

LIST OF CONTENTS

JANUARY

Editorial Addresses	i
Steroid Nomenclature	v
Maurice N. Treacy, Fergus Ryan and Finian Martin	1 Functional glucocorticoid inducible enhancer activity in the 5'-flanking sequences of the rat growth hormone gene
J. Katz, M. Levitz, S. S. Kadner and T. H. Finlay	17 Estradiol esters can replace 17 β -estradiol in the stimulation of DNA and esterase synthesis by MCF-7 cells: a possible role for the estrogen-sensitive MCF-7 cell esterase
Werner Peter, Hans-Joachim Brüller, Gert Vriend, Miguel Beato and Guntram Suske	27 Identification of residues essential for progesterone binding to uteroglobin by site-directed mutagenesis
Kun Chae, Stuart H. Johnston and Kenneth S. Korach	35 Multiple estrogen binding sites in the uterus: stereochemistry of receptor and non-receptor binding of diethylstilbestrol and its metabolites
Kazys Kraujelis, Andronė Ulinskaitė and Vaidevutis Melius	43 Transcortin in rat kidney: subcellular distribution of transcortin-synthesizing polyribosomes
Richard P. Michael, Robert W. Bonsall and Doris Zumper	49 Medroxyprogesterone acetate and the nuclear uptake of testosterone and its metabolites by brain, pituitary gland and genital tract in male cynomolgus monkeys
Stanley Ulick, Connie K. Chan and Jennifer Z. Wang	59 Measurement of 4 urinary C-18 oxygenated corticosteroids by stable isotope dilution mass fragmentography
Shuk-mei Ho	67 Prostatic androgen receptor and plasma testosterone levels in streptozotocin-induced diabetic rats
N. S. E. Sargent and F. K. Habib	73 Partial purification of human prostatic 5 α -reductase (3-oxo-5 α -steroid:NADP $^+$ 4-ene-oxido-reductase; EC 1.3.1.22) in a stable and active form
Mikio Namiki, Kiyoshi Yokokawa, Akihiko Okuyama, Eitetsu Koh, Hisakazu Kiyohara, Makoto Nakao, Saburo Sakoda, Keishi Matsumoto and Takao Sonoda	79 Evidence for the presence of androgen receptors in human Leydig cells
E. Vanluchene, A. Hinting, M. Dhont, P. De Sutter, G. Van Maele and D. Vandekerckhove	83 Follicular fluid steroid levels in relation to oocyte maturity and <i>in vitro</i> fertilization
J. Garza-Flores, M. Menjivar, M. Cardenas, M. Reynoso, G. A. Garcia and G. Pérez Palacios	89 Further studies on the antigonadotropic mechanism of action of norethisterone
Shizuo Nakajin, Kazuaki Takahashi and Masato Shinoda	95 Inhibitory effect of some imidazole antifungal compounds on the synthesis of 16-ene-C ₁₉ -steroid catalyzed by pig testicular microsomes
Armando Menendez-Pelaez, Gerald R. Buzzell, Carmen Rodriguez and Russel J. Reiter	101 Indole and porphyrin content of the Syrian hamster Harderian glands during the proestrous and estrous phases of the estrous cycle
Takao Nakamura, Miki Funabashi and Yuichi Tanabe	105 <i>In vitro</i> studies on steroidogenesis in the presence of pregnenolone as precursors by the follicular tissue of the domestic fowl (<i>Gallus domesticus</i>)

N. Terada, R. Yamamoto, T. Yamamoto, Y. Nishizawa, H. Taniguchi, N. Terakawa, Y. Kitamura and K. Matsumoto	111 Effect of dexamethasone on uterine cell death
<i>Short Communication</i> Marija Žakelj-Mavrič and Igor Belič	117 Induction of steroidal 11β -hydroxylase of <i>Cochliobolus lunatus</i>
Forthcoming Papers	I
Announcements	II
 FEBRUARY	
Borbála Vincze, István Pállyi, Dóra Daubner, Tibor Kremer, Irene Számel, István Bodrogi, János Sugár, János Sepřodí, Imre Mező, István Teplán and Sándor Eckhardt	119 Influence of luteinizing hormone-releasing hormone agonists on human mammary carcinoma cell lines and their xenografts
Mark D. Bergman, Katarzyna Karelus, Leda S. Felicio and James F. Nelson	127 Age-related alterations in estrogen receptor dynamics are independent of cycling status in middle-aged C57BL/6J mice
B. Koffman, K. J. Modarress, T. Beckerman and N. Bashirelahi	135 Evidence for involvement of tyrosine in estradiol binding by rat uterus estrogen receptor
M. Jüptner, A. Jussofie and C. Hiemke	141 Effects of ovariectomy and steroid replacement on GABA _A receptor binding in female rat brain
P. Druzgala, G. Hochhaus and N. Bodor	149 Soft drugs—10. Blanching activity and receptor binding affinity of a new type of glucocorticoid: loteprednol etabonate
Catherine Thériault and Fernand Labrie	155 Multiple steroid metabolic pathways in ZR-75-1 human breast cancer cells
Catherine Bijault and Louis Dehennin	165 Steroid 21-hydroxylase activity in equine ovarian follicles evidenced by isotope dilution-mass spectrometry
Antonio Sanchez-Bueno, Satoru Watanabe, Maria Jose Sancho and Taiichi Saito	173 Studies of conformation and interaction of the cyclohexenone and acetyl group of progesterone with liposomes
J. A. A. Geelen, G. H. Deckers, J. T. H. van der Wardt, H. J. J. Loosen, L. J. W. Tax and H. J. Kloosterboer	181 Selection of 19-(ethylidithio)-androst-4-ene-3,17-dione (ORG 30958): a potent aromatase inhibitor <i>in vivo</i>
J. Saumande	189 Culture of bovine granulosa cells in a chemically defined serum-free medium: the effect of insulin and fibronectin on the response to FSH
Jane W. Turner, Mary F. Ruh, David T. Ward and Thomas S. Ruh	197 Effects of antiestrogen versus antiprogestin on transformed and non-transformed steroid receptors
P. Shirley Li	205 Effect of cortisol on testosterone production by immature pig Leydig cells
M. M. Weber, A. Will, B. Adelmann and D. Engelhardt	213 Effect of ketoconazole on human ovarian C _{17,20} -desmolase and aromatase
D. J. Back, R. Houlgrave, J. F. Tjia, S. Ward and M. L'E. Orme	219 Effect of the progestogens, gestodene, 3-keto desogestrel, levonorgestrel, norethisterone and norgestimate on the oxidation of ethinyloestradiol and other substrates by human liver microsomes
Isao Morimoto, Sumiya Eto, Shunji Inoue, Motomori Izumi, Shigenobu Nagataki, Yutaka Saito and Tanetoshi Hara	227 DHT formation and degradation in cultured human skin fibroblasts: DHT accumulation in the genital skin
J. C. Hoschowan, M. E. L. Cardoso, D. M. Commrong and J. A. Andrade	233 Biosynthesis of testicular steroids in the immature, adult and senescent guinea-pig

N. R. Bartlett and R. Hobkirk	241	Estrogen sulfotransferase and 17 β -hydroxysteroid dehydrogenase activities in guinea-pig chorion through gestation
Kevin E. Smith, Shahid A. Latif and David N. Kirk	249	Microbial transformation of steroids—VII. Hydroxylation of progesterone by extracts of <i>Phycomyces blakesleeanus</i>
William E. Watkins and Thomas L. Glass	257	Characteristics of 16-dehydroprogesterone reductase in cell extracts of the intestinal anaerobe, <i>Eubacterium</i> sp. strain 144
<i>Short Communication</i>		
Robin E. Smith and John W. Funder	265	Renal 11 β -hydroxysteroid dehydrogenase activity: effects of age, sex and altered hormonal status
Book Reviews	269	
Forthcoming Papers	I	
Announcement	II	

MARCH

Iain J. McEwan, Hans-Peter Saluz and Jean-Pierre Jost	275	<i>In vivo</i> and <i>in vitro</i> protein-DNA interactions at the distal oestrogen response element of the chicken vitellogenin gene: evidence for the same protein binding to this sequence in hen and rooster liver
W. Schneider, C. Ramachandran, P. G. Satyaswaroop and G. Shyamala	285	Murine progesterone receptor exists predominantly as the 83-kilodalton 'A' form
C. Pelissero, B. Bennetau, P. Babin, F. Le Menn and J. Dunogues	293	The estrogenic activity of certain phytoestrogens in the Siberian sturgeon <i>Acipenser baeri</i>
M. E. Hayes, D. Bayley, M. Drayson, A. J. Fremont, J. Denton, M. Davies and E. B. Mawer	301	Metabolism of 25-hydroxyvitamin D ₃ to 24,25-dihydroxyvitamin D ₃ by blood derived macrophages from a patient with alveolar rhabdomyosarcoma during short-term culture and 1 α ,25-dihydroxyvitamin D ₃ after long-term culture
Bianca Marchetti, Paulo G. Spinola, Georges Pelletier and Fernand Labrie	307	A potential role for catecholamines in the development and progression of carcinogen-induced mammary tumors: hormonal control of β -adrenergic receptors and correlation with tumor growth
Marie-Joséphe Dembélé-Duchesne, Eric Badia, Maryse Etienne-Julian and Jean-Paul Capony	321	Identification and tissue localization of an eosinophil 17 kDa protein accumulating in rat uterus upon estradiol treatment
Hiroshi Murase, Keigo Yasuda, Leilani B. Mercado-Asis, Akihiro Mori, Takeshi Shimada, Tomoatsu Mune, Hiroyuki Morita, Nobuyasu Noritake, Noriyoshi Yamakita and Kiyoji Miura	331	19-Hydroxyandrostenedione does not modulate [³ H]aldosterone binding to human mononuclear leucocytes and rat renal cytosol
Jamila El Jabri	339	Enzyme immunoassay for plasma estradiol using a monoclonal antibody
Mousa Alkhafaf, Alain Y. Propper and Gérard L. Adessi	345	Proliferation of guinea-pig uterine epithelial cells in serum-free culture conditions: effect of 17 β -estradiol, epidermal growth factor and insulin
Leonid Linberg, Jennifer Z. Wang, Byron H. Arison and Stanley Ulick	351	Synthesis of a deuterium-labeled cortisol for the study of its rate of 11 β -hydroxy dehydrogenation in man
H. Michna, Y. Nishino, M. R. Schneider, T. Louton and M. F. El Etreby	359	A bioassay for the evaluation of antiproliferative potencies of progesterone antagonists
Ramesh K. Chandolia, Gerhard F. Weinbauer, Hermann M. Behre and Eberhard Nieschlag	367	Evaluation of a peripherally selective antiandrogen (Casodex) as a tool for studying the relationship between testosterone and spermatogenesis in the rat
J. S. Kooner, J. D. Few, C. Y. Lee, G. M. Taylor and V. H. T. James	377	Investigation of the salivary 18-hydroxycorticosterone: aldosterone ratio in man using a direct assay

Ryoji Hiramatsu and Bruce C. Nicula	383	Uptake of erythrocyte-associated component of blood testosterone and corticosterone to rat brain
P. Holownia, E. J. Owen, R. Hampl, H. S. Jacobs and J. W. Honour	389	The determination of 11β -hydroxyandrostenedione in human follicular fluid and plasma
Forthcoming Papers	I	
Announcement	II	
Corrigenda	III	

APRIL

Jan E. Zielinski, Sham L. Pahuja, Janice M. Larner and Richard B. Hochberg	399	Estrogenic action of estriol fatty acid esters
A. Migliaccio, G. Castoria, A. de Falco, M. Di Domenico, M. Galdiero, E. Nola, P. Chambon and F. Auricchio	407	<i>In vitro</i> phosphorylation and hormone binding activation of the synthetic wild type human estradiol receptor
M. D. W. G. Krekels, W. Wouters, R. De Coster, R. Van Ginckel, A. Leonards and P. A. J. Janssen	415	Aromatase in the human choriocarcinoma JEG-3: inhibition by R 76 713 in cultured cells and in tumors grown in nude mice
C. S. Watson	423	Human estrogen receptor introduced into the <i>Xenopus</i> oocyte represses expression from an artificial frog estrogen response element
Bhagv R. Bhavnani and Alan H. Gerulath	433	Metabolism of [3 H]equilin in normal and malignant human endometrium and in endometrial adenocarcinoma transplanted into nude mice
W. Schänzer, H. Geyer and M. Donike	441	Metabolism of metandienone in man: identification and synthesis of conjugated excreted urinary metabolites, determination of excretion rates and gas chromatographic-mass spectrometric identification of bis-hydroxylated metabolites
Anthony G. H. Smals, Jos J. A. M. Weusten, Theo J. Benraad and Peter W. C. Kloppenborg	465	The HMG-CoA reductase inhibitor simvastatin suppresses human testicular testosterone synthesis <i>in vitro</i> by a selective inhibitory effect on 17-keto-steroid-oxidoreductase enzyme activity
Aldona Kasprzak, Piers Rebuffat, Paola G. Andreis, Giuseppina Mazzocchi and Gastone G. Nussdorfer	469	Effects of prolonged cysteamine administration on the rat adrenal cortex: evidence that endogenous somatostatin is involved in the control of the growth and steroidogenic capacity of zona glomerulosa
Mary E. Elliott, Heidi M. Jones, Steven Tomasko and Theodore L. Goodfriend	475	Sphingosine inhibits angiotensin-stimulated aldosterone synthesis
M. Es-souni, P. Bournot, J. P. Berlot and L. C. Ramirez	483	19-Hydroxylated steroids, new metabolites produced by the Y1 adrenal cell line
T. E. Chapman, G. P. B. Kraan, G. T. Nagel, B. G. Wolthers and N. M. Drayer	489	Measurement of the cortisol production rate in two sisters with 17 α -hydroxylase deficiency using [1,2,3- 13 C]cortisol and isotope dilution mass spectrometry
Stephen Madden and David J. Back	497	Metabolism of norgestimate by human gastrointestinal mucosa and liver microsomes <i>in vitro</i>
J. P. Wiebe, K. J. Barr and K. D. Buckingham	505	A radioimmunoassay for the regulatory allylic steroid, 3 α -hydroxy-4-pregn-20-one (3 α HP)
John A. Resko, Salah E. Abdelgadir and Peter B. Connolly with the technical assistance of Henry L. Stadelman	513	Androgen metabolism by hepatic and renal tissues of the fetal rhesus monkey

- Teruko Taketo, Jamilah Saeed,
Sylvie Roberge, Noboru Matsuo
and Samuel S. Koide
- 523 Regulation of testicular differentiation and testosterone production in the fetal mouse gonad *in vitro*

Short Communication

- Hideaki Takasaki,
Isamu Miyamori, Kunio Nagai,
Ryoyu Takeda, Hideo Mochizuki
and Masayuki Katagiri

Forthcoming Papers

- 533 Mitochondrial P-450 activities in aldosteronoma tissues

I

MAY*General Review*

- Beverley E. Pearson Murphy

- 537 Steroids and depression

- Javed Ashraf, Sarada Kumpali,
David Chilton and E. Brad Thompson

- 561 Cortivazol mediated induction of glucocorticoid receptor messenger ribonucleic acid in wild-type and dexamethasone-resistant human leukemic (CEM) cells

- B. Koffman, K. J. Modarress
and N. Bashirelahi

- 569 The effects of various serine protease inhibitors on estrogen receptor steroid binding

- Michèle Brochu, Huy Ong and
André De Léan

- 575 Sites of action of angiotensin II, atrial natriuretic factor and guanabenz, on aldosterone biosynthesis

- Koji Iida, Atsushi Imai and
Teruhiko Tamaya

- 583 Stimulatory effects of estrogen on gonadotropin-releasing hormone-induced phosphoinositide turnover in granulosa cells

- Makesh S. Jani, Shalla D. Telang
and Surendra S. Katayare

- 587 Effect of corticosterone treatment on energy metabolism in rat liver mitochondria

- Takahisa Hirose, Masafumi Koga,
Hirosi Saito, Haruhiko Koishara,
Satoru Sumitani, Soji Kasayama,
Keishi Matsumoto and Banzo Sato

- 593 Functional abnormality of glucocorticoid receptor in Shionogi carcinoma 115 cells as evidenced by gene transfer experiments

- Mario Marrero, Russell A. Prough,
Robert S. Putnam, Michael Bennett
and Leon Milewich

- 599 Inhibition of carbamoyl phosphate synthetase-I by dietary dehydroepiandrosterone

- Michael Murray

- 611 Microsomal cytochrome P450-dependent steroid metabolism in male sheep liver. Quantitative importance of 6 β -hydroxylation and evidence for the involvement of a P450 from the IIIA subfamily in the pathway

- Cor J. M. Arts, Carin A. R. L. Govers,
Henk van den Berg,
Mechteldis G. E. Wolters,
Piet van Leeuwen and
Jos H. H. Thijssen

- 621 *In vitro* binding of estrogens by dietary fiber and the *in vivo* apparent digestibility tested in pigs

- I. R. Sencill, S. Rahal
and R. Roberts

- 629 Corticosteroid side-chain oxidations—I. Structural effects on the excreted isotope ratios of 4-¹⁴C- and 21-³H-labelled corticosteroid metabolites in rabbit urine

- Danielle Goudreault and Robert Massé

- 639 Studies on anabolic steroids—6. Identification of urinary metabolites of stenbolone acetate (17β -acetoxy-2-methyl-5 α -androst-1-en-3-one) in human by gas chromatography/mass spectrometry

- Kenzo Matsuzaki, Koji Kimura,
Kiyoshi Kurokawa and
Tatsuo Miyazaki

- 657 Identification of aldosterone metabolites formed by A6 cells

Short Communication

- Debasis Ghosh, Mary Erman
and William L. Duax

- 663 Crystallization and preliminary diffraction analysis of cholesterol esterase from *Candida cylindracea*

Forthcoming Papers

I