

SFU; however, the significance of these observations with respect to the potential utility of the michellamines as cytoprotective agents against HIV is unknown.

The mechanism of anti-HIV-cytopathic effects of the michellamines is as yet unknown. However, it is notable that **2**, either as the free base or the HBr salt, exhibited the same potency against the cytopathic effects of HIV-2 upon MT-2 target cells in vitro (Figure 2) as it did against HIV-1 upon CEM-SS cells. This is significant because very few of the known anti-HIV-1 agents demonstrate any activity against HIV-2. Michellamine A (**1**) was somewhat less effective than **2** against HIV-2, affording only partial protection at comparable concentrations (data not shown). These compounds represent a novel new active chemotype for investigation in the quest for effective anti-HIV drug candidates.

Chemically, the michellamines are unique in several regards. They are the first dimeric alkaloids of this class to be discovered. None of the known "monomeric" alkaloids have the C-5/C-8' linkage between the two ring systems.<sup>3-5</sup> Further, they are the most polar compounds in the class, containing more free phenols per monomeric unit than any of the known compounds.<sup>3-5</sup> Extracts of *Ancistrocladus tectorius*, which contain monomeric alka-

loids of this series,<sup>5</sup> were inactive in the anti-HIV assay. It cannot yet be ascertained whether this is a reflection of the differences in functionalities or in the linkage of the naphthalene and isoquinoline units, or whether the dimeric unit is required for activity.

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\* To whom correspondence should be addressed at the Laboratory of Drug Discovery Research and Development, National Cancer Institute, Building 1052, Room 121, Frederick, MD 21702-1201.

† On leave from the University of Canterbury, Christchurch, New Zealand.

‡ Laboratory of Drug Discovery Research and Development, National Cancer Institute.

§ Laboratory of Bioorganic Chemistry, National Institute of Diabetes, and Digestive and Kidney Diseases.

|| Natural Products Branch, National Cancer Institute.

Kirk P. Manfredi,<sup>†</sup> John W. Blunt<sup>†,‡</sup>  
John H. Cardellina, II,<sup>‡</sup> James B. McMahon<sup>‡</sup>  
Lewis L. Pannell,<sup>§</sup> Gordon M. Cragg<sup>||</sup>  
Michael R. Boyd<sup>\*,‡</sup>

Laboratory of Drug Discovery Research and Development  
National Cancer Institute  
Frederick, Maryland 21702-1201

Laboratory of Bioorganic Chemistry  
National Institute of Diabetes, and  
Digestive and Kidney Disease  
Bethesda, Maryland 20892

Natural Products Branch  
National Cancer Institute  
Frederick, Maryland 21702-1201

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containing 5% CO<sub>2</sub> for 6 days. Subsequently, aliquots of cell-free supernatant were removed from each well using the Biomek, and analyzed for reverse transcriptase activity, p24 antigen production, and synthesis of infectious virions as described.<sup>7</sup> Cellular growth or viability then was estimated on the remaining contents of each well using the XTT,<sup>8</sup> BCECF,<sup>9</sup> and DAPI<sup>10</sup> assays as described.<sup>7</sup> To facilitate graphical displays and comparisons of data, the individual experimental assay results (of at least quadruplicate determinations for each) were averaged, and the mean values were used to calculate percentages in reference to the appropriate controls. Standard errors of the mean values used in these calculations typically averaged less than 10% of the respective mean values.

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(10) McCaffrey, T. A.; Agarwal, L. A.; Weksler, B. B. A Rapid Fluorometric DNA Assay for the Measurement of Cell Density and Proliferation *In Vitro*. *In Vitro Cell Dev. Biol.* 1988, **24**, 247-252.

## Additions and Corrections

1991, Volume 34

**Sumalee Chumpradit, Mei-Pung Kung, Jeffrey J. Billings, and Hank F. Kung\***: Synthesis and Resolution of (±)-7-Chloro-8-hydroxy-1-(3'-iodophenyl)-3-methyl-2,3,4,5-tetrahydro-1*H*-3-benzazepine (TISCH): A High Affinity and Selective Iodinated Ligand for CNS D1 Dopamine Receptor.

Page 877. One of the structures in Chart I, IMAB (**1e**) R<sub>1</sub>: Cl, R<sub>2</sub>: N<sub>3</sub>, R<sub>3</sub>: I, should be changed to IMAB (**1e**) R<sup>1</sup>: I, R<sub>2</sub>: N<sub>3</sub>, R<sub>3</sub>: H.

**Ronald H. Erickson,\* Roger N. Hiner, Scott W. Fee-ney, Paul R. Blake, Waclaw J. Rzeszotarski, Rickey P. Hicks, Diane G. Costello, and Mary E. Abreu:** 1,3,8-Trisubstituted Xanthines. Effects of Substitution Pattern upon Adenosine Receptor A<sub>1</sub>/A<sub>2</sub> Affinity.

Page 1432. Reference 18 is incorrect. The correct reference is: Yoneda, F.; Higuchi, M.; Mori, K.; Senga, K.; Kanamori, Y.; Shimizu, K.; Nishigaki, S. *Chem. Pharm. Bull.* 1978, **26**, 2905-2910.