associazione NADIR onlus

Venerdì, 22 settembre 2017

PROGRAMMA SEMINARIO 2017

presso il Centro Congressi Conte di Cavour Via Cavour 50/A, 00184 Roma – Zona Stazione Termini

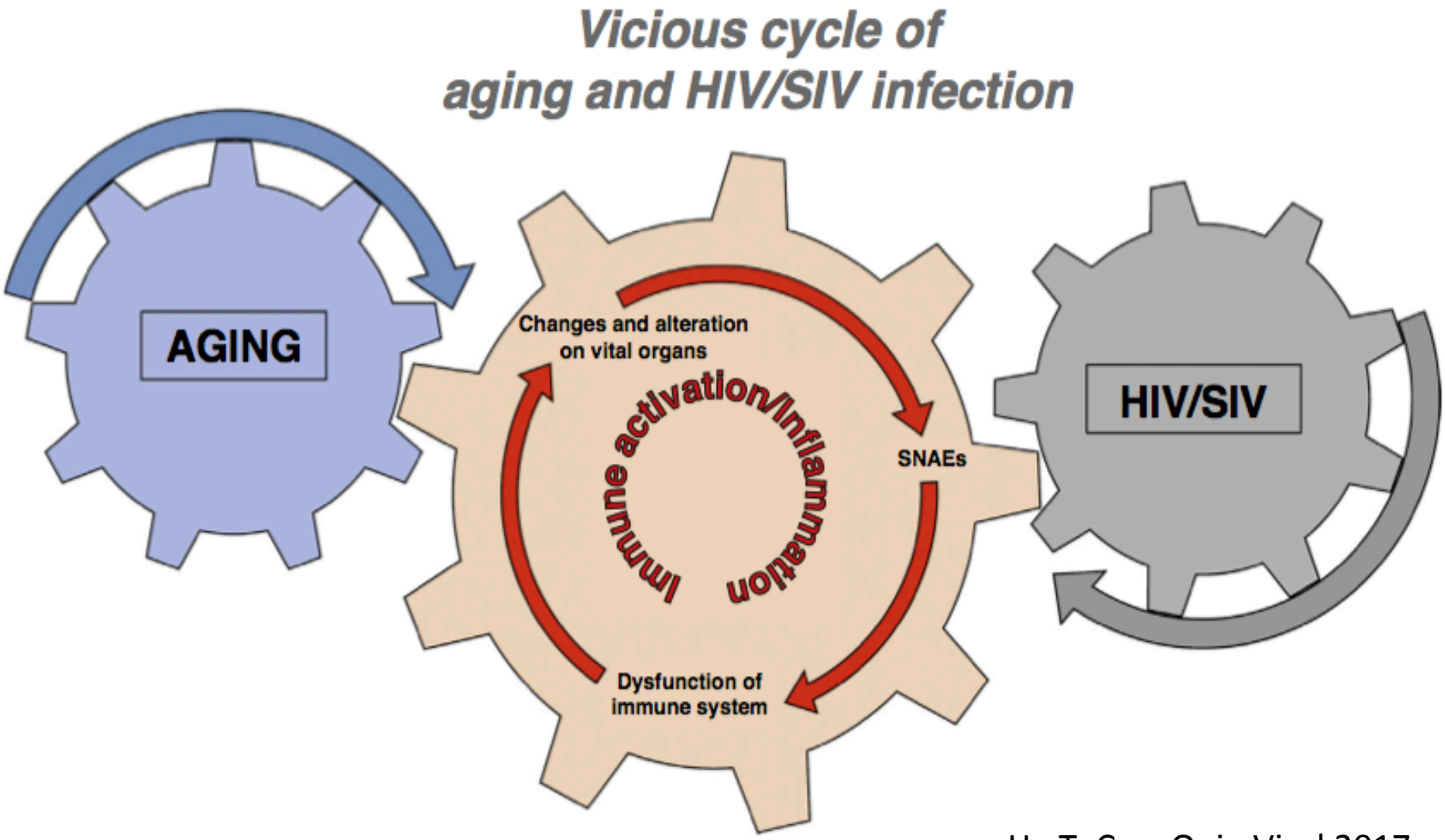
L'*ageing*, le comorbidità e la *polypharmacy*: quanto "pesano" nella scelta terapeutica?

Antonella Castagna

Financial Disclosures

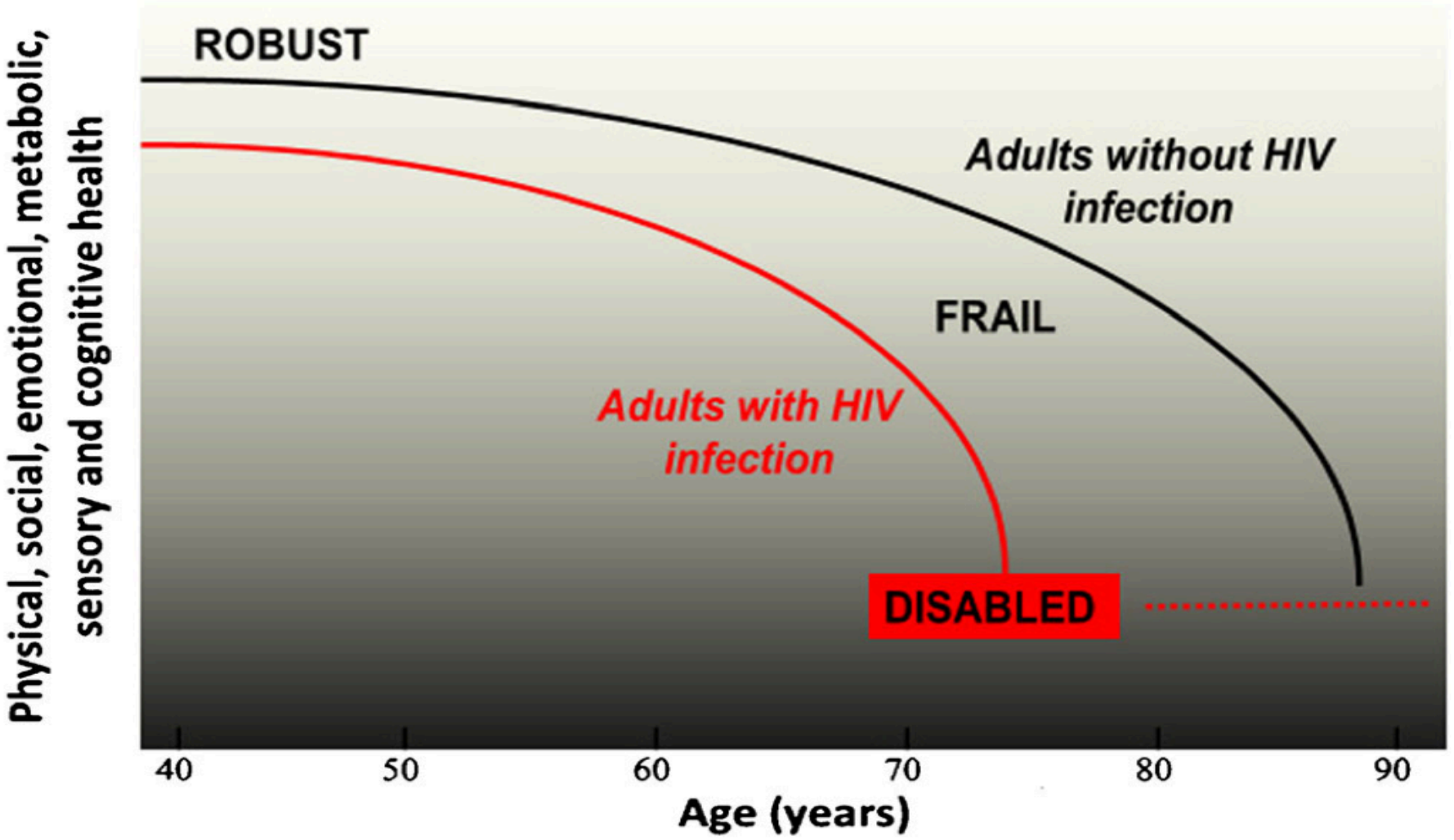
Antonella Castagna has received consulting fees and fees for non-CME services from Abbott, Bristol-Myers Squibb, Gilead Sciences, MSD, Janssen, and ViiV Healthcare.

Modeling aging in HIV infection in nonhuman primates to address an emerging challenge of the post-ART era



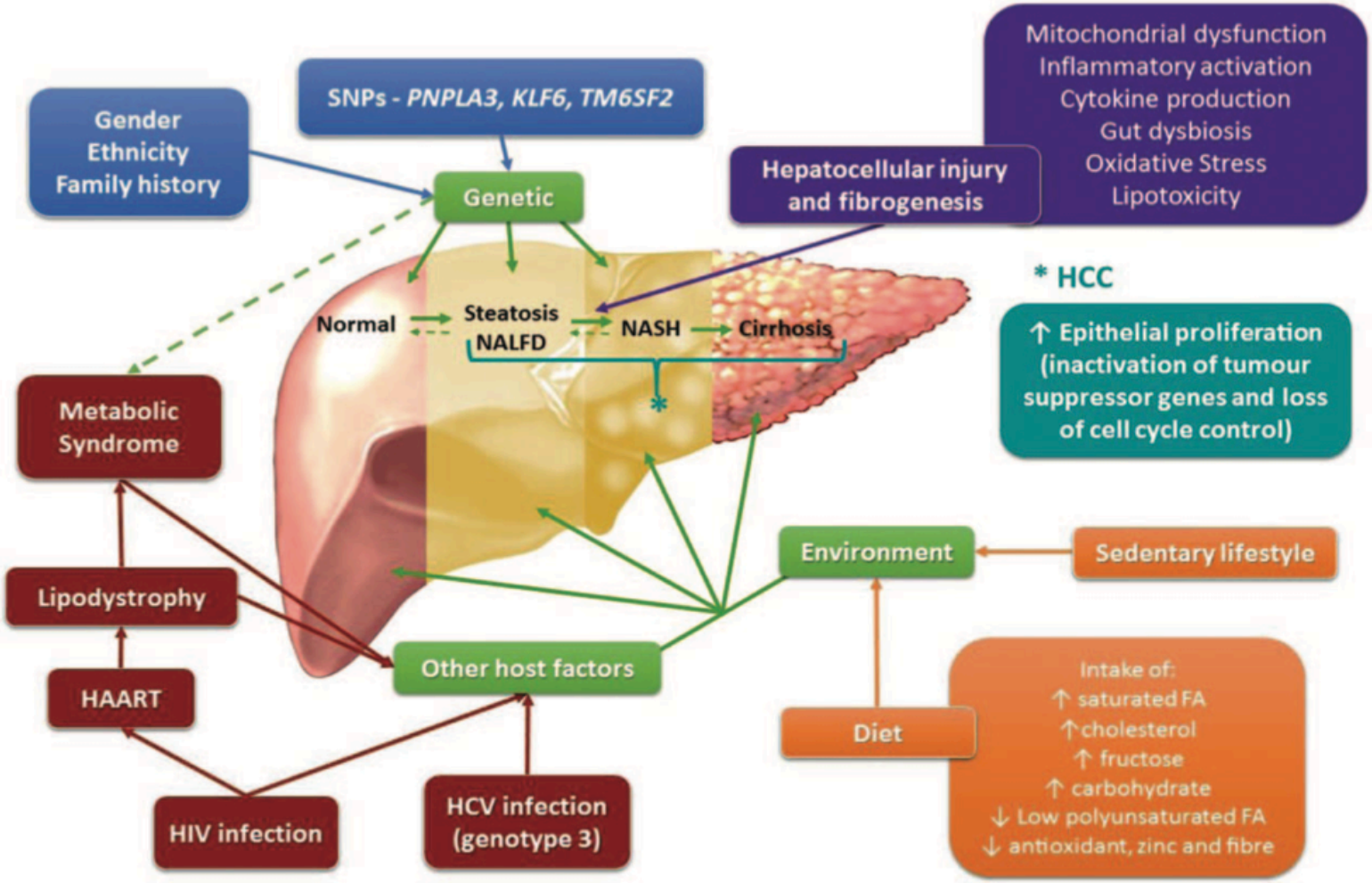
He T, Curr Opin Virol 2017

Faces of Frailty in Aging with HIV Infection



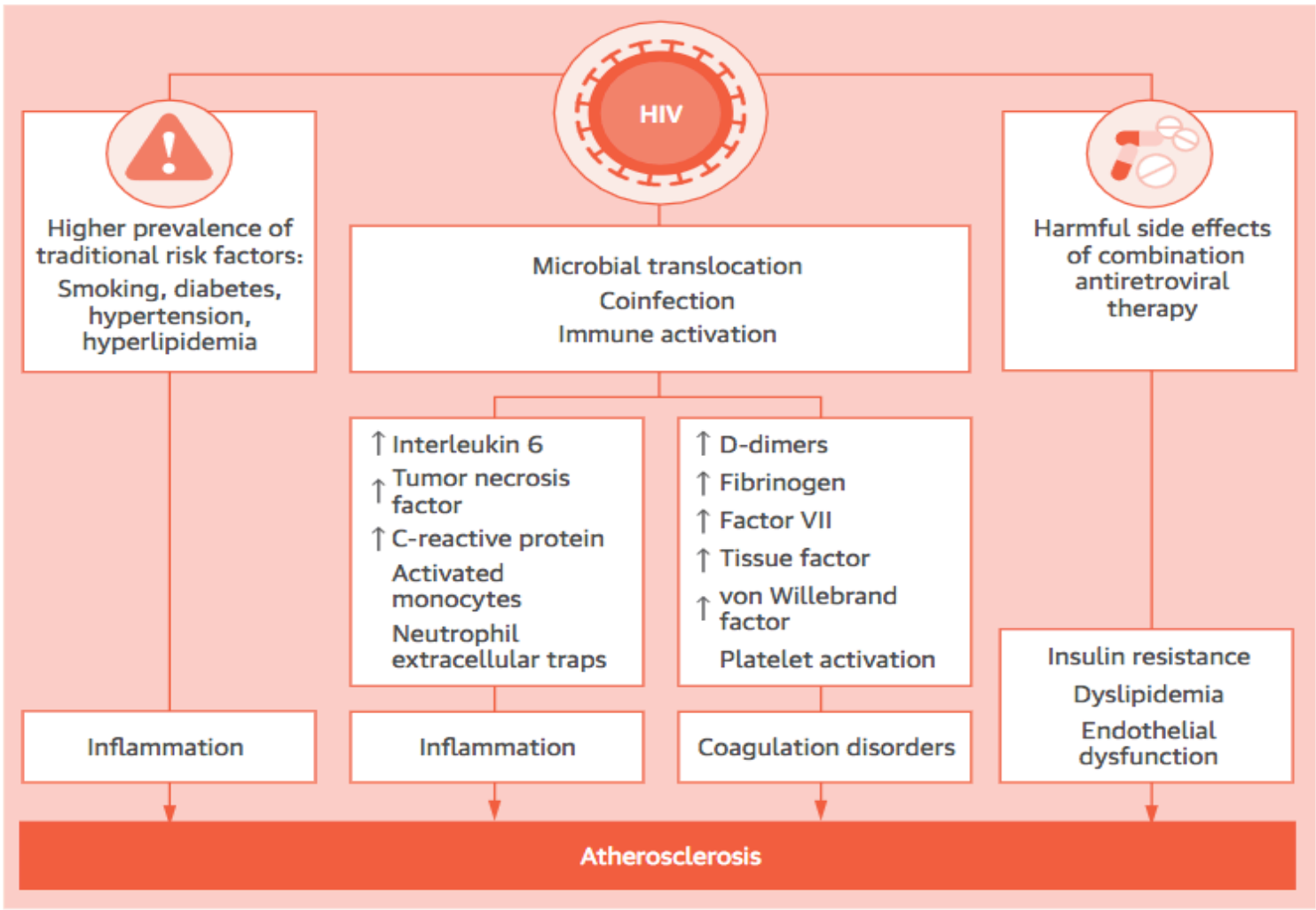
Thurn M, Curr HIV/AIDS Rep (2017) 14:31–37

From serum lipid phenotype to fatty liver



Guaraldi G, AIDS 2017

CENTRAL ILLUSTRATION **HIV and Ischemic Heart Disease: Etiopathogenesis of HIV-Associated Coronary Artery Disease**

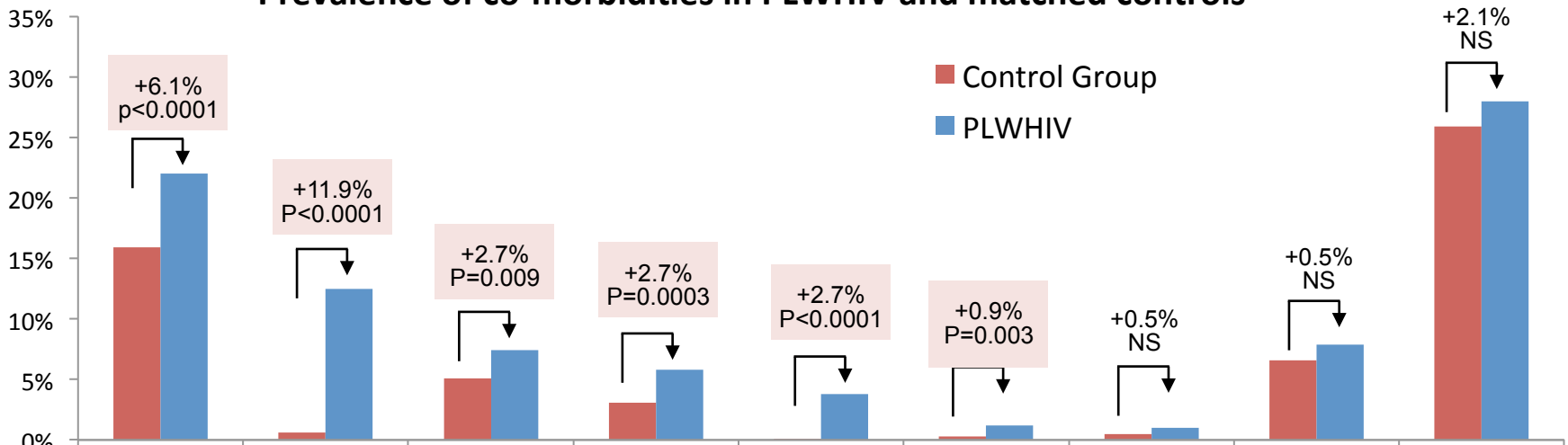


Vachiat, A. et al. J Am Coll Cardiol. 2017;69(1):73-82.

French Claims Database

- Retrospective cohort of PLWHIV diagnosed in 2011, followed until 2014
- N=1091 PLWHIV were compared to N=2181 controls: mean age in 2011: 46.7 vs 49.7 yrs, respectively

Prevalence of co-morbidities in PLWHIV and matched controls



	Dyslipidemia	Hepatitis C	Cardiovascular disease*	Alcohol abuse	Hepatitis B	Chronic renal disease**	Fractures and osteoprorosis	Diabetes	Hypertension
Control Group	15,90%	0,60%	5,10%	3,10%	0,10%	0,30%	0,50%	6,60%	25,90%
PLWHIV	22%	12,50%	7,40%	5,80%	3,80%	1,20%	1%	7,90%	28%

* Ischaemic heart disease; cardiac failure; chronic rheumatic heart disease, stroke or TIA or peripheral artery disease
** Chronic renal disease / dialysis / renal transplant

- **Prevalence of the age-related comorbidities commonly associated with HIV is significantly higher in PLWHIV patients than for matched controls**

Pourcher V, et al. IAS 2017. Paris, France. Poster #TUPEA0145

Time trend in hypertension prevalence, awareness, treatment, and control in a contemporary cohort of HIV-infected patients: the HIV and Hypertension Study

Giuseppe Vittorio De Socio[a], Elena Ricci[b], Paolo Maggi[c], Giustino Parruti[d], Benedetto Maurizio Celesia[e], Giancarlo Orofino[f], Giordano Madeddu[g], Canio Martinelli[h], Barbara Menzaghi[i], Lucia Taramasso[j], Paolo Bonfanti[k], Giacomo Pucci[l], Giuseppe Schillaci[l], for the CISAI study group

De Socio *et al.*

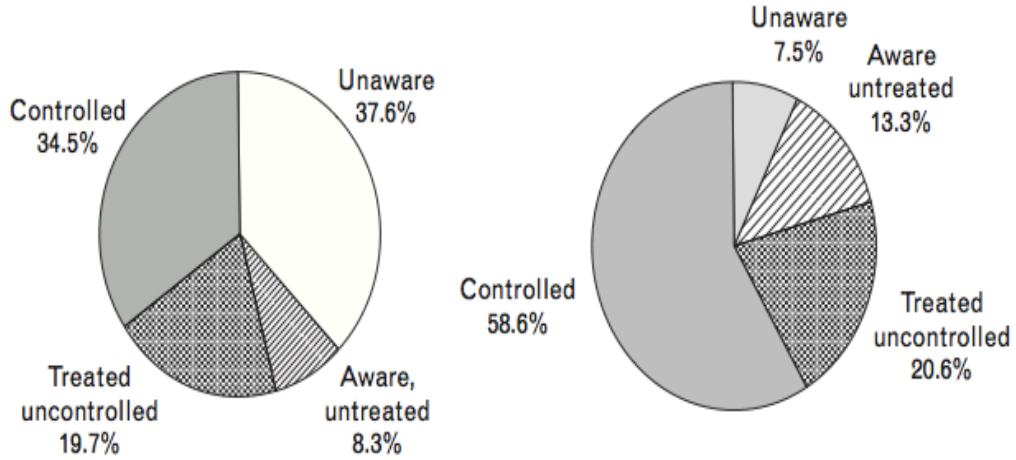


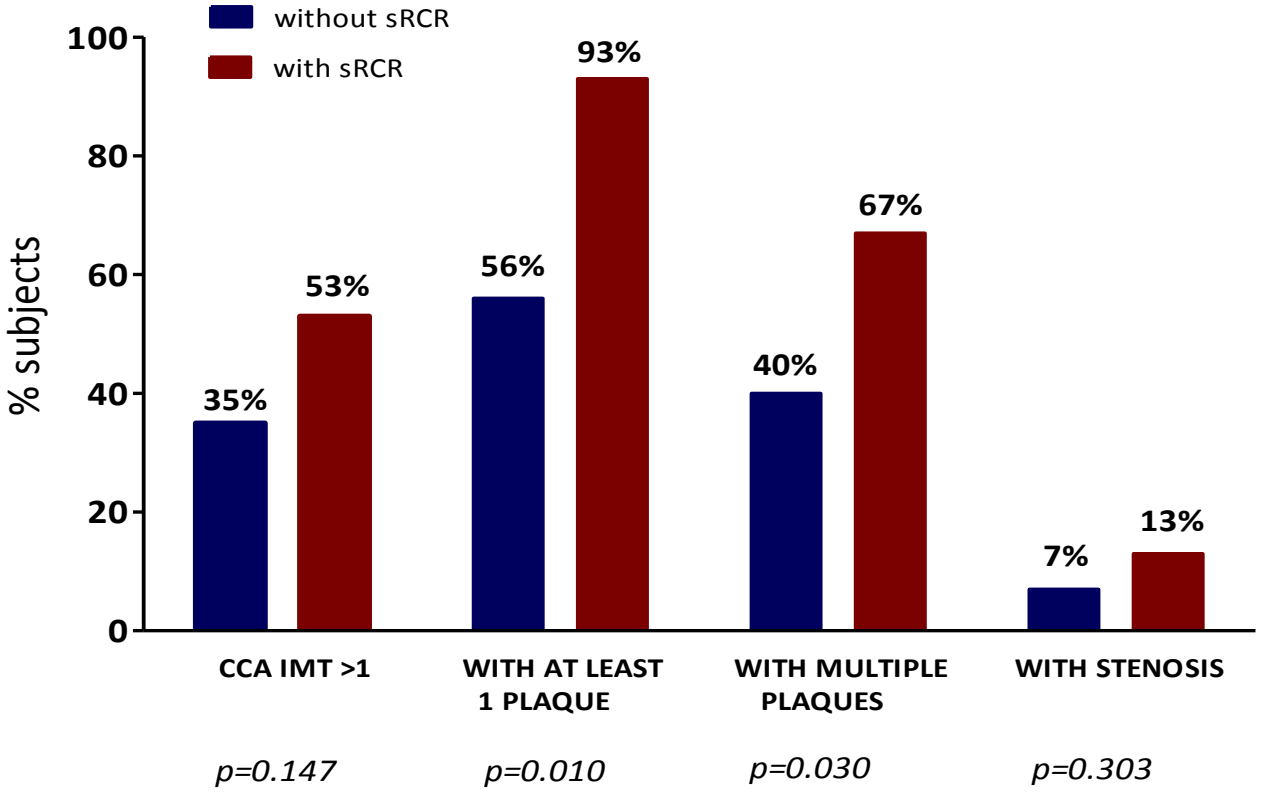
FIGURE 1 Hypertension awareness, treatment and control rates in HIV-positive hypertensive study participants at baseline (left panel) and at the last follow-up visit (right panel).

J Hypertension 2017

Association of IMI and CDU outcomes

IMI prevalence rate was found to be **7.3%**

(95% confidence interval : 4.7% to 11.1%)



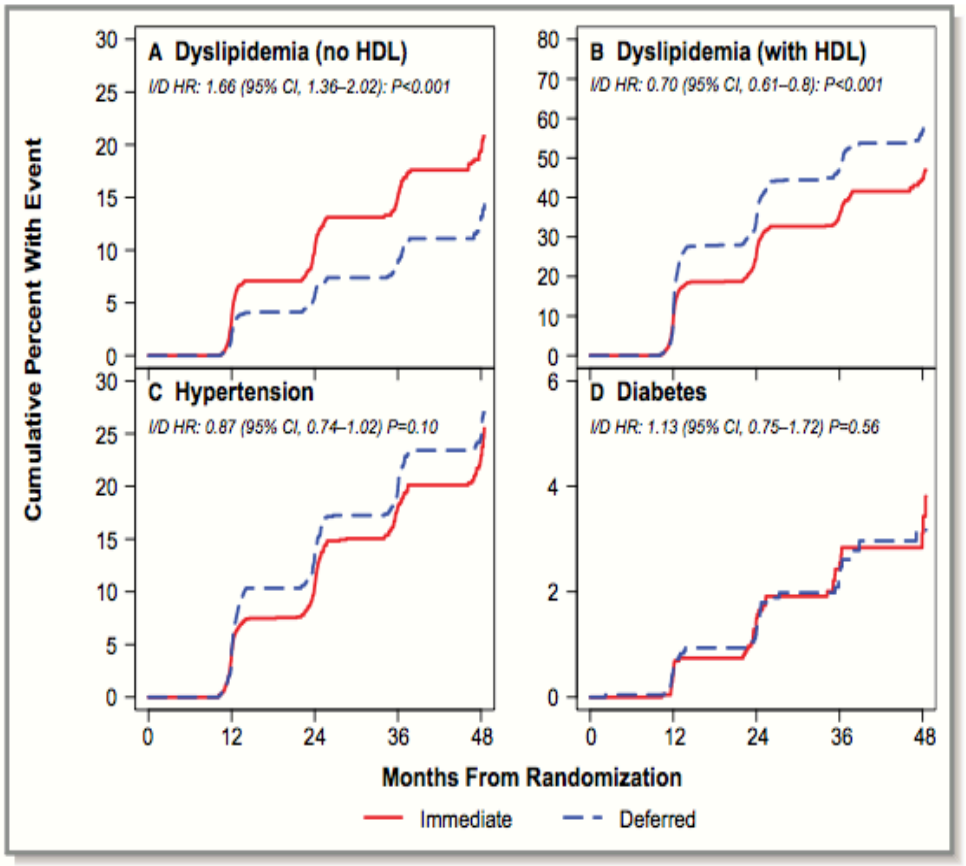
CDU data available in 202 subjects. **100% of subjects with a positive EST had an abnormal CDU compared to 69% of those with a negative EST (p=0.012).**

Spagnuolo et al, ICAR 2017

ORIGINAL RESEARCH

American Heart Association | American Stroke Association

Changes in Cardiovascular Disease Risk Factors With Immediate Versus Deferred Antiretroviral Therapy Initiation Among HIV-Positive Participants in the START (Strategic Timing of Antiretroviral Treatment) Trial



Young low risk population overall
Median age of 36, 10 year CHD risk 1.9
Low number of CV events
Low number of deaths due to CVD
Short FU 3 years

The changing face of diabetes complications

Edward W Gregg, Naveed Sattar, Mohammed K Ali

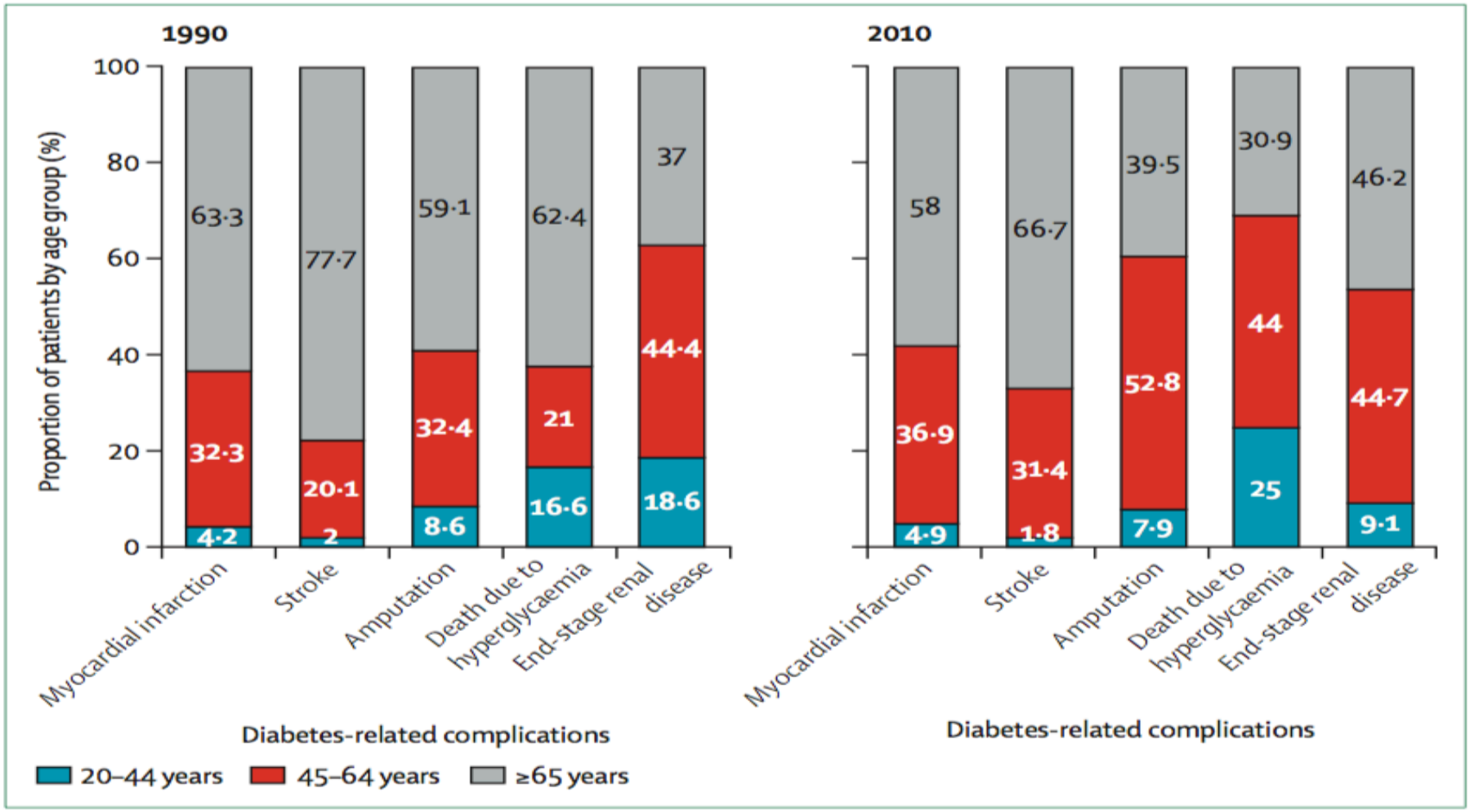
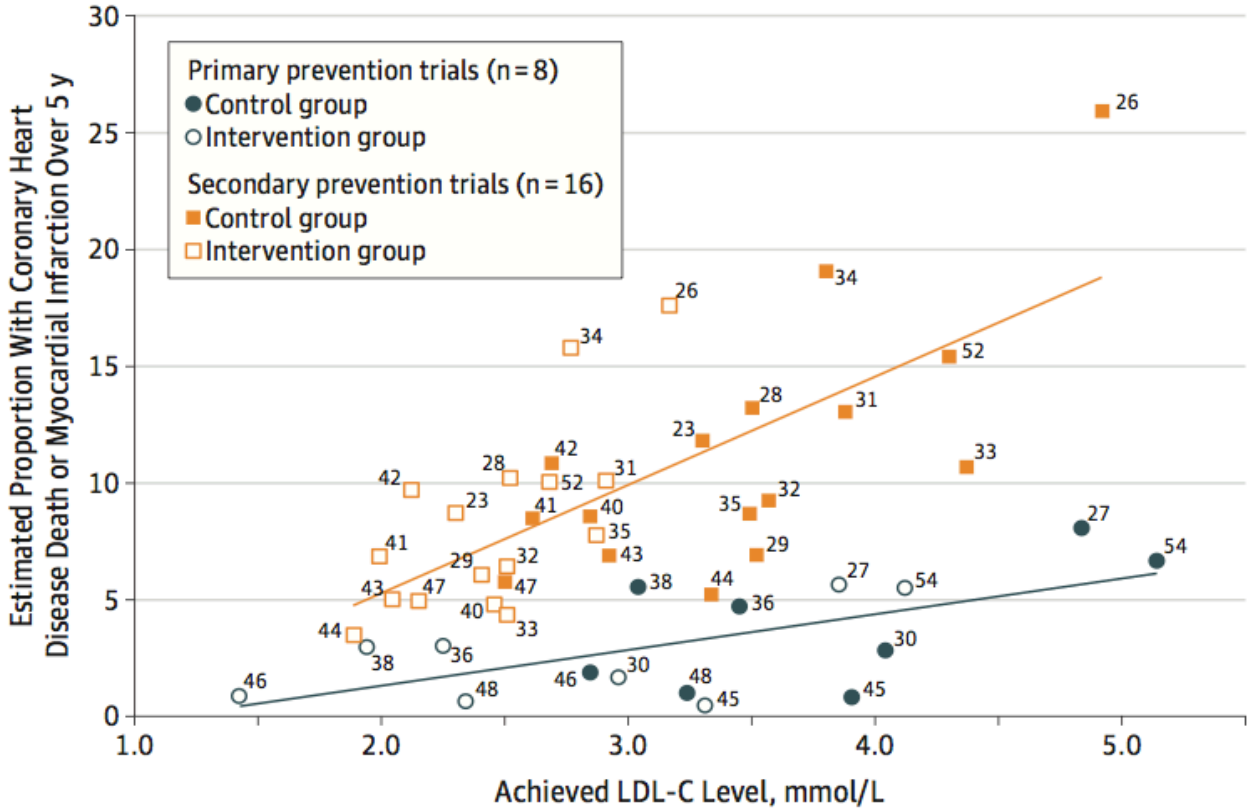


***Figure 4*: Proportional contribution of different age groups to five diabetes-related complications in the USA, by time period**

JAMA | Original Investigation

Association Between Lowering LDL-C and Cardiovascular Risk Reduction Among Different Therapeutic Interventions
A Systematic Review and Meta-analysis

Michael G. Silverman, MD; Brian A. Ference, MD, MPhil, MSc; Kyungah Im, PhD; Stephen D. Wiviott, MD; Robert P. Giugliano, MD, SM; Scott M. Grundy, MD, PhD; Eugene Braunwald, MD; Marc S. Sabatine, MD, MPH



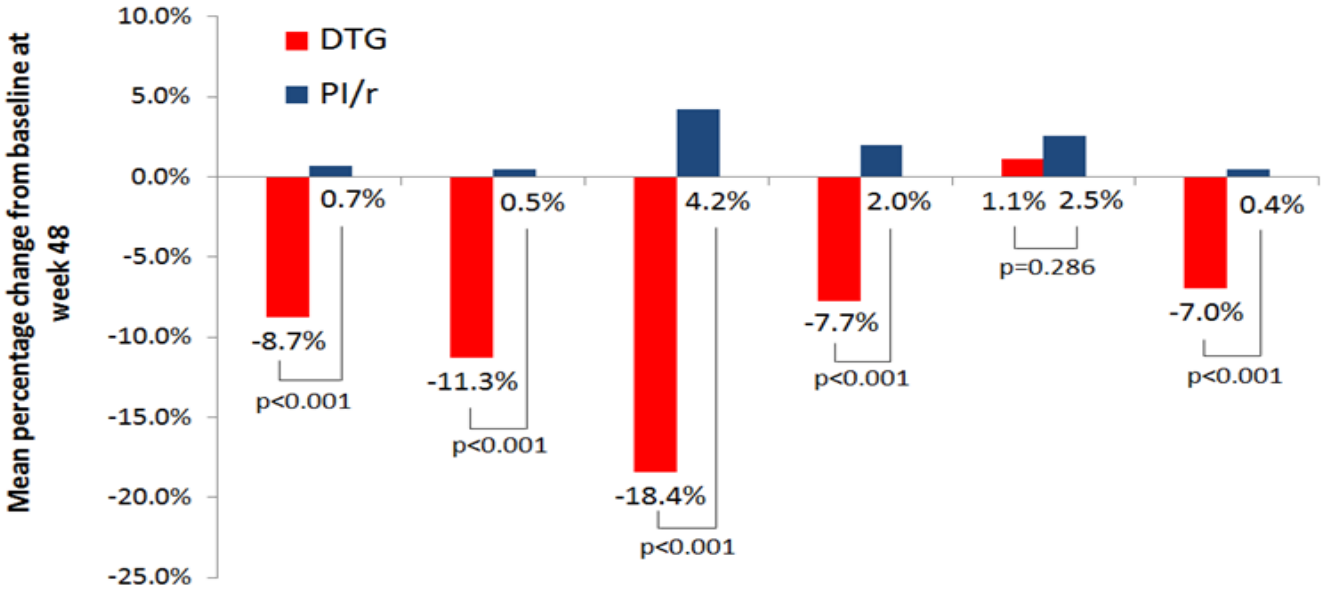
neatid | The European treatment network for HIV, hepatitis and global infectious diseases

SSAT ST STEPHEN'S AIDS TRUST

Switching from a boosted protease inhibitor (PI/r) based regimen to a Dolutegravir (DTG) regimen in virologically suppressed patients with high cardiovascular risk (Framingham score >10% or age > 50 years) is non-inferior and decreases lipids: The NEAT 022 study

J.M. Gatell[1], L. Assoumou[2], G. Moyle[3], L. Waters[4], E. Martinez[5], H.-J. Stellbrink[6], G. Guaraldi[7], S. de Wit[8], F. Raffi[9], A. Pozniak[10] on behalf of NEAT022 Study Group

[1]Hospital Clinic/IDIBAPS. University of Barcelona, Infectious Diseases, Barcelona, Spain, [2]Sorbone Universites, INSERM, UPMC Univ Paris 06. IPLESP UMRS 1136, Paris, France, [3]Chelsea and Westminster Hospital, London, United Kingdom, [4]Mortimer Market Center, London, United Kingdom, [5]Hospital Clinic/ IDIBAPS. University of Barcelona, Barcelona, Spain, [6]Infectiologisches Centrum, Hamburg, Germany, [7]University of Modena and Reggio Emilia, Modena, Italy, [8]Saint Pierre University Hospital, Université Libre de Bruxelles, Brussels, Belgium, [9]CHU Hotel-Dieu Nantes, Nantes, France, [10]Chelsea & Westminster Hospital, London, United Kingdom



	Total cholesterol	Non-HDL cholesterol	Triglycerides	LDL cholesterol	HDL cholesterol	TC/HDL ratio
Mean concentration (SD) at baseline (mmol/L)						
DTG	5.20 (1.04)	3.93 (1.03)	1.87 (1.15)	3.13 (0.88)	1.27 (0.43)	4.45 (1.41)
PI/r	5.08 (0.95)	3.81 (0.91)	1.87 (1.02)	3.03 (0.80)	1.26 (0.39)	4.29 (1.22)
Mean concentration (SD) at week 48 (mmol/L)						
DTG	4.69 (0.91)	3.42 (0.87)	1.38 (0.86)	2.83 (0.83)	1.27 (0.44)	4.05 (1.43)
PI/r	5.07 (1.02)	3.78 (0.99)	1.81 (0.98)	3.04 (0.90)	1.29 (0.42)	4.26 (1.39)

No changes in the utilization of lipid lowering agents . Around 30% in each arm and both at baseline and week 48.

NEAT22/SSAT060 week 48 data

neatid The European treatment network for HIV, hepatitis and global infectious diseases

SSAT ST STEPHEN'S AIDS TRUST

Grade 3 or 4 Laboratory Abnormalities

Grade 3 or 4 (rate ≥ 2% in either arm)	B/F/TAF n=314	DTG/ABC/3TC n=315
Creatine kinase elevation (> 10x ULN)	3.5%	3.2%
LDL elevation (>190 mg/dL [fasting]) §	2.3%	2.6%
Amylase elevation (> 2x ULN)	1.9%	2.2%
Neutropenia (< 1,500 cells/mm^3)	1.6%	3.2%

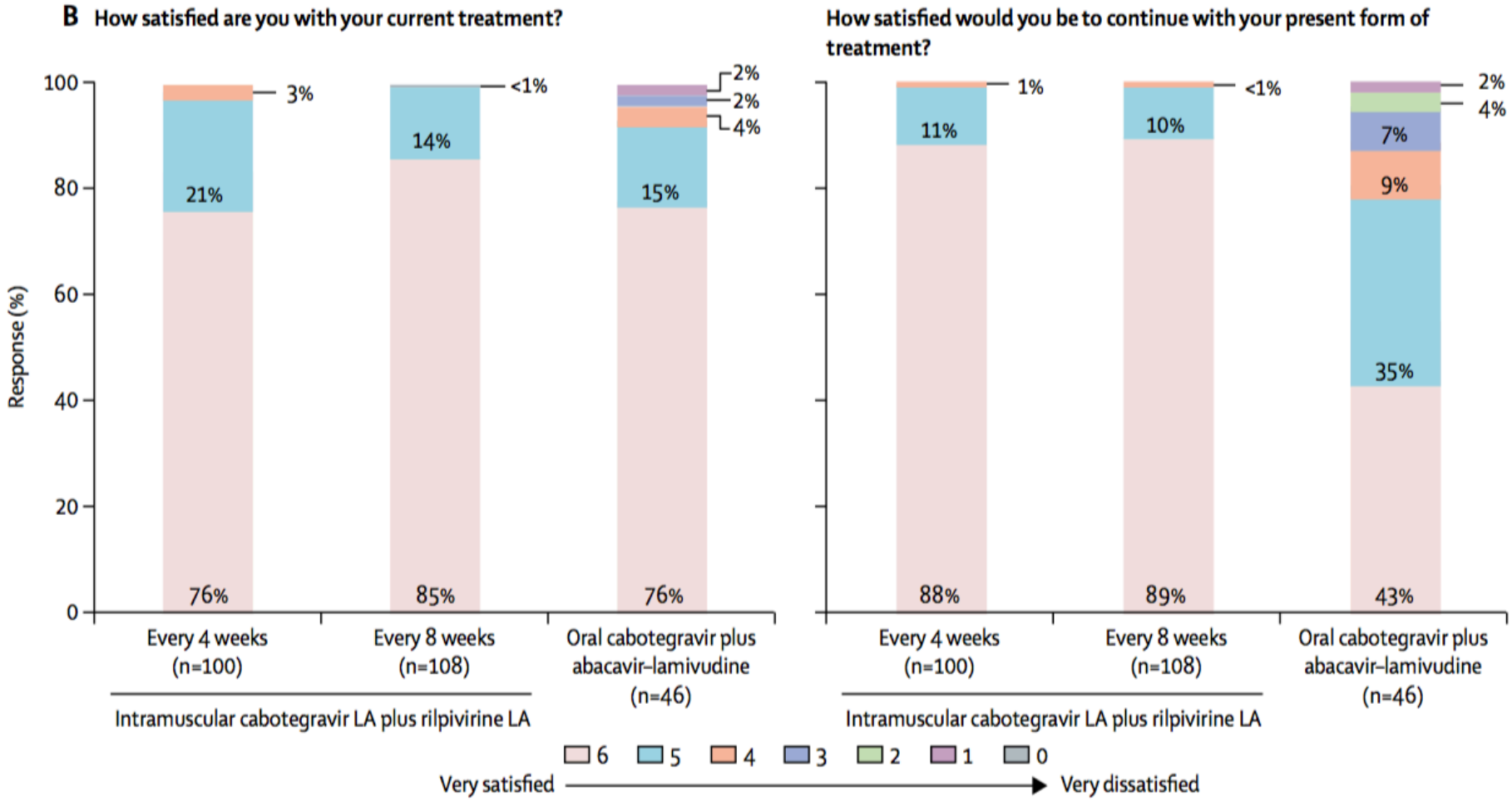
§ SI units for grade 3 or 4 lab abnormalities: Fasting LDL elevation > 4.92 mmol/L

B/F/TAF vs ABC/3TC/DTG:
Rates of Grade 3 or 4 lab abnormalities were low and similar between arms

Gallant J, et al. IAS 2017. Paris, France. Oral #MOAB0105LB

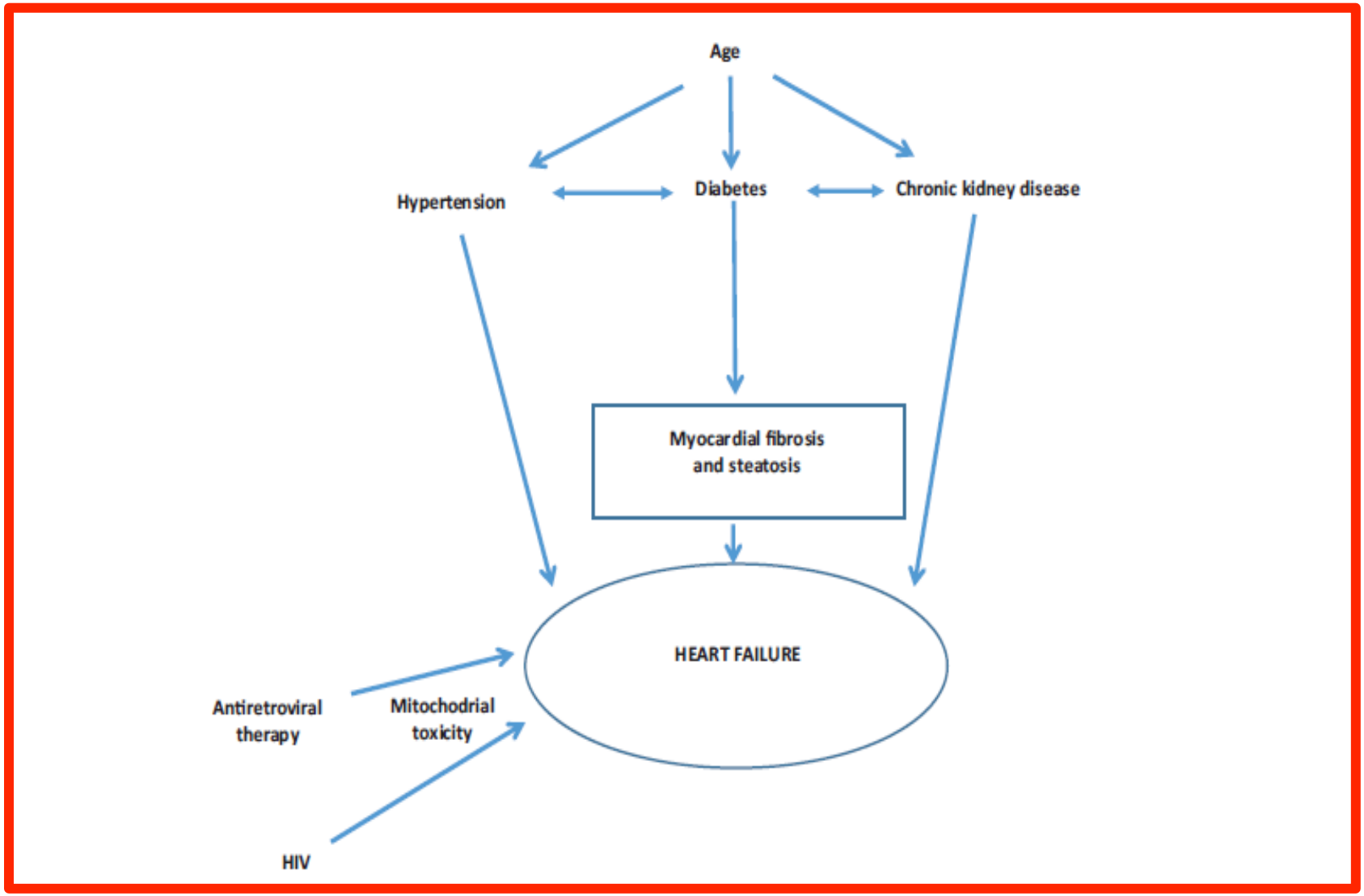
LDL, low-density lipoprotein.

LATTE-2: 96-week results



Margolis D, et al. Lancet 2017

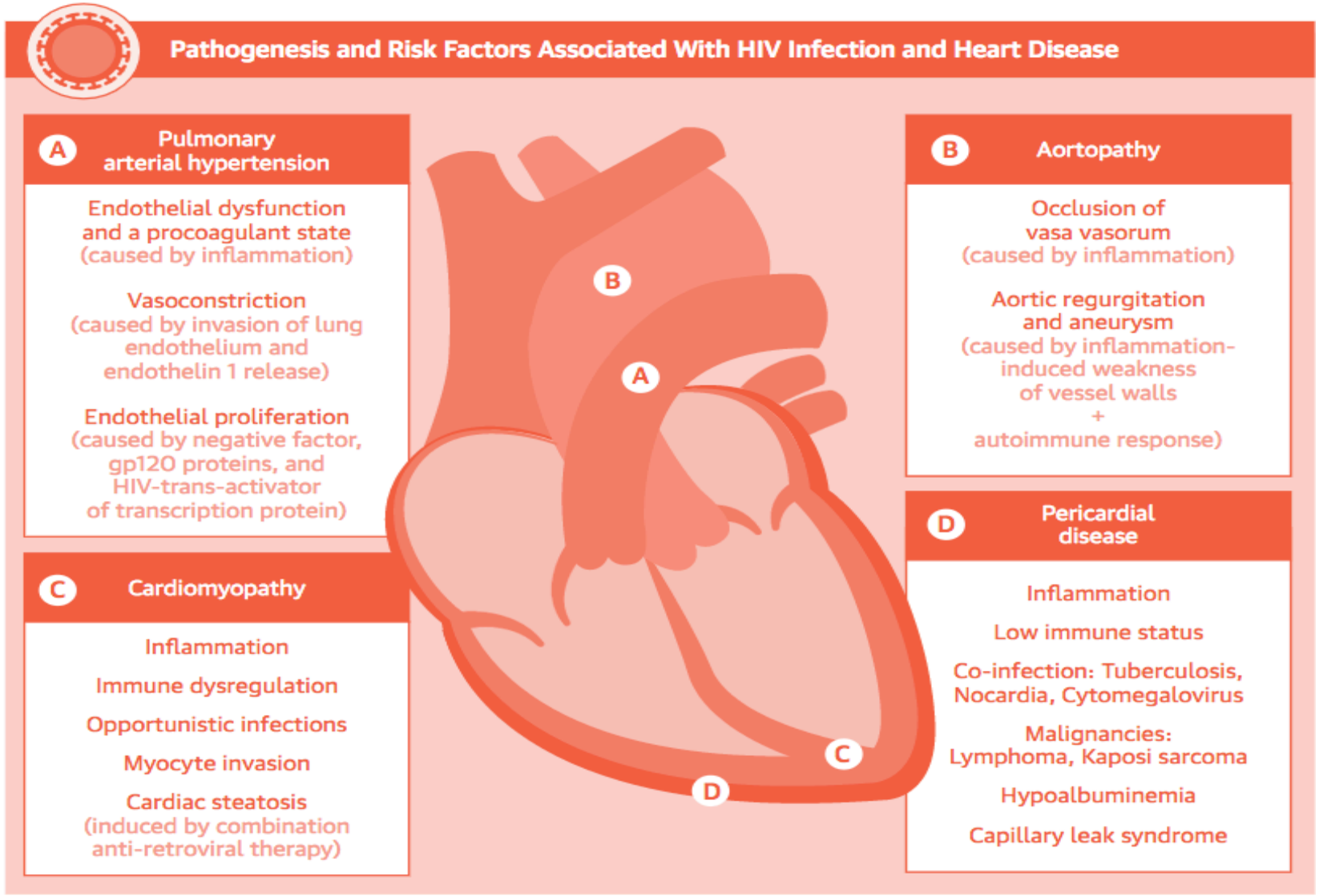
Heart failure in the aging HIV population



Boccara F, AIDS 2017

HIV and Nonischemic Heart Disease

Pravin Manga, MBBCh, PhD, Keir McCutcheon, MBBCh, Nqoba Tsabedze, MBBCh, Ahmed Vachiat, MBBCh, Don Zachariah, MBBCh



Manga, P. et al. J Am Coll Cardiol. 2017;69(1):83-91.

Features of heart failure in persons living with HIV according to treatment status

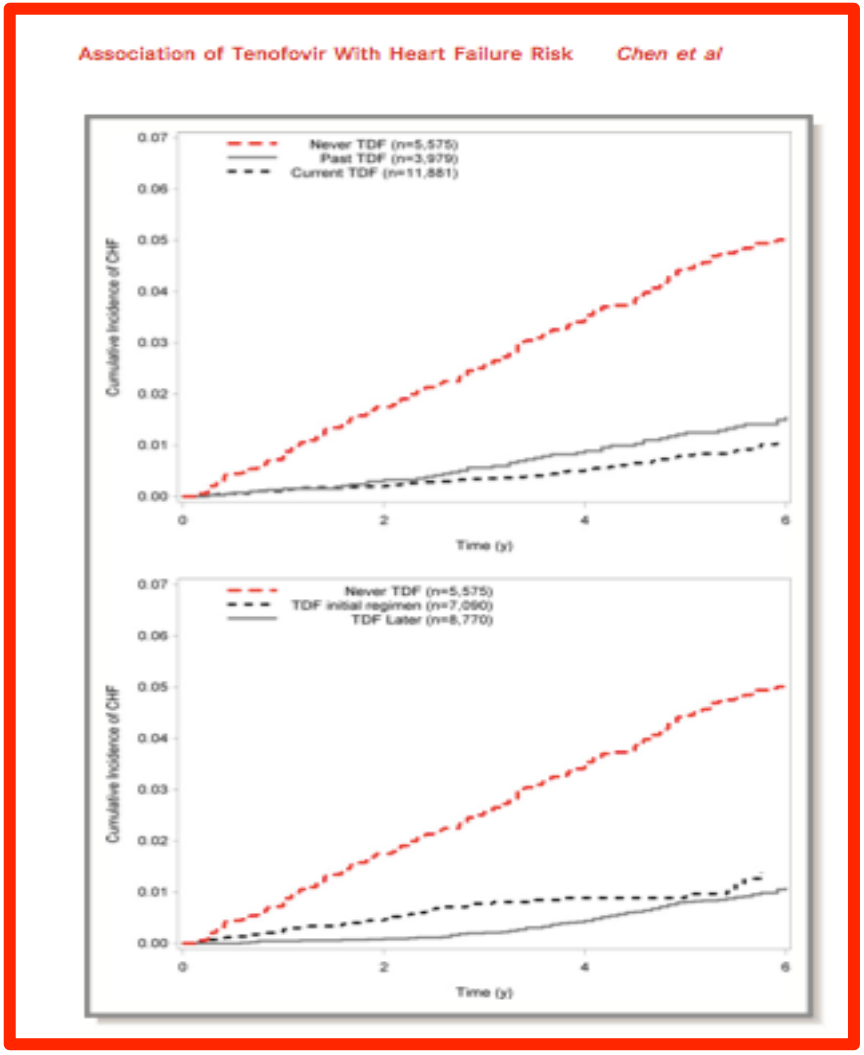
	Untreated PLWHIV	PLWHIV receiving ART
Prevalence	Decreasing with increased ART availability	Increasing with improved survival of PLWHIV
Type of HF	Mainly systolic	More often HF with preserved EF
Cause	HIV ± opportunistic infections, inflammatory, and nutritional deficiencies	CAD, LVH, or both
Time course	Acute	Chronic
Treatment	ART + standard HF care	Standard HF care
Prognosis	Poor without ART	Similar to HF in persons without HIV

ORIGINAL RESEARCH

American Heart Association | American Stroke Association

Association of Tenofovir Use With Risk of Incident Heart Failure in HIV-Infected Patients

Ruijun Chen, MD; Rebecca Scherzer, PhD; Priscilla Y. Hsue, MD; Vasantha Jotwani, MD; Michelle M. Estrella, MD, MHS; Michael A. Horberg, MD; Carl Grunfeld, MD, PhD; Michael G. Shlipak, MD, MPH



We identified 21 435 human immunodeficiency virus–infected patients in the United States Veterans Health Administration actively using antiretrovirals between 2002 and 2011. We excluded patients with a prior diagnosis of HF.

Atrial fibrillation incidence rate per 1000 person years in population studies

Age (years)	Veterans Affairs Case Registry HIV Study	Framingham study	Olmsted county study
<35	1.1	–	–
35–44	1.8	–	–
45–54	3.7	–	–
55–64	8.7	3.1	4.3
65–74	15.5 (≥65)	9.0	12.9
75–84	–	18.9	24.5
≥85	–	38.0	39.7

West T, Curr Opin HIV/AIDS 2017

Use of direct oral anticoagulants in patients with HIV

	Dabigatran	Rivaroxaban (CYP3A4 substrate)	Apixiban (CYP3A4 substrate)
Protease inhibitors (CYP3A4 inhibitors/inducers)	2-h dosing interval	Interaction likely	Interaction likely
NNRTIs (CYP3A4 inhibitors/inducers)	No interaction expected	Interaction likely	Interaction likely
Cobicistat (CYP3A4 inhibitor)	No interaction expected	Interaction possible	Interaction possible
NRTIs renally excreted	No interaction expected	No interaction expected	No interaction expected
Integrase inhibitors (CYP3A4 substrate)	No interaction expected	No interaction expected	No interaction expected
CCR5 antagonists (CYP3A4 substrate)	No interaction expected	No interaction expected	No interaction expected

CCR5, C-C chemokine receptor type 5; CYP3A4, cytochrome P450 3A4; NNRTIs, nonnucleoside reverse transcriptase inhibitors; NRTIs, nucleoside reverse transcriptase inhibitors.

West T, Curr Opin HIV/AIDS 2017

Geriatric syndromes: new frontiers in HIV and sarcopenia

Kellie L. Hawkins[a], Todd T. Brown[b], Joseph B. Margolick[c] and Kristine M. Erlandson[a]

HIV infection, in many circumstances, can now be managed as a chronic disease due to the marked increase in life expectancy since the introduction of combination antiretroviral therapy (ART). As the patients who first had access to combination ART age into their 50s and 60s, the effects of chronic HIV infection on health have become an important research focus in HIV infection. People living with HIV appear to exhibit an earlier occurrence of some aging-related conditions compared to people without HIV, in part due to higher rates of comorbidities, high-risk behaviors (e.g. smoking, substance use), chronic immune activation, inflammation, and ART-specific factors. Some studies have even suggested an earlier-than-expected appearance of the 'geriatric syndromes,' which are complex medical syndromes of older adults that are associated with morbidity and mortality. The geriatric syndromes include a wide variety of disease processes ranging from incontinence and dementia to impairments in physical function. This review will focus on one geriatric syndrome, sarcopenia, in older HIV-infected populations, and its relation to other aging syndromes, including frailty and falls. The contribution of HIV itself, ART exposure, and specific comorbidities, and the importance of early recognition and prevention of these aging syndromes will be highlighted.

AIDS 2017, **31** (Suppl 2):S137–S146

Keywords: falls, frailty, geriatric syndromes, HIV, sarcopenia

HIV Specific Pillars of Aging

Hawkins CL, AIDS 2017

Clinical Infectious Diseases

IDSA GUIDELINE

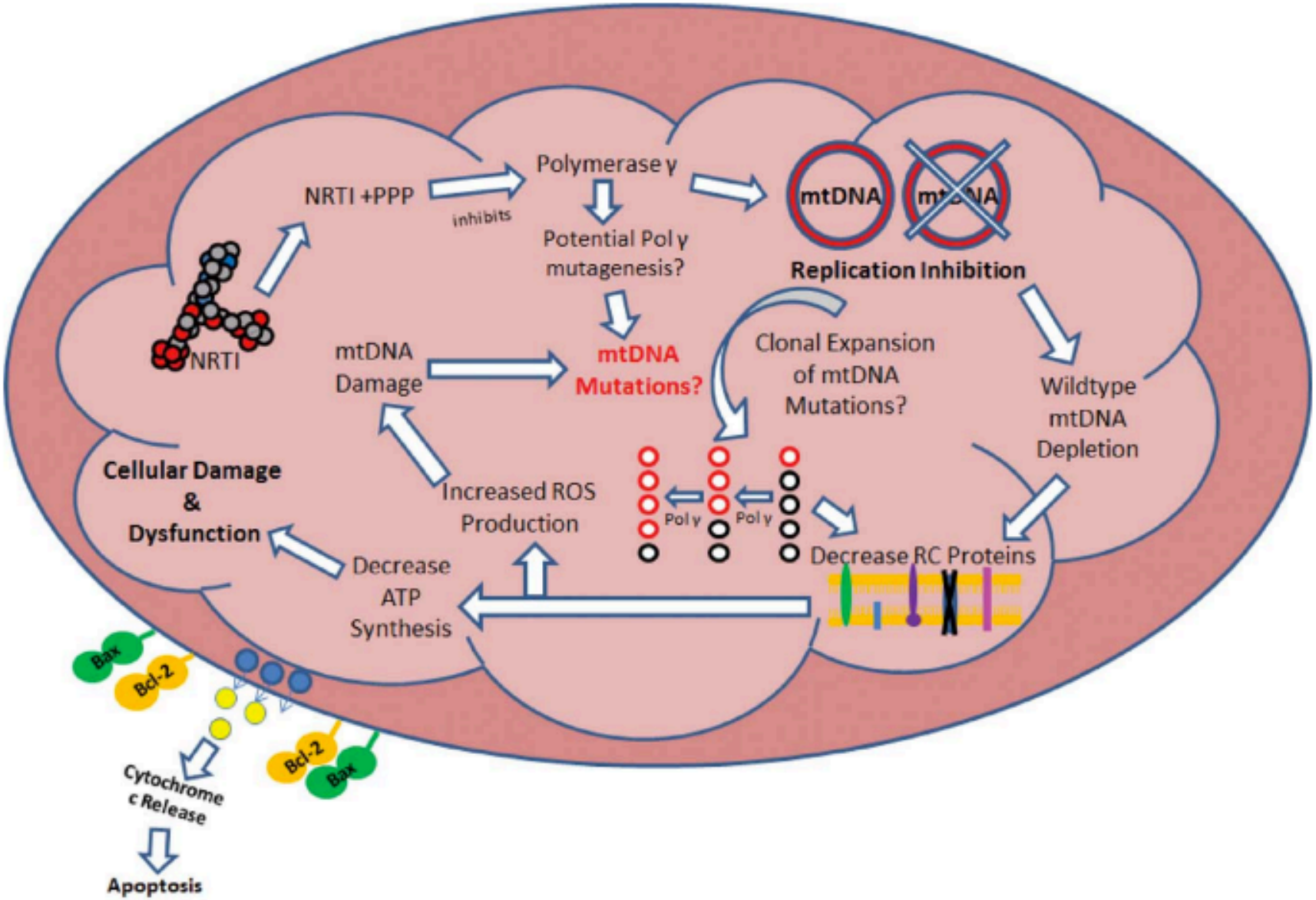
2017 HIVMA of IDSA Clinical Practice Guideline for the Management of Chronic Pain in Patients Living With HIV

R. Douglas Bruce,[1] Jessica Merlin,[2] Paula J. Lum,[3] Ebtesam Ahmed,[4] Carla Alexander,[5] Amanda H. Corbett,[6] Kathleen Foley,[7] Kate Leonard,[8] Glenn Jordan Treisman,[9] and Peter Selwyn[10]

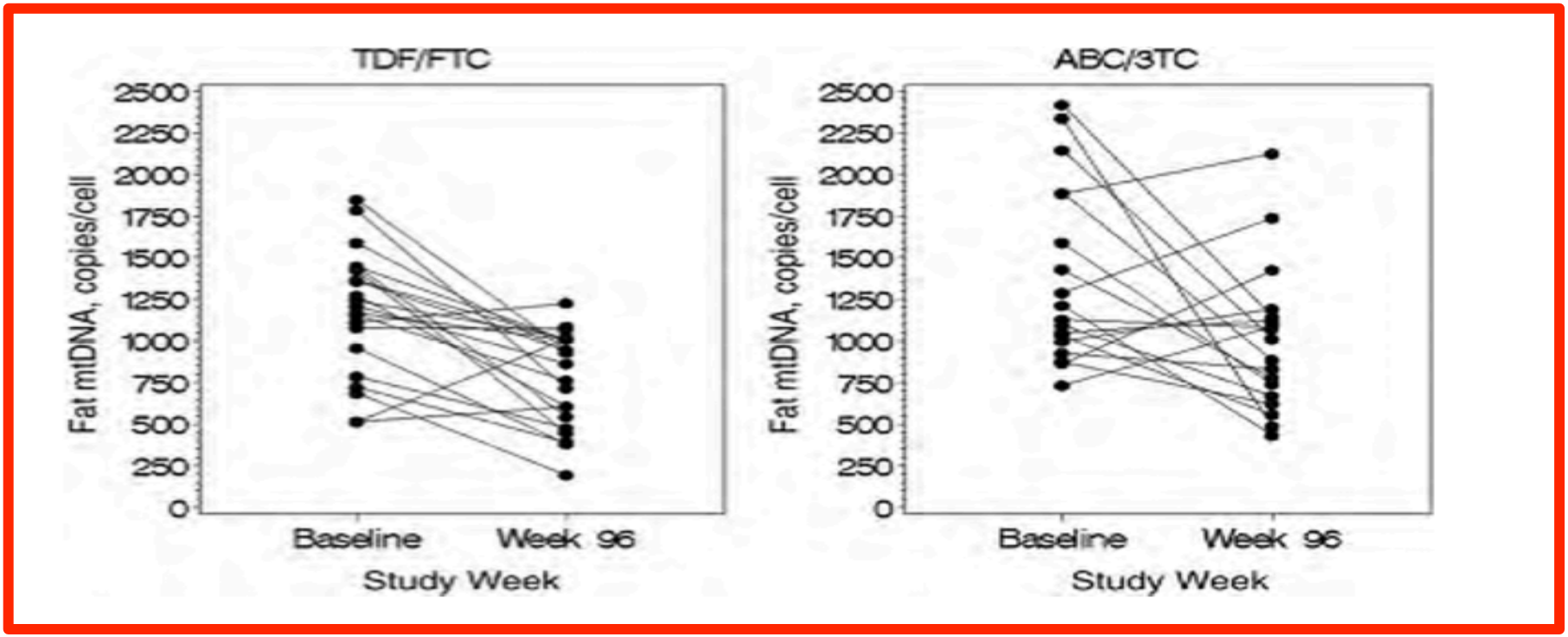
[1]Department of Medicine, Cornell Scott-Hill Health Center and Yale University, New Haven, Connecticut; [2]Divisions of Infectious Diseases and Gerontology, Geriatrics and Palliative Care, University of Alabama at Birmingham; [3]Division of HIV, Infectious Disease, and Global Medicine, University of California San Francisco; [4]St. Johns University College of Pharmacy and Health Sciences, Metropolitan Jewish Health System Institute for Innovation in Palliative Care, New York; [5]University of Maryland School of Medicine, Institute of Human Virology, Baltimore; [6] Eshelman School of Pharmacy, University of North Carolina, Chapel Hill; [7]Attending Neurologist Emeritus, Memorial Sloan Kettering Cancer Center, New York; [8]Division of Neuroscience and Clinical Pharmacology, Cornell University, New York, New York; [9]Division of HIV Medicine, Johns Hopkins Medical Center, Baltimore, Maryland; and [10]Department of Family and Social Medicine, Montefiore Medical Center, Albert Einstein College of Medicine, Bronx, New York

Pain has always been an important part of human immunodeficiency virus (HIV) disease and its experience for patients. In this guideline, we review the types of chronic pain commonly seen among persons living with HIV (PLWH) and review the limited evidence base for treatment of chronic noncancer pain in this population. We also review the management of chronic pain in special populations of PLWH, including persons with substance use and mental health disorders. Finally, a general review of possible pharmacokinetic interactions is included to assist the HIV clinician in the treatment of chronic pain in this population.

It is important to realize that guidelines cannot always account for individual variation among patients. They are not intended to supplant physician judgment with respect to particular patients or special clinical situations. The Infectious Diseases Society of American considers adherence to these guidelines to be voluntary, with the ultimate determination regarding their application to be made by the physician in the light of each patient's individual circumstances.


NRTI +PPP
inhibits
Polymerase γ
Potential Pol γ mutagenesis?
mtDNA
Replication Inhibition
NRTI
mtDNA Damage
mtDNA Mutations?
Clonal Expansion of mtDNA Mutations?
Wildtype mtDNA Depletion
Cellular Damage & Dysfunction
Increased ROS Production
Pol γ
Pol γ
Decrease RC Proteins
Decrease ATP Synthesis
Bax
Bcl-2
Cytochrome c Release
Bcl-2
Bax
Apoptosis

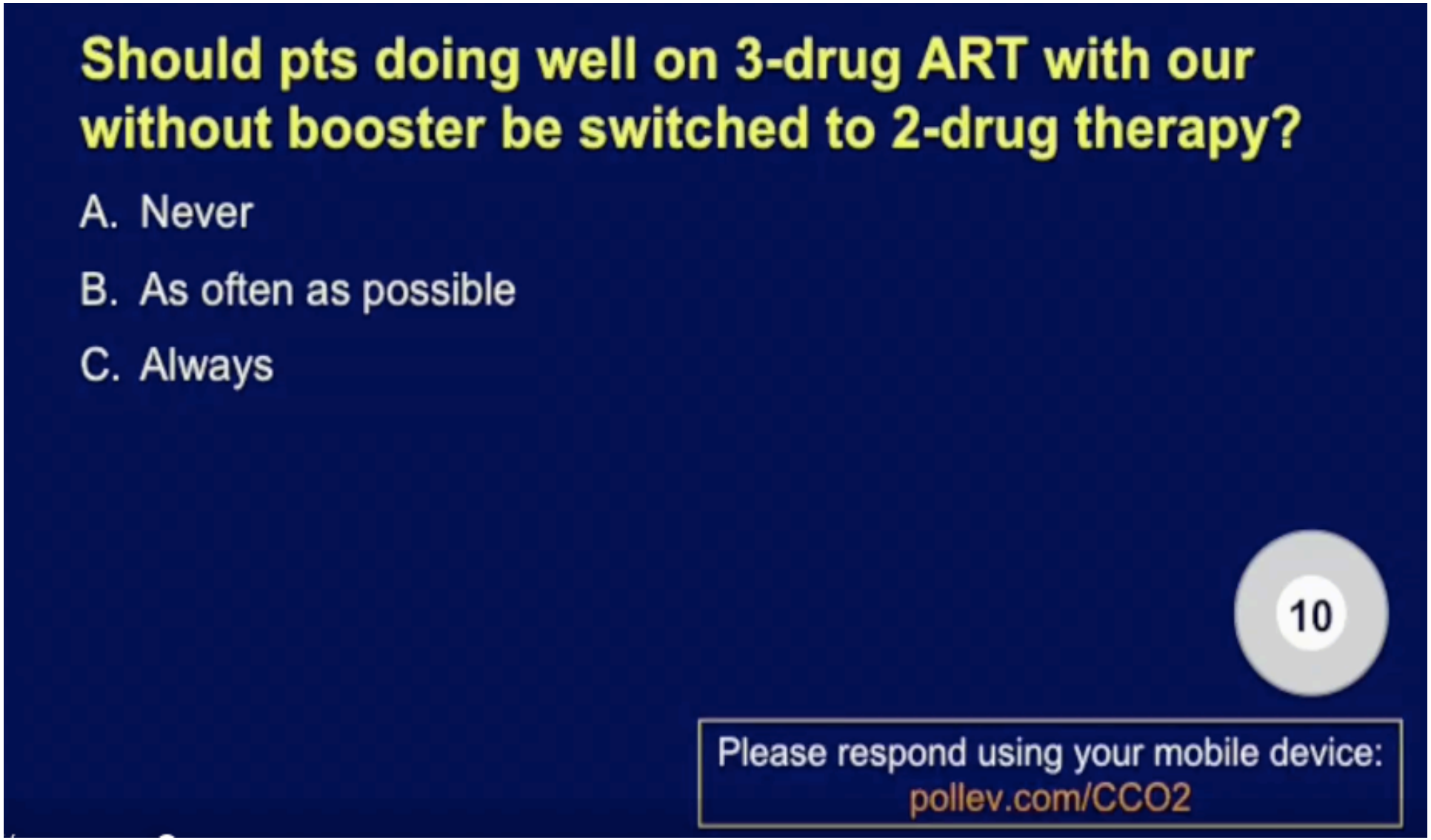
Changes in Fat Mitochondrial DNA and Function in Subjects Randomized to Abacavir-Lamivudine or Tenofovir DF–Emtricitabine With Atazanavir-Ritonavir or Efavirenz: AIDS Clinical Trials Group Study A5224s, Substudy of A5202

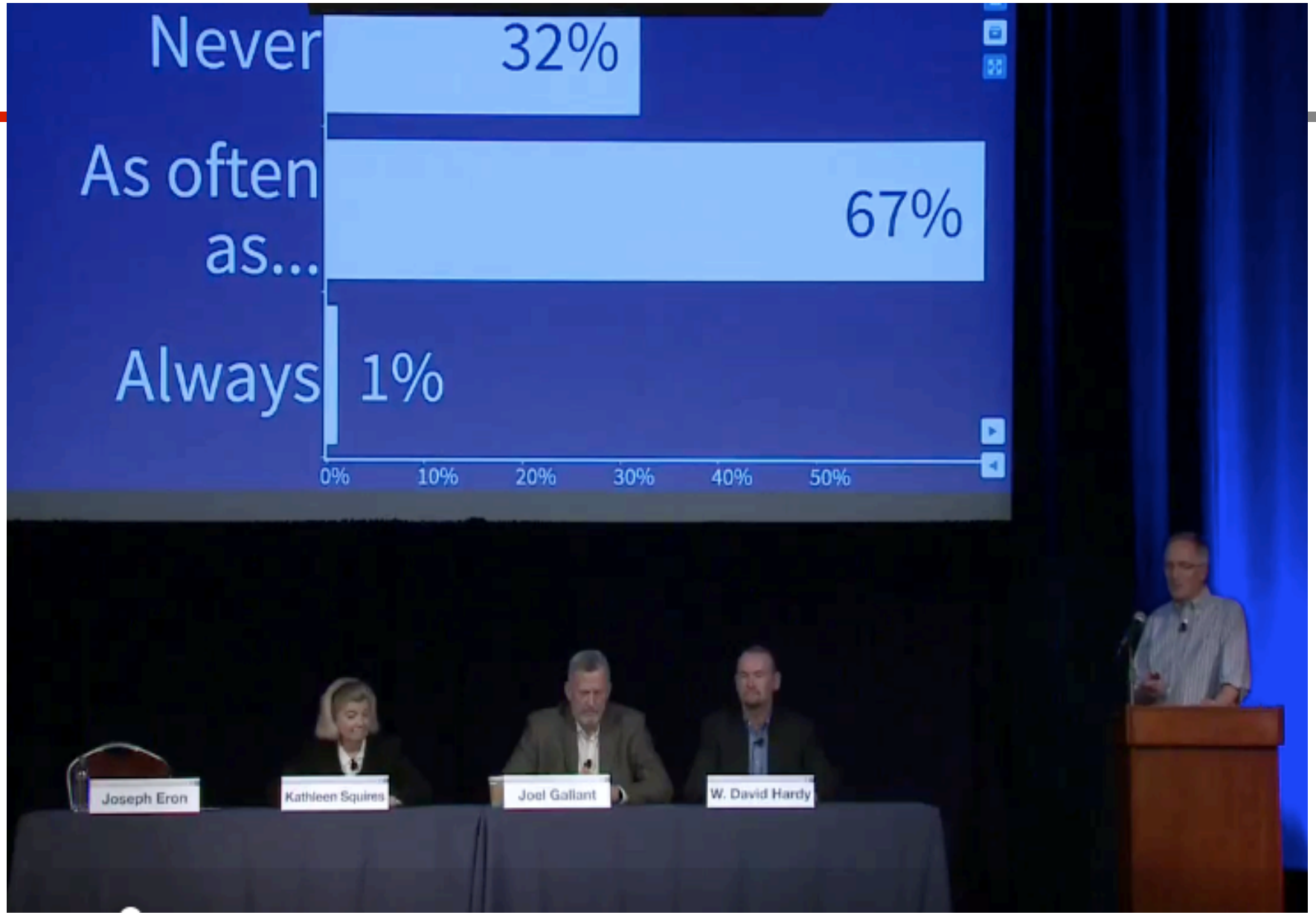


There was a significant decrease in fat mtDNA at week 96 compared with baseline in subjects randomized to either ABC/3TC (−341 copies/cell) or TDF/FTC (−400 copies/cell). The decrease did not differ between ABC/3TC and TDF/FTC groups .

‡

Live From CCO




Never
32%
As often as...
67%
Always
1%
0%
10%
20%
30%
40%
50%
Joseph Eron
Kathleen Squires
Joel Gallant
W. David Hardy