

HIV DART 2006
Frontiers in Drug Development for Antiretroviral Therapies

Scientific Program

Sunday, December 10, 2006

Abstract

Chairs: Robert Murphy *Northwestern University, USA*
Juan Sierra-Madero *Instituto Nacional de Ciencias Médicas y Nutrición
Salvador Zubirán, Mexico*

15:00 Opening Remarks and Presentation of David Barry DART Achievement Award
Robert Murphy *Northwestern University, USA*
The award will be given to Dr. Mitsuya by Mrs. Gracia Barry

15:15 **David Barry DART Achievement Award**
Development of anti-HIV drugs: From the AZT era to the present 01
Hiroaki Mitsuya *Kumamoto University School of Medicine, Japan*

16:00 **State of the Art Lecture**
Successes and failures in HIV drug development: Are there lessons for HCV? 02
Robert Schooley *University of California, San Diego, USA*

18:00 **Welcome Reception**

Monday, December 11, 2006

Chairs: Pedro Cahn *Fundación Huesped, Argentina*
Raymond F. Schinazi *Emory University/ Veterans Affairs Medical Center, USA*

8:00 Presentation of Gertrude Elion Distinguished Lecturer Award
Raymond F. Schinazi *Emory University/ Veterans Affairs Medical Center, USA*

8:10 **Gertrude Elion Distinguished Lecturer Award**
Hidden drug resistance: Detection and implications for antiretroviral therapy 03
John Mellors *University of Pittsburgh, USA*

Implications of Viral Drug Resistance

Chairs: Christine Katlama *Groupe Hospitalier Pitié-Salpêtrière, France*
Luis Soto-Ramirez *Instituto Nacional de Ciencias Médicas y Nutrición
Salvador Zubirán, Mexico*

9:00 The clinical interpretation of HIV drug resistance 04
Anna Maria Geretti *Royal Free Hospital and Royal Free & University College
Medical School, London, UK*

9:20 Re-evaluating the cost-effectiveness of HAART based on its effect on secondary prevention
of HIV infection 05
Julio Montaner *St. Paul's Hospital, Canada*

9:40 Patterns of antiretroviral therapy drug resistance in South Africa with treatment
according to WHO guidelines 06
Ian Sanne *Wits Health Consortium, South Africa*

10:00 ART drug resistance mutations in ART experienced and newly initiated patients in Nigeria 07
Phyllis Kanki *Harvard School of Public Health, USA*

10:20 **Break**

	<u>Abstract</u>
10:50 Effect of low abundance mutant HIV on phenotypic resistance and response to ART Randall Lanier <i>GlaxoSmithKline, USA</i>	08
11:10 Resistance testing in the clinic today: A critical assessment Andrew Zolopa <i>Stanford University, USA</i>	09
11:30 Optimizing the use of new antiretrovirals to minimize resistance Brendan Larder <i>HIV Resistance Response Database Initiative, UK</i>	10
11:50 Panel Discussion	
12:30 Lunch	
MONDAY EVENING SESSION	
New Targets	
Chairs: Brendan Larder <i>HIV Resistance Response Database Initiative, UK</i> John Moore <i>Weill Medical College of Cornell University, USA</i>	
17:00 State of the Art Lecture Discovery of the HIV integration cofactor p75 Eric Poeschla <i>Mayo Clinic College of Medicine, USA</i>	19
17:30 Activity of an HIV-1 maturation inhibitor <i>in vitro</i> requires assembled Gag Michael Sakalian <i>The University of Oklahoma Health Sciences Center, USA</i>	20
17:50 TRIM5alpha: Innate immunity to retroviruses Byeongwoon Song <i>Dana Farber Cancer Institute, USA</i>	21
18:10 Host metalloproteinase: Implications for controlling HIV infections Thomas Hodge <i>University of Georgia, USA</i>	22
18:30 Panel Discussion	

Tuesday, December 12, 2006

Preventive Technologies: Microbicides and Vaccines

Chairs: Michael Greenberg <i>Trimeris, Inc., USA</i> Robert Murphy <i>Northwestern University, USA</i>	
8:00 State of the Art Lecture Vaccine development overview Tomáš Hanke <i>University of Oxford, UK</i>	24
8:30 State of the Art Lecture Status of microbicide product development to prevent HIV infections Zeda Rosenberg <i>International Partnership for Microbicides, USA</i>	25
9:00 Entry inhibitors as topical microbicides to prevent HIV-1 sexual transmission John Moore <i>Weill Medical College of Cornell University, USA</i>	26
9:20 HIV treatment in resource-poor settings – where are we and what needs to be done to avert a great catastrophe Joep Lange <i>University of Amsterdam, the Netherlands</i>	27
9:40 Panel Discussion	
10:10 Break	

Drug Discovery and Development I: Chemistry and Pre-Clinical Development

Abstract

Chairs: Gilles Gosselin

Université Montpellier II, France

Randall Lanier

GlaxoSmithKline, USA

10:40 **State of the Art Lecture**

New drugs in development and their potential clinical use

David Cooper

University of New South Wales, Australia

11:10 Engineering kinases for improved nucleoside analog phosphorylation

Stefan Lutz

Emory University, USA

31

11:30 Amidate prodrug of nucleotide analog GS-9148 has favorable *in vitro* activity against resistant HIV and *in vivo* pharmacokinetics

Adrian Ray

Gilead Sciences, Inc., USA

32

11:50 Chemoprophylaxis with higher drug potency correlates with increased protection against rectal SHIV transmission

Walid Heneine

Centers for Disease Control and Prevention, USA

33

12:10 Panel Discussion

12:30 **Lunch on your own**

16:30 **Poster Session**

TUESDAY EVENING SESSION

Salvage and Alternative Therapies

Chairs: Ashley Haase

University of Minnesota, USA

Anna Maria Geretti

Royal Free Hospital, UK

18:00 **State of the Art Lecture**

Developing antiviral agents for the developing world

John Erickson

Institute for Global Therapeutics, USA

18:30 Racivir as second line therapy

Pedro Cahn

Fundación Huesped, Argentina

36

18:50 The role of NNRTIs in treatment experienced patients - an update on TMC125

Brian Woodfall

Tibotec BVBA, Belgium

37

19:10 Panel Discussion

Wednesday, December 13, 2006

Drug Discovery and Development II: Viral Targets

Chairs Raymond F. Schinazi

Emory University/ Veterans Affairs Medical Center, USA

Hiroaki Mitsuya

Kumamoto University School of Medicine, Japan

8:00 **State of the Art Lecture**

Inhibitors of human immunodeficiency virus type I integration: Lessons from *in vitro* and *in vivo* studies

Daria Hazuda

Merck & Co., Inc., USA

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8:30 Clinical development of an HIV-1 integrase inhibitor GS-9137

Jeff Enejosa

Gilead Sciences, Inc., USA

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	<u>Abstract</u>
8:50 HIV peptide fusion inhibitors Michael Greenberg <i>Trimeris, Inc., USA</i>	41
Oral Abstract Presentation	
9:10 Validation of the translocational equilibrium of HIV-1 RT as a specific target Matthias Götte <i>McGill University, Canada</i>	42
9:20 Panel Discussion	
9:50 Break	
Safety and Effectiveness of Antiretroviral Agents	
Chairs: David Cooper <i>University of New South Wales, Australia</i> Ian Sanne <i>Wits Health Consortium, South Africa</i>	
10:20 State of the Art Lecture The future of HIV drug interactions Charles Flexner <i>Johns Hopkins University, USA</i>	59
10:50 Complications of antiretroviral therapy: Current issues Christine Katlama <i>Hopital Pitié-Salpêtrière, France</i>	60
11:10 Evaluating cardiac toxicity of antiretroviral agents Judith Currier <i>University of California, Los Angeles, USA</i>	61
11:30 The immune system and complications of HIV therapy Richard Pollard <i>University of California, Davis Medical Center, USA</i>	62
11:50 Panel Discussion	
12:30 Lunch	
WEDNESDAY EVENING SESSION	
HIV Reservoirs and Immunotherapy	
Chairs: Bruce Polsky <i>St. Luke's-Roosevelt Hospital Center, USA</i> Joep Lange <i>University of Amsterdam, The Netherlands</i>	
17:00 State of the Art Lecture Anatomic sites and cellular reservoirs in HIV-1 infection before and during HAART Ashley Haase <i>University of Minnesota, USA</i>	73
Oral Abstract Presentations	
17:30 Safety and efficacy of darunavir in combination with low-dose ritonavir: 48-week results from the POWER studies Peter Ruane <i>Light Source Medical, USA</i>	74
17:40 VS411: An immunomodulating drug combination to inhibit both HIV and immune activation Franco Lori <i>Research Institute for Genetic and Human Therapy (RIGHT), Italy and USA</i>	75
17:50 Panel Discussion	
20:00 Gala Party	

HIV/Hepatitis and Other Co-Infections

Chairs: Robert Schooley *University of California, San Diego, USA*
Charles Flexner *Johns Hopkins University, USA*

8:00 **State of the Art Lecture**
Co-infections with HCV and HBV 76
Andrea Cox *Johns Hopkins University, USA*

8:30 New therapies for HCV and HBV 77
Bruce Polsky *St. Luke's-Roosevelt Hospital Center, USA*

8:50 Clinical management of co-infected patients
Robert Murphy *Northwestern University, USA*

9:10 Panel Discussion

9:40 **Break**

Late Breaker Abstracts

Chairs: Daria Hazuda *Merck & Co., Inc., USA*
Dennis Liotta *Emory University, USA*

Oral Abstract Presentations

10:10 Vicriviroc as a component of HAART in treatment-naïve individuals: Final analysis 82
of Study 3802
Lisa Dunkle *Schering-Plough Research Institute, USA*

10:20 Preclinical and clinical evaluation of PPL-100, a next generation HIV protease inhibitor 83
Jinzi Wu *Ambria Biopharma Inc., Canada*

10:30 *In vitro* and *in vivo* evaluation of hexadecyloxypropyl-9-R-[2-(phosphono-methoxy) 84
propyl]adenine as a potential treatment of HIV-1 infection
Karl Hostetler *Veterans Medical Research Foundation and
the University of California, San Diego, USA*

10:40 Similar changes in metabolic parameters of darunavir (TMC114) and atazanavir, 85
each coadministered with low-dose ritonavir in healthy volunteers
Frank Tomaka *Tibotec Inc., USA*

10:50 Panel Discussion

11:20 **Closing Remarks**
Raymond F. Schinazi *Emory University/Veterans Affairs Medical Center, USA*