

## 7. Literaturangaben

1. **Ackermann D, Vogt B, Escher G, Dick B, Reichen J, Frey BM, Frey FJ** 1999 Inhibition of  $11\beta$ -hydroxysteroid dehydrogenase by bile acids in rats with cirrhosis. *Hepatology* 30:623-629
2. **Agarwal AK, Monder C, Eckstein B, White PC** 1989 Cloning and expression of rat cDNA encoding corticosteroid 11 beta-dehydrogenase. *Journal of Biological Chemistry* 264:18939-18943
3. **Agarwal AK, Mune T, Monder C, White PC** 1994 NAD(+)-dependent isoform of 11 beta-hydroxysteroid dehydrogenase. Cloning and characterization of cDNA from sheep kidney. *Journal of Biological Chemistry* 269:25959-25962
4. **Agarwal AK, Mune T, Monder C, White PC** 1995 Cloning of cDNA encoding an NAD<sup>+</sup>-dependent isoform of  $11\beta$ -hydroxysteroid dehydrogenase in sheep kidney. *Endocrine Research* 21:389-397
5. **Agarwal AK, Rogerson FM, Mune T, White PC** 1995 Analysis of the human gene encoding the kidney isozyme of  $11\beta$ -hydroxysteroid dehydrogenase. *Journal of Steroid Biochemistry and Molecular Biology* 55:473-479
6. **Agarwal AK, Rogerson FM, Mune T, White PC** 1995 Gene structure and chromosomal localization of the human *HSD11K* gene encoding the kidney (Type 2) isozyme of  $11\beta$ -hydroxysteroid dehydrogenase. *Genomics* 29:195-199
7. **Albiston AL, Obeyesekere VR, Smith RE, Krozowski ZS** 1994 Cloning and tissue distribution of the human  $11\beta$ -hydroxysteroid dehydrogenase type 2 enzyme. *Molecular and Cellular Endocrinology* 105:R11-R17
8. **Albiston AL, Smith RE, Krozowski ZS** 1995 Sex- and tissue- specific regulation of  $11\beta$ -hydroxysteroid dehydrogenase mRNA. *Molecular and Cellular Endocrinology* 109:183-188
9. **Albiston AL, Smith RE, Obeyesekere VR, Krozowski ZS** 1995 Cloning of the 11 beta HSD type II enzyme from human kidney. *Endocr Res* 21:399-409
10. **Alfaidy N, Blot-Chabaud M, Robic D, Kenouch S, Bourbouze R, Bonvalet J-P, Farman N** 1995 Characteristics and regulation of  $11\beta$ -hydroxysteroid dehydrogenase of proximal and distal nephron. *Biochimica et Biophysica Acta: General Subjects* 1243:461-468

11. **Baggia S, Albrecht ED, Babischkin JS, Pepe GJ** 1990 Interconversion of cortisol and cortisone in baboon trophoblast and decidua cells in culture. *Endocrinology* 127:1735-1741
12. **Baggia S, Albrecht ED, Pepe GJ** 1990 Regulation of 11 beta-hydroxysteroid dehydrogenase activity in the baboon placenta by estrogen. *Endocrinology* 126:2742-2748
13. **Batra S, Iosif S** 1985 Progesterone receptors in human vaginal tissue. *Am J Obstet Gynecol* 153:524-528
14. **Beretta Piccoli C, Salvade G, Crivelli PL, Weidmann P** 1985 Body-sodium and blood volume in a patient with licorice-induced hypertension. *Journal of Hypertension* 3:19-23
15. **Bernal AL, Flint AP, Anderson AB, Turnbull AC** 1980 11 beta-Hydroxysteroid dehydrogenase activity (E.C. 1.1.1.146) in human placenta and decidua. *Journal of Steroid Biochemistry* 13:1081-1087
16. **Best R, Nelson SM, Walker BR** 1997 Dexamethasone and 11-dehydrodexamethasone as tools to investigate the isozymes of 11 $\beta$ -hydroxysteroid dehydrogenase *in vitro* and *in vivo*. *Journal of Endocrinology* 153:41-48
17. **Bland R, Worker CA, Noble BS, Eyre LJ, Bujalska IJ, Sheppard MC, Stewart PM, Hewison M** 1999 Characterization of 11 $\beta$ -hydroxysteroid dehydrogenase activity and corticosteroid receptor expression in human osteosarcoma cell lines. *Journal of Endocrinology* 161:455-464
18. **Bonvalet JP, Doignon I, Blot Chabaud M, Pradelles P, Farman N** 1990 Distribution of 11 beta-hydroxysteroid dehydrogenase along the rabbit nephron. *J Clin Invest* 86:832-837
19. **Brem AS, Bina RB, King T, Morris DJ** 1995 Bidirectional activity of 11 $\beta$ -hydroxysteroid dehydrogenase in vascular smooth muscle cells. *Steroids* 60:406-410
20. **Brem AS, Matheson KL, Barnes JL, Morris DJ** 1991 11-Dehydrocorticosterone, a glucocorticoid metabolite, inhibits aldosterone action in toad bladder. *American Journal of Physiology* 261:F873-9
21. **Brem AS, Matheson KL, Latif S, Morris DJ** 1993 Activity of 11 beta-hydroxysteroid dehydrogenase in toad bladder: effects of 11-dehydrocorticosterone. *American Journal of Physiology* 264:F854-8

22. **Brown RW, Chapman KE, Kotelevtsev Y, Yau JLW, Lindsay RS, Brett L, Leckie C, Murad P, Lyons V, Mullins JJ, Edwards CRW, Seckl JR** 1996 Cloning and production of antisera to human placental 11 $\beta$ -hydroxysteroid dehydrogenase type 2. *Biochem J* 313:1007-1017
23. **Brown RW, Chapman KE, Murad P, Edwards CRW, Seckl JR** 1996 Purification of 11 $\beta$ -hydroxysteroid dehydrogenase type 2 from human placenta utilizing a novel affinity labelling technique. *Biochem J* 313:997-1005
24. **Buhler H, Perschel FH, Fitzner R, Hierholzer K** 1994 Endogenous inhibitors of 11 beta-OHSD: existence and possible significance. *Steroids* 59:131-135
25. **Buhler H, Perschel FH, Hierholzer K** 1991 Inhibition of rat renal 11 beta-hydroxysteroid dehydrogenase by steroidal compounds and triterpenoids; structure/function relationship. *Biochimica et Biophysica Acta* 1075:206-212
26. **Bujalska I, Shimojo M, Howie A, Stewart PM** 1997 Human 11 beta-hydroxysteroid dehydrogenase: studies on the stably transfected isoforms and localization of the type 2 isozyme within renal tissue. *Steroids* 62:77-82
27. **Bujalska IJ, Kumar S, Hewison M, Stewart PM** 1999 Differentiation of adipose stromal cells: The roles of glucocorticoids and 11 $\beta$ -hydroxysteroid dehydrogenase. *Endocrinology* 140:3188-3196
28. **Bujalska IJ, Kumar S, Stewart PM** 1997 Does central obesity reflect "Cushing's disease of the omentum"? *Lancet* 349:1210-1213
29. **Bujalska O, Shimojo M, Howie A, Stewart PM** 1997 Human 11 $\beta$ -hydroxysteroid dehydrogenase: Studies on the stably transfected isoforms and localization of the type 2 isozyme within renal tissue. *Steroids* 62:77-82
30. **Burton PJ, Waddell BJ** 1999 Dual function of 11 $\beta$ -hydroxysteroid dehydrogenase in placenta: Modulating placental glucocorticoid passage and local steroid action. *Biol Reprod* 60:234-240
31. **Cadenas S, Lertsiri S, Otsuka M, Barja G, Miyazawa T** 1996 Phospholipid hydroperoxides and lipid peroxidation in liver and plasma of ODS rats supplemented with Alpha-tocopherol and ascorbic acid. *Free Radical Research* 24:485-493
32. **Chin D, Shackleton C, Prasad VK, Kohn B, David R, Imperato-McGinley J, Cohen H, McMahon DJ, Oberfield SE** 2000 Increased 5 $\alpha$ -reductase and normal 11beta-hydroxysteroid dehydrogenase metabolism of C19 and C21 steroids in a young population with polycystic ovarian syndrome. *J Pediatr Endocrinol Metab* 13:253-259

33. **Cole TJ** 1995 Cloning of the mouse 11 $\beta$ -hydroxysteroid dehydrogenase type 2 gene: Tissue specific expression and localization in distal convoluted tubules and collecting ducts of the kidney. *Endocrinology* 136:4693-4696
34. **Cooper MS, Walker EA, Bland R, Fraser WD, Hewison M, Stewart PM** 2000 Expression and functional consequences of 11beta-hydroxysteroid dehydrogenase activity in human bone. *Bone* 27:375-381
35. **Dallman MF, Strack AM, Akana SF, Bradbury MJ, Hanson ES, Scribner KA, Smith M** 1993 Feast and famine: critical role of glucocorticoids with insulin in daily energy flow. *Front Neuroendocrinol* 14:303-347
36. **Darnel AD, Archer TK, Yang K** 1999 Regulation of 11 $\beta$ -hydroxysteroid dehydrogenase type 2 by steroid hormones and epidermal growth factor in the Ishikawa human endometrial cell line. *Journal of Steroid Biochemistry and Molecular Biology* 70:203-210
37. **Davis EA, Morris DJ** 1991 Medicinal uses of licorice through the millennia: the good and plenty of it. *Mol Cell Endocrinol* 78:1-6
38. **Diederich S, Hanke B, Bähr V, Oelkers W** 1996 The metabolism of 9 $\alpha$ -fluorinated steroids in the human kidney. *Endocr Res* 22:803-810
39. **Diederich S, Hanke B, Oelkers W, Bähr V** 1997 Metabolism of dexamethasone in the human kidney: Nicotinamide adenine dinucleotide-dependent 11 $\beta$ -reduction. *Journal of Clinical Endocrinology and Metabolism* 82:1598-1602
40. **Diederich S, Quinkler M, Burkhardt P, Großmann C, Bähr V, Oelkers W** 2000 11beta-Hydroxysteroid-dehydrogenase isoforms: tissue distribution and implications for clinical medicine. *Eur J Clin Invest* 30:21-27
41. **Duax WL, Ghosh D, Pletnev V** 2000 Steroid dehydrogenase structures, mechanism of action, and disease. *Vitam Horm* 58:121-148
42. **Eckhoff C, Oelkers W, Bähr V** 1988 Effects of two oral antimycotics, ketoconazole and fluconazole, upon steroidogenesis in rat adrenal cells in vitro. *Journal of Steroid Biochemistry* 31:819-823
43. **Edwards CR, Benediktsson R, Lindsay RS, Seckl JR** 1993 Dysfunction of placental glucocorticoid barrier: link between fetal environment and adult hypertension. *Lancet* 341:355-357
44. **Edwards CR, Stewart PM, Burt D, Brett L, McIntyre MA, Sutanto WS, de Kloet ER, Monder C** 1988 Localisation of 11 beta-hydroxysteroid dehydrogenase--tissue specific protector of the mineralocorticoid receptor. *Lancet* 2:986-989

45. **Escher G, Meyer KV, Vishwanath BS, Frey BM, Frey FJ** 1995 Furosemide inhibits 11 $\beta$ -hydroxysteroid dehydrogenase *in vitro* and *in vivo*. *Endocrinology* 136:1759-1765
46. **Farese RV, Jr., Biglieri EG, Shackleton CH, Irony I, Gomez Fontes R** 1991 Licorice-induced hypermineralocorticoidism. *N Engl J Med* 325:1223-1227
47. **Ferrari P, Smith RE, Funder JW, Krozowski ZS** 1996 Substrate and inhibitor specificity of the cloned human 11 $\beta$ -hydroxysteroid dehydrogenase type 2 isoform. *American Journal of Physiology* 270:E900-E904
48. **Frey FJ, Escher G, Frey BM** 1994 Pharmacology of 11 beta-hydroxysteroid dehydrogenase. *Steroids* 59:74-79
49. **Fuhrmann U, Hess-Stumpp H, Cleve A, Neef G, Schwede W, Hoffmann J, Fritzemeier KH, Chwalisz K** 2000 Synthesis and biological activity of a novel, highly potent progesterone receptor antagonist. *J Med Chem* 43:5010-5016
50. **Funder JW** 1995 Apparent mineralocorticoid excess, 11 $\beta$  hydroxysteroid dehydrogenase and aldosterone action - Closing one loop, opening another. *Trends Endocrinol Metab* 6:248-251
51. **Funder JW, Pearce PT, Smith R, Smith AI** 1988 Mineralocorticoid action: target tissue specificity is enzyme, not receptor, mediated. *Science* 242:583-585
52. **Fuster D, Escher G, Vogt B, Ackermann D, Dick B, Frey BM, Frey FJ** 1998 Furosemide inhibits 11beta-hydroxysteroid dehydrogenase type 2. *Endocrinology* 139:3849-3854
53. **Gao HB, Ge RS, Lakshmi V, Marandici A, Hardy MP** 1997 Hormonal regulation of oxidative and reductive activities of 11 $\beta$ -hydroxysteroid dehydrogenase in rat Leydig cells. *Endocrinology* 138:156-161
54. **Gelding SV, Taylor NF, Wood PJ, Noonan K, Weaver JU, Wood DF, Monson JP** 1998 The effect of growth hormone replacement therapy on cortisol- cortisone inter-conversion in hypopituitary adults:evidence for growth hormone modulation of extra-renal 11 $\beta$ -hydroxysteroid dehydrogenase activity. *Clin Endocrinol (Oxf)* 48:153-162
55. **Gomez-Sanchez EP, Cox D, Foeking M, Ganjam V, Gomez-Sanchez CE** 1996 11 $\beta$ -hydroxysteroid dehydrogenases of the choriocarcinoma cell line JEG-3 and their inhibition by glycyrrhetic acid and other natural substances. *Steroids* 61:110-115

56. **Gomez-Sanchez EP, Ganjam V, Chen YJ, Cox DL, Zhou MY, Thanigaraj S, Gomez-Sanchez CE** 1997 The sheep kidney contains a novel unidirectional, high affinity NADP<sup>+</sup>-dependent 11 $\beta$ -hydroxysteroid dehydrogenase (11 $\beta$ -HSD- 3). *Steroids* 62:444-450
57. **Gourmelen M, Saint-Jacques I, Morineau G, Soliman H, Julien R, Fiet J** 1996 11 $\beta$ -hydroxysteroid dehydrogenase deficit: A rare cause of arterial hypertension. Diagnosis and therapeutic approach in two young brothers. *Eur J Endocrinol* 135:238-244
58. **Guo J, Reidenberg MM** 1998 Inhibition of 11 $\beta$ -hydroxysteroid dehydrogenase by bioflavonoids and their interaction with furosemide and gossypol. *J Lab Clin Med* 132:32-38
59. **Hammami M, Siiteti PK** 1991 11 $\beta$ -Hydroxysteroid dehydrogenase (11 $\beta$ -HSD) activity in guinea pig and rat tissues. *Proc 73rd Annu Meet Endocr Soc*64
60. **Handoko K, Yang K, Strutt B, Khalil W, Killinger D** 2000 Insulin attenuates the stimulatory effects of tumor necrosis factor alpha on 11beta-hydroxysteroid dehydrogenase 1 in human adipose stromal cells. *Journal of Steroid Biochemistry and Molecular Biology* 72:163-168
61. **Hatakeyama H, Inaba S, Takeda R, Miyamori I** 2000 11beta-Hydroxysteroid dehydrogenase in human vascular cells. *Kidney Int* 57:1352-1357
62. **Hatakeyama H, Inaba S, Taniguchi N, Miyamori I** 2000 Functional adrenocorticotrophic hormone receptor in cultured human vascular endothelial cells : possible role in control of blood pressure. *Hypertension* 36:862-865
63. **Hennebold JD, Ryu SY, Mu HH, Galbraith A, Daynes RA** 1996 11 $\beta$ -hydroxysteroid dehydrogenase modulation of glucocorticoid activities in lymphoid organs. *Am J Physiol Regul Integr Comp Physiol* 270:R1296-R1306
64. **Hermanowski-Vosatka A, Gerhold D, Mundt SS, Loving VA, Lu M, Chen Y, Elbrecht A, Wu M, Doebber T, Kelly L, Milot D, Guo Q, Wang PR, Ippolito M, Chao YS, Wright SD, Thieringer R** 2000 PPARalpha Agonists Reduce 11beta-Hydroxysteroid Dehydrogenase Type 1 in the Liver. *Biochemical and Biophysical Research Communications* 279:330-336
65. **Hierholzer K, Agarwal R, Lichtenstein I, Siebe H** 1994 Heterogenous distribution of 11beta-hydroxysteroid-oxido-reductase (11beta-HSOR) in the mammalian body and differential inhibition by endogenous and exogenous inhibitors. *Wissenschaftswoche Univ -Klinikum Benj Franklin Berlin* 199486-87

66. **Hierholzer K, Siebe H, Fromm M** 1990 Inhibition of 11 beta-hydroxysteroid dehydrogenase and its effect on epithelial sodium transport. *Kidney Int* 38:673-678
67. **Hirasawa G, Sasano H, Takahashi KI, Fukushima K, Suzuki T, Hiwatashi N, Toyota T, Krozowski ZS, Nagura H** 1997 Colocalization of 11 $\beta$ -hydroxysteroid dehydrogenase type II and mineralocorticoid receptor in human epithelia. *Journal of Clinical Endocrinology and Metabolism* 82:3859-3863
68. **Horigome H, Horigome A, Homma M, Hirano T, Oka K** 1999 Glycyrrhetic acid-induced apoptosis in thymocytes: impact of 11 $\beta$ -hydroxysteroid dehydrogenase inhibition. *American Journal of Physiology* 277:E624-E630
69. **Hu MC, Hsu NC, Pai CI, Wang CK, Chung B** 2001 Functions of the upstream and proximal steroidogenic factor 1 (sf-1)-binding sites in the *cyp11a1* promoter in basal transcription and hormonal response. *Molecular Endocrinology* 15:812-818
70. **Huang Y, Hu M, Hsu N, Wang CL, Chung B** 2001 Action of hormone responsive sequence in 2.3 kb promoter of *CYP11A1*. *Mol Cell Endocrinol* 175:205-210
71. **Hult M, Jörnvall H, Oppermann UCT** 1998 Selective inhibition of human type 1 11 $\beta$ -hydroxysteroid dehydrogenase by synthetic steroids and xenobiotics. *FEBS Letters* 441:25-28
72. **Hundertmark S, Bühler H, Ragosch V, Dinkelborg L, Arabin B, Weitzel HK** 1995 Correlation of surfactant phosphatidylcholine synthesis and 11 $\beta$ -hydroxysteroid dehydrogenase in the fetal lung. *Endocrinology* 136:2573-2578
73. **Hundertmark S, Ragosch V, Bühler H, Weitzel HK** 1996 Steuerung der fetalen Surfactant-Phosphatidylcholin-Synthese durch das Enzym 11-Hydroxysteroid-Dehydrogenase. *Perinatal Medizin* 8:84-87
74. **Hundertmark S, Ragosch V, Schein B, Buhler H, Lorenz U, Fromm M, Weitzel HK** 1994 Gestational age dependence of 11 beta-hydroxysteroid dehydrogenase and its relationship to the enzymes of phosphatidylcholine synthesis in lung and liver of fetal rat. *Biochimica et Biophysica Acta* 1210:348-354
75. **Jamieson A, Wallace AM, Andrew R, Nunez BS, Walker BR, Fraser R, White PC, Connell JMC** 1999 Apparent cortisone reductase deficiency: A functional defect in 11 $\beta$ -hydroxysteroid dehydrogenase type 1. *Journal of Clinical Endocrinology and Metabolism* 84:3570-3574
76. **Jamieson PM, Chapman KE, Edwards CRW, Seckl JR** 1995 11 $\beta$ -hydroxysteroid dehydrogenase is an exclusive 11 $\beta$ -reductase in primary cultures of rat hepatocytes: Effect of physiochemical and hormonal manipulations. *Endocrinology* 136:4754-4761

77. **Jamieson PM, Chapman KE, Seckl JR** 1999 Tissue- and temporal-specific regulation of 11 $\beta$ -hydroxysteroid dehydrogenase type 1 by glucocorticoids in vivo. *Journal of Steroid Biochemistry and Molecular Biology* 68:245-250
78. **Jamieson PM, Nyirenda MJ, Walker BR, Chapman KE, Seckl JR** 1999 Interactions between oestradiol and glucocorticoid regulatory effects on liver-specific glucocorticoid-inducible genes: possible evidence for a role of hepatic 11 $\beta$ -hydroxysteroid dehydrogenase type 1. *Journal of Endocrinology* 160:103-109
79. **Jellinck PH, Dhabhar FS, Sakai RR, McEwen BS** 1997 Long-term corticosteroid treatment but not chronic stress affects 11 $\beta$ -hydroxysteroid dehydrogenase type I activity in rat brain and peripheral tissues. *Journal of Steroid Biochemistry and Molecular Biology* 60:319-323
80. **Kageyama Y, Suzuki H, Saruta T** 1992 Glycyrrhizin induces mineralocorticoid activity through alterations in cortisol metabolism in the human kidney. *Journal of Endocrinology* 135:147-152
81. **Kato J, Onouchi T, Okinaga S** 1978 Hypothalamic and hypophysial progesterone receptors: estrogen-priming effect, differential localization, 5 $\alpha$ -dihydroprogesterone binding, and nuclear receptors. *Journal of Steroid Biochemistry* 9:419-427
82. **Kenouch S, Lombes M, Delahaye F, Eugene E, Bonvalet J-P, Farman N** 1994 Human skin as target for aldosterone: Coexpression of mineralocorticoid receptors and 11 $\beta$ -hydroxysteroid dehydrogenase. *Journal of Clinical Endocrinology and Metabolism* 79:1334-1341
83. **Kobayashi N, Schulz W, Hierholzer K** 1987 Corticosteroid metabolism in rat kidney in vitro. IV. Subcellular, sites of 11 beta-hydroxysteroid dehydrogenase activity. *Pflugers Arch* 408:46-53
84. **Kornel L** 1994 Colocalization of 11 beta-hydroxysteroid dehydrogenase and mineralocorticoid receptors in cultured vascular smooth muscle cells. *American Journal of Hypertension* 7:100-103
85. **Kotelevtsev Y, Holmes MC, Burchell A, Houston PM, Schmoll D, Jamieson P, Best R, Brown R, Edwards CRW, Seckl JR, Mullins JJ** 1997 11Beta-hydroxysteroid dehydrogenase type 1 knockout mice show attenuated glucocorticoid-inducible responses and resist hyperglycemia on obesity or stress. *Proceedings of the National Academy of Sciences of the United States of America* 94:14924-14929



86. **Krozowski Z, Maguire JA, Stein-Oakley AN, Dowling J, Smith RE, Andrews RK** 1995 Immunohistochemical localization of the 11 $\beta$ -hydroxysteroid dehydrogenase type II enzyme in human kidney and placenta. *Journal of Clinical Endocrinology and Metabolism* 80:2203-2209
87. **Krozowski Z, Obeyesekere V, Smith R, Mercer W** 1992 Tissue-specific expression of an 11 beta-hydroxysteroid dehydrogenase with a truncated N-terminal domain. A potential mechanism for differential intracellular localization within mineralocorticoid target cells. *Journal of Biological Chemistry* 267:2569-2574
88. **Kyossef Z, Walker PD, Reeves WB** 1996 Immunolocalization of NAD-dependent 11 $\beta$ -hydroxysteroid dehydrogenase in human kidney and colon. *Kidney Int* 49:271-281
89. **l'Allemand D, Biason-Lauber A** 2000 Intra-adrenal regulation of androgen synthesis. *Eur J Clin Invest* 30:28-33
90. **Lakshmi V, Monder C** 1985 Evidence for independent 11-oxidase and 11-reductase activities of 11 beta-hydroxysteroid dehydrogenase: enzyme latency, phase transitions, and lipid requirements. *Endocrinology* 116:552-560
91. **Lakshmi V, Monder C** 1988 Purification and characterization of the corticosteroid 11 beta- dehydrogenase component of the rat liver 11 beta-hydroxysteroid dehydrogenase complex. *Endocrinology* 123:2390-2398
92. **Lakshmi V, Nath N, Muneyyirci Delale O** 1993 Characterization of 11 beta-hydroxysteroid dehydrogenase of human placenta: evidence for the existence of two species of 11 beta-hydroxysteroid dehydrogenase. *Journal of Steroid Biochemistry and Molecular Biology* 45:391-397
93. **Lakshmi V, Sakai RR, McEwen BS, Monder C** 1991 Regional distribution of 11 beta-hydroxysteroid dehydrogenase in rat brain. *Endocrinology* 128:1741-1748
94. **Latif SA, Semafuko WEB, Morris DJ** 1992 Effects of carbenoxolone administered acutely to adrenalectomized rats (in vivo) on renal and hepatic handling of corticosterone by 11 $\beta$ -hydroxysteroid dehydrogenase. *Steroids* 57:494-501
95. **Latif SA, Sheff MF, Ribeiro CE, Morris DJ** 1997 Selective inhibition of sheep kidney 11 $\beta$ -hydroxysteroid dehydrogenase isoform 2 activity by 5 $\alpha$ -reduced (but not 5 $\beta$ ) derivatives of adrenocorticosteroids. *Steroids* 62:230-237
96. **Lax ER, Ghraf R, Schriefers H** 1978 The hormonal regulation of hepatic microsomal 11beta- hydroxysteroid dehydrogenase activity in the rat. *Acta Endocrinol Copenh* 89:352-358

96. **Leckie C, Chapman KE, Edwards CRW, Seckl JR** 1995 LLC-PK<sub>1</sub> cells model 11 $\beta$ -hydroxysteroid dehydrogenase type 2 regulation of glucocorticoid access to renal mineralocorticoid receptors. *Endocrinology* 136:5561-5569
97. **Lee YS, Lorenzo BJ, Koufis T, Reidenberg MM** 1996 Grapefruit juice and its flavonoids inhibit 11 beta- hydroxysteroid dehydrogenase. *Clin Pharmacol Ther* 59:62-71
99. **Li KXZ, Obeyesekere VR, Krozowski ZS, Ferrari P** 1997 Oxoreductase and dehydrogenase activities of the human and rat 11 $\beta$ -hydroxysteroid dehydrogenase type 2 enzyme. *Endocrinology* 138:2948-2952
100. **Lim PO, Donnan PT, MacDonald TM** 2001 Aldosterone to renin ratio as a determinant of exercise blood pressure response in hypertensive patients. *J Hum Hypertens* 15:119-123
101. **Lindsay RS, Lindsay RM, Edwards CRW, Seckl JR** 1996 Inhibition of 11 $\beta$ -hydroxysteroid dehydrogenase in pregnant rats and the programming of blood pressure in the offspring. *Journal of Biological Chemistry* 27:1200-1204
102. **Lindsay RS, Lindsay RM, Waddell BJ, Seckl JR** 1996 Prenatal glucocorticoid exposure leads to offspring hyperglycaemia in the rat: Studies with the 11 $\beta$ -hydroxysteroid dehydrogenase inhibitor carbenoxolone. *Diabetologia* 39:1299-1305
103. **Liu YJ, Nakagawa Y, Nasuda K, Saegusa H, Igarashi Y** 1996 Effect of growth hormone, insulin and dexamethasone on 11  $\beta$ -hydroxysteroid dehydrogenase activity on a primary culture of rat hepatocytes. *Life Sciences* 59:227-234
104. **Liu YJ, Nakagawa Y, Toya K, Saegusa H, Nasuda K, Endoh A, Ohzeki T** 1998 Effects of thyroid hormone (thyroxine) and testosterone on hepatic 11 $\beta$ -hydroxysteroid dehydrogenase mRNA and activity in pubertal hypothyroid male rats. *Metabolism* 47:474-477
105. **Livingstone DE, Kenyon CJ, Walker BR** 2000 Mechanisms of dysregulation of 11beta-hydroxysteroid dehydrogenase type 1 in obese Zucker rats. *J Endocrinol* 167:533-539
106. **Lo YH, Sheff MF, Latif SA, Ribeiro C, Silver H, Brem AS, Morris DJ** 1997 Kidney 11 $\beta$ -HSD2 is inhibited by glycyrrhetic acid-like factors in human urine. *Journal of Biological Chemistry* 29:500-505
107. **Loh KC, Koay ES, Khaw MC, Emmanuel SC, Young WF, Jr.** 2000 Prevalence of primary aldosteronism among Asian hypertensive patients in Singapore. *J Clin Endocrinol Metab* 85:2854-2859

108. **Lombès M, Alfaidy N, Eugene E, Lessana A, Farman N, Bonvalet J-P** 1995 Prerequisite for cardiac aldosterone action: Mineralocorticoid receptor and  $11\beta$ -hydroxysteroid dehydrogenase in the human heart. *Circulation* 92:175-182
109. **Low SC, Moisan MP, Noble JM, Edwards CR, Seckl JR** 1994 Glucocorticoids regulate hippocampal  $11\beta$ -hydroxysteroid dehydrogenase activity and gene expression in vivo in the rat. *J Neuroendocrinol* 6:285-290
110. **MacKenzie MA, Hoefnagels WH, Jansen RW, Benraad TJ, Kloppenborg PW** 1990 The influence of glycyrrhetic acid on plasma cortisol and cortisone in healthy young volunteers. *Journal of Clinical Endocrinology and Metabolism* 70:1637-1643
111. **Marandici A, Monder C** 1993 Inhibition by glycyrrhetic acid of rat tissue  $11\beta$ -hydroxysteroid dehydrogenase in vivo. *Steroids* 58:153-156
112. **Maser-Gluth C, Reincke M, Allolio B, Schulze E** 2000 Metabolism of glucocorticoids and mineralocorticoids in patients with adrenal incidentalomas. *Eur J Clin Invest* 30:83-86
113. **Maser E** 1999 The protective role of  $11\beta$ -hydroxysteroid dehydrogenase/carbonyl reductase against tobacco-smoke related lung cancer. *Adv Exp Med Biol* 463:379-387
114. **Maser E, Bannenberg G** 1994  $11\beta$ -hydroxysteroid dehydrogenase mediates reductive metabolism of xenobiotic carbonyl compounds. *Biochem Pharmacol* 47:1805-1812
115. **Maser E, Richter E, Friebertshäuser J** 1996 The identification of  $11\beta$ -hydroxysteroid dehydrogenase as carbonyl reductase of the tobacco-specific nitrosamine 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone. *Eur J Biochem* 238:484-489
116. **Mazzocchi G, Rossi GP, Malendowicz LK, Champion HC, Nussdorfer GG** 2000 Endothelin-1[1-31], acting as an ETA-receptor selective agonist, stimulates proliferation of cultured rat zona glomerulosa cells. *FEBS Letters* 487:194-198
117. **Mazzocchi G, Rossi GP, Neri G, Malendowicz LK, Albertin G, Nussdorfer GG** 1998  $11\beta$ -Hydroxysteroid dehydrogenase expression and activity in the human adrenal cortex. *FASEB J* 12:1533-1539
118. **Michael AE, Evagelatou M, Norgate DP, Clarke RJ, Antoniow JW, Stedman BA, Brennan A, Welsby R, Bujalska I, Stewart PM, Cooke BA** 1997 Isoforms of  $11\beta$ -hydroxysteroid dehydrogenase in human granulosa-lutein cells. *Mol Cell Endocrinol* 132:43-52

119. **Moisan MP, Edwards CR, Seckl JR** 1992 Differential promoter usage by the rat 11 beta-hydroxysteroid dehydrogenase gene. *Molecular Endocrinology* 6:1082-1087
120. **Moisan MP, Edwards CR, Seckl JR** 1992 Ontogeny of 11 beta-hydroxysteroid dehydrogenase in rat brain and kidney. *Endocrinology* 130:400-404
121. **Moisan MP, Seckl JR, Edwards CR** 1990 11 beta-hydroxysteroid dehydrogenase bioactivity and messenger RNA expression in rat forebrain: localization in hypothalamus, hippocampus, and cortex. *Endocrinology* 127:1450-1455
122. **Molhuysen JA, Gerbrandy J, De Vries LA, De Jong JC, Lenstra JB, Turner KP, Borst JGG** 1950 A liquorice extract with Deoxycortone-like action. *Lancet* 381-386
123. **Monder C, Lakshmi V** 1989 Evidence for kinetically distinct forms of corticosteroid 11 beta-dehydrogenase in rat liver microsomes. *Journal of Steroid Biochemistry* 32:77-83
124. **Monder C, Shackleton CH** 1984 11 beta-Hydroxysteroid dehydrogenase: fact or fancy? *Steroids* 44:383-417
125. **Monder C, Stewart PM, Lakshmi V, Valentino R, Burt D, Edwards CR** 1989 Licorice inhibits corticosteroid 11 beta-dehydrogenase of rat kidney and liver: in vivo and in vitro studies. *Endocrinology* 125:1046-1053
126. **Moore JS, Monson JP, Kaltsas G, Putignano P, Wood PJ, Sheppard MC, Besser GM, Taylor NF, Stewart PM** 1999 Modulation of 11 $\beta$ -hydroxysteroid dehydrogenase isozymes by growth hormone and insulin-like growth factor: *In vivo* and *in vitro* studies. *Journal of Clinical Endocrinology and Metabolism* 84:4172-4177
127. **Morita H, Zhou MY, Foecking MF, Gomez-Sanchez EP, Cozza EN, Gomez-Sanchez CE** 1996 11 $\beta$ -Hydroxysteroid dehydrogenase type 2 complementary deoxyribonucleic acid stably transfected into Chinese hamster ovary cells: Specific inhibition by 11  $\alpha$ -hydroxyprogesterone. *Endocrinology* 137:2308-2314
128. **Morris DJ, Davis E, Latif SA** 1990 Licorice, Tobacco chewing, and Hypertension. *Lancet* 322:849-850
129. **Morris DJ, Semafuko WE, Latif SA, Vogel B, Grimes CA, Sheff MF** 1992 Detection of glycyrrhetic acid-like factors (GALFs) in human urine. *Journal of Biological Chemistry* 20:356-360
130. **Morris DJ, Souness GW** 1990 The 11 beta-OHSD inhibitor, carbenoxolone, enhances Na retention by aldosterone and 11-deoxycorticosterone. *American Journal of Physiology* 258:F756-9

131. **Mune T, Rogerson FM, Nikkilä H, Agarwal AK, White PC** 1995 Human hypertension caused by mutations in the kidney isozyme of 11 $\beta$ -hydroxysteroid dehydrogenase. *Nature Genetics* 10:394-399
132. **Murphy BE** 1981 Demonstration of novel compounds in human fetal tissues and a consideration of their possible role in parturition. *Am J Obstet Gynecol* 139:353-358
133. **Nacharaju VL, Muneyirci-Delale O, Khan N** 1997 Presence of 11 $\beta$ -hydroxysteroid dehydrogenase in human semen: Evidence of correlation with semen characteristics. *Steroids* 62:311-314
134. **Napolitano A, Voice MW, Edwards CRW, Seckl JR, Chapman KE** 1998 11 $\beta$ -hydroxysteroid dehydrogenase 1 in adipocytes: Expression is differentiation-dependent and hormonally regulated. *Journal of Steroid Biochemistry and Molecular Biology* 64:251-260
135. **Naray Fejes Toth A, Fejes Toth G** 1994 11 beta-Hydroxysteroid dehydrogenase in renal collecting duct cells. *Steroids* 59:105-110
136. **Naray Fejes Toth A, Watlington CO, Fejes Toth G** 1991 11 beta-Hydroxysteroid dehydrogenase activity in the renal target cells of aldosterone. *Endocrinology* 129:17-21
137. **Nath N, Lakshmi V, Rosenthal JC** 1993 Presence of 11 beta-hydroxysteroid dehydrogenase enzyme in the human prostate tumor cell line LNCaP. *Prostate* 23:225-233
138. **Náray-Fejes-Tóth A, Fejes-Tóth G** 1996 Subcellular localization of the type 2 11 $\beta$ -hydroxysteroid dehydrogenase - A green fluorescent protein study. *Journal of Biological Chemistry* 271:15436-15442
139. **Náray-Fejes-Tóth A, Fejes-Tóth G** 1998 Extranuclear localization of endogenous 11 $\beta$  -hydroxysteroid dehydrogenase-2 in aldosterone target cells. *Endocrinology* 139:2955-2959
140. **Nussey SS, Page SR, Peterson DB, Byrne J, Crosby SR, White A, Ang VT, Jackson R, Jenkins JS** 1991 Corticotrophin releasing hormone (CRH1-41) stimulates the secretion of adrenocorticotrophin, vasopressin and oxytocin but not adrenocorticotrophin precursors: evidence from petrosal sinus sampling in man. *Clin Endocrinol Oxf* 34:51-56
141. **Nwe KHH, Morat PB, Khalid BAK** 1997 Opposite effects of sex steroids on 11 $\beta$ -hydroxysteroid dehydrogenase activity in the normal and adrenalectomized rat testis. *Gen Pharmacol* 28:661-664

142. **Obeyesekere VR, Ferrari P, Andrews RK, Wilson RC, New MI, Funder JW, Krozowski ZS** 1995 The R337C mutation generates a high Km 11 $\beta$ -hydroxysteroid dehydrogenase type II enzyme in a family with apparent mineralocorticoid excess. *Journal of Clinical Endocrinology and Metabolism* 80:3381-3383
143. **Ocker M, Sachse R, Rico A, Hensen J** 2000 PCR-SSCP analysis of human adrenocortical adenomas: absence of K-ras gene mutations. *Exp Clin Endocrinol Diabetes* 108:513-514
144. **Page N, Warriar N, Govindan MV** 1994 11 beta-Hydroxysteroid dehydrogenase and tissue specificity of androgen action in human prostate cancer cell LNCaP. *Journal of Steroid Biochemistry and Molecular Biology* 49:173-181
145. **Pácha J, Miksik I, Lisa V, Pohlova I** 1997 Hormonal regulation of intestinal 11 $\beta$ -hydroxysteroid dehydrogenase. *Life Sciences* 61:2391-2396
146. **Pácha J, Miksík I** 1996 11 $\beta$ -hydroxysteroid dehydrogenase in developing rat intestine. *Journal of Endocrinology* 148:561-566
147. **Pepe GJ, Burch MG, Albrecht ED** 1999 Expression of the 11 $\beta$ -hydroxysteroid dehydrogenase types 1 and 2 proteins in human and baboon placental syncytiotrophoblast. *Placenta* 20:575-582
148. **Pepe GJ, Davies WA, Dong KW, Luo H, Albrecht ED** 1999 Cloning of the 11 $\beta$ -hydroxysteroid dehydrogenase (11 $\beta$ -HSD)- 2 gene in the baboon: effects of estradiol on promoter activity of 11 $\beta$ -HSD-1 and -2 in placental JEG-3 cells. *Biochim Biophys Acta Gene Struct Expression* 1444:101-110
149. **Perschel FH, Buhler H, Hierholzer K** 1991 Bile acids and their amidates inhibit 11 beta-hydroxysteroid dehydrogenase obtained from rat kidney. *Pflugers Arch* 418:538-543
150. **Petrelli MD, Lim-Tio SS, Condon J, Hewison M, Stewart PM** 1997 Differential expression of nuclear 11 $\beta$ -hydroxysteroid dehydrogenase type 2 in mineralocorticoid receptor positive and negative tissues. *Endocrinology* 138:3077-3080
151. **Phillipov G, Palermo M, Shackleton CHL** 1996 Apparent cortisone reductase deficiency: A unique form of hypercortisolism. *Journal of Clinical Endocrinology and Metabolism* 81:3855-3860
152. **Ponz de Leon M, Loria P, Carulli N, Murphy GM, Dowling RH** 1980 Intestinal solubilization, absorption, pharmacokinetics and bioavailability of chenodeoxycholic acid. *Eur J Clin Invest* 10:261-271

153. **Qi C, Zhu Y, Reddy JK** 2000 Peroxisome proliferator-activated receptors, coactivators, and downstream targets. *Cell Biochem Biophys* 32 Spring:187-204
154. **Qi C, Zhu Y, Reddy JK** 2000 Peroxisome proliferator-activated receptors, coactivators, and downstream targets. *Cell Biochem Biophys* 32 Spring:187-204
155. **Quinkler M, Kosmale B, Bähr V, Oelkers W, Diederich S** 1997 Evidence for isoforms of 11 $\beta$ -hydroxysteroid dehydrogenase in the liver and kidney of the guinea pig. *Journal of Endocrinology* 153:291-298
156. **Quirk SJ, Slattery J, Funder JW** 1990 11 beta-hydroxysteroid dehydrogenase activity in the mammary gland. *Journal of Steroid Biochemistry* 35:623-625
157. **Rajan V, Chapman KE, Lyons V, Jamieson P, Mullins JJ, Edwards CRW, Seckl JR** 1995 Cloning, sequencing and tissue-distribution of mouse 11 $\beta$ -hydroxysteroid dehydrogenase-1 cDNA. *Journal of Steroid Biochemistry and Molecular Biology* 52:141-147
158. **Raven PW, Checkley SA, Taylor NF** 1995 Extra-adrenal effects of metyrapone include inhibition of the 11-oxoreductase activity of 11 $\beta$ -hydroxysteroid dehydrogenase: A model for 11-HSD I deficiency. *Clin Endocrinol (Oxf)* 43:637-644
159. **Reeves WB** 1995 NAD-dependent 11 $\beta$ -hydroxysteroid dehydrogenase in cultured human colonic epithelial cells. *American Journal of Physiology: Cell Physiology* 268:C1467-C1473
160. **Reichardt HM, Tuckermann JP, Bauer A, Schutz G** 2000 Molecular genetic dissection of glucocorticoid receptor function in vivo. *Z Rheumatol* 59 Suppl 2:1-5
161. **Reidenberg MM** 2000 Environmental inhibition of 11beta-hydroxysteroid dehydrogenase. *Toxicology* 144:107-111
162. **Ricketts ML, Stewart PM** 1999 Regulation of 11 $\beta$ -hydroxysteroid dehydrogenase type 2 by diuretics and the renin-angiotensin-aldosterone axis. *Clin Sci* 96:669-675
163. **Ricketts ML, Verhaeg JM, Bujalska I, Howie AJ, Rainey WE, Stewart PM** 1998 Immunohistochemical localization of type 1 11 $\beta$ -hydroxysteroid dehydrogenase in human tissues. *Journal of Clinical Endocrinology and Metabolism* 83:1325-1335
164. **Riddle MC, McDaniel PA** 1993 Acute reduction of renal 11 $\beta$ -hydroxysteroid dehydrogenase activity by several antinatriuretic stimuli. *Metabolism* 42:1370-1374

165. **Riddle MC, McDaniel PA** 1994 Renal 11 beta-hydroxysteroid dehydrogenase activity is enhanced by ramipril and captopril. *Journal of Clinical Endocrinology and Metabolism* 78:830-834
166. **Roland BL, Li KXZ, Funder JW** 1995 Hybridization histochemical localization of 11 $\beta$ -hydroxysteroid dehydrogenase type 2 in rat brain. *Endocrinology* 136:4697-4700
167. Rusvai E, Naray Fejes Toth A 1993 A new isoform of 11 beta-hydroxysteroid dehydrogenase in aldosterone target cells. *Journal of Biological Chemistry* 268: 10717-10720
168. **Sampath-Kumar R, Yu M, Khalil MW, Yang K** 1997 Metyrapone is a competitive inhibitor of 11 $\beta$ -hydroxysteroid dehydrogenase type 1 reductase. *Journal of Steroid Biochemistry and Molecular Biology* 62:195-199
169. **Sang GW, Lorenzo B, Reidenberg MM** 1991 Inhibitory effects of gossypol on corticosteroid 11-beta- hydroxysteroid dehydrogenase from guinea pig kidney: a possible mechanism for causing hypokalemia. *Journal of Steroid Biochemistry and Molecular Biology* 39:169-176
170. **Savory JG, Prefontaine GG, Lamprecht C, Liao M, Walther RF, Lefebvre YA, Hache RJ** 2001 Glucocorticoid Receptor Homodimers and Glucocorticoid-Mineralocorticoid Receptor Heterodimers Form in the Cytoplasm through Alternative Dimerization Interfaces. *Mol Cell Biol* 21:781-793
171. **Seckl JR, Dickson KL, Yates C, Fink G** 1991 Distribution of glucocorticoid and mineralocorticoid receptor messenger RNA expression in human postmortem hippocampus. *Brain Res* 561:332-337
172. **Shah JR, Laredo J, Hamilton BP, Hamlyn JM** 1999 Effects of angiotensin II on sodium potassium pumps, endogenous ouabain, and aldosterone in bovine zona glomerulosa cells. *Journal of Biological Chemistry* 33 Suppl.:373-377
173. **Shimojo M, Ricketts ML, Petrelli MD, Moradi P, Johnson GD, Bradwell AR, Hewison M, Howie AJ, Stewart PM** 1997 Immunodetection of 11 $\beta$ -hydroxysteroid dehydrogenase type 2 in human mineralocorticoid target tissues: Evidence for nuclear localization. *Endocrinology* 138:1305-1311
174. **Shimojo M, Whorwood CB, Stewart PM** 1996 11 $\beta$ -Hydroxysteroid dehydrogenase in the rat adrenal. *J Mol Endocrinol* 17:121-130
175. **Siebe H, Baude G, Lichtenstein I, Wang D, Buhler H, Hoyer GA, Hierholzer K** 1993 Metabolism of dexamethasone: sites and activity in mammalian tissues. *Renal Physiol Biochem* 16:79-88



176. **Song D, Lorenzo B, Reidenberg MM** 1992 Inhibition of 11 beta-hydroxysteroid dehydrogenase by gossypol and bioflavonoids. *J Lab Clin Med* 120:792-797
177. **Soro A, Ingram MC, Tonolo G, Glorioso N, Fraser R** 1995 Evidence of coexisting changes in 11 $\beta$ -hydroxysteroid dehydrogenase and 5 $\beta$ -reductase activity in subjects with untreated essential hypertension. *Journal of Biological Chemistry* 25:67-70
178. **Souness GW, Latif SA, Laurenzo JL, Morris DJ** 1995 11 $\alpha$ - and 11 $\beta$ -hydroxyprogesterone, potent inhibitors of 11 $\beta$ -hydroxysteroid dehydrogenase (isoforms 1 and 2), confer marked mineralocorticoid activity on corticosterone in the ADX rat. *Endocrinology* 136:1809-1812
179. **Souness GW, Myles K, Morris DJ** 1994 Other physiological considerations of protective mechanisms of mineralocorticoid action. *Steroids* 59:142-147
180. **Stewart PM** 1996 11 $\beta$ -hydroxysteroid dehydrogenase: Implications for clinical medicine. *Clin Endocrinol (Oxf)* 44:493-499
181. **Stewart PM, Mason JI** 1995 Cortisol to cortisone: Glucocorticoid to mineralocorticoid. *Steroids* 60:143-146
182. **Stewart PM, Murry BA, Mason JI** 1994 Type 2 11 beta-hydroxysteroid dehydrogenase in human fetal tissues. *Journal of Clinical Endocrinology and Metabolism* 78:1529-1532
183. **Stewart PM, Walker BR, Holder G, O'Halloran D, Shackleton CHL** 1995 11 $\beta$ -hydroxysteroid dehydrogenase activity in Cushing's syndrome: Explaining the mineralocorticoid excess state of the ectopic adrenocorticotropin syndrome. *Journal of Clinical Endocrinology and Metabolism* 80:3617-3620
184. **Stewart PM, Wallace AM, Atherden SM, Shearing CH, Edwards CR** 1990 Mineralocorticoid activity of carbenoxolone: contrasting effects of carbenoxolone and liquorice on 11 beta-hydroxysteroid dehydrogenase activity in man. *Clin Sci Colch* 78:49-54
185. **Stewart PM, Wallace AM, Valentino R, Burt D, Shackleton CH, Edwards CR** 1987 Mineralocorticoid activity of liquorice: 11-beta-hydroxysteroid dehydrogenase deficiency comes of age. *Lancet* 2:821-824
186. **Stewart PM, Whorwood CB, Mason JI** 1995 Type 2 11 $\beta$ -hydroxysteroid dehydrogenase in foetal and adult life. *Journal of Steroid Biochemistry and Molecular Biology* 55:465-471

187. **Sun K, Yang KP, Challis JRG** 1998 Regulation of 11 $\beta$ -hydroxysteroid dehydrogenase type 2 by progesterone, estrogen, and the cyclic adenosine 5'-monophosphate pathway in cultured human placental and chorionic trophoblasts. *Biol Reprod* 58:1379-1384
188. **Tannin GM, Agarwal AK, Monder C, New MI, White PC** 1991 The human gene for 11 beta-hydroxysteroid dehydrogenase. Structure, tissue distribution, and chromosomal localization. *Journal of Biological Chemistry* 266:16653-16658
189. **Teelucksingh S, Mackie AD, Burt D, McIntyre MA, Brett L, Edwards C** 1990 Potentiation of hydrocortisone activity in skin by glycyrrhetic acid [see comments]. *Lancet* 335:1060-1063
190. **Tetsuka M, Milne M, Simpson GE, Hillier SG** 1999 Expression of 11 $\beta$ -hydroxysteroid dehydrogenase, glucocorticoid receptor, and mineralocorticoid receptor genes in rat ovary. *Biol Reprod* 60:330-335
191. **Tetsuka M, Thomas FJ, Thomas MJ, Anderson RA, Mason JI, Hillier SG** 1997 Differential expression of messenger ribonucleic acids encoding 11 $\beta$ -hydroxysteroid dehydrogenase types 1 and 2 in human granulosa cells. *Journal of Clinical Endocrinology and Metabolism* 82:2006-2009
192. **Tomlinson JW, Moore J, Cooper MS, Bujalska I, Shahmanesh M, Burt C, Strain A, Hewison M, Stewart PM** 2001 Regulation of Expression of 11beta-Hydroxysteroid Dehydrogenase Type 1 in Adipose Tissue: Tissue-Specific Induction by Cytokines. *Endocrinology* 142:1982-1989
193. **Toogood AA, Taylor NF, Shalet SM, Monson JP** 2000 Modulation of cortisol metabolism by low-dose growth hormone replacement in elderly hypopituitary patients [In Process Citation]. *J Clin Endocrinol Metab* 85:1727-1730
194. **Topper YJ, Freeman CS** 1980 Multiple hormone interactions in the developmental biology of the mammary gland. *Physiol Rev* 60:1049-1106
195. **Tseng L, Zhu HH** 1997 Regulation of progesterone receptor messenger ribonucleic acid by progestin in human endometrial stromal cells. *Biol Reprod* 57:1360-1366
196. **Tsujita Y, Iwai N, Katsuya T, Higaki J, Ogihara T, Tamaki S, Kinoshita M, Mannami T, Ogata J, Baba S** 2001 Lack of association between genetic polymorphism of CYP11B2 and hypertension in Japanese: the Suita Study. *Hypertens Res* 24:105-109
197. **Ulick S, Wang JZ, Blumfeld JD, Pickering TG** 1992 Cortisol inactivation overload: A mechanism of mineralocorticoid hypertension in the ectopic adrenocorticotropin syndrome. *jc* 74:963-967

198. **Voice MW, Seckl JR, Edwards CRW, Chapman KE** 1996  $11\beta$ -Hydroxysteroid dehydrogenase type 1 expression in 2S FAZA hepatoma cells is hormonally regulated: A model system for the study of hepatic glucocorticoid metabolism. *Biochem J* 317:621-625
199. **Walker BR, Campbell JC, Fraser R, Stewart PM, Edwards CR** 1992 Mineralocorticoid excess and inhibition of 11 beta- hydroxysteroid dehydrogenase in patients with ectopic ACTH syndrome. *Clin Endocrinol Oxf* 37:483-492
200. **Walker BR, Stewart PM, Shackleton CH, Padfield PL, Edwards CR** 1993 Deficient inactivation of cortisol by 11 beta-hydroxysteroid dehydrogenase in essential hypertension. *Clin Endocrinol Oxf* 39:221-227
201. **Walker BR, Williams BC, Edwards CRW** 1994 Regulation of  $11\beta$ -hydroxysteroid dehydrogenase activity by the hypothalamic-pituitary-adrenal axis in the rat. *Journal of Endocrinology* 141:467-472
202. **Walker BR, Yau JL, Brett LP, Seckl JR, Monder C, Williams BC, Edwards CR** 1991 11 beta-hydroxysteroid dehydrogenase in vascular smooth muscle and heart: implications for cardiovascular responses to glucocorticoids. *Endocrinology* 129:3305-3312
203. **Weiler PJ, Wiebe JP** 2000 Plasma membrane receptors for the cancer-regulating progesterone metabolites, 5alpha-pregnane-3,20-dione and 3alpha-hydroxy-4-pregnen-20-one in MCF-7 breast cancer cells. *Biochemical and Biophysical Research Communications* 272:731-737
204. **White PC, Mune T, Agarwal AK** 1997  $11\beta$ -hydroxysteroid dehydrogenase and the syndrome of apparent mineralocorticoid excess. *Endocr Rev* 18:135-156
205. **White PC, Mune T, Rogerson FM, Kayes KM, Agarwal AK** 1997 Molecular analysis of  $11\beta$ -hydroxysteroid dehydrogenase and its role in the syndrome of apparent mineralocorticoid excess. *Steroids* 62:83-88
206. **Whorwood CB, Franklyn JA, Sheppard MC, Stewart PM** 1992 Tissue localization of 11 beta-hydroxysteroid dehydrogenase and its relationship to the glucocorticoid receptor. *Journal of Steroid Biochemistry and Molecular Biology* 41:21-28
207. **Whorwood CB, Sheppard MC, Stewart PM** 1993 Licorice inhibits 11 beta-hydroxysteroid dehydrogenase messenger ribonucleic acid levels and potentiates glucocorticoid hormone action. *Endocrinology* 132:2287-2292
208. **Whorwood CB, Sheppard MC, Stewart PM** 1993 Tissue specific effects of thyroid hormone on 11 beta- hydroxysteroid dehydrogenase gene expression. *Journal of Steroid Biochemistry and Molecular Biology* 46:539-547

209. **Williams SM, Addy JH, Phillips JA, III, Dai M, Kpodonu J, Afful J, Jackson H, Joseph K, Eason F, Murray MM, Epperson P, Aduonum A, Wong LJ, Jose PA, Felder RA** 2000 Combinations of variations in multiple genes are associated with hypertension. *Hypertension* 36:2-6
210. **Wu PS, Zhang YS, Liu YL, Wang XA, Guo ZG, Zhang YH, Liang XW, Lai WY** 1999 Effects of glycyrrhizin on production of vascular aldosterone and corticosterone. *Horm Res* 51:189-192
211. **Wyse BD, Linas SL, Thekkumkara TJ** 2000 Functional role of a novel cis-acting element (GAGA box) in human type-1 angiotensin II receptor gene transcription. *J Mol Endocrinol* 25:97-108
212. **Yang K** 1995 Ovine 11beta-hydroxysteroid dehydrogenase: From gene to function. *Endocrine Research* 21:367-377
213. **Yang K, Matthews SG, Challis JRG** 1995 Developmental and glucocorticoid regulation of pituitary 11 $\beta$ -hydroxysteroid dehydrogenase 1 gene expression in the ovine fetus and lamb. *Journal of Molecular Endocrinology* 14:109-116
214. **Yang K, Smith CL, Dales D, Hammond GL, Challis JR** 1992 Cloning of an ovine 11 beta-hydroxysteroid dehydrogenase complementary deoxyribonucleic acid: tissue and temporal distribution of its messenger ribonucleic acid during fetal and neonatal development. *Endocrinology* 131:2120-2126
215. **Yang K, Yu M** 1994 Evidence for distinct isoforms of 11 beta-hydroxysteroid dehydrogenase in the ovine liver and kidney. *Journal of Steroid Biochemistry and Molecular Biology* 49:245-250
216. **Yang X, Li X, Wu P, Meng Y, Li S, Lai W** 2000 CYP11B2 Expression in Rat Liver and the Effect of Spironolactone on Hepatic Fibrogenesis. *FASEB J* 14:288-293
217. **Zhang YD, Lorenzo B, Reidenberg MM** 1994 Inhibition of 11 beta-hydroxysteroid dehydrogenase obtained from guinea pig kidney by furosemide, naringenin and some other compounds. *Journal of Steroid Biochemistry and Molecular Biology* 49:81-85
218. **Zhou MY, Gomez-Sanchez EP, Foeking MF, Gomez-Sanchez CE** 1995 Cloning and expression of the rat adrenal cytochrome P-450 11B3 (CYP11B3) enzyme cDNA: Preferential 18-hydroxylation over 11 $\beta$ -hydroxylation of DOC. *Mol Cell Endocrinol* 114:137-145