Therapeutic Use of Ingenol Mebutate in Dermatology

Guest Editor

Günther F.L. Hofbauer, Zurich
In some respects actinic keratosis is the most common and best-known pathology in dermatology. Being such an ordinary pathology, actinic keratosis gives nevertheless insight into an extraordinary number of important biological and clinical processes. Actinic keratoses are found in significant numbers on the sun-exposed skin of Caucasians, especially those living in sun-bathed countries such as Australia, as two of the editors and a considerable number of the authors of this book do.

The authors who have contributed to this volume are researchers and clinicians discussing actinic keratosis across the whole spectrum – from epidemiology to immunology, from molecular biology to behavioral psychology – and of course pathologists and clinicians dealing with patients who experience the many manifestations of actinic keratoses. The fact that all these various aspects are considered renders this book valuable reading for scientists and clinicians alike.

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The fifth revised edition of this highly successful book presents the most extensive enhancement since Using and Understanding Medical Statistics was first published 30 years ago. Without question, the single greatest change has been the inclusion of source code, together with selected output, for the award-winning, open-source, statistical package known as R. This innovation has enabled the authors to de-emphasize formulae and calculations, and let software do all of the ‘heavy lifting.

This edition also introduces readers to several graphical statistical tools, such as Q-Q plots to check normality, residual plots for multiple regression models, funnel plots to detect publication bias in a meta-analysis and Bland-Altman plots for assessing agreement in clinical measurements. New examples that better serve the expository goals have been added to a half-dozen chapters. In addition, there are new sections describing exact confidence bands for the Kaplan-Meier estimator, as well as negative binomial and zero-inflated Poisson regression models for over-dispersed count data.

The end result is not only an excellent introduction to medical statistics, but also an invaluable reference for every discerning reader of medical research literature.
Contents

See the journal website for contents
Photodynamic Therapy (PDT) has become an important treatment modality in medical practice. New and exciting applications continue to emerge and the future of PDT looks brighter and brighter. Dermatologists and other health professionals around the world rely on its therapeutic effect for the treatment of actinic keratoses, non-melanoma skin cancers, acne vulgaris, and various other dermatologic conditions.

In this comprehensive yet concise book, world-renowned experts showcase all of the common, everyday uses of PDT in dermatologic offices. They also examine how this beneficial therapy can be utilized to its full capacity. The considerable knowledge presented here renders this publication an indispensable resource for all dermatologists and health professionals who offer their patients this effective, noninvasive procedure.

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- Photodynamic Therapy for Acne Vulgaris and Sebaceous Gland Hyperplasia: Taub, A.F.; Schieber, A.C.
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- How I Use Photodynamic Therapy with 5-Aminolevulinic Acid in My Clinical Practice: Gilbert, D.J.

Author Index/Subject Index
In the past decade research into skin pharmacology has rapidly developed with new and promising drugs and therapeutic concepts being introduced regularly. Recently, the use of nanoparticles for drug delivery in dermatology and cosmetology has become a topic of intensive research, yielding remarkable and in part surprising results. Another topic of current research is the use of tissue tolerable plasma in wound treatment. Stimulating not only wound healing processes but also the penetration of topically applied substances into the skin, this novel technique is expected to deliver very interesting results.

There are many open questions which reflect the importance of the subject and the need for an international scientific forum where they can be discussed in extenso. Dermatologists, pharmaceutical chemists, pharmacologists, toxicologists, and others interested in the subject are invited to contribute and to submit their best research work for publication in Skin Pharmacology and Physiology.

### Selected contributions

- **The Antimicrobial Peptides Psoriasin (S100A7) and Koebnersin (S100A15) Suppress Extracellular Matrix Production and Proliferation of Human Fibroblasts**: Gauglitz, G.G.; Bureik, D.; Zwicker, S.; Ruzicka, T.; Wolf, R. (Munich)
- **pH Influence on Antibacterial Efficacy of Common Antiseptic Substances**: Wiegand, C. (Jena); Abel, M. (Neuwied); Elsner, P.; Hipfer, U.-C. (Jena)
- **Metrics and Clinical Relevance of Percutaneous Penetration and Lateral Spreading**: Vieille-Petit, A. (San Francisco, Calif./Lyon); Blickenstaff, N.; Coman, G.; Maibach, H. (San Francisco, Calif.)
- **Novel in vitro Approaches for the Simulation and Analysis of Human Skin Wounds**: Planz, V.; Franzen, L.; Windbergs, M. (Saarbruecken)
- **An in vitro Skin Penetration Model for Compromised Skin: Estimating Penetration of Polyethylene Glycol [14C]-PEG-7 Phosphate**: Dey, S. (Cincinnati, Ohio); Rothe, H. (Tranent); Page, L. (Tranent); O’Connor, R.; Farahmand, S. (Cincinnati, Ohio); Toner, F. (Tranent); Marsh, R.; Wehmeyer, K.; Zhou, S. (Cincinnati, Ohio)
- **Porcine Ear Skin as a Biological Substrate for in vitro Testing of Sunscreen Performance**: Sohn, M.; Korn, V. (Muntenz); Imanidis, G. (Muntenz/Basel)
- **Skin Diseases Associated with the Depletion of Stratum Corneum Lipids and Stratum Corneum Lipid Substitution Therapy**: Sahle, F.F. (Halle (Saale)/Addis Ababa); Gebre-Mariam, T. (Addis Ababa); Dobner, B.; Wohlrab, J.; Neubert, R.H.H. (Halle (Saale))
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Selected contributions
- Pharmacokinetics of Macitentan in Caucasian and Japanese Subjects: The Influence of Ethnicity and Sex: Bruderer, S.; (Alicschwil); Marjason, J. (Herston, Qld.); Sidharta, P.N.; Dingemans, J. (Alicschwil)
- Effects of Interleukin-31 on MUC5AC Gene Expression in Nasal Allergic Inflammation: Shah, S.; Ishinaga, H.; Hou, B. (Tsukuba); Okano, M. (Okayama); Takeuchi, K. (Tsukuba)
- Statins in Low Doses Reduce VEGF and BFGF Serum Levels in Patients with Type 2 Diabetes Mellitus: Dworacki, M.; Krzyżanowska, E.; Wesołowska, A.; Borowska, M. (Poznań); Iskakova, S. (Aktobe); Dworacki, G. (Poznań)
- Tetramethylpyrazine Analogue CXC195 Protects against Cerebral Ischaemia/Reperfusion Injury in the Rat by an Antioxidant Action via Inhibition of NADPH Oxidase and iNOS Expression: Liu, H.; Wei, X.; Chen, L.; Liu, X.; Li, S.; Liu, X.; Zhang, X. (Jinan)
- O-Methylated Metabolite of 7,8-Dihydroxyflavone Activates TrkB Receptor and Displays Antidepressant Activity: Liu, X.; Qi, Q.; Xiao, G. (Atlanta, Ga.); Li, J.; Luo, M.J.; Ye, K. (Atlanta, Ga.)
- Neuronal Mechanisms and the Treatment of Motion Sickness: Schmäl, F. (Greven)

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