

Poster Session I: Retroviruses

4:30-6:30pm

20. Short Sequences of the Matrix- and the Capsid-Protein of the Human Immunodeficiency Virus (HIV) Influence Viral Assembly and Inhibit Production of Infective Particles. B. Kattenbeck, A. von Poblitzki, R. Wagner, H. Lilie, J. Buchner, Wolf, and S. Modrow. *Universitt Regensburg, Regensburg, FRG.*
21. Nucleoside Derivatives of 2-Mercapto-5,6-Dichlorobenzimidazole: Synthesis and Antiviral Evaluation. J.-L Imbach, C. Math, C. Prigaud, and G. Gosselin. *Universit de Montpellier II, Montpellier, Cedex, France.*
22. Cytosolic Delivery of Anti-HIV Nucleoside Monophosphates Having Enzyme-Labile Transient Phosphate Protecting Groups. J.-L. Imbach, G. Gosselin, C. Prigaud, I. Lefbvre, J.-L. Girardet, S. Benzaria. *Universit de Montpellier II, Montpellier, Cedex, France.*
23. 2',3',5'-Trideoxyuridine-5'-Methylphosphonic Acid: Synthesis, Antiviral Evaluation, and Interaction of its Diphosphate Derivative with HIV-1 Reverse Transcriptase. J.-L. Imbach, S. Benzaria, G. Maury, G. Gosselin, L. Rittinger, B. Muller, G. Divita, and R.S. Goody. *Universit de Montpellier II, France; and Max-Planck Institut, Heidelberg, Germany.*
24. Synthesis of 2-halo- and 2-aza-adenine Analogues of 1,3-oxathiolane Nucleoside as Potential Anti-HIV Agents. L. Chan, D. Lafleur, N. Nguyen-Ba, E.U. Hooker, and N. Cammack. *BioChem Therapeutic, Inc., Laval, Canada; and Glaxo Group Research, Ltd., Greenford, Middlesex, UK.*
25. Synthesis of Novel HEPT Analogues as Potential Anti-HIV-1 Agents. L. Chan, N. Nguyen-Ba, E.U. Hooker, and N. Cammack. *BioChem Therapeutic, Inc., Laval, Canada; and Glaxo Group Research, Ltd., Greenford, Middlesex, UK.*
26. Synthesis and Anti-HIV Activity of Isonucleosides and Acyclic Nucleotides Related to Clitocine. P. Franchetti, L. Cappellacci, G. Abu Sheikha, M. Grifantini, L. Messini, A.G. Loi, A. De Montis, M.G. Spiga, and P. La Colla. *Univ. di Camerino, Camerino; and Univ. di Cagliari, Cagliari, Italy.*
27. Systematic SAR Studies of BMS-182,193, A Novel Inhibitor of HIV Protease. G. Bisacchi, P. Chen, S. Ahmad, M. Alam, A. Ashfaq, J. Barrish, P. Cheng, R. Colonno, T. Dejneka, B. DeLange, E. Gordon, J. Greytok, G. Jacobs, M. Hermsmeier, P.-F. Lin, K. Lis, M. Marella, Z. Merchant, T. Mitt, D. Ryono, M. Skoog, S. Spergel, J. Tino, G. Vite, R. Zahler. *Bristol Myers Squibb PRI, Princeton, NJ; and Wallingford, CT, USA.*

28. Potent Inhibitors of HIV Protease: P2 and P3 Extended Analogs of BMS-182,193. S. Ahmad, P. Cheng, M. Alam, A. Ashfaq, J. Barrish, G. Bisacchi, P. Chen, R. Colonna, T. Dejneka, J. Greytok, M. Hermsmeier, G. Jacobs, P.-F. Lin, M. Marella, Z. Merchant, T. Mitt, D. Ryono, M. Skoog, S. Spergel, J. Stevenson, C.-Q. Sun, J. Tino, G. Vite, R. Zahler. *Bristol Myers Squibb PRI, Princeton, NJ; and Wallingford, CT, USA.*
29. Antiviral Properties of BMS 182,193, an Aminoalcohol Inhibitor of HIV Protease. C.M. Bechtold, A.K. Patick, M. Alam, J. Tino, P. Chen, E. Gordon, R. Zahler, J. Barrish, R. Colonna, and P.F.-Lin. *Bristol-Myers Squibb PRI, Wallingford, CT; and Lawrenceville, NJ, USA.*
30. Potent Inhibition of Human Immunodeficiency Virus (HIV) Replication by Aromatic Linked Bis-Azamacrocycles: Synthesis and Effects of Macrocyclic Ring Size. S. Padmanabhan, G. Bridger, R. Skerlj, D. Thornton, M. Abrams, G. Henson, R. Datema, N. Yamamoto, K. De Vreese, R. Pauwels, and E. De Clercq. *Johnson Matthey Pharmaceutical Research, West Chester, PA; Johnson Matthey Technology Centre, Sonning Common, Reading, UK; Sandoz Forschungsinstitut, Vienna, Austria; and Katholieke Universiteit Leuven, Leuven, Belgium.*
31. Potent Inhibition of Human Immunodeficiency Virus (HIV) Replication by Aromatic Linked Bis-Azamacrocycles: Synthesis and Effects of Substitution at the Aromatic Linker. R. Skerlj, G. Bridger, S. Padmanabhan, D. Thornton, M. Abrams, G. Henson, R. Datema, N. Yamamoto, K. De Vreese, R. Pauwels, and E. De Clercq. *Johnson Matthey Pharmaceutical Research, West Chester, PA, USA; Johnson Matthey Technology Centre, Sonning Common, Reading, UK; Sandoz Forschungsinstitut, Vienna, Austria; and Katholieke Universiteit Leuven, Leuven, Belgium.*
32. Potent Inhibition of Human Immunodeficiency Virus (HIV) Replication by Aromatic Linked Bis-Azamacrocycles: Structure Activity Relationships. G. Bridger, R. Skerlj, S. Padmanabhan, D. Thornton, G. Henson, M. Abrams, R. Datema, N. Yamamoto, K. De Vreese, R. Pauwels, and E. De Clercq. *Johnson Matthey Pharmaceutical Research, West Chester, PA, USA; Johnson Matthey Technology Centre, Sonning Common, Reading, UK; Sandoz Forschungsinstitut, Vienna, Austria; and Katholieke Universiteit Leuven, Leuven, Belgium.*
33. Selective Inhibition of Viral DNA Polymerases by the Triphosphates of β -L-2',3'-Dideoxycytidine (β -L-DDC) and its 5-Fluoro Derivative (β -L-FDDC) A. Faraj, R.F. Schinazi, G. Gosselin, J.-L. Imbach, and J.P. Sommadossi. *Univ. of Alabama at Birmingham, Birmingham, AL; VAMC, Emory Univ., Decatur, GA, USA; and Univ. of Montpellier II, Montpellier, France.*

34. Didanosine (DDI) and Zidovudine (AZT) Sensitivities of HIV-1 Strains Isolate from DDI-Treated Patients, and Tested in a HeLa-CD4 Immunofluorescence Focus Assay (IFFA). C. Murrenhoff, J.P. Kruppenbacher, and H.J. Eggers. *Universitaet zu Koeln, Koeln, Germany.*
35. Selective Activity of Triciribine Against HIV-1 in Acutely Infected CEM-T4 Cells. M.R. Nassiri, D.E. Ickes, M. Lew, C. Shipman, Jr., L.B. Townsend, and J.C. Drach. *University of Michigan, Ann Arbor, MI, USA.*
36. Antiretroviral Activity of N-‘-acetyl-nona-D Arginine Amide Acetate (ALX40-4C). B. Conway, O. Mpanju, J. Sahai, M. Twist, and M. Sumner-Smith. *University of Ottawa AIDS Research Group, Ottawa; and Allelix Biopharmaceuticals, Inc., Mississauga, Ontario, Canada.*
37. Antiretroviral Activity and Selective Cytotoxicity of Lithium Gamma-Linolenic Acid (LiGLA). S.I. Randall, D. Kinchington, M.D. Winther, D.F. Horrobin, W.F. Schlech, D. Kumar, O. Mpanju, and B. Conway. *St. Bartholemew Medical College, London, UK; Scotia Pharmaceuticals, Nova Scotia; Dalhousie University, Halifax; University of Ottawa AIDS Research Group, Ottawa, Canada.*
38. Biological and Biochemical Anti-HIV Activity of a Phosphorothioate G-Quartet (TTGGGGTT). R.W. Buckheit, Jr., J.R. Roberson, J.R. Wyatt, T.A. Vickers, E. DeBaets, P.W. Davis, and D.J. Ecker. *Southern Research Institute, Frederick Research Center, Frederick, MD; and ISIS Pharmaceuticals, Carlsbad, CA, USA.*
39. Comparative Biological and Biochemical Evaluation of a Diverse Group of Nonnucleoside Reverse Transcriptase Inhibitors. R.W. Buckheit, Jr., V. Fliakas-Boltz, W.D. Decker, J.L. Roberson, and C.A. Pyle. *Southern Research Institute, Frederick Research Center, Frederick, MD, USA.*
40. Effects of HIV-Inhibitory Compounds on the Production of Virus from Chronically and Latently Infected Cell Lines. S. Halliday and R.W. Buckheit, Jr. *Southern Research Institute, Frederick Research Center, Frederick, MD, USA.*
41. Synthesis and Anti-HIV-1 Activity of Pyrrolbenzothiadiazepines. E. Tramontano, M. Artico, S. Massa, R. Silvestri, A. Mai, A.G. Loi, A. De Montis, and P. La Colla. *Universita di Cagliari, Cagliari; and Universita di Roma, Roma, Italy.*
42. Comparison of Antiretroviral Drug Combinations in a Murine Leukemia Virus (MuLV) Model. L.B. Allen, D.C. Quenelle, L. Westbrook, W.M. Shannon, A.D. Brazier, and M.J. Hollingshead. *Southern Research Institute, Birmingham, AL, USA.*

43. Ganciclovir Does Not Antagonize the Anti-Human Immunodeficiency Virus Activity of AZT in A3.01 Cells In Vitro. M. Laney, M.J. McRoberts, S. Chiu, J. Minor, S. Michelson, and R.C. Schatzman. *Syntex Discovery Research, Palo Alto, CA, USA.*
44. Zidovudine (AZT)-induced Down Regulation of Transcripts of Erythropoietin Receptor (Epo-R), c-fos and α -Protein Kinase C (PKC) in Human Erythroid Progenitor Cells (EPC): Reversal with a combination of Erythropoietin and Interleukin-3. K.C. Agrawal, S.R. Gogu, B.J. Rider, and C.A. Leissinger. *Tulane Univ School of Medicine, New Orleans, LA, USA.*
45. Isolation and Characterization of an HIV-1 Variant with Reduced Sensitivity to an Aminoalcohol Protease Inhibitor. A.K. Patick, B. Rose, J. Greytok, C.M. Bechtold, I. Deckman, P. Chen, M. Skoog, J. Barrish, R. Zahler, R.J. Colonno, and P.F. Lin. *Bristol-Myers Squibb PRI, Department of Virology, Wallingford, CT; and Lawrenceville, NJ, USA.*
46. **Withdrawn.**
47. Comparison of the Conformations of the 5'-Triphosphates of Zidovudine®(AZT) and Thymidine Bound to HIV-1 Reverse Transcriptase. G.R. Painter, A.E. Aulabaugh, and C.W. Andrews. *Burroughs Wellcome Co., Research Triangle Park, NC, USA.*
48. Local Perturbation of Recombinant HIV-1 Reverse Transcriptase by Urea Occurs Prior to Global Denaturation. L.L. Wright, J.E. Wilson, J.L. Martin, S.E. Haire, P.H. Ray, and G.R. Painter. *Burroughs Wellcome Co., Research Triangle Park, NC, USA.*
49. Recombinant Human Immunodeficiency Virus Type-1 Reverse Transcriptase is Conformationally Heterogeneous. J.E. Wilson, L.L. Wright, J.L. Martin, G.R. Painter, and P.A. Furman. *Burroughs Wellcome Co., Research Triangle Park, NC, USA.*
50. Biochemical Analysis of Human Immunodeficiency Virus Type-1 Reverse Transcriptase with Mutations at Methionine 184 in the Highly Conserved YMDD Region: Mechanism for 1- β -L Nucleoside Drug Resistance. J.E. Wilson, J.L. Martin, A. Aulabaugh, L.L. Wright, S. McPherson, J.K. Wakefield, S. Jablonski, C.D. Morrow, and P.A. Furman. *Burroughs Wellcome Co., Research Triangle Park, NC, USA; and The University of Alabama at Birmingham, Birmingham, AL, USA.*
51. Inhibition of HIV-1 Replication by SDZ NIM 811, a Non-Immuno-suppressive Cyclosporin A Analog: Mode of Action Studies. B. Rosenwirth, A. Billich, F. Hammerschmid, R. Harrison, W. Schnitzel, A. Steinkasserer, and G. Werner. *Sandoz Forschungsinstitut, Vienna, Austria*

52. Sequence Comparison of Different Subpopulations of Proviral and "Viral" HIV-1 Reverse Transcriptase from Patients on Long-term AZT Treatment. C.A. Stein, P. Levantis, and J.S. Oxford. *London Hospital Medical College, London, UK.*
53. Hydroxyurea Inhibits HIV-1 Replication by Inducing Low dNTP Levels. A Cellular Enzyme as a Target to Inhibit HIV-1. F. Lori, W.Y. Gao, A.Cara, and R.C. Gallo. *NCI, NIH, Bethesda, MD, USA.*
54. Uveitis In Prototype AIDS Vaccines Using SIV. M.D. Conway, M. Murphey-Corb, and B. Detrick. *LSU Eye Center, New Orleans, LA; Tulane Regional Primate Research Center, Covington, LA; and George Washington University Medical Center, Washington DC, USA.*
55. Optimization of the Reverse Transcriptase Assay for the Detection of Viral Burden in Mice Infected with Rauscher Murine Leukemia Virus. E.L. White, L. Westbrook, M.G. Hollingshead, and W.M. Shannon. *Southern Research Institute, Birmingham, AL, USA.*
56. Antiretroviral Efficacy and Pharmacokinetics of Ester Prodrugs of 9-(2-Phosphonylmethoxy-ethyl)adenine (PMEA). L. Naesens, J. Balzarini, P. Alexander, A. Holy, and E. De Clercq. *Katholieke Universiteit Leuven, Leuven, Belgium, and Institute of Organic Chemistry and Biochemistry, Praha, Czech Republic.*
57. Lipophilic Phosphorus Prodrugs for the Antiviral Agent PMEA. A. Glazier, R. Buckheit, M. Yanachkova, I. Yanachkov, and G.E. Wright. *Drug Innovation and Design, Inc., Newton, MA; Southern Research Institute, Birmingham, AL; and University of Massachusetts Medical School, Worcester, MA, USA.*
58. Superantigen Toxic Shock Syndrome Toxin-1 (TSST-1) Enhances the Replication of HIV-1 in Peripheral Blood Mononuclear Cells: Implication of a New Anti-HIV-1 Assay In Vitro. K. Hashimoto, M. Baba, and S. Shigeta. *Fukushima Medical College, Fukushima, Japan.*
59. 2'5' Oligoadenylate Synthetase and Effects of Interferon on Retrovirus-Producing Murine Lymphoma Cells. A.A. Verkhatskaya, M.P. Zavelevitch, and G.Ch. Matsuka. *Institute of Molecular Biology and Genetics, Kiev, Ukraine.*
60. A Stromal Cell Line from LP-BM5 Infected Long-Term Bone Marrow Cell Cultures (LTBMC) Inhibits Hematopoiesis In Vitro. V.S. Gallicchio, K.F. Tse, and N.K. Hughes. *University of Kentucky Medical Center and Department of Veterans Affairs, Lexington, KY, USA.*
61. Effect of Antiviral Nucleoside Analogs on Human Polymerases and Mitochondrial DNA Synthesis. J.L. Martin, C.E. Brown, and J.E. Reardon. *Burroughs Wellcome Co., Research Triangle Park, NC, USA.*

62. Mixed Infection of Lymphoid Cells, Induced with Epstein-Barr Virus, Adenoviruses, HIV, HTLV-I as a Model for Screening Antivirus Substances. N.S. Dyachenko, O.Y. Povnitsa, S.L. Tibalko, G.V. Panasenko, A.A. Chernomaz, L.N. Nosach, S.T. Dyadun, and I.A. Smirnova. *Institute of Microbiology and Virology of Academy of Sciences, and Institute of Epidemiology and Infectious Diseases of Ministry of Health Protection, Kiev, Ukraine.*
63. Salivary Inhibition of HIV: Broad Antiviral Activity of Salivary Mucin and Correlation of Antiviral Activity with the Recovery of Infectious Virus. D.H. Copenhaver and P.S. Woo. *The University of Texas Medical Branch, Galveston, TX, USA.*
64. Rapid Evaluation of Experimental Antiretroviral Therapy by Quantitative Competitive Polymerase Chain Reaction (QC-PCR) Assessment of HIV-1 Viral Load in Plasma. J.D. Lifson, M.S. Saag, L.C. Yang, J. Kappes, S. Gosh, G.M. Shaw, and M. Piatak. *Genelabs Technologies, Inc., Redwood City, CA; and University of Alabama at Birmingham, Birmingham, AL, USA.*
65. Synthesis and Properties of Dioxolane Deoxynucleoside Analogues. S.N. Mikhailov, E.V. Efimtseva, A.V. Bochkarey, G.V. Gurskaya, L.S. Viktorova, and E.R. Kern. *Engelgardt Institute of Molecular Biology, Russian Academy of Sciences, Moscow, Russia; and The University of Alabama at Birmingham, Birmingham, AL, USA.*