10° WORKSHOP NAZIONALE CISAI

MILANO

PREVENZIONE E GESTIONE DELLE CO-MORBIDITÀ ASSOCIATE ALL'INFEZIONE DA HIV

PRESIDENTI
PAOLO BONFANTI
ANTONIO DI BIAGIO

30 SETTEMBRE
1 OTTOBRE
2021

CISAI

FONDAZIONE ASIA

Deprescribing antiretroviral therapy

Giovanni Guaraldi
Università di Modena

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UNIMORE
UNIVERSITÀ DEGLI STUDI DI MODENA E REGGIO EMILIA

CISAI
FONDAZIONE ASIA

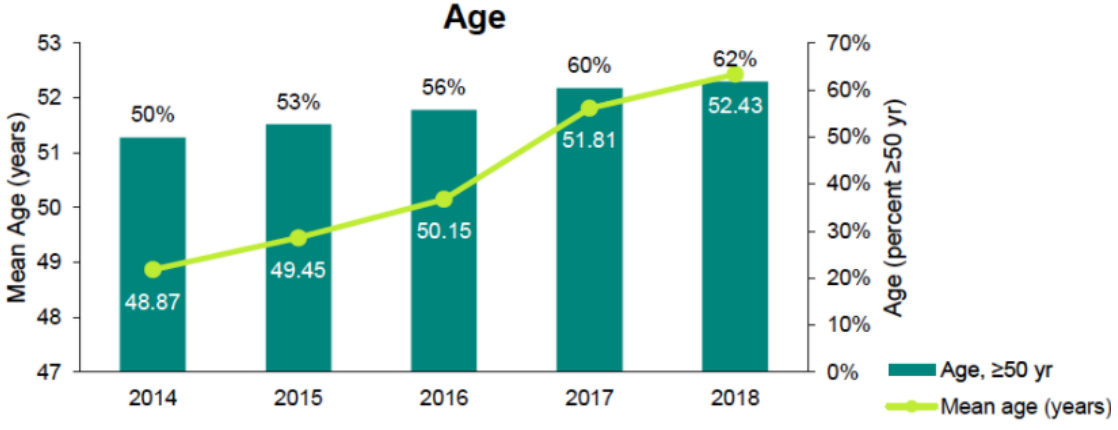
Disclosures

Prof Guaraldi received study grants and attended advisory boards for ViiV, Gilead, Jansen, Merck.

IDWeek 2021

September 29 - October 3, 2021 **Virtual Event, IDWeek.org**

Increasing trends in multimorbidity and polypharmacy over a 5-year period in people living with HIV in the United States



2014: n=14,222 2015: n=14,527 2016: n=16,310 2017: n=18,571 2018: n=20,249

Princy Kumar, MD
Georgetown University Medical Center, Washington, DC, USA

Increasing trends in multimorbidity and polypharmacy over a 5-year period in people living with HIV in the United States

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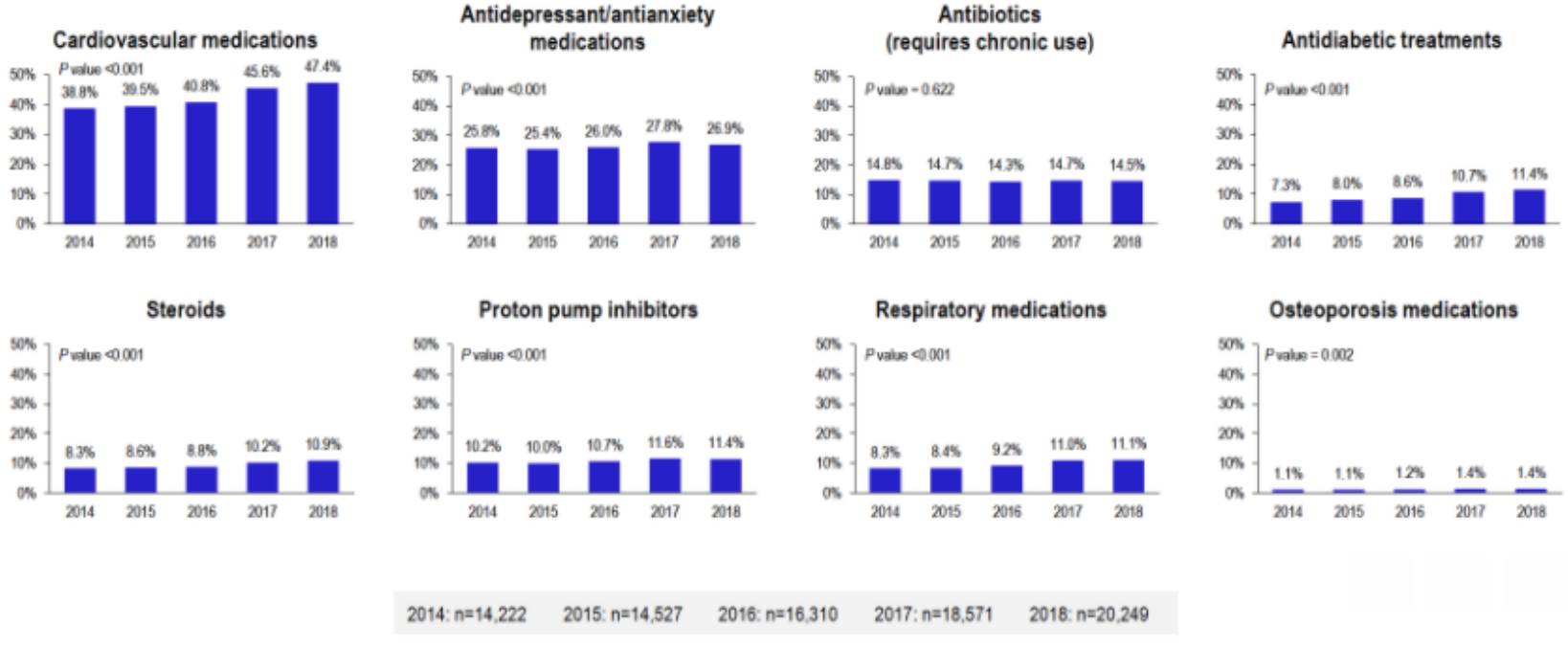

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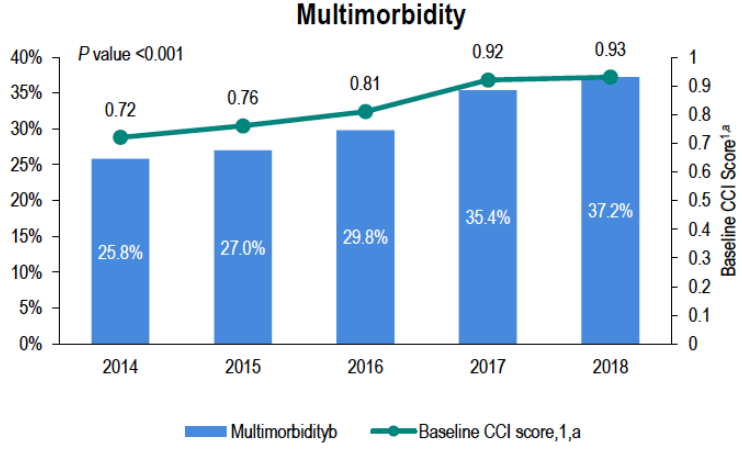

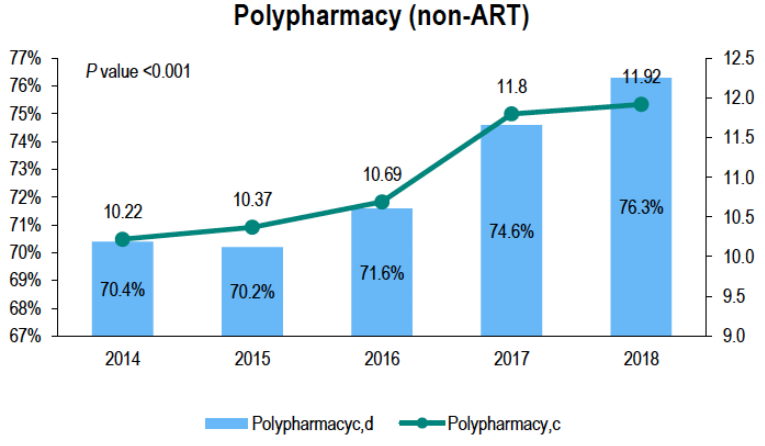

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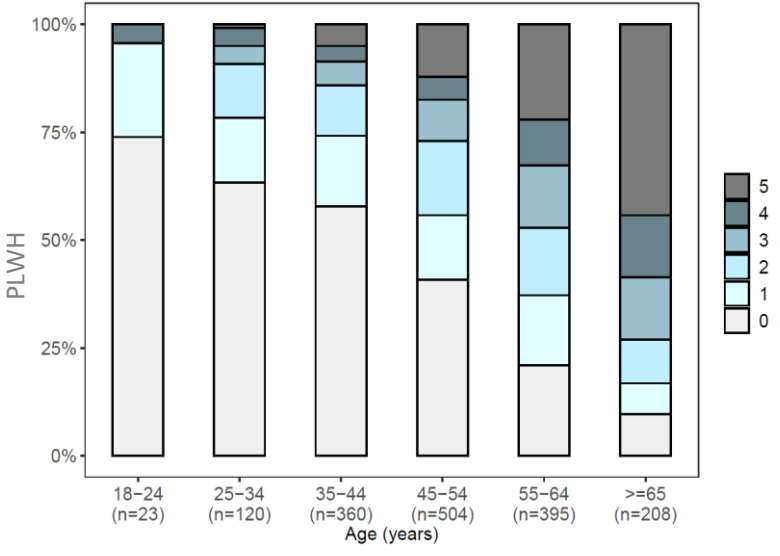
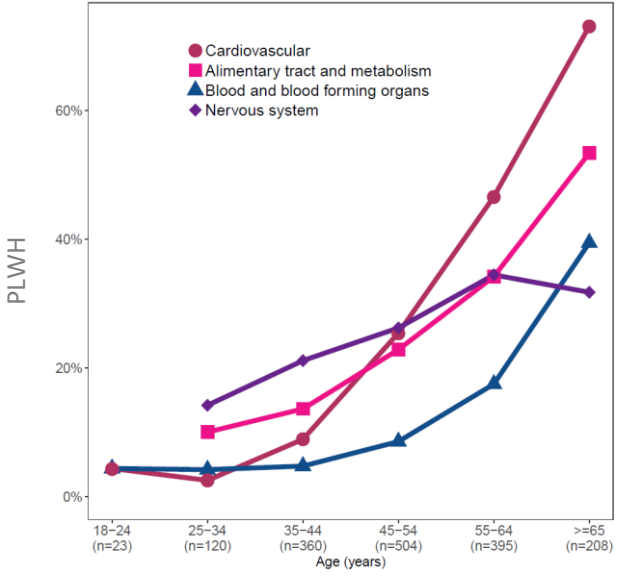
Polypharmacy (≥ 5 non-HIV drugs) increases with age

Swiss HIV Cohort

Number of non- HIV medications



Prevalence of comedications use



Courlet P et al. Open Forum Infect Dis 2020

Guaraldi et al. BMC Geriatrics (2018) 18:99
https://doi.org/10.1186/s12877-018-0789-0

BMC Geriatrics

RESEARCH ARTICLE Open Access

The increasing burden and complexity of multi-morbidity and polypharmacy in geriatric HIV patients: a cross sectional study of people aged 65 – 74 years and more than 75 years

G. Guaraldi[1*], A. Malagoli[1], A. Calcagno[2], C. Mussi[3], B. M. Celesia[4], F. Carli[1], S. Piconi[5], G. V. De Socio[6], A. M. Cattelan[7], G. Orofino[8], A. Riva[9], E. Focà[10], S. Nozza[11] and G. Di Perri[2]

PP burden in geriatric HIV positive patients are related to longer duration of HIV-infection rather than older age per se

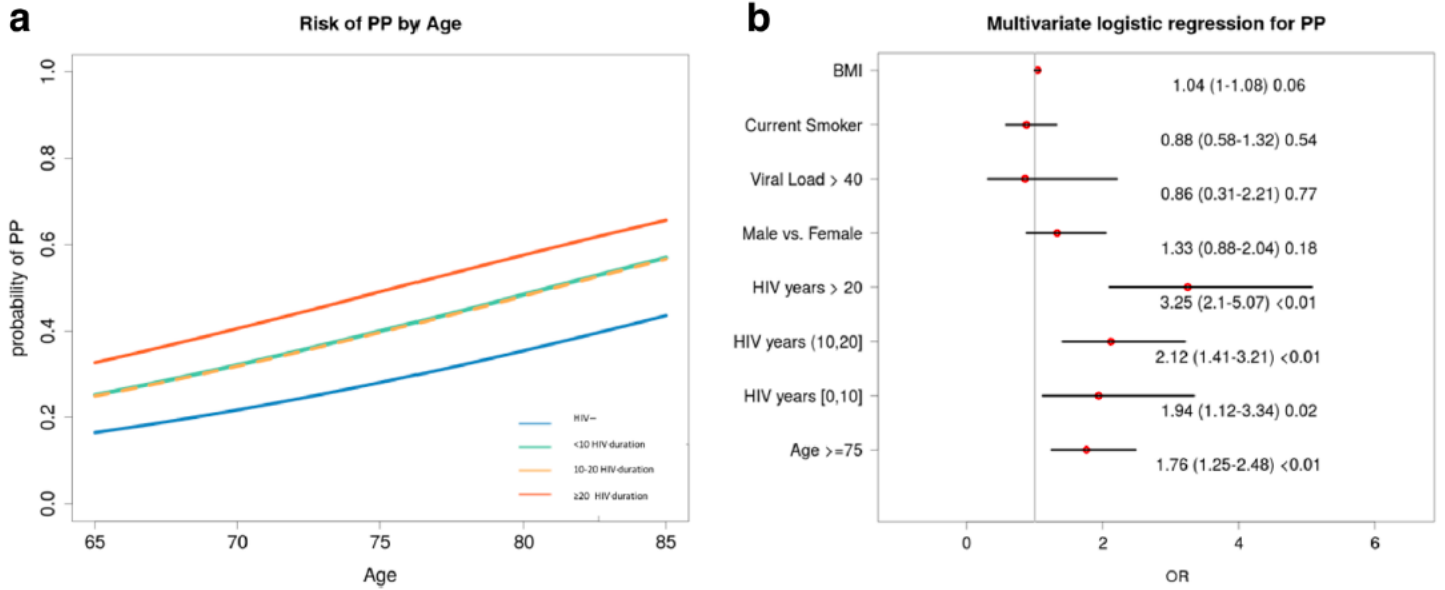
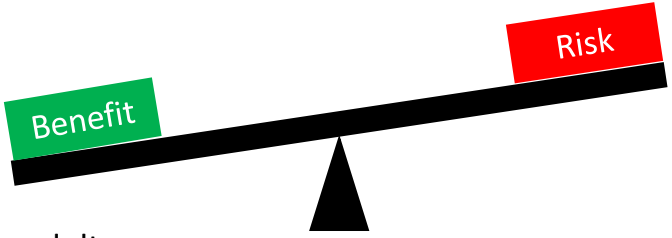


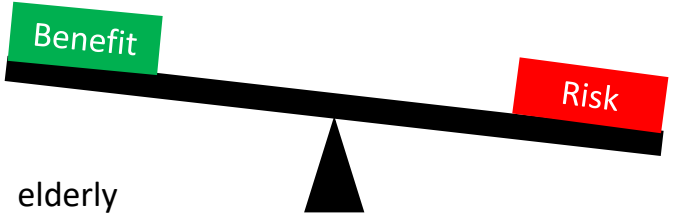
Fig. 4 a Probability of PP per year above the age of 65. The HIV positive patients are stratified by duration of HIV infection (< 10, 10–20 and > 20 years). **b** Multivariable logistic regression models to detect the independent predictors of PP.Abbreviations – PP: polypharmacy

Prescribing in elderly

Risk/benefit balance of medications



adults



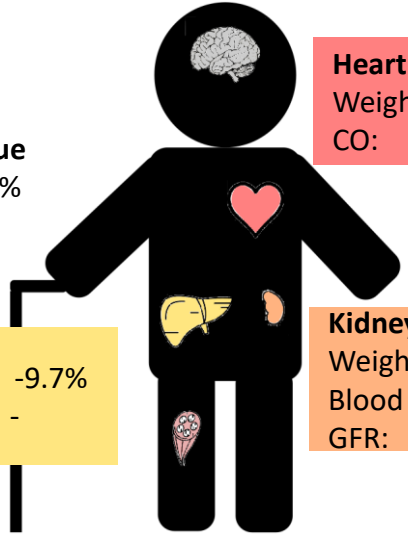
elderly

Multiple comorbidities => polypharmacy => ↑ DDIs, side effets

Age-related physiological changes which can impact PK/PD => ↑ side effects

Age associated physiological changes in 70 years relative to 30 years old

70 years old man



Heart
Weight: 12.3%
CO: -21.3%

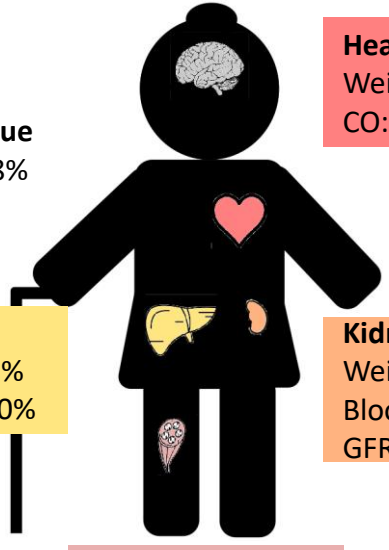
Adipose tissue
Weight: 11.2%

Liver
Weight: -9.7%
Blood flow: -17.8%

Kidney
Weight: -3.7%
Blood flow: -23.5%
GFR: -26.6%

Muscle
Weight: -11.6%

70 years old women



Heart
Weight: 19.8%
CO: -21.0%

Adipose tissue
Weight: 27.8%

Liver
Weight: -5.8%
Blood flow: -17.0%

Kidney
Weight: -5.9%
Blood flow: -26.5%
GFR: -24.2%

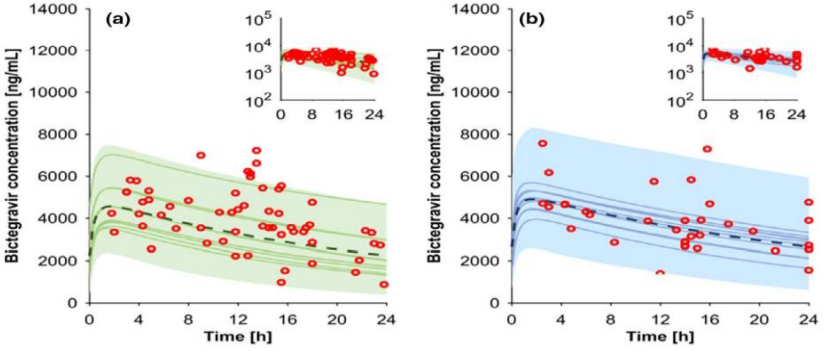
Muscle
Weight: -13.6%

Stader F et al. Clin Pharmacokinet 2019

Effect of aging on antiretroviral drug pharmacokinetics

Bictegravir

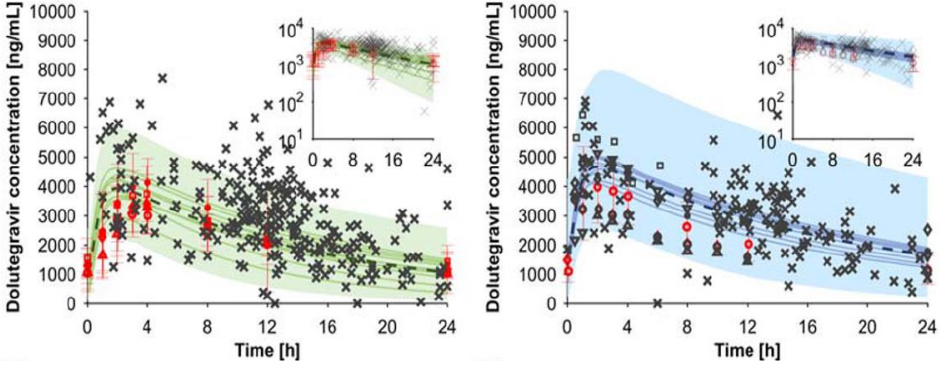
Young adults (20-55 years) **Elderly adults (55-85 years)**



Bictegravir AUC elderly/young: **1.01** (observed)
1.12 (predicted)

Dolutegravir

Young adults (20-55 years) **Elderly adults (55-85 years)**

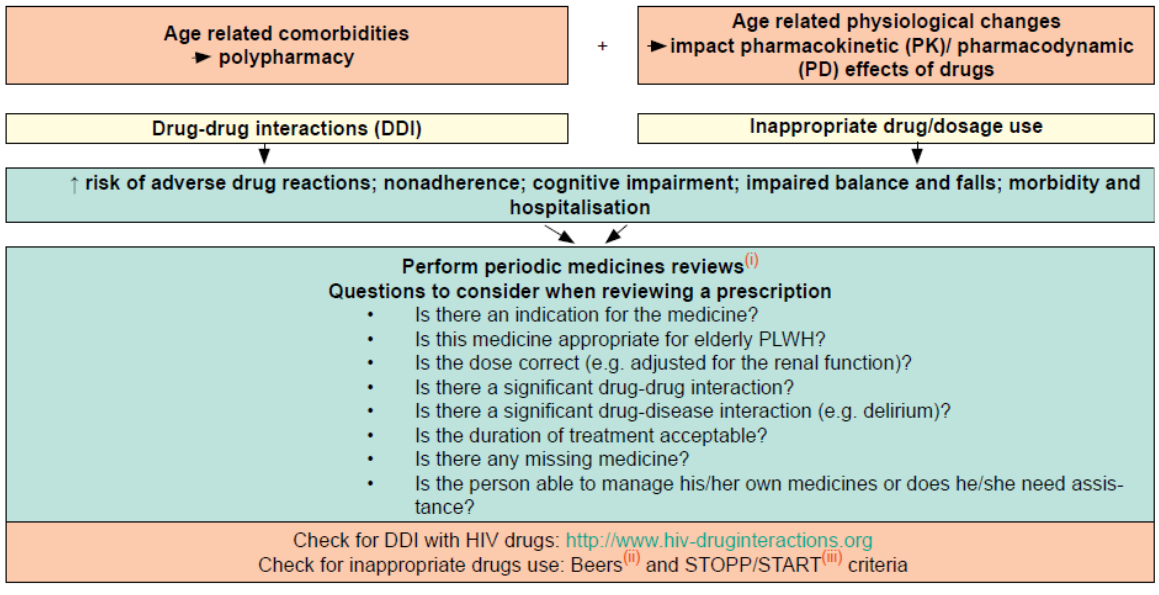


Dolutegravir AUC elderly/young: **1.16** (observed)
1.31 (predicted)

Simulations combined with clinical data indicate that older age does not impact antiretroviral PK to a clinically significant extent. No a priori dose adjustment is needed in elderly individuals in absence of severe comorbidities.

Courlet P et al. AIDS 2020 , Stader F et al. Br J Clin Pharmacol 2021; Stader F et al. Clin Pharmacol Ther 2021

Prescribing in the Elderly



Adapted from [10], [11], [12]

i-iii The Beers and STOPP criteria are tools established by experts in geriatric pharmacotherapy to detect and reduce the burden of inappropriate prescribing in elderly. Inappropriate medicines include, for instance, those which in elderly persons with certain diseases can lead to drug-disease interactions, are associated with a higher risk of adverse drug reactions in the elderly, medicines that predictably increase the risk of falls in the elderly or those to be avoided in case of organ dysfunction. The START criteria consist of evidence-based indicators of potential prescribing omission in elderly with specific medical conditions

Job bag: HIVF/UK/19-09/NMAR/1071k
Date of prep: November 2019

Negative consequences of polypharmacy

Multimorbidity

Polypharmacy

↓ Medication adherence

↑ **Adverse health outcomes**

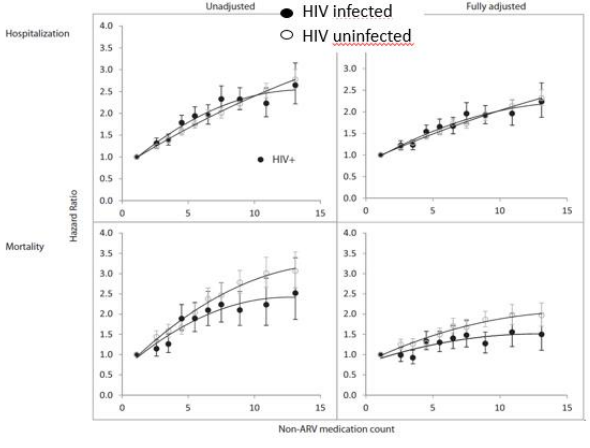
Three large case-control studies using data from the Veterans Aging Cohort Study (VACS) have demontrated associations with:

Polypharmacy and frailty among persons with HIV

Minhee Sung [a,b], Kirsha Gordon[b], E. Jennifer Edelman[c,d], Kathleen M. Akgün[b,c], Krisann K. Oursler[e,f] and Amy C. Justice[b,c,d]

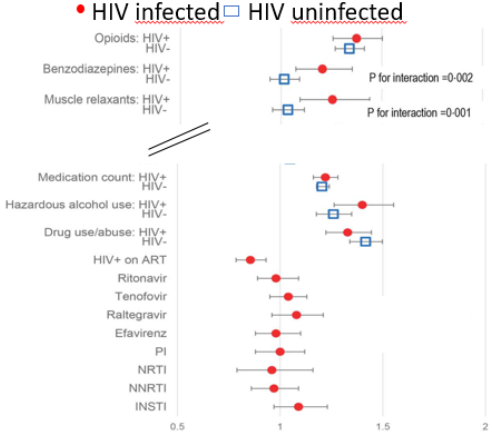
AIDS Care 2020

Cross-sectional study in 1762 PLWH and 2679 uninfected individuals found that each additional non-HIV medication was associated with 11% higher risk of frailty in PLWH vs 4% in uninfected individuals.



Increased nb of medications associated with increased risk for **hospitalization/ mortality**

Justice AC. AIDS 2018

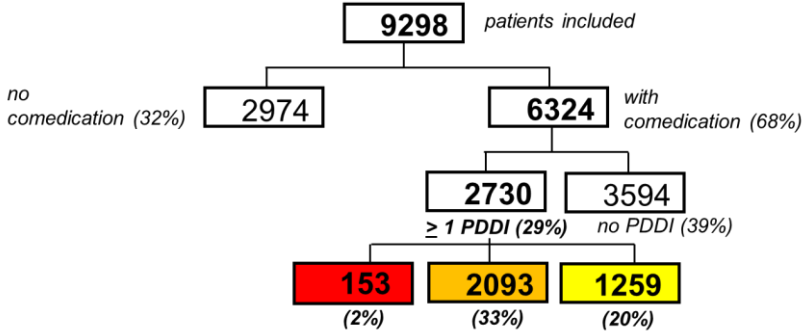


Polypharmacy associated with increased risk of fall

Womack J et al. JAIDS 2019

Clinical Infectious Diseases
MAJOR ARTICLE

Prevalence of Potential Drug–Drug Interactions in Patients of the Swiss HIV Cohort Study in the Era of HIV Integrase Inhibitors



Prevalence of potential drug-drug interactions in 2018 vs 2008

Prevalence DDIs	2008	2018
Red flag DDIs	↔	
Amber flag DDIs	↘ -16%	

ARV treatment	2008	2018
Patients on boosted ARVs	53%	30%
Patients on NNRTIs	43%	32%
Patients on unboosted INIs (without boosted ARVs or NNRTIs)	0%	**40%**

More comedications prescribed in 2018 due to aging of HIV population

Conclusions:
Prevalence of potential drug–drug interactions (PDDIs) was lower with more widespread use of INIs in 2018 than in 2008.

- Deutschmann E et al. Clin Infect Dis 2020

J Antimicrob Chemother 2021; **76**: 758–764
doi:10.1093/jac/dkaa505 Advance Access publication 5 December 2020

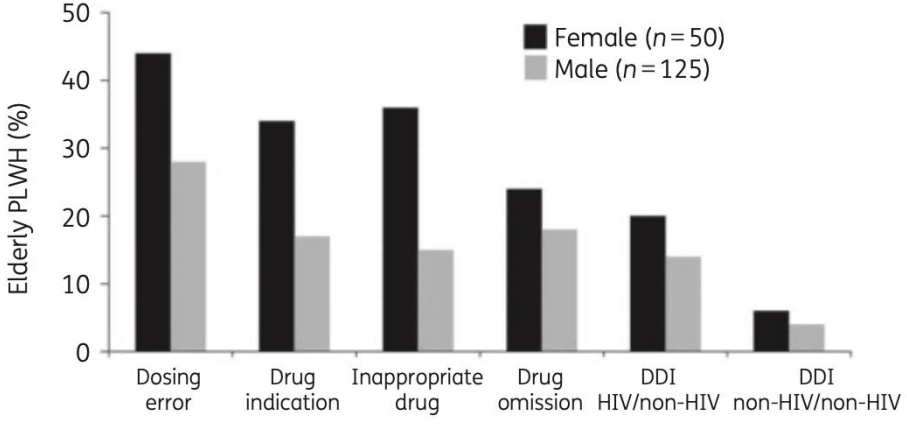
Journal of Antimicrobial Chemotherapy

Analysis of inappropriate prescribing in elderly patients of the Swiss HIV Cohort Study reveals gender inequity

Prescribing errors in SHCS patients ≥ 75 years

Overall prescribing issues : 67% participants

Incorrect drug dosage:	26%
No indication:	21%
Prescription omission:	17%
Inappropriate drug:	18%
Deleterious DDIs:	17%
Treatment duration exceeding recommendations:	1%



- 40% of the prescribing issues could possibly lead to deleterious clinical consequences
- Prescribing issues more frequent with non-HIV comeds

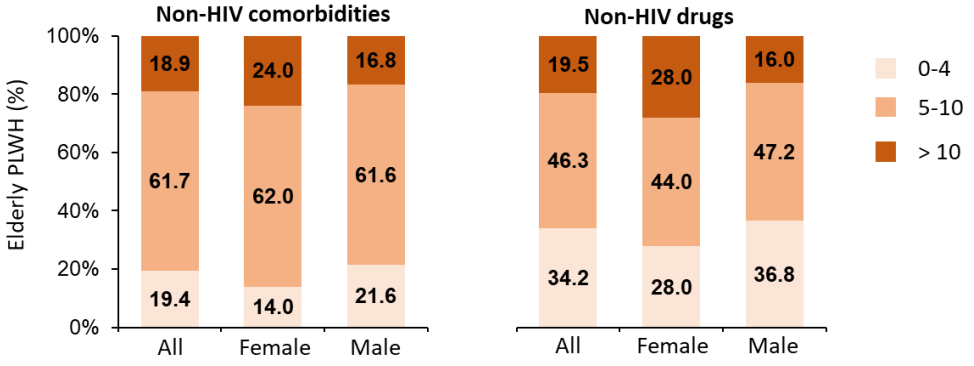
Livio F et al. J Antimicrob Chemother 2021

Inappropriate precription

Prescription of drugs that has more risks that benefit or in which the prescribed doses are not in accordance with the accepted medical standards"

Hanlon J.T. et al. JAGS 2001

Distribution of elderly PLWH by number of non-HIV comorbidities and non-HIV drugs



Risk factors for inappropriate prescribing

Factors	OR	95% CI
Age	1.03	0.97-1.08
Duration of HIV infection	1.02	0.98-1.06
Polypharmacy	**2.50**	1.34-4.65
Renal impairment	**2.68**	1.42-5.05
HIV treatment containing TDF	1.38	0.77-2.49
Treatment with CNS drug	**2.09**	1.14-3.82
Female sex	**8.28**	2.44-28.08

➔ dosing errors, drugs prescribed without indication and inappropriate drugs more frequently observed in female than male

Livio F et al. J Antimicrob Chemother 2021

Adverse effects related to inappropriate prescribing in older PLWH

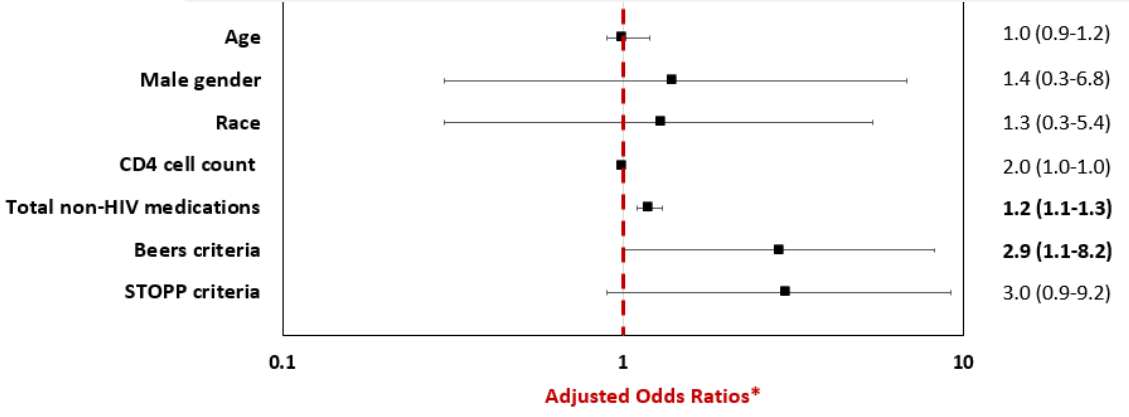
Study examined the prevalence of adverse effects resulting from inappropriate prescribing in 104 PLWH ≥ 65 years old.

➔ 29% had >1 adverse event related to inappropriate prescribing
➔ 14% went to emergency room 1 or more times
➔ 2% got admitted to the hospital

Table 3. Type of Adverse Event

Adverse event	n
Fall	28
Bleed	7
Fracture	5
Anticholinergic side effects	2
Acute kidney injury	1
Hypotension	1
Hyponatremia	1
Infection	1
Other	7

In multivariate analysis, risk of having AE increased as the total number of non-HIV medication increased or when being prescribed a medication fulfilling the Beers or STOPP criteria.



Cinquegrani M et al. ID Week 2020

Top 10 drug classes to avoid in older people living with HIV

Drug class	Problems/alternatives
First generation antihistamines e.g., clemastine, diphenhydramine, doxylamine, hydroxyzine	Strong anticholinergic properties, risk of impaired cognition, delirium, falls, peripheral anticholinergic adverse reactions (dry mouth, constipation, blurred vision, urinary retention). Alternatives: cetirizine, desloratadine, loratadine
Tricyclic antidepressants e.g., amitryptiline, clomipramine, doxepin, imipramine, trimipramine	Strong anticholinergic properties, risk of impaired cognition, delirium, falls, peripheral anticholinergic adverse reactions (dry mouth, constipation, blurred vision, urinary retention). Alternatives: citalopram, escitalopram, mirtazapine, venlafaxine
Benzodiazepines Long and short acting benzodiazepines e.g., clonazepam, diazepam, midazolam Non-benzodiazepines hypnotics e.g., zolpidem, zopiclone	Elderly are more sensitive to their effect, risk of falls, fractures, delirium, cognitive impairment, drug dependency. Use with caution, at the lowest dose and for a short duration. Alternatives: non-pharmacological treatment of sleep disturbance/sleep hygiene.
Atypical antipsychotics e.g., clozapine, olanzapine, quetiapine	Anticholinergic adverse reactions, increased risk of stroke and mortality (all antipsychotics). Alternatives: aripiprazole, ziprasidone
Urological spasmolytic agents e.g., oxybutynin, solifenacin, tolterodine	Strong anticholinergic properties, risk of impaired cognition, delirium, falls, peripheral anticholinergic adverse reactions (dry mouth, constipation, blurred vision, urinary retention). Alternatives: non-pharmacological treatment (pelvic floor exercises).
Stimulant laxatives e.g., senna, bisacodyl	Long-term use may cause bowel dysfunction. Alternatives: fibres, hydration, osmotic laxatives
NSAIDs e.g., diclofenac, indomethacin, ketorolac, naproxen	Avoid regular, long-term use of NSAIDs due to risk of gastrointestinal bleeding, renal failure, worsening of heart failure. Alternatives: paracetamol, weak opioids
Digoxin Dosage > 0.125 mg/day	Avoid doses higher than 0.125 mg/day due to risk of toxicity. Alternatives for atrial fibrillation: beta-blockers
Long acting sulfonylureas e.g., glyburide, chlorpropamide	Can cause severe prolonged hypoglycemia. Alternatives: metformin or other antidiabetic classes
Cold medications Most of these products contain antihistamines (e.g., diphenhydramine) and decongestants (e.g., phenylephrine, pseudoephedrine)	First generation antihistamines can cause central and peripheral anticholinergic adverse reactions as described above. Oral decongestants can increase blood pressure.

EACS guidelines 2020; www.hiv-druginteractions.org

Older people living with HIV beliefs towards their medications and deprescribing

Serrano Gimenez R et al. Rev Esp Quimioter 2020

Deprescribing

Deprescribing = planned and supervised process of dose reduction or stopping of medications that may be causing harm or no longer provide benefit.

When should deprescribing be considered?

- No valid indication for the medicine
- Adverse drug reaction
- Risk of cumulative toxicity
- Lack of effectiveness
- Drug-drug interactions
- Inappropriate medications
- Short remaining life expectancy
- Drugs that patient is reluctant to take (toxicity, difficulty taking medication)

Scott IA et al. JAMA Intern Med 2015; Bain K et al. J Am Geriatr Soc 2008

Interventions to limit and manage polypharmacy/prescribing issues

1) Medication reconciliation

- Establish list of current prescription & over-the-counter drugs to be updated at each medical visit

2) Periodic medication review

Questions to consider when reviewing a prescription

- Is there an indication for the medicine?
- Is the medicine appropriate for elderly PLWH? ➔Beers/STOPP&START criteria
- Is the dose correct (e.g. adjusted for renal function)?
- Is there a significant drug-drug interaction? (favor unboosted ARV) ➔www.hiv-druginteractions.org
- Is there a significant drug-disease interaction?
- Is the duration of treatment acceptable?
- Is there any missing medicine?
- Is the person able to manage his/her own medicines or does he/she need assistance?

3) Medication prioritization

- Consider risk/benefit of each medication within context of a given patient's care goals, level of functioning, life expectancy and preference

Strategies for DEPRESCRIBING

Cutting

- ✓ Pre-defined list of inappropriate medication (STOPP/Beers criteria)
- ✓ Algorithm based
- ✓ Scientific evidence backed by expert
- ✓ Easier to perform

Pruning back

- ✓ Patient-specific approach
- ✓ Personalized choice
- ✓ Physician opinion
- ✓ Multidisciplinary involvement
- ✓ Takes into account comorbidities, frailty, functionality (physical, cognitive, social) and preferences

Discontinue potentially inapropriate medications (PIM)

Patient centered deprescribing framework

Patients' lived experience with medicine (PLEM)

J Antimicrob Chemother
doi:10.1093/jac/dkaa329

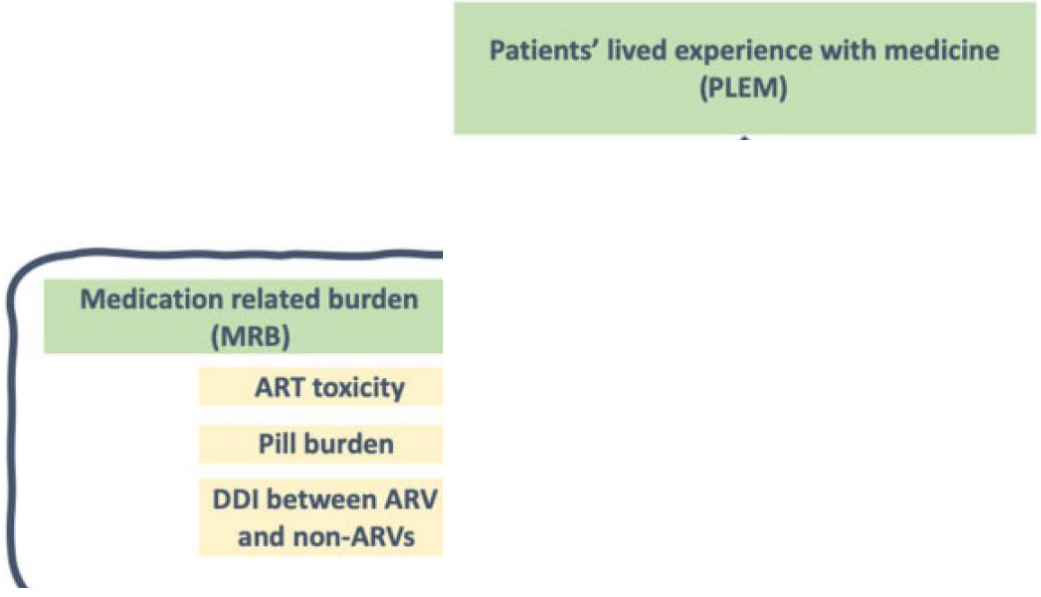
Journal of Antimicrobial Chemotherapy

A patient-centred approach to deprescribing antiretroviral therapy in people living with HIV

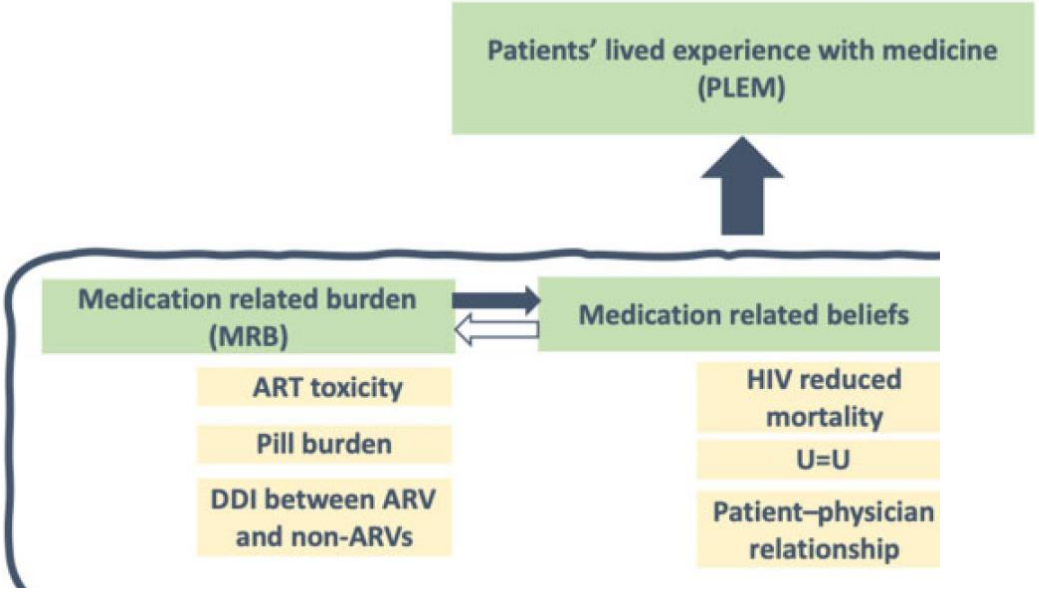
Giovanni Guaraldi [1,2]*, Jovana Milic[1–3], Simone Marcotullio[4] and Cristina Mussini[1,2]

Guaraldi G, et al. J Antimicrob Chemother. 2020 Dec 1;75(12):3425-3432. doi 10.1093/jac/dkaa329.

Patient centered deprescribing framework



Patient centered deprescribing framework



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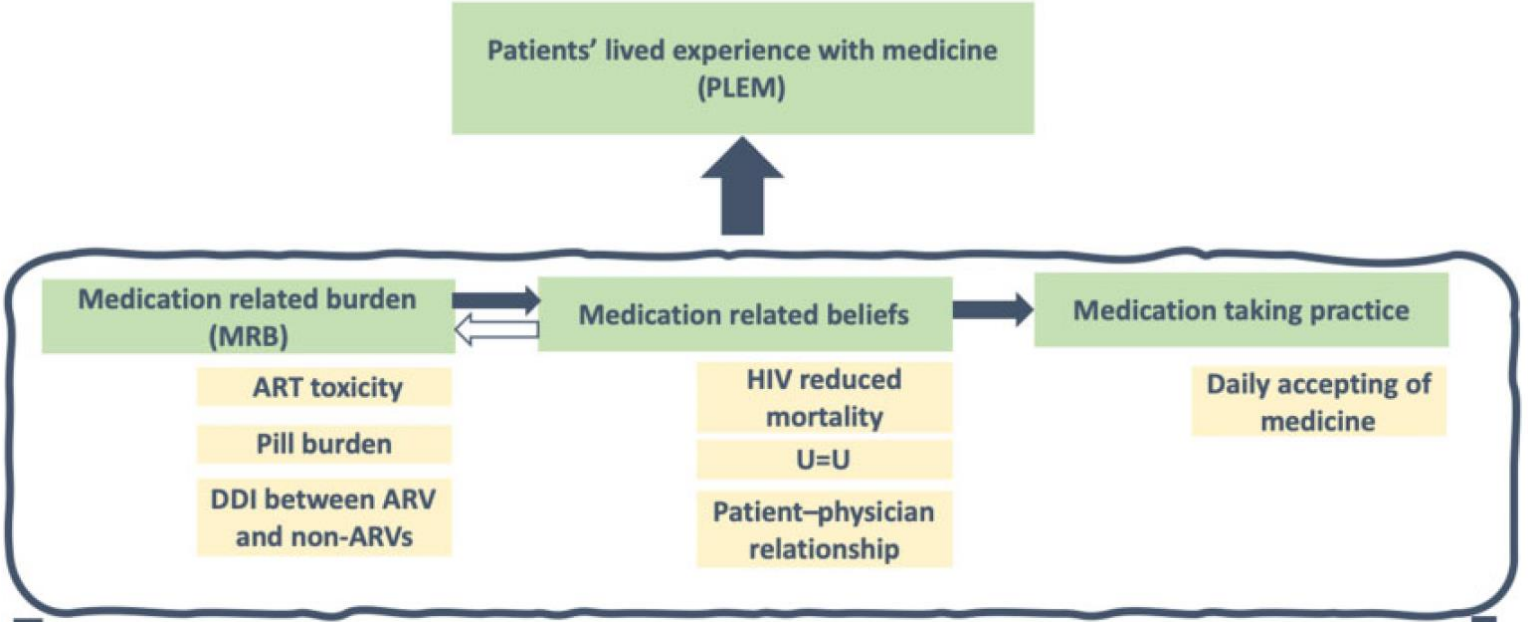

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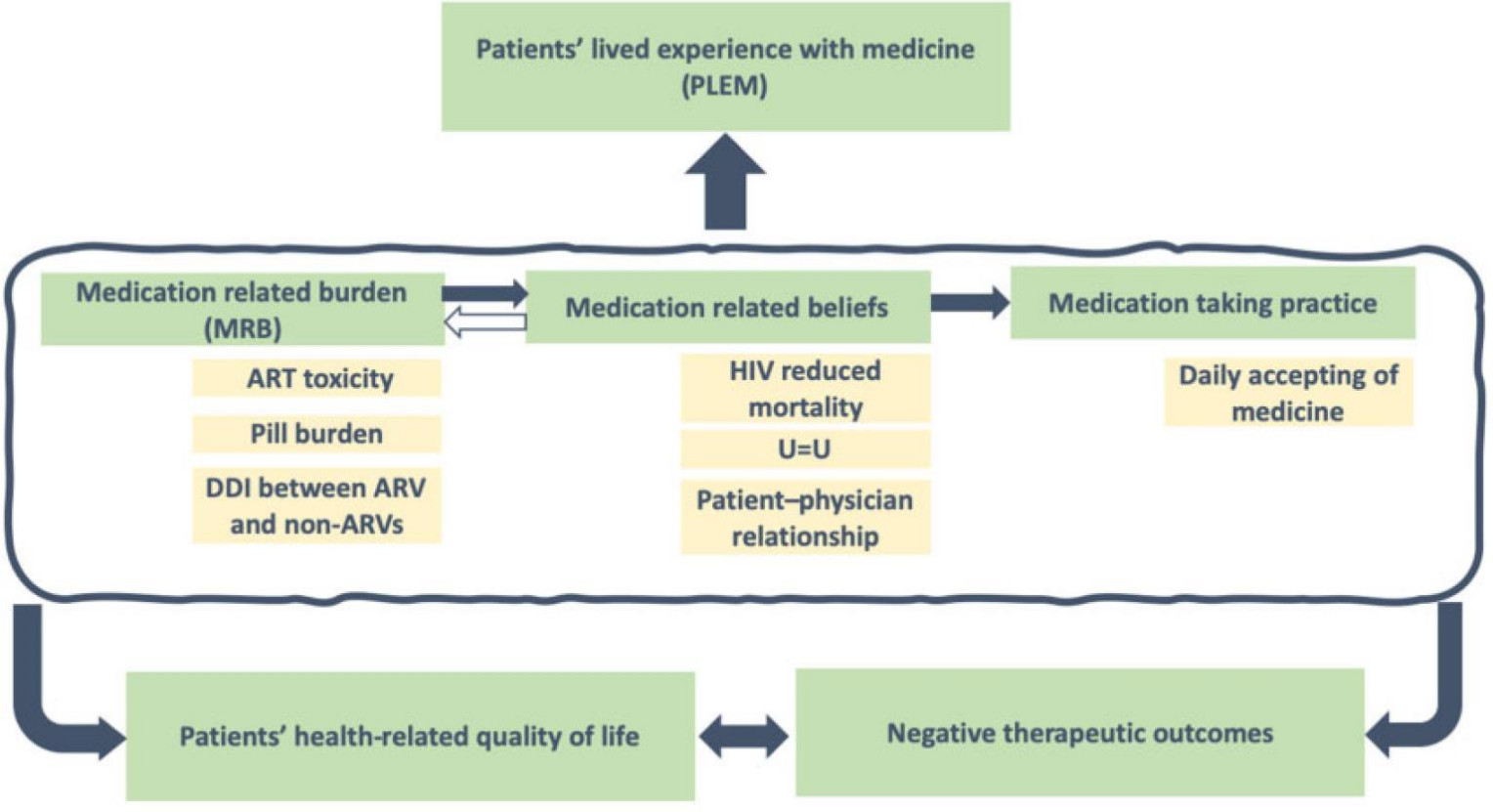
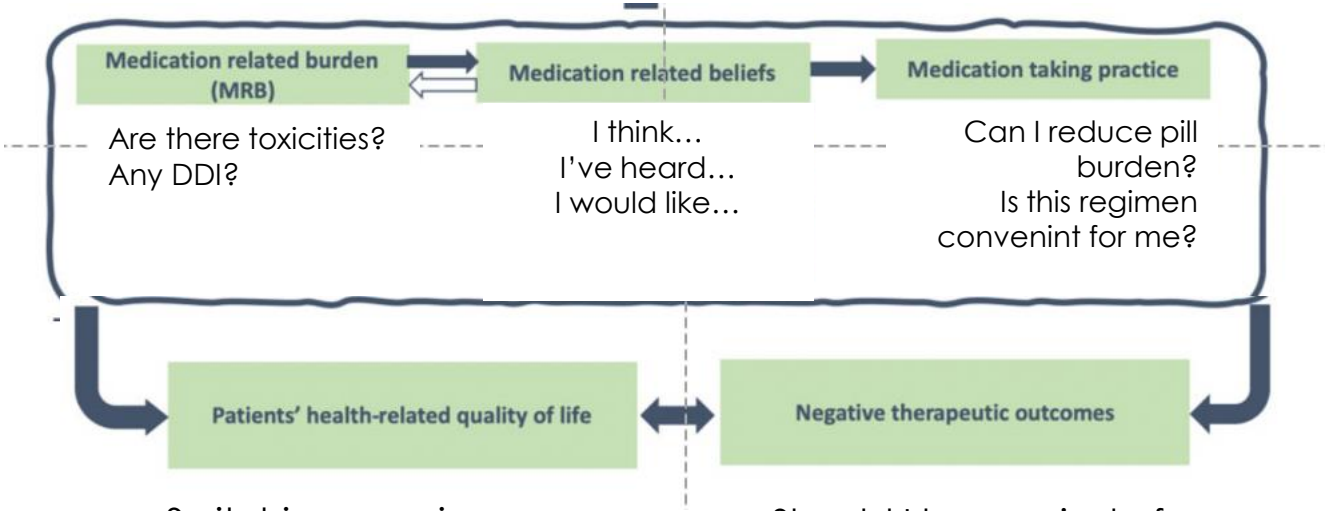


My lived experience with medicine (PLEM)

Hey Dr, these are my medicines….

Are all needed? Are dosages corrects?
Can you offer me somthing else?



Switching may improve my HRQoL?

Should I be worried of metabolic health?

«Less burden of the disese»
When the patient is the hero

ACCEPTED MANUSCRIPT

HIV care models during the COVID-19 era

Giovanni Guaraldi, Jovana Milic, Esteban Martinez, Adeeba Kamarulzaman, Cristina Mussini, Laura Waters, Anton Pozniak, Patrick Mallon, Jürgen Rockstroh, Jeffrey V Lazarus

Clinical Infectious Diseases, ciaa1864, https://doi.org/10.1093/cid/ciaa1864
Published: 19 December 2020 **Article history**

	Assessment	Follow-up frequency (#)	F2F	Telehealth	Tool	Comment
Polypharmacy		At 4- and 8-months post F2F		✓	Possibly using cell phone apps or pictures of drugs that patients take	Recall the updated list of drugs and dosages the patients is taking Ask for medication burden, medication believe and medication live in proactive
Polypharmacy	Assess drug reconciliation list to exclude drug drug interaction and potentially inappropriate drug prescription	12 months	✓		Deprescribing strategy (including ARV) aim to calibrate the patient's therapeutic regimen, according to the actual need in his treatment path (or a part of it), interrupting the prescription of drugs not considered necessary for the maintenance / achievement of the patient's well-being	

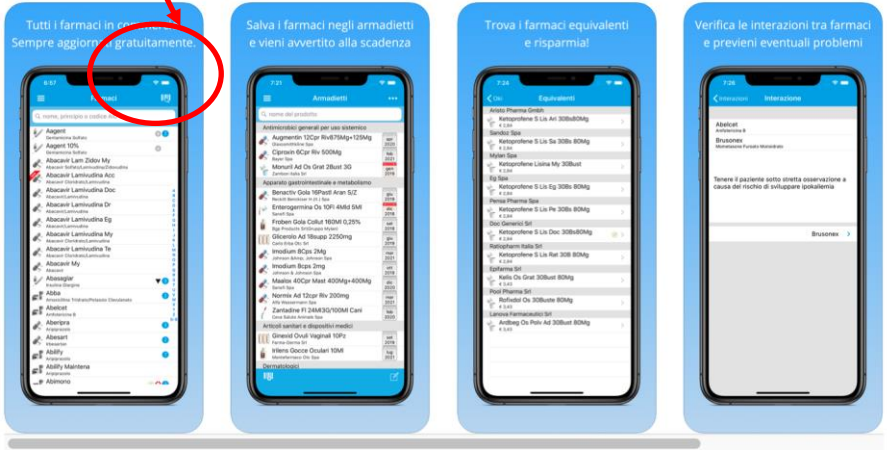
Definition:

- ✓ simultaneous use of numerous drugs (≥5?)
- ✓ the complexity of the drugs taken

Consequences

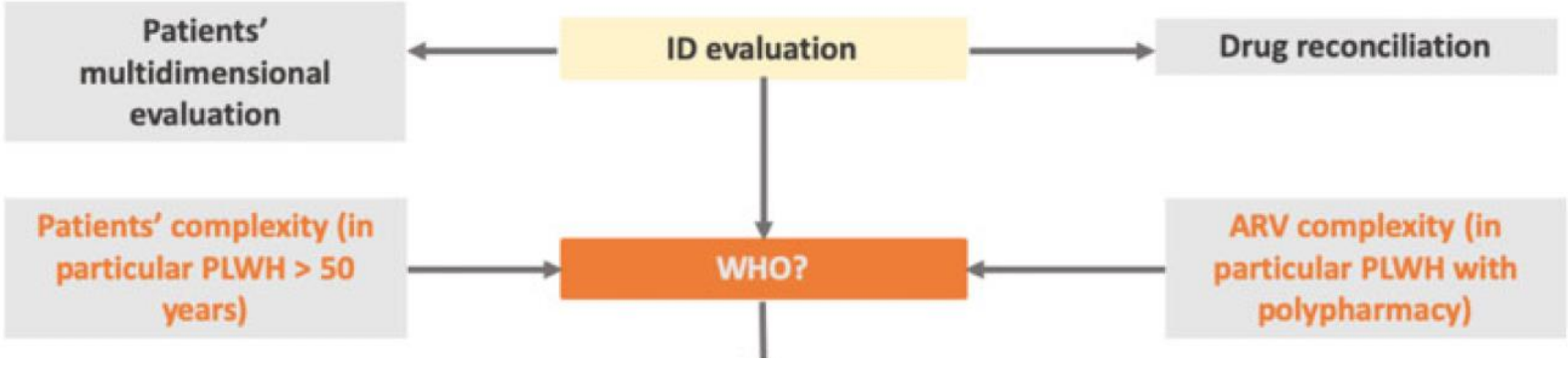
- ✓ DDI
- ✓ Non-adherence
- ✓ Adverse events
- ✓ ethical, social, and economic consequences

QR-code to identify the drug from a barcode

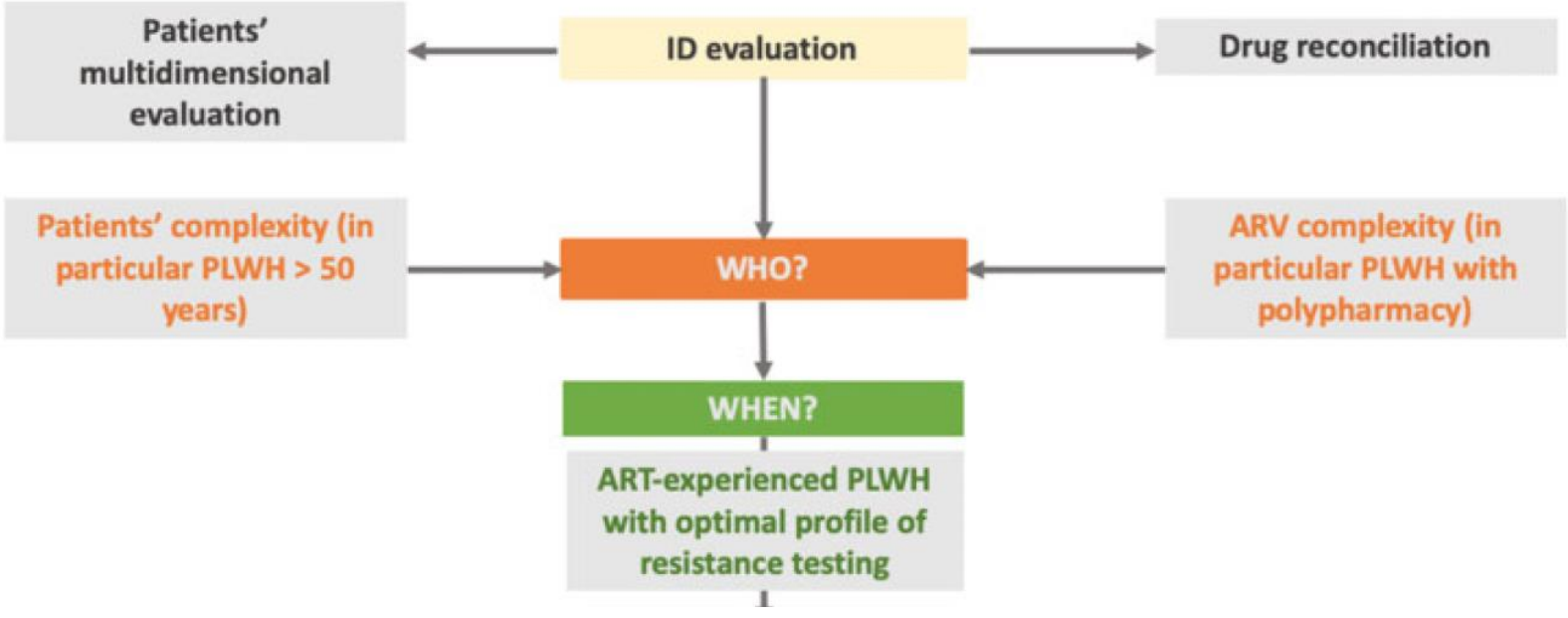


Algorithm for deprescribing ARV in PLWH

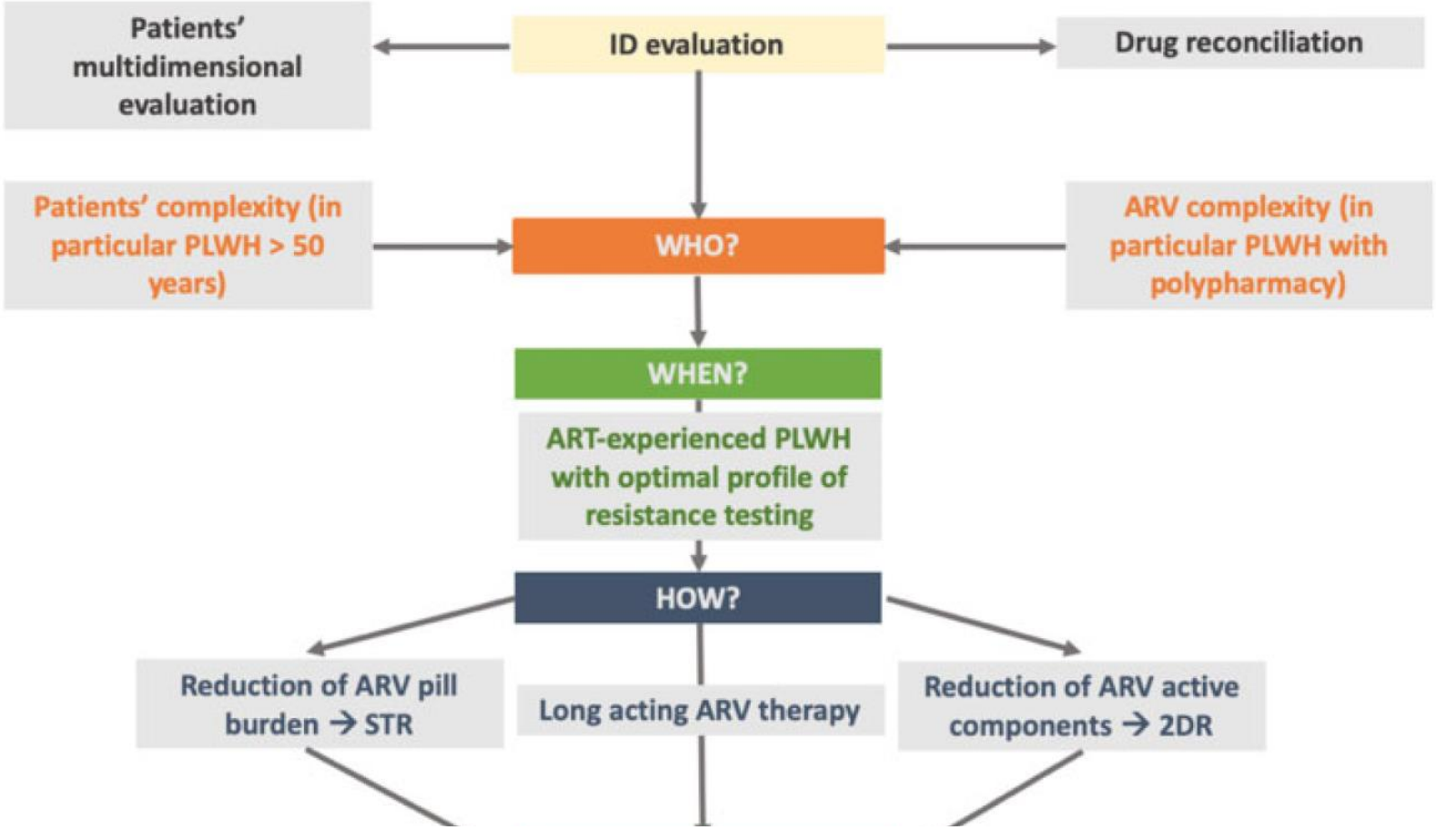
Algorithm for deprescribing ARV in PLWH



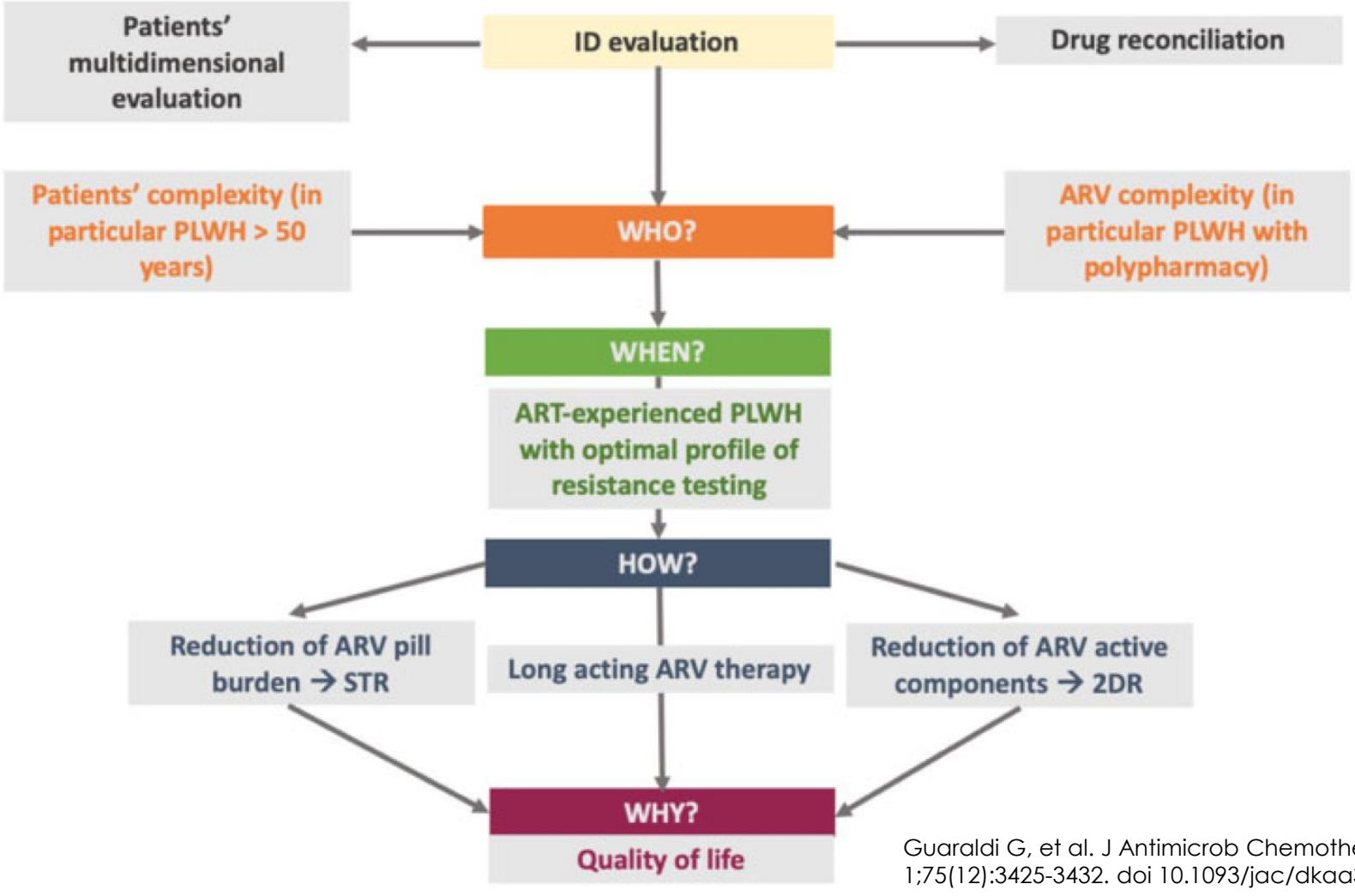
Algorithm for deprescribing ARV in PLWH



Algorithm for deprescribing ARV in PLWH



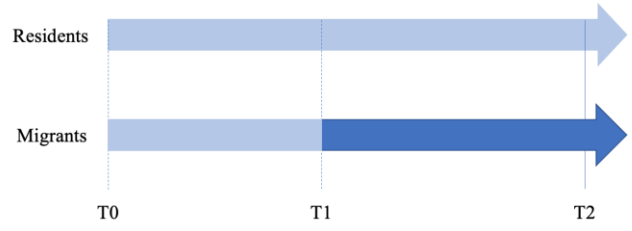
Algorithm for deprescribing ARV in PLWH



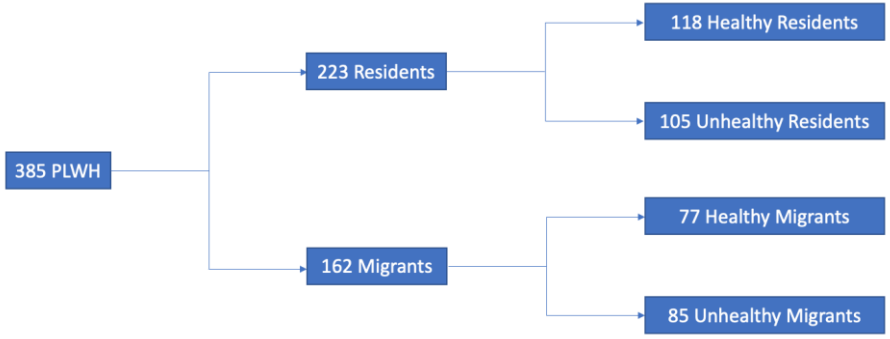
Guaraldi G, et al. J Antimicrob Chemother. 2020 Dec 1;75(12):3425-3432. doi 10.1093/jac/dkaa329.

Trends of polypharmacy and 2DR antiretroviral use: a 15-year observational matched-cohort study

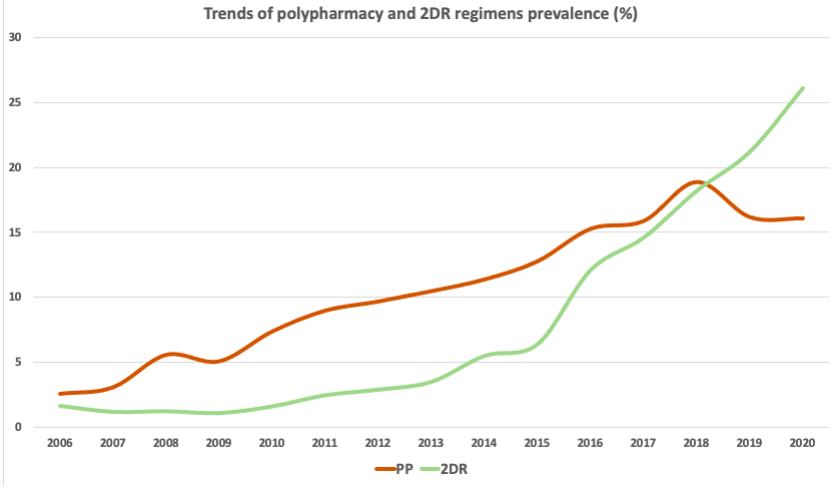
The **objective** of the study was to describe prevalence and risk factors for polypharmacy (PP) and two-drug regimens (2DR) antiretroviral therapy (ART) in the period 2006-2020. PLWH were divided into two groups: **residents** (non-switchers) and **migrants** (2DR switchers), each of them divided in : **healthy** (without multimorbidity), **unhealthy** (with multimorbidity)

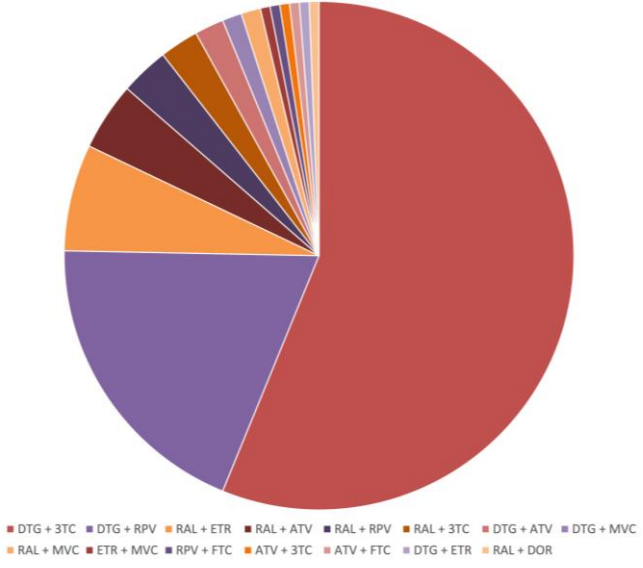


A matching was performed to select study population, based on similar observation time since entrance in the MHMC cohort (T1-T0).



Trends of polypharmacy and 2DR antiretroviral use: a 15-year observational matched-cohort study



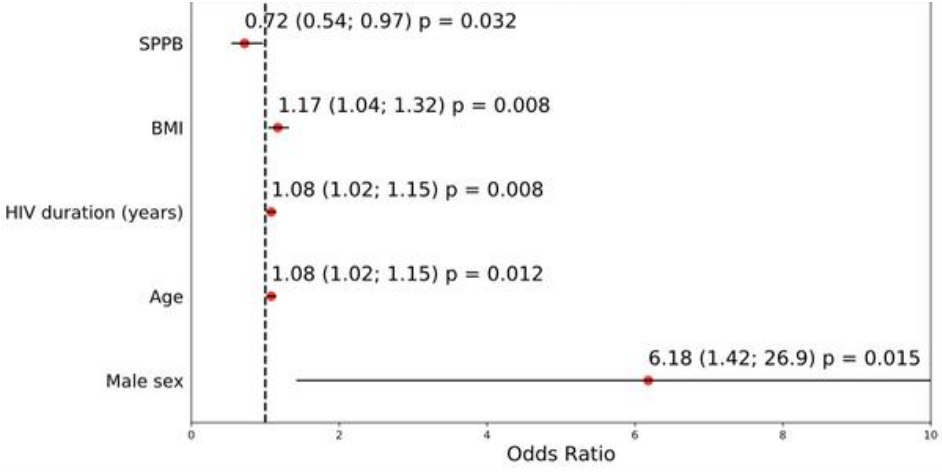


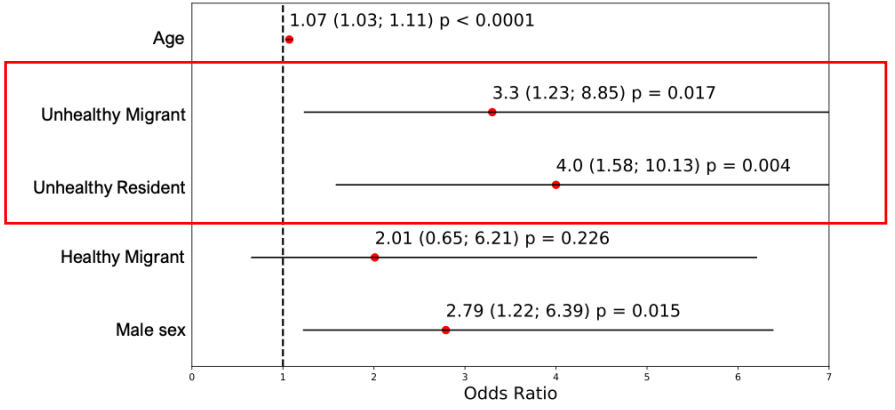
Trends of polypharmacy and 2DR antiretroviral use: a 15-year observational matched-cohort study

Feature	Unhealthy migrants (N=85) (22.1%)	Healthy migrants (N=77) (20%)	Unhealthy residents (N=105) (27.3%)	Healthy residents (N=118) (30,3%)	p
Age, years, mean (± SD)	56.2 (7.3)	49.8 (7.9)	55.0 (8.6)	47.6 (6.7)	<0.001
BMI, kg/m2, median (Q1, Q3)	24.5 (21.7 - 27.4)	23.7 (22.1 - 26.1)	24.7 (22.1 - 27.1)	23.4 (21.6 - 24.9)	0.01
CD4 nadir, c/µL, median (Q1, Q3)	170.0 (52.8 - 265.0)	247.5 (108.0 - 362.0)	161.5 (84.3 - 284.3)	214.0 (99.5 - 303.0)	0.002
HIV duration, median (Q1, Q3)	24.0 (20.0 - 29.0)	18.0 (8.5 - 25.0)	21.5 (17.0 - 27.0)	18.0 (10.0 - 21.0)	<0.001
Number of co-medications, mean (±SD)	4.1 (2.7)	2.3 (1.8)	3.7 (2.5)	1.9 (1.5)	<0.001
Polypharmacy, N (%)	**23 (27.1 %)**	**5 (6.5 %)**	**23 (22.0 %)**	**3 (2.5 %)**	**<0.001**
Frailty, median (Q1, Q3)	0.31 (0.23 - 0.35)	0.22 (0.15 - 0.31)	0.31 (0.23 - 0.40)	0.24 (0.19 - 0.32)	<0.001

Trends of polypharmacy and 2DR antiretroviral use: a 15-year observational matched-cohort study

Predictors of Polypharmacy





Discussion

- A parallel increase in 2DR and PP trends was observed in the period 2006-2020.
- PLWH switching to 2DR are heterogenous population in which PP does not represent a major driver for switch.
- 2DR should be considered a deprescribing option in the management of PP.

A patient journey prospective to 2DR studies

Too healthy

2 DR

Healthy switchers

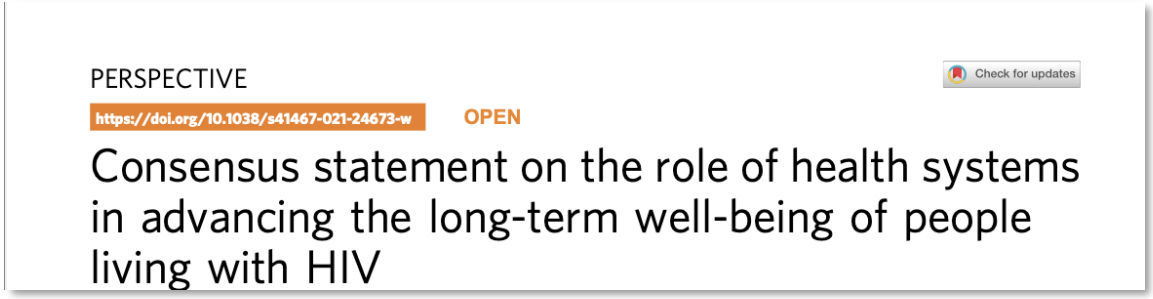
3 DR

Unhealthy switchers

Too ill

2 DR

How can we shrink this area?



Metabolic Health is a component of the 4° 90% goal

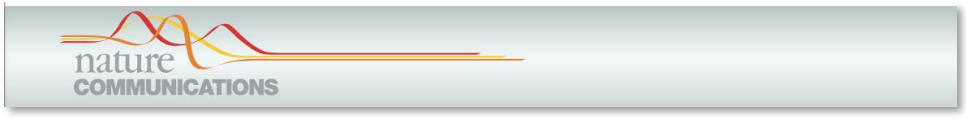
Diagnosed

On treatment

Virally suppressed

Good health-related quality-of-life

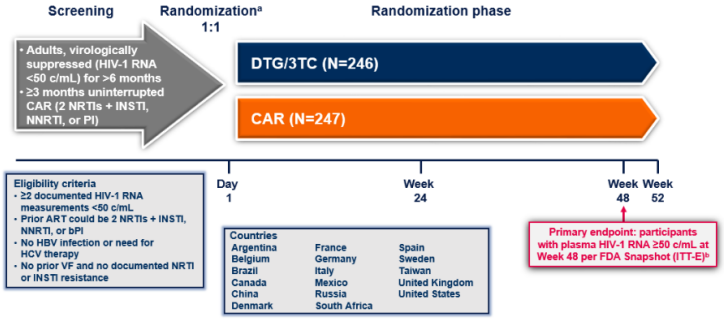
UNAIDS has included a broad health target for PLHIV in its strategic guidance for the first time in 2021, calling for 90% of PLHIV to "**have access to integrated or linked services for HIV treatment and cardiovascular diseases, cervical cancer, mental health, diabetes diagnosis and treatment, education on healthy lifestyle counselling, smoking cessation advice and physical exercise**



METABOLIC HEALTH in 2DR SWITCH STUDIES: data from IAS2021

SALSA Phase III Study Design

Randomized, open-label, active-controlled, multicenter, parallel-group, non-inferiority study

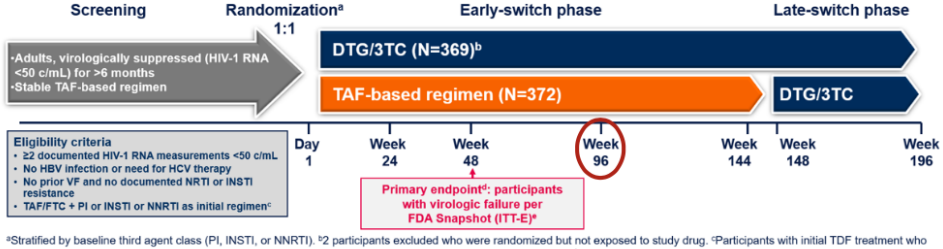


[a]Stratified by baseline third agent class (PI, INSTI, or NNRTI). [b]5% non-inferiority margin.

SWITCHING TO THE 2-DRUG REGIMEN OF DOLUTEGRAVIR/LAMIVUDINE (DTG/3TC) FIXED-DOSE COMBINATION IS NON-INFERIOR TO CONTINUING A 3-DRUG REGIMEN THROUGH 48 WEEKS IN A RANDOMIZED CLINICAL TRIAL (SALSA)

Josep M. Llibre,[1] Carlos Alves Brites,[2] Chien-Yu Cheng,[3,4] Olayemi Osiyemi,[5] Carlos Galera,[6] Laurent Hocqueloux,[7] Franco Maggiolo,[8] Olaf Degen,[9] Libby Blair,[10] Brian Wynne,[10] James Oyee,[11] Mark Underwood,[10] Lloyd Curtis,[11] Gilda Bontempo,[10] Jean van Wyk[12]

TANGO Phase 3 Study Design

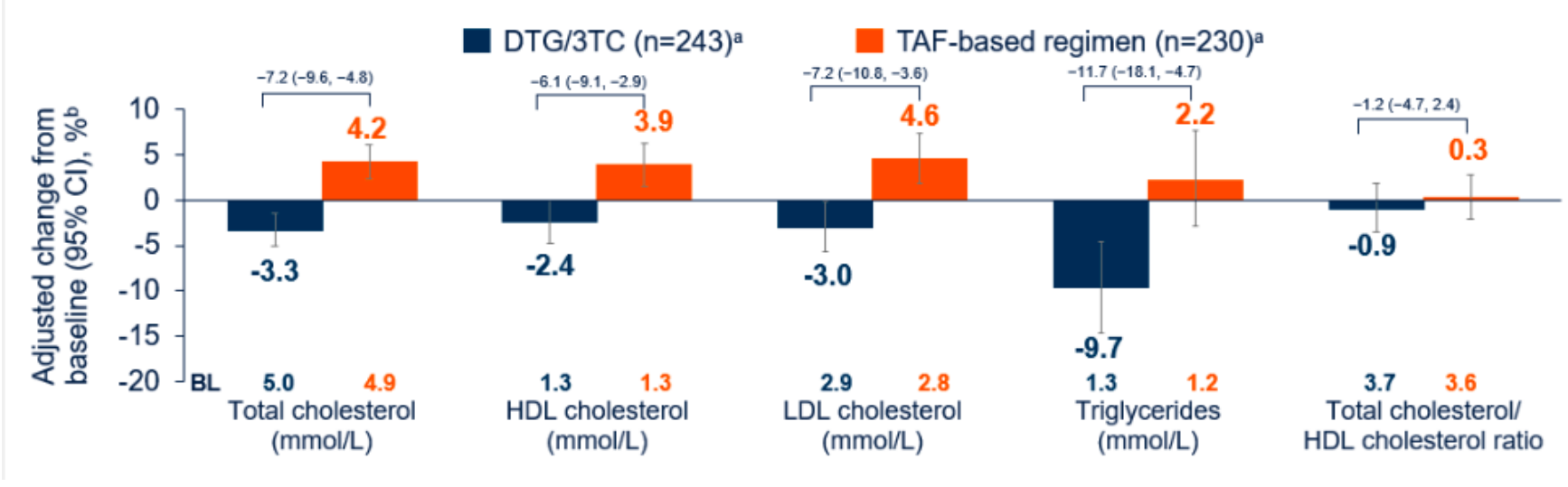


[a]Stratified by baseline third agent class (PI, INSTI, or NNRTI). [b]2 participants excluded who were randomized but not exposed to study drug. [c]Participants with initial TDF treatment who switched to TAF ≥3 months before screening, with no changes to other drugs in their regimen, were also eligible. [d]4% non-inferiority margin. [e]Includes participants who changed a background therapy component or discontinued study treatment for lack of efficacy before Week 48, or who had HIV-1 RNA ≥50 c/mL in the 48-week window.

COMPARISON OF VIRAL REPLICATION FOR THE 2DR REGIMEN OF DTG/3TC VERSUS A 3/4-DRUG TAF–BASED REGIMEN (TBR) IN THE TANGO STUDY THROUGH WEEK 96

Ruolan Wang,[1] Jonathan Wright,[2] Nisha George,[2] Mounir Ait-Khaled,[3] Thomas Lutz,[4] Olayemi Osiyemi,[5] Miguel Gorgolas,[6] Peter Leone,[1] Brian Wynne,[1] Jean Andre van Wyk,[3] Mark Underwood[1]

TANGO wks 144 : Metabolic health parameters

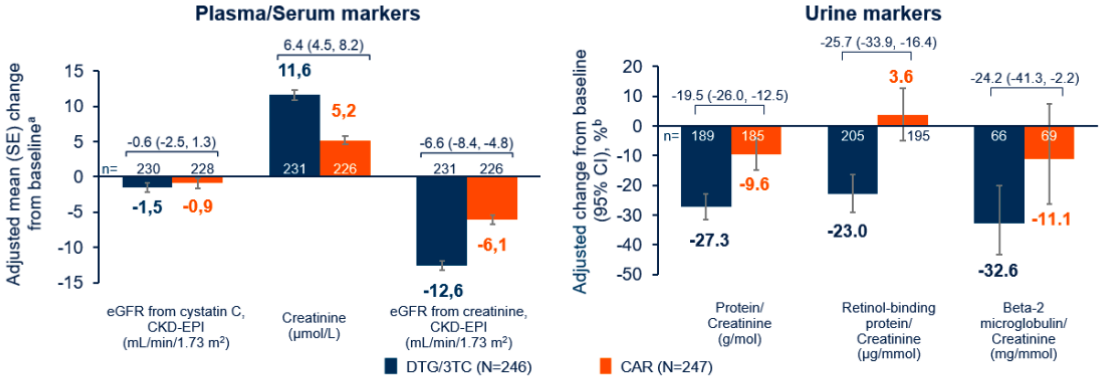


Change in fasting lipids from baseline to Week 144 generally favored DTG/3TC

Post-baseline lipid-modifying agent use occurred in 12% (45/369) of the DTG/3TC group and 11% (42/372) of the TAF-based regimen group

SALSA Study: Change in Renal Biomarkers at Week 48 - Safety Population

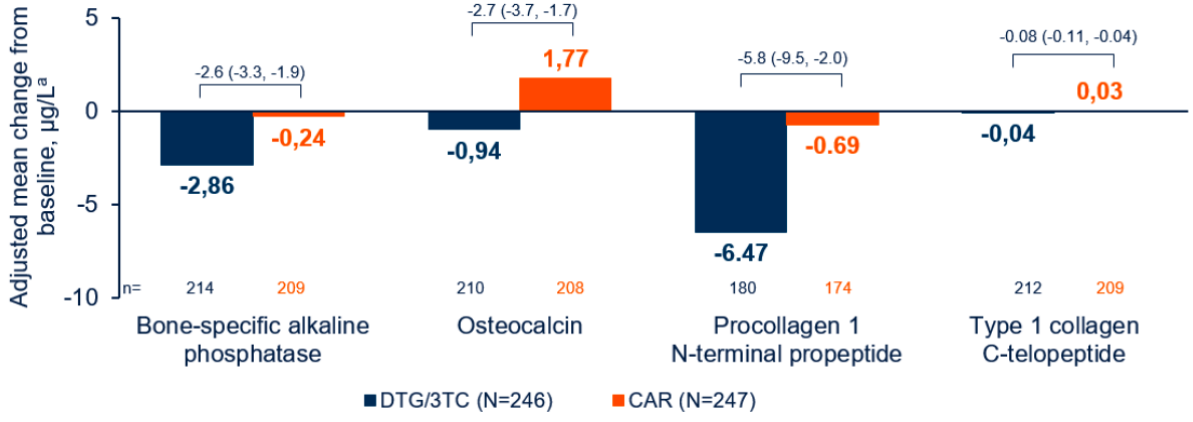
Llibre et al. IAS 2021; Virtual. Slides OALB0303



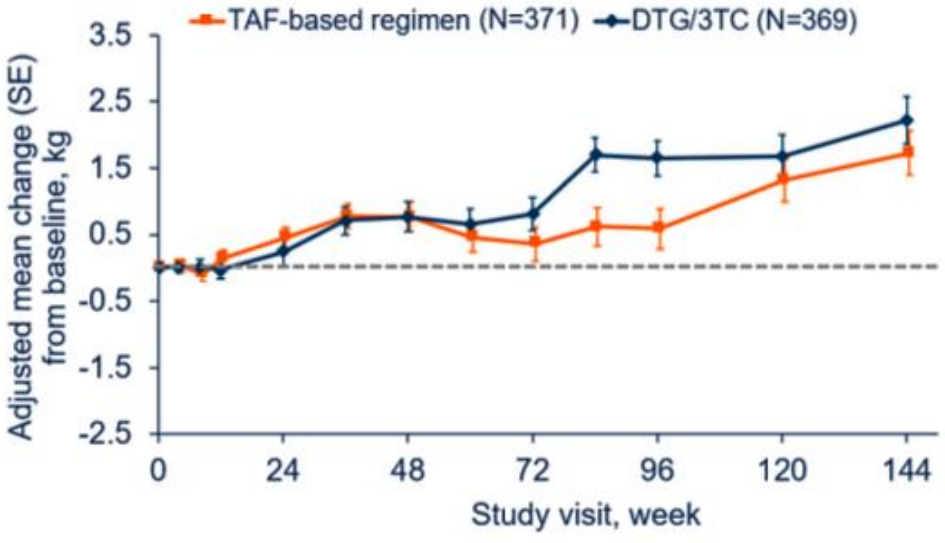
- Similar small changes in eGFR from cystatin C observed in both treatment groups;
- decreases in eGFR by creatinine observed in both treatment groups, with a greater decrease with DTG/3TC.
- Improvements in markers for proximal tubular renal function observed with DTG/3TC

SALSA Study: Change in Bone Biomarkers at Week 48 - Safety Population

- Improvements in markers of bone turnover observed after switching to DTG/3TC

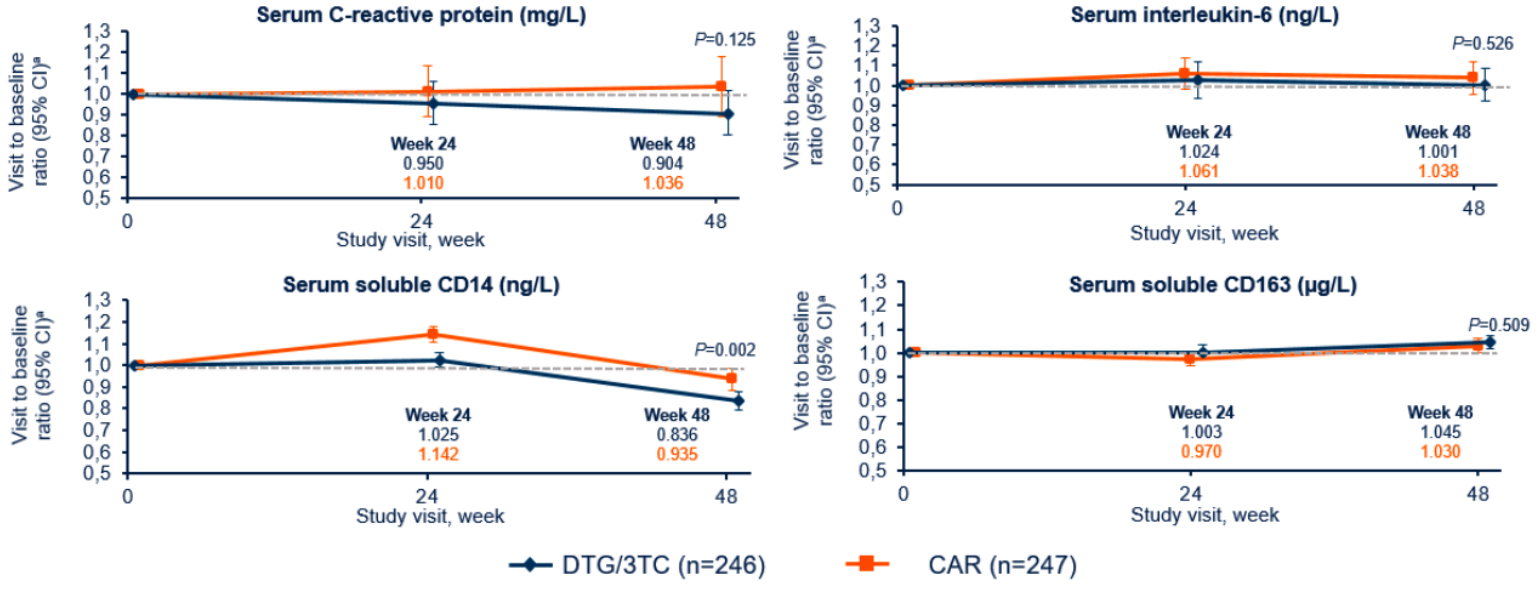


Weight Change Through wks 144 by Treatment Group in TANGO



Adjusted mean **change in weight from BL to wks 144** was **comparable** between the DTG/3TC and TAF-based regimen groups (2.2 vs 1.7 kg; median [IQR] change in weight, 2.2 [−0.8, 5.6] vs 1.3 [−1.5, 5.0] kg, respectively)

Salsa Studio: Change in Change in Inflammatory Biomarkers at Week 48 - Safety Populations



Changes in inflammatory biomarkers were generally similar between groups, with the exception of soluble CD14 changes favoring DTG/3TC

Referencia: Llibre JM, Alves Brites C, Cheng CY, et al. Switching to the 2-drug regimen of dolutegravir/lamivudine (DTG/3TC) fixed-dose combination is non-inferior to continuing a 3-drug regimen through 48 weeks in a randomized clinical trial (SALSA). Slides OALB03. Presented at 11th IAS Conference on HIV Science; July 18-21, 2021; Virtual. Disponible en https://conference.ias2021.org/media-1057-oalb03---modern-art-and-covid-19-in-plhiv-cme-accredited Acceso realizado septiembre 2021

What is relevant for me:

- ✓ These results are obtained from RCT
- ✓ Switching studies are the closest to my clinical practice
- ✓ I like to see data which couple Immunologic and Metabolic paramethers
- ✓ **Comparable and small changes in inflammation markers at WK96** in the 2DR and 3DR treatment arms, **reflecting the high and comparable VL <40 c/mL and TND results**

What is relevant for my patients:

- ✓ **DTG/3TC switching shows zero virologic withdrawals**, with **no viral resistance**
- ✓ **Changes** in **lipids generally favored the DTG/3TC group**; **changes** in other **metabolic health parameters** were **generally similar between groups**
- ✓ **Weight changes** were **similar between treatment groups** and c**omparable to what would be expected in the general population (0.5-1.0 kg/year)**

DTG/3TC is a robust switch option with high levels of efficacy, good safety and tolerability, and a high barrier to resistance

Take home message (1/2)

- Drug-drug interactions with antiretroviral drugs are still an issue we have to face with modern antiretroviral therapy particularly in the context of an aging population with polypharmacy.

- Polypharmacy often unavoidable, avoid unnecessary/inappropriate polypharmacy.

- Medication reconciliation and regular medication review constitute important measures to prevent prescribing issues.

- Multidisciplinary team approach recommended for care of elderly PLWH.

Take home message (2/2)

- Patient lived experience with medicine (PLEM) are a framework to to support ART simplification in the context of deprescribing
- 2DR regimens may reduce the cumulative life burden of drug exposure and related potential toxicity.
- LA ART may substantially reduce the medication fatigue associated with daily remind of HIV stigma, introducing an ethical principle, nevertheless this has to be evaluated in the real world setting.

«Manierism» or the way we «manage» polypharmacy

….any similarity is accidental

- “Less ARV drugs”: when tolerability is the hero -

  “Less ARV pills”: when freedom is the hero –

  “Less burden disease”: when the patient is the hero –