

## CURRICULUM VITAE

**KENNETH ALLEN LICHTENSTEIN, MD**

### **I. Educational History**

1965-68	Tulane University New Orleans, LA
1968-69	University of Colorado Boulder, CO B.A.
1969-73	University of Colorado Denver, CO M.D.
1973-74	University of Colorado Affiliated Hospitals Denver, CO Straight Medical Internship
1974-76	University of Colorado Affiliated Hospitals Denver, CO Residency – Internal Medicine
1976-78	University of Colorado Affiliated Hospitals Denver, CO Fellowship – Infectious Diseases
1976	American Board of Internal Medicine Diplomate
1978	Infectious Diseases Diplomate

### **II. Professional Positions**

1978-88	Private Practice Internal Medicine and Infectious Diseases Rose Medical Center Denver, CO
1988-03	Private Practice HIV/AIDS, Tropical Medicine, Infectious Diseases Rose Medical Center Denver, CO
1981-present	Chairman, Infection Control Committee Rose Medical Center Denver, CO
1983-present	Chief, Division of Infectious Diseases Rose Medical Center Denver, CO

1982-84	Chairman, Utilization Review and Quality Care Committee Rose Medical Center Denver, CO
1985-88	Member, Board of Trustees Rose Medical Center Denver, CO
1986-90	Member, Pharmacy and Therapeutics Committee Rose Medical Center Denver, CO
1990-92	Chairman, Infection Control Committee Vencor Hospital Denver, CO
1991-92	Member, Go-Forward Committee Rose Medical Center Denver, CO
1991-94	Member Environmental Issues Committee Rose Medical Center Denver, CO
1992-07	Hospital Epidemiologist Rose Medical Center Denver, CO
1994-95	Chair, Ancillary Services Committee Rose Medical Center Denver, CO
1994-06	Member Institutional Research Review Board Rose Medical Center Denver, CO
1995-03	Chairman, Quality Management Committee Rose Medical Center Denver, CO
1995-03	Member, Board of Advisors Rose Medical Center Denver, CO
1996-03	Member, Quality Management Committee Board Columbia Health-One Board of Governors Denver, CO
1998-00	Chairman, Infection Control Committee SCCI Hospital Denver, CO

## II. Professional Positions (con't)

2003-07	Chairman, Department of Medicine Rose Medical Center Denver, CO
2003-07	Clinical Practice – Infectious Disease Group Practice University of Colorado Health Sciences Center Denver, CO
2005-06	Chairman, Institutional Research Review Board Rose Medical Center Denver, CO

## III. Honors and Awards

1973	Franklin Ebaugh Award
1973	Robert I. Slater Award
1990	Clinical Faculty Community Service Award University of Colorado Health Services Center Denver, CO
1993	Health Care Finance Administration World AIDS Day Administrator's Citation Washington, DC
1994-99	“5280” Magazine – Best Infectious Diseases and AIDS Care
1999-04	“5280” Magazine – Best AIDS Care
1995	Clinical Research Award University of CO Health Sciences Center Denver, CO
1997	Clinical Research Award University of CO Health Sciences Center Denver, CO

## IV. Professional Affiliations

1984-87	Denver Medical Society Chair, Public Health Commission Member, Nuclear Arms Education Committee Member, Radiation Safety Committee
1988-90	Secretary
1993-99	Board of Directors
1980-present	Infectious Diseases Society of America
1986-93	American Association for the Advancement of Science Physicians for Social Responsibility
1984-86	National House of Delegates
1985-87	Finance Committee

1985-88	President, Colorado Chapter
1986-87	Member, International Committee
1986-90	Southwest Regional Director
1987-89	Chair, Chapter and Regional Development Committee
1987-89	Psychosocial Task Force
1989-93	Physicians' Task Force on Department of Energy Weapons Facilities
1990-91	National President Elect
1991-92	National President
1992-93	National Immediate Past President
1993-present	Society for Healthcare Epidemiology of America
2005-present	American Academy for HIV Medicine

**V. Professional Service and Committees (Local/Regional)**

1984-90	Board of Directors, CO Coalition for the Prevention of Nuclear War
1989-90	Board of Directors, Rocky Flats Clean-up Commission, US EPA
1989-93	Board of Directors, Committee for Better Health Care for All Colorado Citizens
1989-93	Member, Health Resources and Service Administration AIDS Service Demonstration Project Grant
1990	Member, Health Effects Workshop, Congress of the United States, Office of Technology Assessment Complex Cleanup – The Environmental Legacy of Nuclear Weapons Production
1990	Participant, Rocky Flats Economic Conversion Task Force for Josie Heath, US. Senate Candidate
1990-00	Member, Governor's Health Advisory Panel on Rocky Flats
1990-93	Board of Sponsors, CO Coalition for the Prevention of Nuclear War
1992	Member, Advisory Panel on Managing Materials from Warheads, Congress of the United States, Office of Technology Assessment
1995-97	Governor's AIDS Council
1996-04	Member, Board of Director's, CO AIDS Project
1990	Testified before the House Armed Services Committee on Nuclear Weapons Complex Oversight

**Professional Service and Committees (National/International)**

06-06-84	Delegate, 4th International Congress, International Physicians for the Prevention of Nuclear War, Helsinki, Finland. First tour of American Physicians to the Soviet Union on American-Soviet physician's exchange.
05-20-87	Delegate, 7th International Congress, International Physicians for the Prevention of Nuclear War, Moscow, USSR.

01-05-88	Co-organizer, "International Symposium on Nuclear Testing," Las Vegas, Nevada.
01-12-89	Appeared on Danish Broadcasting Company documentary on Rocky Flats.
05-21-90	Participant and speaker at International Conference on a Nuclear Test Ban in Alma Ata, Kazakhstan, USSR.
07-13-90	Appeared on documentary on the Cold War and forty years of peace in Europe on "La Clave". Joined by the Head of the Ministry of Psychiatry in the Soviet Union, a Japanese pathologist on the Atomic Bomb Casualty Commission who was a survivor of the Atomic Bombing of Hiroshima, and the navigator of the "Enola Gay". Madrid, Spain.

**VI. Patents**  
None

**VII. Review and Referee Activities (editorial boards, ad hoc reviews, book reviews, NIH study sections)**

May 5, 2005	Journal of AIDS
July 13, 2005	Journal of AIDS
September 1, 2005	HIV Medicine
November 24, 2005	HIV Medicine
February 9, 2006	New England Journal of Medicine
March 4, 2006	Clinical Endocrinology
March 6, 2006	Journal of Infectious Diseases
June 1, 2006	Journal of AIDS
June 26, 2006	AIDS Research and Human Retroviruses
August 21, 2006	Clinical Infectious Diseases
February 1, 2007	New England Journal of Medicine
February 17, 2007	Journal of AIDS
April 2, 2007	New England Journal of Medicine
October 2, 2007	Southern Medical Journal
October 28, 2007	Antiviral Therapy

### **VIII. Teaching Activities**

1978–80	Clinical Instructor in Medicine University of Colorado Health Sciences Center Denver, CO
1980–86	Assistant Clinical Professor University of Colorado Health Sciences Center Denver, CO
1986–97	Associate Clinical Professor University of Colorado Health Sciences Center Denver, CO
1997–03	Clinical Professor University of Colorado Health Sciences Center Denver, CO
2003-07	Professor of Medicine University of Colorado Health Sciences Center Denver, CO
2007-present	Professor of Medicine National Jewish Medical and Research Center

### **IX. Research Grants, Contracts, and Special Grants**

1993- present	Community Programs in Clinical Research in AIDS Subsite
1993-present	AIDS Clinical Trials Group Principal Investigator for investigational trials on AZT, ddI, ddC, fluconazole, trimetrexate, spiramycin, d4T, ganciclovir, 3TC, nelfinavir, adefovir, efavirenz, abacavir, lodenosine, ABT 378/r, monomeric Interleukin-2, atazanavir, tipranavir, human growth hormone, Merck integrase inhibitor, TMC 114, Pfizer second generation non-nucleoside reverse transcriptase inhibitor, TMB 105, TMB 202
1998-present	Co-Principal Investigator for HIV Outpatient Study Centers for Disease Control and Prevention
2005-07	Co-director Clinical Core, Center for AIDS Research University of Colorado Health Sciences Center

**XI. Bibliography** (complete citation and pagination)

- 1981 Stratton CW, **Lichtenstein KA**, Lowenstein SR, Phelps DB, Reller LB: Granulomatous tenosynovitis and carpal tunnel syndrome caused by *Sporothrix schenckii*. *Am J Med*; 71:161–4.
- 1983 Weinstein MP, Reller LB, Murphy JR, and **Lichtenstein KA**: The clinical significance of positive blood cultures: A comprehensive analysis of 500 episodes of bacteremia and fungemia in adults. I. Laboratory and epidemiologic observations. *Rev Inf Dis*; 5:35–53.
- 1983 Weinstein MP, Murphy JR, Reller LB, **Lichtenstein KA**: The clinical significance of positive blood cultures: A comprehensive analysis of 500 episodes of bacteremia and fungemia in adults. II. Clinical observations, with special reference to factors influencing prognosis. *Rev Inf Dis*; 5:54–70.
- 1993 Minor Injuries and Repairs. John A. Grossman. Chapter 9, “Antibiotic Therapy,” **Kenneth A. Lichtenstein, M.D.** Gower Medical Publishing, 1993.
- 12-95 Tyler KL, Tedder DG, Yamamoto LJ, Klapper JA, Ashley R, **Lichtenstein KA**, Levin MJ: Recurrent Brainstem Encephalitis Associated with Herpes Simplex Virus Type I DNA in Cerebrospinal Fluid. *Neurology*; 45: 2246–2250.
- 2000 Weidle P, **Lichtenstein KA**, Moorman AC, Von Bargan JC, Geenberg KS, Palella F, Holmberg SD, et al. Factors associated with the successful modification of antiretroviral therapy. *AIDS*. 2000;14:491-497.
- 2001 **Lichtenstein KA**, Ward DJ, Moorman AC, Delaney KM, Young B, Palella FJ, Rhodes PH, Wood KC, Holmberg SD, HOPS Study Group. Clinical assessment of HIV-associated lipodystrophy in an ambulatory population. *AIDS*. 15:1389-98. 2001.
- 2001 Kosmiski L, Kuritzkes D, **Lichtenstein K**, et al. Fat distribution and Metabolic Changes are Strongly Correlated and Energy Expenditure is Increased in the HIV Lipodystrophy Syndrome. *AIDS*. 15:1-8. 2001
- 2003 Kosmiski L, Kuritzkes D, **Lichtenstein K**, Eckel R. Adipocyte-derived hormone levels in HIV lipodystrophy. *Antivir Ther* 2003; 8(1):9-15)
- 2003 **Lichtenstein, KA**, Delaney, KM, Armon C, Ward DJ, Moorman AC, Wood KC, Holmberg DS, HOPS Study Group. Incidence of and Risk Factors for Lipoatrophy (Abnormal Fat Loss) in Ambulatory HIV-1-Infected Patients. *JAIDS*. 32:48-56. 2003.
- 2004 Anderson PL, Kakuda TN, **Lichtenstein KL**. The Cellular Pharmacology of Nucleoside- and Nucleotide-Analogue Reverse Transcriptase Inhibitors and Its Relationship to Clinical Toxicities. *Clin Infect Dis*. 2004;38:743-53.
- 2004 Holmberg SD, Palella FJ, **Lichtenstein KA**, Havlir, DV. The Case for Earlier Treatment of HIV Infection. *Clin Infect Dis*. 2004; 39:1699-704.

- 2004 **Lichtenstein KA**, Armon C, Moorman AC, Wood KC, Holmberg SD. A 7-year Longitudinal Analysis of IL-2 in Patients Treated with Highly Active Antiretroviral Therapy. *AIDS*. 2004; 18, 17: 4-6.
- 2005 **Lichtenstein KA**, Armon C, Baron A, Moorman AC, Wood KC, Holmberg SD, HOPS Study Group. Modification of the Incidence of Drug-Associated Symmetrical Peripheral Neuropathy by Host and Disease Factors in the HIV Outpatient Study Cohort. *Clin Infect Dis*. 2005; 40:148-157.
- 2005 **Lichtenstein KA**. Redefining lipodystrophy syndrome: risks and impact on clinical decision- making. *JAIDS*. 39(4): 395-400, 2005.
- 2007 **Lichtenstein KA, et al**. HIV-associated adipose redistribution syndrome (HARS): Etiology and pathophysiological mechanisms. *AID Res Ther*. June, 2007; 4:14.
- 2008 **Lichtenstein KA, et al**. Initiating HAART at CD4+ T-lymphocyte counts does not increase incidence of peripheral neuropathy, anemia, or renal insufficiency. *JAIDS*. January 2008, in print.
- 2008 **Lichtenstein KA**. Lipoatrophy – Letting the genome out of the bottle. *J Infect Dis*. Invited Editorial. January 2008, in print.
- 2008 **Lichtenstein KA**. HIV and Aging. Sharon Lee. Book Chapter. “Cardiovascular Disease in HIV”. May 2008, in print.

## Abstracts

- 1998 Weidle PJ, **Lichtenstein KA**, Moorman AC, Von Bargen JC, Greenberg KS, Palella FJ, Holmberg SD, and The HIV Outpatient Study Investigators. Factors Associated with the Successful Modification of Antiretroviral Therapy. Poster presentation, Infectious Disease Society of America 36<sup>th</sup> Annual Meeting, November 1998.
- 1998 Weidle PJ, **Lichtenstein KA**, Moorman AC, Von Bargen JC, Greenberg KS, Palella F, Holmberg SD, et al. Protease inhibitor (PI) versus nonnucleoside reverse transcriptase inhibitor (NNRTI) based highly active antiretroviral therapy (HAART) as initial therapy for HIV infection. Abstracts, 1<sup>st</sup> International Conference on the Discovery and Clinical Development of Antiretroviral Therapies, St Thomas, December 13-17, 1998.
- 1999 **Lichtenstein KA**, Ward DJ, Delaney KM, Moorman AC, Palella FJ, Young B, Wood KC, Holmberg SD, HOPS Study Group. Clinical factors related to the severity of fat redistribution in the HIV Outpatient Study (HOPS). Abstracts. 1<sup>st</sup> International Workshop on Adverse Drug Reactions and Lipodystrophy in HIV, San Diego, California, June 26-28, 1999.
- 1999 Ward D, **Lichtenstein KA**, Delaney KM, Moorman AC, Palella FJ, Young B, Wood K, Holmberg SD, the HOPS Investigators. Description of lipodystrophy in the HIV Outpatient Study (HOPS). Abstracts. 1<sup>st</sup> International Workshop on Adverse Drug Reactions and Lipodystrophy in HIV, San Diego, California, June 26-28, 1999.



- 1999 Ward D, **Lichtenstein KA**, Moorman AC, Delaney K, Palella F, Young B, Wood K, Holmberg SD, the HOPS Investigators. Presence of lipodystrophy and related factors in the HIV Outpatient Study (HOPS). Abstracts. 1<sup>st</sup> International Workshop on Adverse Drug Reactions and Lipodystrophy in HIV, San Diego, California, June 26-28, 1999.
- 1999 Ward D, Delaney K, Moorman AC, **Lichtenstein KA**, Palella F, Young B, Wood K, Holmberg SD, and the HOPS Investigators. Clinical factors related to lipodystrophy severity in the HIV Outpatient Study (HOPS). In: Abstracts, 39<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), San Francisco, California, September 26-29, 1999.
- 1999 Ward D, Delaney K, Moorman AC, **Lichtenstein KA**, Palella F, Wood K, Young B, Holmberg SD, and the HOPS Investigators. Description of lipodystrophy in the HIV Outpatient Study (HOPS). In: Abstracts, 39<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy (ICAAC), San Francisco, California, September 26-29, 1999.
- 2000 **Lichtenstein KA**, Delaney, KM, Armon C, Ward DJ, Moorman AC, Palella F, Holmberg DS, Wood KC, HOPS Study Group. Changes in HIV-associated fat maldistribution over time. In: Abstracts, of the 2nd International Workshop on Adverse Drug Reactions and Lipodystrophy in HIV, Toronto, Ontario, Canada, September, 13-15, 2000. (oral presentation)
- 2000 Ward DJ, Delaney KM, **Lichtenstein KA**, Moorman AC, Holmberg SD. Lipid elevations in a survey of lipodystrophy in HIV-infected ambulatory patients. In: Abstracts of the 40<sup>th</sup> Interscience Conference on Antimicrobial Agents and Chemotherapy, Toronto, Ontario, Canada, September 17-20, 2000.
- 2000 **Lichtenstein, KA**, Delaney KM, Ward DJ, Moorman AC, Palella FJ, Holmberg SD, Wood KC, the HOPS Study Group. Changes in HIV-associated fat maldistribution over time. In: Abstracts, XIII International AIDS Conference. Durban, South Africa, July 9-14, 2000. Oral presentation
- 2000 **Lichtenstein, KA**, Ward DJ, Delaney KM, Moorman AC, Young B, Palella FJ, Wood KC, Holmberg SD, and the HOPS Investigators. Clinical factors related to severity of fat redistribution in the HIV Outpatient Study (HOPS). In: Abstracts, 7<sup>th</sup> Conference on Retroviruses and Opportunistic Infections. San Francisco, CA, January 30-February 2, 2000.
- 2000 Ward DJ, Delaney KM, **Lichtenstein KA**, Moorman AC, Holmberg SD. Lipid elevations in a survey of lipodystrophy in HIV-infected ambulatory patients. In: Abstracts of the 2<sup>nd</sup> International Conference on Adverse Drug Reactions and Lipodystrophy in HIV, Toronto, Ontario, Canada, September 13-15, 2000.
- 2001 **Lichtenstein KA**. Clinical factors associated with the incidence of HIV-associated lipodystrophy. In: Abstracts, 4<sup>th</sup> International Conference on Nutrition and HIV Infection and the 2<sup>nd</sup> European Workshop on Lipodystrophy, Cannes, France, April 19-21, 2001. (oral presentation).

- 2001 **Lichtenstein KA.** Clinical factors associated with the incidence of HIV-associated lipodystrophy. In: Abstracts, 3<sup>rd</sup> International Workshop on Adverse Drug Reactions and Lipodystrophy in HIV, Athens, Greece, October 24-26, 2001.
- 2002 **Lichtenstein KA,** Delaney KM, Armon C, Ward DJ, Moorman AC, Wood KC, Holmberg DS, HOPS Study Group. Incidence of and Risk Factors for Lipoatrophy (Abnormal Fat Loss) in Ambulatory HIV-1-Infected Patients. In: Abstracts of the XIV International AIDS Conference, Barcelona. July, 7-12, 2002.
- 2002 **Lichtenstein KA,** Delaney KM, Ward D, Moorman AC, Wood KC, Greenberg A, Holmberg SD, and the HOPS Investigators. Incidence and risk factors for lipoatrophy (abnormal fat loss) in ambulatory HIV-1 infected patients. In: Abstracts, 8<sup>th</sup> Conference on Retroviruses and Opportunistic Infections, Seattle, Washington, February 24-28, 2002.
- 2003 **Lichtenstein KA,** Armon C, Baron A, Moorman AC, Wood KC, Holmberg SD. Peripheral Neuropathy (PN) in the HIV Outpatient Study (HOPS) Cohort: Evolving Risk Factors in the Era of Highly Active Antiretroviral Therapy. In: Abstracts, 2<sup>nd</sup> International AIDS Society Conference on Pathogenesis and Treatment, Paris, France, July 13-16, 2003.
- 2003 **Lichtenstein KA,** Dezii CM, Maa JF, Hodder, SL. Significant Correlation Between Low Nadir CD4 and the Incidence of Peripheral Neuropathy, Pancreatitis, and Lactic Acidosis. In: Abstracts, 2<sup>nd</sup> International AIDS Society Conference on Pathogenesis and Treatment, Paris, France, July 13-16, 2003.
- 2003 Dezii CM, **Lichtenstein KA,** Maa JF, Hodder SL. Significant Correlation Between Low Nadir CD4 and the Incidence of Fat Wasting but not Lipodystrophy without Fat Wasting. Poster presentation. 5<sup>th</sup> International Workshop on Adverse Drug Reactions and Lipodystrophy in HIV, Paris. July 8-11, 2003.
- 2003 **Lichtenstein KA,** Clumeck N, Bellos N, Rodriguez C, Estrada V, Gialelis K, Sankoh S, Ledesma E. Improvement in Lipid Levels in Antiretroviral (ARV)-Experienced HIV-Infected Patients Who are Failing Therapy and Are Switched to an Atazanavir (ATV)-Containing Regimen. In: Abstracts, 5<sup>th</sup> International Workshop on Adverse Drug Reactions and Lipodystrophy in HIV, Paris, France. July 8-11, 2003.
- 2004 **Lichtenstein KA,** Clumeck N, Bellos N, Rodriguez C, Estrada V, Gialelis K, Sankoh S, Ledesma E. Lipid Benefits are Observed in Antiretroviral (ARV)-Experienced HIV-Infected Patients When Switched to Atazanavir (ATV)-Containing Regimens. Poster presentation. 2<sup>nd</sup> International AIDS Society Conference, Paris. July 13-16, 2003.
- 2004 **Lichtenstein KA,** Wanke C, Henry K, Thompson M, Muurahainen N, Kotler DP. Estimated Prevalence of HIV-Associated Adipose Redistribution Syndrome (HARS) – Abnormal Abdominal Fat Accumulation – in HIV-infected Patients. Poster L795. 6<sup>th</sup> International Workshop on Adverse Drug Reactions and Lipodystrophy in HIV, October, 2004.

- 2004 **Lichtenstein KA.** Clinical factors associated with HIV-1 antiretroviral-associated co-morbidities in the HOPS cohort. 5<sup>th</sup> Annual North American Observational Database Meeting, Washington, DC, November 11, 2004.
- 2005 **Lichtenstein KA,** Armon C, Wood KC, Moorman AC, Holmberg SD, Brooks JT. Influence of host and disease factors on ART-associated co-morbidities. Poster 852. 12<sup>th</sup> Conference on Retroviruses and Opportunistic Infections, Boston. February 22-25, 2005.
- 2005 **Lichtenstein KA,** Armon C, Buchacz K, Moorman A, Wood K, Brooks J, the HOPS Investigators. Early, uninterrupted antiretroviral therapy is associated with improved outcomes and less toxicities in the HIV Outpatient Study (HOPS). 6<sup>th</sup> Annual North American HIV Cohorts Meeting, Washington, DC, November 10, 2005.
- 2005 **Lichtenstein KA,** Armon C, Buchacz K, Moorman A, Wood K, Brooks J, the HOPS Investigators. Analysis of cardiovascular risk factors in the HIV Outpatient Study (HOPS) Cohort. 6<sup>th</sup> Annual North American HIV Cohorts Meeting, Washington, DC, November 10, 2005.
- 2006 **Lichtenstein KA,** Armon C, Buchacz K, Moorman A, Wood K, Brooks JT. Analysis of Cardiovascular Risk Factors in the HIV Outpatient Study Group. Poster 735. 13<sup>th</sup> Conference on Retroviruses and Opportunistic Infections, Denver, Colorado, February 5-9, 2006.
- 2006 **Lichtenstein KA,** Armon C, Buchacz K, Moorman A, Wood K, Brooks JT. Early, uninterrupted Antiretroviral Therapy Is Associated with Improved Outcomes and Fewer Toxicities in the HIV Outpatient Study. Poster 769. 13<sup>th</sup> Conference on Retroviruses and Opportunistic Infections, Denver. February 5-9, 2006.
- 2007 Mondy K, Henry K, Overton T, Bush T, Conley L, **Lichtenstein K,** Kojic E, Mack W, Hodis H, Brooks J, and the SUN Study Investigators. Carotid Intima-media Thickness, Coronary Artery Calcium Scores, and Framingham Risk Scores among HIV-infected Patients in the Study to Understand the Natural History of HIV/AIDS in the Era of Effective Therapy. Poster 810. 14<sup>th</sup> Conference on Retroviruses and Opportunistic Infections, Los Angeles. February 25-28, 2007.
- 2007 Overton T, Mondy K, Bush T, Conley L, Kojic E, Henry K, Hammer J, Wood K, **Lichtenstein K,** Brooks J, and the SUN Study Investigators. Factors Associated with Low Bone Mineral Density in a Large Cohort of HIV-Infected US Adults: Baseline Results from the SUN Study. Poster 836. 14<sup>th</sup> Conference on Retroviruses and Opportunistic Infections, Los Angeles. February 25-28, 2007.
- 2007 **Lichtenstein KA,** Armon C, Moorman A, Buchacz K, Chmiel JS, Wood K, Brooks J, and the HOPS Investigators. Initiation of antiretroviral therapy at higher CD4+ T-cell counts reduces incidence of nucleoside analogue toxicities acutely and risk for later development with continued use of these agents in the HIV Outpatient (HOPS) cohort. In: Abstracts of the 4<sup>th</sup> International AIDS Society Conference on HIV Pathogenesis, Treatment, and Prevention, Sydney, Australia, July 22-25, 2007.