuvel, G.B., and Igarashi, P., (1997). A conserved *Hox* axis in the mouse and human female reproductive system: late establishment and persistent adult expression of the *Hoxa* cluster genes. *Biology of Reproduction* **57:** 1338-1345

160) Tessier, C., Deb, S., Prigent-Tessier, A., Ferguson-Gottschall, S., Gibori, G.B., Shiu, R.P.C., and Gibori, G., (2000). Estrogen receptors α and β in rat decidua cells: cell-specific expression and differential regulation by steroid hormones and prolactin. *Endocrinology* **141 (10):** 3842-3851

161) Voet, D., and Voet, J.G., (1995). Techniques of Protein Purification. In: *Biochemistry*. 2nd ed. John Wiley & Sons, Inc., New York

162) Wang, H., Eriksson, H., and Sahlin, L., (2000). Estrogen receptors α and β in the female reproductive tract of the rat during the estrous cycle. *Biology of Reproduction* **63:** 1331-1340

163) Wang, H., Masironi, B., Eriksson, H., and Sahlin,L., (1999). A comparative study of estrogen receptors α and β in the rat uterus. *Biology of Reproduction* **61:** 955-964

164) Wu, W.X., Derks, J.B., Zhang, Q., and Nathanielsz, P.W., (1996). Changes in heat shock protein-90 and -70 messenger ribonucleic acid in uterine tissues of the ewe in relation to parturition and regulation by estradiol and progesterone. *Endocrinology* **137 (12):** 5685-5693

165) Yang, X., Dale, E.C., Diaz, J., and Shyamala, G., (1995). Estrogen dependent expression of heat shock transcription factor: implications for uterine synthesis of heat shock proteins. *The Journal of Steroid Biochemistry and Molecular Biology* **52 (5):** 415-419

166) Yao, M.W.M., Lim, H., Schust, D.J., Choe, S.E., Farago, A., Ding, Y., Michaud, S., Church, G.M., and Maas, R.L., (2003). Gene expression profiling reveals progesterone-mediated cell cycle and immunoregulatory roles of Hoxa-10 in the pre-implantation uterus. *Molecular Endocrinology* **17:** 610-627

167) Yoshinaga, K., and Adams, C.E., (1966a). Endocrine aspects of egg implantation in the rat. *Journal of Reproduction and Fertility* **12:** 583-586

168) Yoshinaga, K., and Adams, C.E., (1966b). Delayed implantation in the spayed, progesterone treated adult mouse. *Journal of Reproduction and Fertility* **12:** 593-595

169) Yoshinaga, K., Hawkins, R.A., Stocker, J.F., (1969). Estrogen secretion by the rat ovary *in vivo* during the estrous cycle and pregnancy. *Endocrinology* **85:** 103-112

170) Zhou, Y., Chorich, L.P., Mahesh, V.B., and Ogle, T.F., (1993). Regulation of estrogen receptor protein and messenger ribonucleic acid by estradiol and progesterone in rat uterus. *The Journal of Steroid Biochemistry and Molecular Biology* **46 (6):** 687-698