



Subject index to volume 86

- Adaptive hypersensitivity
 following long-term estrogen deprivation: involvement of multiple signal pathways, 265
- Adrenals
 molecular cloning and expression of guinea pig cytochrome P450c21 cDNA (steroid 21-hydroxylase) isolated from the, 123
- Advanced breast cancer
 letrozole versus tamoxifen in the treatment of, 289
 updates on anastrozole versus tamoxifen, 321
- Anastrozole
 advanced breast cancer updates on, versus tamoxifen, 321
 versus tamoxifen as adjuvant therapy in postmenopausal women with early breast cancer, 399
- Anastrozole–formestane
 is there a benefit by the sequence, for postmenopausal metastatic breast cancer women, 107
- Androgen(s)
 aromatase in bone: role of, 393
- 5 α -androst-16-en-3-one binding of the pheromonal steroid, to membrane-enriched fractions of boar and rat olfactory epithelium, 133
- Anti-estrogen(s)
 the intratumoral aromatase model: studies with aromatase inhibitors and, 283
- Apoptosis
 effects of 2-methoxy oestrogens and their sulphamoylated derivatives in conjunction with TNF- α on endothelial and fibroblast cell growth, morphology and, 189
- Aromatase
 and cyclooxygenases: enzymes in breast cancer, 501
 an integrated view of aromatase and its inhibition, 413
 breast cancer tissue estrogens and their manipulation with, inhibitors and inactivators, 245
 gene (P450) update on physiologic roles and genomic organization of promoters, 219
 in bone: roles of vitamin D3 and androgens, 393
 multiple mechanisms control brain, activity at the genomic and non-genomic level, 367
 neurological effects of, deficiency in the mouse, 357
 phenotype characteristics of transgenic male mice overexpressing human, under ubiquitin C promoter, 469
 regulation of, gene expression in Leydig cells and germ cells, 335
 structure-function studies of, and its inhibitors, 231
 the intratumoral, model, 283
 unique regulation of human, expression in the placenta, 327
 validation of new aromatase monoclonal antibodies for immunohistochemistry 239
- Aromatase inhibitors
 as adjuvant therapies in patients with breast cancer, 309
 celecoxib anti-aromatase neoadjuvant (CAAN) trial for locally advanced breast cancer, 443
 clinical trials strategies involving, in breast cancer prevention, 487
 comparison between, and sequential use, 275
 hormonal effects of, focus on premenopausal effects and interaction with tamoxifen, 255
 neoadjuvant comparisons of, and tamoxifen: pretreatment determinants of response and on-treatment effect, 301
 neoadjuvant tamoxifen and, comparisons and clinical outcomes, 295
 novel treatment of short stature with, 345

- structure-function studies of aromatase and, 231
 - the intratumoral aromatase model: studies with, and antiestrogens, 283
 - versus tamoxifen for management of postmenopausal breast cancer in the advanced disease and neoadjuvant settings, 313
- Bone**
- aromatase in, and roles of vitamin D3 and androgens, 393
- Brain**
- characterisation of estrogenic 17 β -hydroxysteroid dehydrogenase activity in the, of human, 79
 - multiple mechanisms control, aromatase activity at the genomic and non-genomic level, 367
- Breast**
- genotoxic metabolites of estradiol in, and potential mechanism of estradiol induced carcinogenesis, 477
- Breast cancer**
- anastrozole versus tamoxifen as adjuvant therapy in postmenopausal women with early, 399
 - aromatase and cyclooxygenases: enzymes in, 501
 - aromatase inhibitors as adjuvant therapies in patients with, 309
 - aromatase inhibitors versus tamoxifen for management of postmenopausal, 313
 - celecoxib anti-aromatase neoadjuvant (CAAN) trial for locally advanced, 443
 - clinical trials strategies involving aromatase inhibitors in the prevention of, 487
 - cyclooxygenase-2 and chemoprevention of, 495
 - effects of hormone therapy on cognition in, 405
 - is there a benefit by the sequence anastrozole-formestane for postmenopausal women with metastatic, 107
 - role of steroid sulfatase in local formation of estrogen in post-menopausal, patients, 455
 - steroid sulphatase inhibitors for, therapy, 423
 - tissue estrogens and their manipulation with aromatase inhibitors and inactivators, 245
 - updates on anastrozole versus tamoxifen in advanced, 321
- Breast cancer cells**
- the N-terminal of the estrogen receptor (ER α) mediates transcriptional cross-talk with the retinoic acid receptor in human, 1
- Breast parenchymal tissue**
- formation of estrone and estradiol from estrone sulfate by normal, 159
- Cholesterol 7 α -hydroxylase**
- sulfhydryl groups responsible for extreme liability of human, identified by site-directed mutagenesis, 35
- Creatine kinase**
- DT56a (Tofupill[®]) selectively stimulates, specific activity in skeletal tissues of rats but not in the uterus, 93
- Cyclooxygenases**
- 2 and chemoprevention of breast cancer, 495
 - aromatase and, enzymes in breast cancer, 501
- CYP19 promoters**
- analysis of, in zebrafish, 381
- Cytochrome P450c21**
- molecular cloning and expression of guinea pig, cDNA (steroid 21-hydroxylase) isolated from the adrenals, 123
- Dexamethasone**
- phospholipase C β 1 isozyme expression in human vascular smooth muscle cells is decreased by, 173
- Embryonic testis**
- insulin-like growth factor I (IGF-I) regulates endocrine activity of the, in the mouse, 151
- Endometrial cancer cells**
- target specificity of selective estrogen receptor modulators within human, 27
- Estradiol**
- genotoxic metabolites of, in breast : potential mechanism of carcinogenesis induced by, 477
- Estrogen(s)**
- and growth factor signaling pathway: basic approaches for clinical application, 433
 - breast cancer tissue, and their manipulation with aromatase inhibitors and inactivators, 245
 - receptor(s)- α and Sp1 interact in the induction of the low density lipoprotein (LDL)-receptor, 113
 - α : full-length, and its ligand-binding domain adopt different conformations upon binding ligand, 143

- β : silymarin is a selective, agonist and has estrogenic effects in the metaphysis of the femur but no or antiestrogenic effects in the uterus of ovariectomized (ovx) rats, 179
- identification of, beta expression in cells of Chinese hamster ovary, 41
- investigations on the influence of terminal groups at the C2-propyl side chain of 1,1-bis(4-hydroxyphenyl)-2-phenylpent-1-ene and 1,1,2-tris(4-hydroxyphenyl)pent-1-ene on the, binding and the estrogenic/anti-estrogenic properties, 57
- potentiation of human, α -mediated gene expression by steroid receptor coactivator-1 (SRC-1) in *Saccharomyces cerevisia*, 15
- target specificity of selective, modulators within human endometrial cancer cells, 27
- the N-terminal of the, α mediates transcriptional cross-talk with the retinoic acid receptor in human breast cancer cells, 1
- update on animal models developed for analyses of, biological activity, 387
- sources of estrogen and their importance, 225
- Estrogen deprivation
 - adaptive hypersensitivity following long-term, and involvement of multiple signal pathways, 265
- Estrone sulfate
 - formation of estrone and estradiol from, by normal breast parenchymal tissue, 159
- Estrogen sulfotransferase
 - in normal human tissue and breast carcinoma, 449
- Glucocorticoid(s)
 - effect of, on the myosin heavy chain isoforms' turnover in skeletal muscle, 201
- Growth factor signaling pathway
 - estrogen and, basic approaches for clinical application, 433
- Histone hyperacetylation
 - correlation between butyrate-induced, turn-over and c-myc expression, 167
- 2-Hydroxyestrone
 - urinary equol excretion in relation to, concentrations in young to middle-aged women, 71
- 16 α -Hydroxyestrone
 - urinary equol excretion in relation to, concentrations in young to middle-aged women, 71
- 3 β -Hydroxysteroid dehydrogenase
 - inhibition of rat testis microsomal, activity by tributyltin, 99
- 17 β -Hydroxysteroid dehydrogenase (17 β -HSD)
 - characterisation of estrogenic, activity in the human brain, 79
- Insulin-like growth factor I (IGF-I)
 - comparative studies on the regulation of insulin-like growth factor binding protein-1 (IGFBP-1) and sex hormone binding globulin (SHBG) production by insulin and, in human hepatoma cells, 197
 - regulates endocrine activity of the embryonic testis in the mouse, 151
- Letrozole
 - use of, as a chemopreventive agent in aromatase overexpressing transgenic mice, 461
 - versus tamoxifen in the treatment of advanced breast cancer and as neoadjuvant therapy, 289
- Leydig cells
 - regulation of aromatase gene expression in, 335
- Low density lipoprotein (LDL)
 - receptor(s) estrogen receptor (ER)- α and Sp1 interact in the induction of the, 113
- 2-Methoxy oestrogen(s)
 - effects of, and their sulphamoylated derivatives in conjunction with TNF- α on endothelial and fibroblast cell growth, morphology and apoptosis, 189
 - c-myc correlation between butyrate-induced histone hyperacetylation turn-over and, expression, 167
- Phospholipase C β 1 isozyme expression
 - dexamethasone decreases, in human vascular smooth muscle cells, 173
- Placenta
 - unique regulation of expression of human aromatase in the, 327

Postmenopausal metastatic breast cancer women

is there a benefit by the sequence anastrozole-formestane for, 107

Promoters

the human *CYP19* (aromatase P450) gene : update on physiologic roles and genomic organization of, 219

Receptor(s)

estrogen(s)- α and Sp1 interact in the induction of the low density lipoprotein (LDL)-receptor, 113

- α : full-length, and its ligand-binding domain adopt different conformations upon binding ligand, 143

- β : silymarin is a selective, agonist and has estrogenic effects in the metaphysis of the femur but no or antiestrogenic effects in the uterus of ovariectomized (ovx) rats, 179

identification of, beta expression in cells of Chinese hamster ovary, 41

investigations on the influence of terminal groups at the C2-propyl side chain of 1,1-bis(4-hydroxyphenyl)-2-phenylpent-1-ene and 1,1,2-tris(4-hydroxyphenyl)pent-1-ene on the, binding and the estrogenic/anti-estrogenic properties, 57

potentiation of human, α -mediated gene expression by steroid receptor coactivator-1 (SRC-1) in *Saccharomyces cerevisia*, 15

target specificity of selective, modulators within human endometrial cancer cells, 27

the N-terminal of the, - α mediates transcriptional cross-talk with the retinoic acid receptor in human breast cancer cells, 1

update on animal models developed for analyses of, biological activity, 387

low density lipoprotein (LDL) estrogen receptor (ER)- α and Sp1 interact in the induction of the, 113

Sex hormone binding globulin (SHBG)

comparative studies on the regulation of insulin-like growth factor binding protein-1 (IGFBP-1) and, production by insulin and insulin-like growth factors in human hepatoma cells, 197

Sex steroid hormone

metabolism of, takes place in human ocular cells, 207

Steroid receptor coactivator-1 (SRC-1)

potentiation of human estrogen receptor α -mediated gene expression by, in *Saccharomyces cerevisia*, 15

Steroid sulfatase

in normal human tissue and breast carcinoma, 449

role of, in local formation of estrogen in post-menopausal breast cancer patients, 455

Steroid sulphatase inhibitors

for breast cancer therapy, 423

Tamoxifen

advanced breast cancer updates on anastrozole versus, 321

anastrozole versus, as adjuvant therapy in postmenopausal women with early breast cancer, 321

aromatase inhibitors versus, for management of postmenopausal breast cancer in the advanced disease and neoadjuvant settings, 313

hormonal effects of aromatase inhibitors: focus on premenopausal effects and interaction with, 255

letrozole versus, in the treatment of advanced breast cancer and as neoadjuvant therapy, 289

neoadjuvant, and aromatase inhibitors: comparisons and clinical outcomes, 295

neoadjuvant comparisons of aromatase inhibitors and, pretreatment determinants of response and on-treatment effect, 301

Ubiquitin C promoter

phenotype characteristics of transgenic male mice overexpressing human aromatase under, 469

Vitamin D3

aromatase in bone: role of, 393

We would like to express our deep thanks to the following persons for their kind collaboration in reviewing papers for this volume of **The Journal of Steroid Biochemistry & Molecular Biology**:

1. **FIET J.**, Paris, FRANCE
2. **LIEHR J.G.**, Texas, U.S.A.
3. **POUTANEN M.**, Turku, FINLAND