

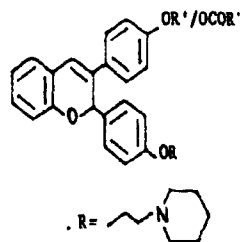
## GRAPHICAL ABSTRACTS

### SYNTHESIS AND POST - COITAL CONTRACEPTIVE ACTIVITY OF ETHER AND ESTER ANALOGUES OF 2,3 - DIARYL - 2H - 1 - BENZOPYRANS

*Bioorg. Med. Chem.* 1995, 3, 1417

Kanchan Hajela, Kamal K. Kapoor and Randhir S. Kapil,  
Regional Research Laboratory, Jammu Tawi - 180 001, INDIA.

Several ether and ester analogues of 2,3 - diaryl - 2H - 1 - benzopyrans have been synthesised and tested for their pregnancy inhibiting activity in immature rats. Esters were found to be better anti-implantation agents than ethers.

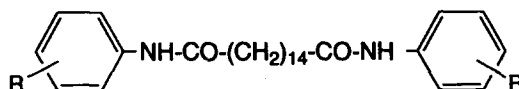


### Specific Inhibitors for the Glycolytic Enzymes of *Trypanosoma brucei*

*Bioorg. Med. Chem.* 1995, 3, 1423

M. Trinquier, J. Perie, M. Willson\*, M. Callens and F. Opperdoes  
*Chimie Organique Biologique URA 470, Universite Paul Sabatier, 31062 Toulouse, France*

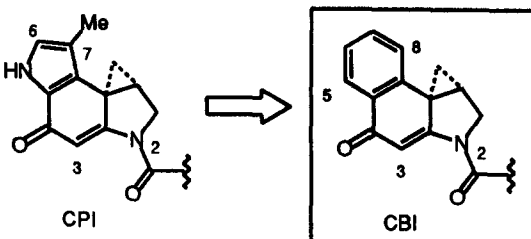
**Abstract**—The synthesis of powerful inhibitors for the glycolytic enzymes in *Trypanosoma brucei* are described and their specificity determined by comparison with corresponding mammalian enzymes.



**1,2,9,9a-Tetrahydrocyclopropa[c]benz[e]indol-4-one (CBI) Analogs of CC-1065 and the Duocarmycins: Synthesis and Evaluation.** Dale L. Boger, Weiya Yun, and Nianhe Han,  
*Department of Chemistry, The Scripps Research Institute, 10666 North Torrey Pines Road, La Jolla, California 92037.*

*Bioorg. Med. Chem.* 1995, 3, 1429

**Abstract.** A full study of analogs of the potent antitumor antibiotics CC-1065 and the duocarmycins which incorporate the CBI alkylation subunit are detailed.

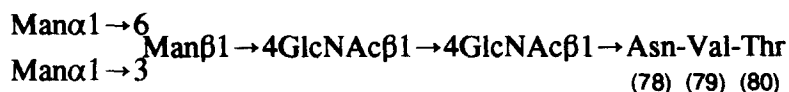


### Synthesis of a glycoprotein carrying a N-linked core pentasaccharide

*Bioorg. Med. Chem.* 1995, 3, 1455

I. Matsuo, Y. Nakahara, Y. Ito, T. Nukada, Y. Nakahara and T. Ogawa  
*The Institute of Physical and Chemical Research (RIKEN) Wako-shi, Saitama, Japan*

Glycopeptide 1 which corresponds to amino acid 78-80 of  $\alpha$ -chain of human chorionic gonadotropin (hCG) was synthesized



## Molecular Dynamics Simulations of m3-muscarinic Receptor Activation and QSAR Analysis

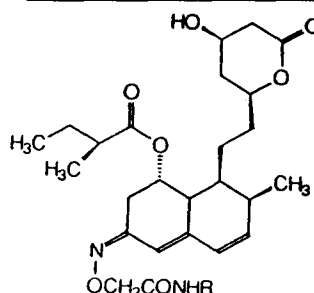
Francesca Fanelli, M. Cristina Menziani and Pier G. De Benedetti\*

Dipartimento di Chimica, Università di Modena, via Campi 183, 41100 Modena, Italy

### 3-Hydroxy-3-Methylglutaryl-Coenzyme A Reductase Inhibitors: Oxime Ether Analogs of Pravastatin.

Noor Turabi, Richard A. DiPietro, Subbarao Mantha, Carl Ciosek, Lois Rich and Jan-I Tu  
Diagnostics Drug Discovery, Bristol-Myers Squibb,  
P.O. Box 4000, Princeton, NJ 08543-4000

A series of oxime ether analogs of Pravastatin have been prepared and their biological activities evaluated. One member of the series was found to be several times more potent than Pravastatin.



### BY HYDRAZINE-THIAZOLE DERIVATIVES: STRUCTURE-ACTIVITY RELATIONSHIPS.

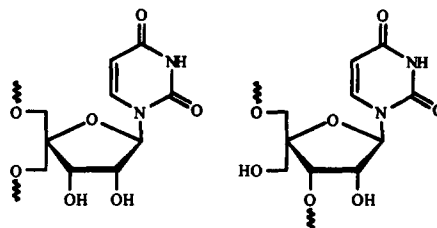
G. Raciti, <sup>a</sup> P. Mazzone, <sup>a</sup> A. Raudino, <sup>b</sup> G. Mazzone, <sup>c</sup> and A. Cambria <sup>a \*</sup>

<sup>a</sup>Istituto di Scienze Biochimiche e Farmacologiche, and the <sup>b</sup>Dipartimento di Scienze Chimiche, and the <sup>c</sup>Istituto di Chimica Farmaceutica of the Università di Catania, Viale A. Doria, 6, 95125 Catania, Italy.

**Abstract:** The relationship between chemical structure and inhibitory activity of some hydrazine-thiazole derivatives on rat liver mitochondria monoamine oxidase was studied. The structure-activity relationship of MAO inhibitors was established in relation to hydrophobic, electronic, and steric hindrance parameters. A mechanism of enzyme inhibition was proposed based on the calculation of HOMO energies.

### OLIGONUCLEOTIDE ANALOGUES CONTAINING 4'-C-(HYDROXYMETHYL)URIDINE: SYNTHESIS, EVALUATION AND MASS SPECTROMETRIC ANALYSIS

Kenneth Due Nielsen,<sup>a</sup> Finn Kirpekar,<sup>b</sup>  
Peter Roepstorff<sup>b</sup> and Jesper Wengel<sup>a \*</sup>  
Department of Chemistry<sup>a</sup> and Department of Molecular Biology,<sup>b</sup>  
Odense University, DK-5230 Odense M, Denmark



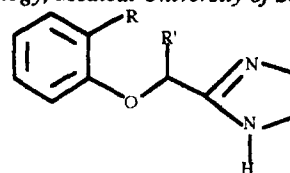
## Separation of $\alpha$ -Adrenergic and Imidazoline/Guanidinium Receptive Sites (IGRS) Activity in a Series of Imidazoline Analogues of Cirazoline

*Bioorg. Med. Chem.* **1995**, *3*, 1503

Livio Brasili,<sup>a\*</sup> Maria Pigni,<sup>b</sup> Gabriella Marucci,<sup>b</sup> Wilma Quaglia,<sup>b</sup> Luca Malmusi,<sup>a</sup> Stephen M. Lanier<sup>c</sup> and Biljana Lanier<sup>c</sup>

<sup>a</sup>Dipartimento di Scienze Farmaceutiche, Università di Modena, Via Campi 183, 41100 Modena, Italy, <sup>b</sup>Dipartimento di Scienze Chimiche, Università di Camerino, 62032 Camerino (MC), Italy and <sup>c</sup>Department of Pharmacology, Medical University of South Carolina, Charleston, South Carolina 29425.

A number of cirazoline (R=cyclopropyl, R'=H) derivatives were synthesized and tested for  $\alpha$ -adrenergic and IGRS activities. Thanks to their IGRS selectivity, some of them represent novel and valuable pharmacological tools for characterization and elucidation of the physiological role of these novel sites.



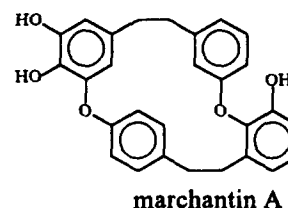
## The Biological Activity of Cyclic Bis(bibenzyls): A Rational Approach

*Bioorg. Med. Chem.* **1995**, *3*, 1511

György M. Keserű<sup>\*</sup> and Mihály Nógrádi

Department of Chemical Information Technology, Technical University of Budapest, Research Group for Alkaloid Chemistry of the Hungarian Academy of Sciences, POB 91, H-1521, Budapest, Hungary

The biological activities reported for marchantin A, a natural cyclic bis(bibenzyl) were studied in comparison with cepharanthine, a therapeutically useful bisbenzyl isoquinoline alkaloid.



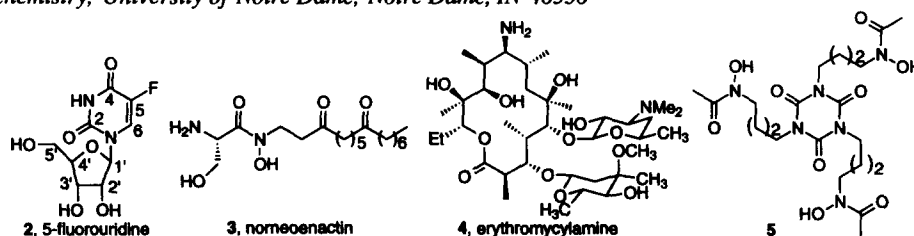
## Design, Synthesis, and Biological Evaluation of Isocyanurate-Based Anti-Fungal and Macrolide Antibiotic Conjugates: Iron Transport-Mediated Drug Delivery

*Bioorg. Med. Chem.* **1995**, *3*, 1519

Manuka Ghosh and Marvin J. Miller<sup>\*</sup>

Department of Chemistry and Biochemistry, University of Notre Dame, Notre Dame, IN 46556

Synthesis and activity of conjugates of 2, 3, and 4 with the synthetic isocyanurate-based siderophore 5, is described.



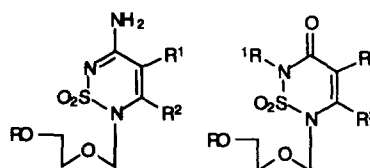
## New 1,2,6-Thiadiazine Dioxide Acyclonucleosides: Synthesis and Antiviral Evaluation

*Bioorg. Med. Chem.* **1995**, *3*, 1527

A. I. Esteban,<sup>a</sup> O. Juanes,<sup>a</sup> S. Conde,<sup>a</sup> P. Goya,<sup>a</sup> A. Martínez,<sup>a\*</sup> and E. DeClercq<sup>b</sup>

<sup>a</sup>Instituto de Química Médica (C.S.I.C.), Juan de la Cierva, 3. 28006 Madrid, Spain. <sup>b</sup>Rega Institute for Medical Research, Katholieke Universiteit Leuven, B-3000 Leuven, Belgium.

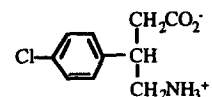
1. Synthesis of new 1,2,6-thiadiazine dioxide acyclonucleosides
2. Lipase-mediated deacylation
3. Biological test as antiviral agents



**Structure-Affinity Relationships of Baclofen and 3-Heteroaromatic**

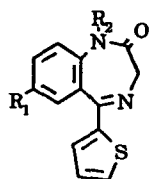
**Analogues**, Bernard Pirard,<sup>\*a</sup> Pierre-Alain Carrupt,<sup>b</sup> Bernard Testa,<sup>b</sup> Ruey-Shiuan Tsai,<sup>b</sup> Pascal Berthelot,<sup>c</sup> Claude Vaccher,<sup>c</sup> Michel Debaert,<sup>c</sup> and François Durant<sup>a</sup>; <sup>a</sup>*Laboratoire de Chimie Moléculaire Structurale, Facultés Universitaires Notre-Dame de la Paix, rue de Bruxelles, 61, B-5000 Namur, Belgium*, <sup>b</sup>*Institut de Chimie Thérapeutique, Section de Pharmacie, Université de Lausanne, CH-1015 Lausanne, Switzerland*, <sup>c</sup>*Laboratoire de Pharmacie Chimique, UFR de Pharmacie, rue du Professeur Laguesse, 3, F-59006 Lille Cedex, France*

The lipophilic of and electronic properties of baclofen and selected 3-heteroaromatic analogues have been studied, gaining insight into the structural features necessary for GABA<sub>B</sub> affinity.



**A BEHAVIORALLY SELECTIVE CLASS OF THIOPHENE-CONTAINING BENZODIAZEPINE RECEPTOR LIGANDS**, *L. T. Schove\*, S.-W. Chen, M.*

*Beatty, P. A. Maguire, M. F. Davies, and Gilda H. Loew*, Molecular Research Institute, 845 Page Mill Road, Palo Alto, California 94304



**Abstract:** In a continued effort to probe the role of the aromatic rings of classical 1,4-benzodiazepine ligand pharmacology, a series of new thiophene containing benzodiazepine receptor (BDZR) ligands (**5a-5d**) were synthesized. The affinities in two central nervous system regions, cerebellum, in which a single "Type I" BDZR could be labeled; and spinal cord, in which we have previously demonstrated some receptor heterogeneity, were determined. These compounds were assessed for their compliance with a recently developed three dimensional pharmacophore for recognition and activation of the "Type I" BDZR. Since the compounds all complied and showed reasonable affinity, the behavioral profile of one of them (**5a**) at five *in vivo* endpoints was determined.