ORGANIZING COMMITTEE

Harold A. Harvey
Allan Lipton
Richard J. Santen

PROGRAM

List of Speakers

Introduction to the Conference, Aromatase: New Perspectives for Breast Cancer.
  Richard J. Santen
Review of Studies on Estrogen Biosynthesis in the Human.
  Pentti K. Siiteri

Physiology, Biochemistry, and Biological Significance

Chairpersons: Pentti K. Siiteri
  Richard J. Santen

Aromatase in the Central Nervous System.
  F. Naftolin and Neil J. MacLusky
Biochemical Mechanism of Aromatization.
  Jack Fishman
Discussion

Epidemiological Considerations: Aromatase, Obesity, and Breast Carcinoma

Chairpersons: Marvin A. Kirschner
  Kenneth J. Ryan

Obesity, Androgens, Estrogens, and Cancer Risk.
  M. A. Kirschner, G. Schneider, N.H. Ertel, and E. Worton
Cyclic Ovarian Function and Breast Cancer.
  Barry M. Sherman, Robert B. Wallace, and Judy A. Bean
Relationship of Obesity to Blood Estrogens.
  Barnett Zumoff
Discussion

In Vitro and in Vivo Assay Methodology and Biochemistry

Chairpersons: Pentti K. Siiteri
  Kenneth J. Ryan

In Vitro Assays of Aromatase and Their Role in Studies of Estrogen Formation in Target Tissues.
  Judith Weisz
Multiple Forms of Aromatase and Response of Breast Cancer Aromatase to Antiplacental Aromatase II Antibodies.
  Yoshio Osawa, Buichi Tochigi, Tadayoshi Higashiyama, Carol Yarborough, Tohoru Nakamura, and Takara Yamamoto
Discussion
Pharmacological Inhibitors of Aromatase: Biochemical Studies

Chairpersons: Harry Brodie
Pentti K. Siiiteri

Methods and Results of Aromatization Studies in Vivo.
Christopher Longcope .......................................................... 3307s

Overview of Recent Development of Aromatase Inhibitors.
Angela M. H. Brodie .............................................................. 3312s

Basic Studies on Aminogluthimide.
Hilton A. Salhanick .............................................................. 3315s

Design of Mechanism-based Inactivators of Human Placental Aromatase.
Patrick A. Marcotte and Cecil H. Robinson .............................. 3322s

A New Hypothesis Based on Suicide Substrate Inhibitor Studies for the Mechanism of Action of Aromatase.
Douglas F. Covey and William F. Hood ................................. 3327s

Discussion .............................................................................. 3332s

Substituted C19 Steroid Analogs as Inhibitors of Aromatase.
Robert W. Brueggemeier, Catherine E. Snider, and Raymond E. Counsell .......................... 3334s

Estrogen Synthesis in Human Breast Tumor and Its Inhibition by Testololactone and Bromoandrostenedione.
Thomas L. Dao ......................................................................... 3338s

Biochemistry of Aromatase: Significance to Female Reproductive Physiology.
Kenneth J. Ryan ....................................................................... 3342s

Pharmacological Inhibitors of Aromatase: In Vivo Studies

Chairpersons: Christopher Longcope
Richard J. Santen

In Vivo Effects of Δ1-Testololactone on Peripheral Aromatization.
Howard L. Judd, Robert M. Barone, Larry R. Laufer, Joseph C. Gambone, Steven L. Monfort, and Bill L. Lasley .......................... 3345s

Steroid Hormone Profiles in Women Treated with Aminogluthimide for Metastatic Carcinoma of the Breast.
E. Samojlik, R. J. Santen, M. A. Kirschner, and N. H. Ertel .................. 3349s

In Vivo and in Vitro Pharmacological Studies of Aminogluthimide as an Aromatase Inhibitor.

Discussion .............................................................................. 3357s

Aromatase Inhibitors as Treatment of Animal Breast Carcinoma Models

Chairperson: Richard J. Santen

Effects of Aromatase Inhibitor 4-Hydroxyandrostenedione and Other Compounds in the 7,12-Dimethylbenz(a)anthracene-
induced Breast Carcinoma Model.
Angela M. H. Brodie, Wesley M. Garrett, James R. Hendrickson, and Chon-Hwa Tsai-Morris .......................... 3360s

Discussion .............................................................................. 3363s

Aromatase in Human Breast Carcinoma—Biochemistry: In Vitro Inhibitors

Chairpersons: Angela M. H. Brodie
William R. Miller

Significance of Aromatase Activity in Human Breast Cancer.
W. R. Miller, R. A. Hawkins, and A. P. M. Forrest ...................... 3365s

Aromatase in Human Breast Carcinoma.
E. Pere, M. E. Blackstein, and D. W. Killinger ................................ 3369s

Comparative Studies of Aromatase Inhibitors in Relation to the Significance of Estrogen Synthesis in Human Mammary Tumors.
Yusuf J. Abul-Hajj ................................................................... 3373s

Comparative Studies of Aromatase Inhibitors in Cultured Human Breast Cancer Cells.
J. H. MacIndoe, G. R. Woods, L. A. Etre, and D. F. Covey .......................... 3378s

A Reassessment of the Role of Breast Tumor Aromatization.
H. Leon Bradlow ....................................................................... 3382s

Discussion .............................................................................. 3385s
Aromatase Inhibitors as Treatment of Human Breast Carcinoma

Chairpersons: Allan Lipton
Trevor J. Powles

Δ¹-Testololactone: Clinical Trials.
Albert Segaloff

Kenneth E. Gale

Adequacy of Estrogen Suppression with Aminoglutethimide and Hydrocortisone as Treatment of Human Breast Cancer: Correlation of Hormonal Data with Clinical Responses.
Richard J. Santen, Thomas J. Worgul, Eugeniusz Samojlik, Alice E. Boucher, Allan Lipton, and Harold Harvey

Aminoglutethimide in the Treatment of Metastatic Breast Cancer.
Michael B. Troner

Aminoglutethimide in the Treatment of Advanced Postmenopausal Breast Cancer.
Adrian L. Harris, Trevor J. Powles, and Ian E. Smith

Tamoxifen and Aminoglutethimide in Advanced Breast Cancer.
Joseph Corkery, Robert C. F. Leonard, I. Craig Henderson, Rebecca S. Gelman, Joseph Hourihan, Diane M. Ascoli, and Hilton A. Salhanick

Adjuvant Aminoglutethimide Therapy for Postmenopausal Patients with Primary Breast Cancer: Progress Report.

Antiestrogens as Alternative Means of Inhibiting Estrogen Action

Chairpersons: Allan Lipton
William L. McGuire

New Strategies for Investigating Antiestrogen Action in Breast Cancer.
William Leo McGuire

Discussion

Antiestrogen Treatment of Breast Cancer: An Overview.
Olof H. Pearson, Andrea Manni, and Baha‘uddin M. Arafah

Discussion

Randomized Trials of Aromatase Inhibitors versus Antiestrogens

Chairpersons: William L. McGuire
Harold A. Harvey

Tamoxifen versus Aminoglutethimide versus Combined Tamoxifen and Aminoglutethimide in the Treatment of Advanced Breast Carcinoma.
Ian E. Smith, Adrian L. Harris, Michael Morgan, Jean-Claude Gazet, and J. Alan McKinna

Discussion

Randomized Trial of Aminoglutethimide versus Tamoxifen in Metastatic Breast Cancer.
Allan Lipton, Harold A. Harvey, Richard J. Santen, Alice Boucher, Deborah White, Albert Bernath, Richard Dixon, George Richards, and Ahmed Shafik

Robin M. L. Murray and Paula Pitt

Discussion

Phase II Study of Aminoglutethimide and Medroxyprogesterone Acetate in the Treatment of Patients with Advanced Breast Cancer.
Gerd A. Nagel, Hans-Erik Wander, and Hans-Christian Blossey

Discussion
Aminoglutethimide in Tamoxifen-resistant Patients

Chairpersons: Harold A. Harvey
William L. McGuire

Use of Aminoglutethimide as Second-Line Endocrine Therapy in Metastatic Breast Cancer.
Stanley B. Kaye, Robert L. Woods, Richard M. Fox, Alan S. Coates, and Martin H. N. Tattersall

Aminoglutethimide after Tamoxifen Therapy in Advanced Breast Cancer: M. D. Anderson Hospital Experience.
Aman U. Buzdar, Kimberly C. Powell, and George R. Blumenschein

Aromatase Inhibition versus Surgical Ablation

Chairpersons: Harold A. Harvey
William L. McGuire

Cross-Over Comparison of Tamoxifen and Aminoglutethimide in Advanced Breast Cancer.
Harold A. Harvey, Allan Lipton, Deborah S. White, Richard J. Santen, Alice E. Boucher, Ahmed S. Shafik, Richard J. Dixon, and Members of The Central Pennsylvania Oncology Group

Comparison of Surgical Adrenalectomy to Medical Adrenalectomy in Patients with Metastatic Carcinoma of the Breast.
Samuel A. Wells, Jr., Thomas J. Worgul, Eugeniusz Samojlik, Alice E. Boucher, Allan Lipton, Harold Harvey, Deborah White, Emma Smart, Charles Cox, and Richard J. Santen

Combinations of Agents to Inhibit Estrogenic Actions as Treatment of Breast Carcinoma

Chairpersons: William L. McGuire
Harold A. Harvey

Clinical Trial of Multiple Endocrine Therapy for Metastatic and Locally Advanced Breast Cancer with Tamoxifen-Aminoglutethimide-Danazol Compared to Tamoxifen Used Alone.
Trevor J. Powles, C. Gordon, and R. C. Coombes

Progress Report on Two Clinical Trials in Women with Advanced Breast Cancer. Trial I: Tamoxifen versus Tamoxifen plus Aminoglutethimide; Trial II: Aminoglutethimide in Patients with Prior Tamoxifen Exposure.
James N. Ingle, Stephanie J. Green, David L. Ahmann, John H. Edmonson, William C. Nichols, Stephen Frytak, and Joseph Rubin

Discussion

Closing Remarks to the Conference, Aromatase: New Perspectives for Breast Cancer.
Allan Lipton, Harold A. Harvey, and Richard J. Santen