

La gestione degli eventi avversi in  
alcuni pazienti particolari  
**Il paziente over 65**

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**INTRO (BREVE)**

# Caratteristiche del paziente anziano

Tabella 1 - Elementi di specificità del paziente anziano.

	RACCOMANDAZIONE (FORZA/EVIDENZA)
<b>Relativi all'ospite</b>	
Minore recupero delle cellule T CD4+.	[AII]
Migliore risposta virologica (migliore aderenza al trattamento).	[AII]
Maggiore rischio progressione rispetto < 50 anni.	[AII]
Maggiore rischio mortalità non AIDS.	[AII]
Maggiore rischio interruzione cART.	[AII]
<b>Relativi al trattamento</b>	
Multimorbilità e politerapia devono guidare la scelta della terapia cART alla pari dell'efficacia virologica.	[AII]
Nella fase di mantenimento terapeutico (ossia stabile soppressione virologica), la scelta di regimi <i>NRTI-sparing</i> o <i>booster-free</i> - anche in semplificazione in mono o bi-terapia - deve essere considerata in condizioni di multimorbilità e/o politerapia.	[BII]
TAF deve essere preferito a TDF.	[AI]
I pazienti con multimorbilità hanno maggior rischio di interazioni farmacologiche (DDIs) e di tossicità derivate dalle stesse.	[AII]

## 70-item CSHA Frailty Index (Rockwood)

### Fried's Phenotype (5 items):

1. self-reported unintentional **weight loss** >10 lbs or recorded weight loss >5% in a year;

2. measured **weak grip-strength**;

3. **low activity**/energy expenditure

4. Measured **slow walking speed**

5. **Self reported exhaustion**

69. Impaired mobility

70. Tiredness all the time

1. Changes in everyday activities; 2. Head and neck problems; 3. Poor muscle tone in neck; 4. Bradykinesia, facial; 5. Problems getting dressed; 6. Problems with bathing; 7. Problems carrying out personal grooming; 8. Urinary incontinence; 9. Toileting problems; 10. Bulk difficulties; 11. Rectal problems; 12. Gastrointestinal problems; 13. Problems cooking; 14. Sucking problems; 15. Problems going out alone; 16. Musculoskeletal problems; 17. Bradykinesia of the limbs; 18. Poor muscle tone in limbs; 19. Poor limb coordination; 20. Poor coordination, trunk; 21. Poor standing posture; 22. Irregular gait pattern; 23. Falls; 24. Mood problems; 25. Feeling sad, blue, depressed; 26. History of depressed mood; 27. Depression (clinical impression); 28. Sleep changes; 29. Restlessness; 30. Memory changes; 31. Short-term memory impairment; 32. Long-term memory impairment; 33. Changes in general mental functioning; 34. Onset of cognitive symptoms; 35. Clouding or delirium; 36. Paranoid features; 37. History relevant to cognitive impairment or loss; 38. Family history relevant to cognitive impairment or loss; 39. Impaired vibration; 40. Tremor at rest; 41. Postural tremor; 42. Intention tremor; 43. History of Parkinson's disease; 44. Family history of degenerative disease; 45. Seizures, partial complex; 46. Seizures, generalized; 47. Syncope or blackouts; 48. Headache; 49. Cerebrovascular problems; 50. History of stroke; 51. History of diabetes mellitus; 52. Arterial hypertension; 53. Peripheral pulses; 54. Cardiac problems; 55. Myocardial infarction; 56. Arrhythmia; 57. Congestive heart failure; 58. Lung problems; 59. Respiratory problems; 60. History of thyroid disease; 61. Thyroid problems; 62. Skin problems; 63. Malignant disease; 64. Breast problems; 65. Abdominal problems; 66. Presence of snout reflex; 67. Presence of the palmomental reflex; 68. • Other medical history

# Quali “strumenti” devo usare?

Grado di autosufficienza?  
Con chi vive?  
E' mai caduto?  
Come va la memoria?  
E' triste?  
Si sente fiacco?  
Cammina bene? Usa il bastone?  
Ha appetito? Com'è il peso?

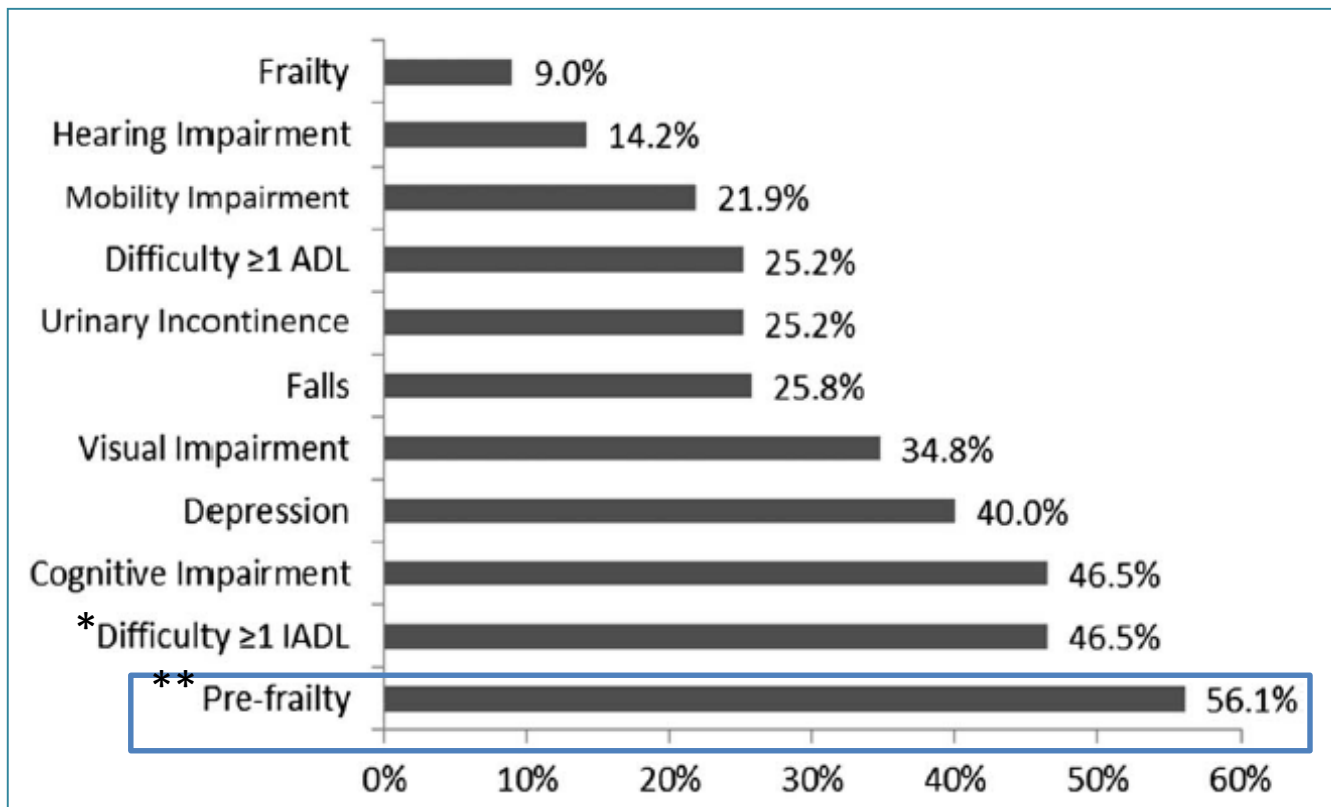
ADL  
Fare il BAGNO, VESTIRSI, TOILETTE,  
SPOSTARSI, CONTINENZA, ALIMENTAZIONE

IADL  
Uso del TELEFONO, SPESA, preparazione  
CIBO, governo CASA, BUCATO, MEZZI di  
TRASPORTO, FARMACI, DENARO



# Burden of geriatric syndromes

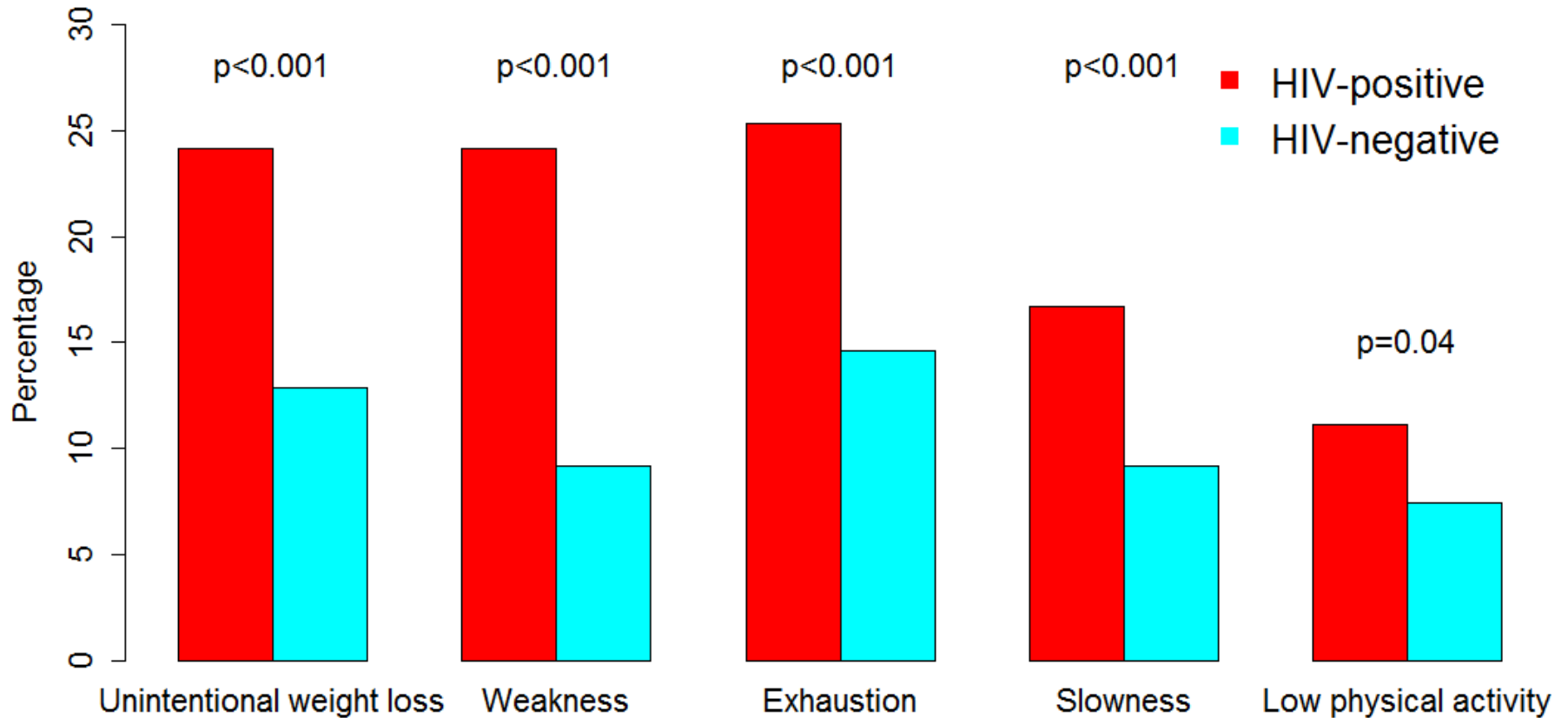
## n=155, age>50 (??)



\*difficulty with instrumental activities of daily living

\*\* Participants were classified on *Fried criteria* as frail if they met 3 or more of the 5 criteria and were classified as prefrail if they met 1 or 2 of the criteria.

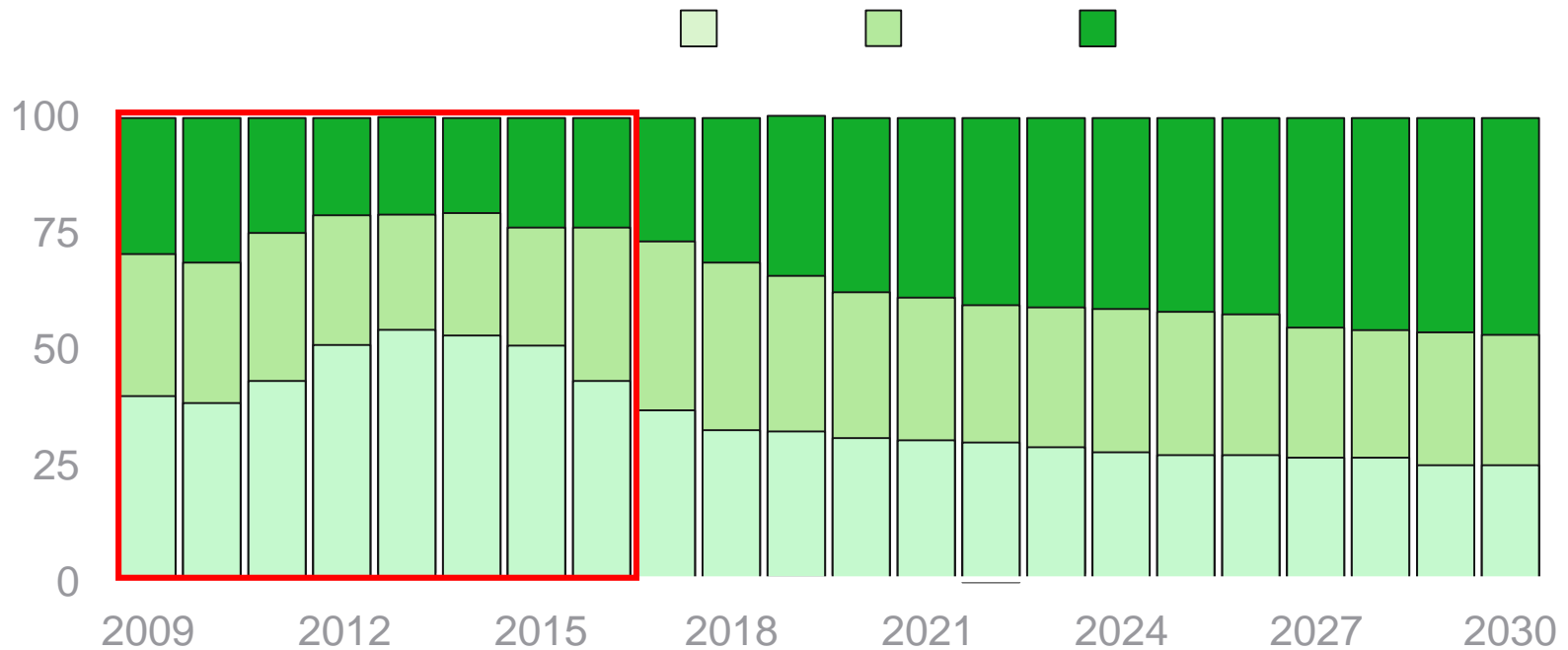
# All frailty factors more prevalent in HIV+ participants



# Model Simulation Predicts Increased Frailty Burden in Aging HIV+ Population

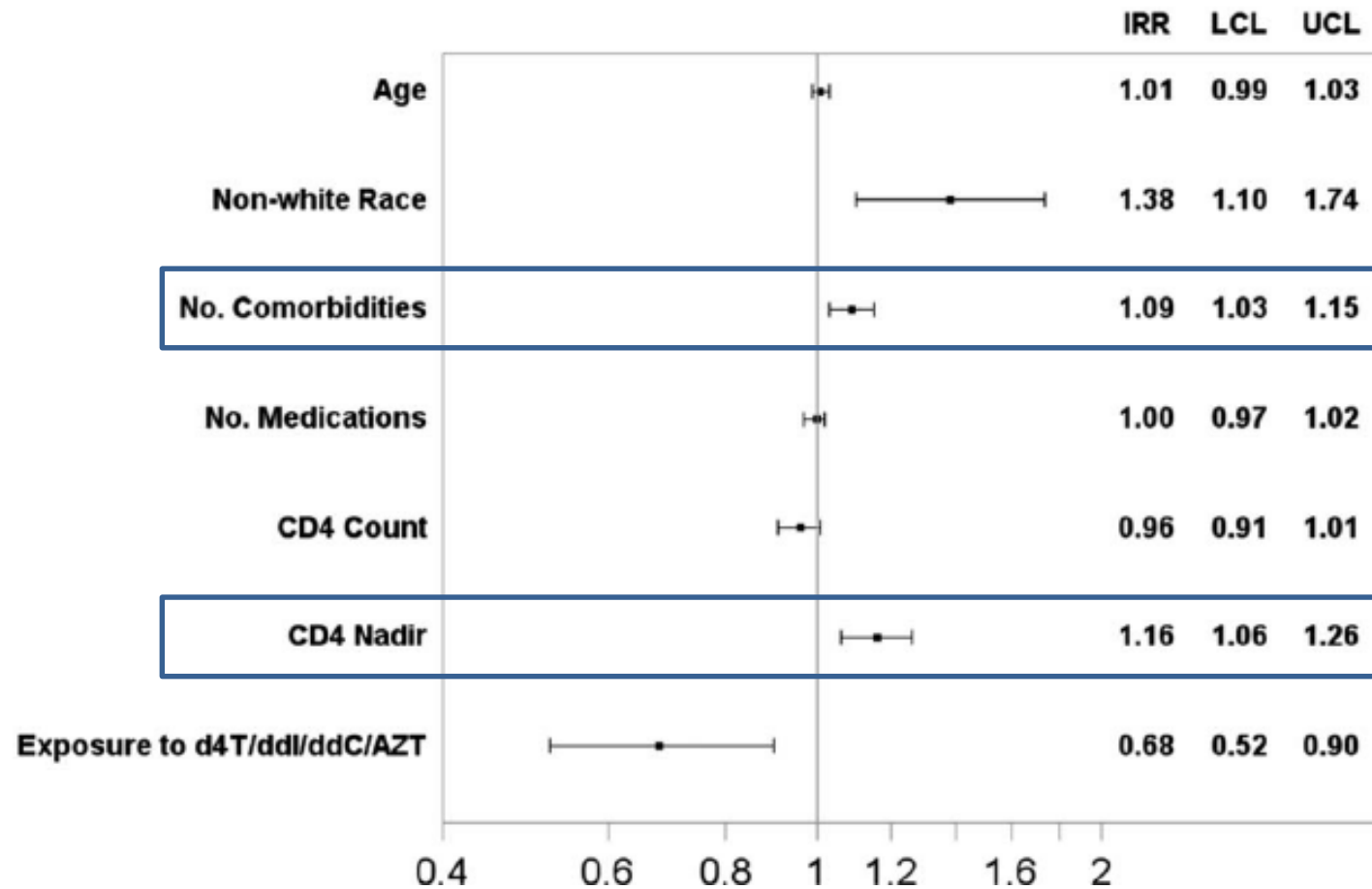
- By 2030, 75% of HIV+ pts predicted to have significant frailty

Observed (Red Box) and Projected Frailty Burden in HIV+ Pts 2009-2030



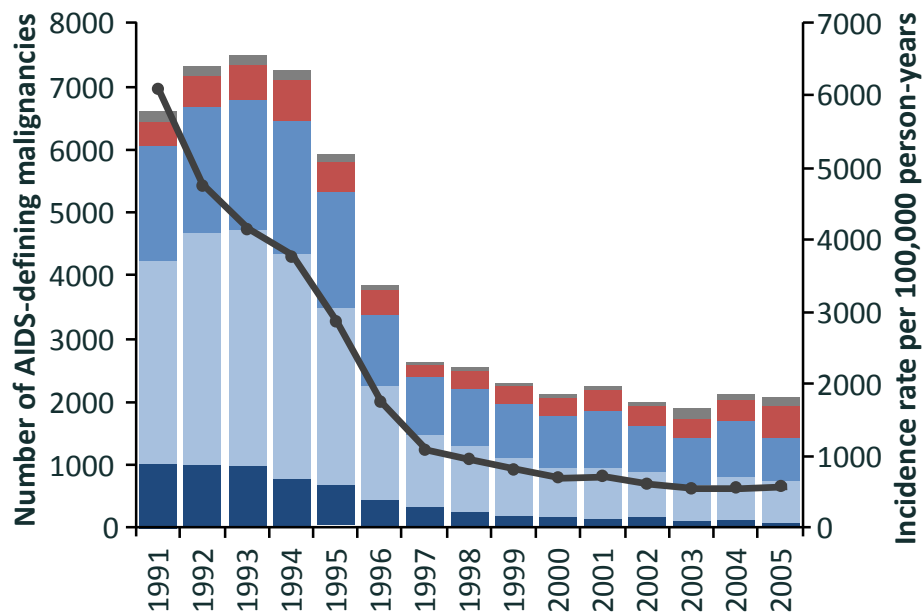


# Demographic and clinical factors associated with increasing numbers of geriatric syndromes

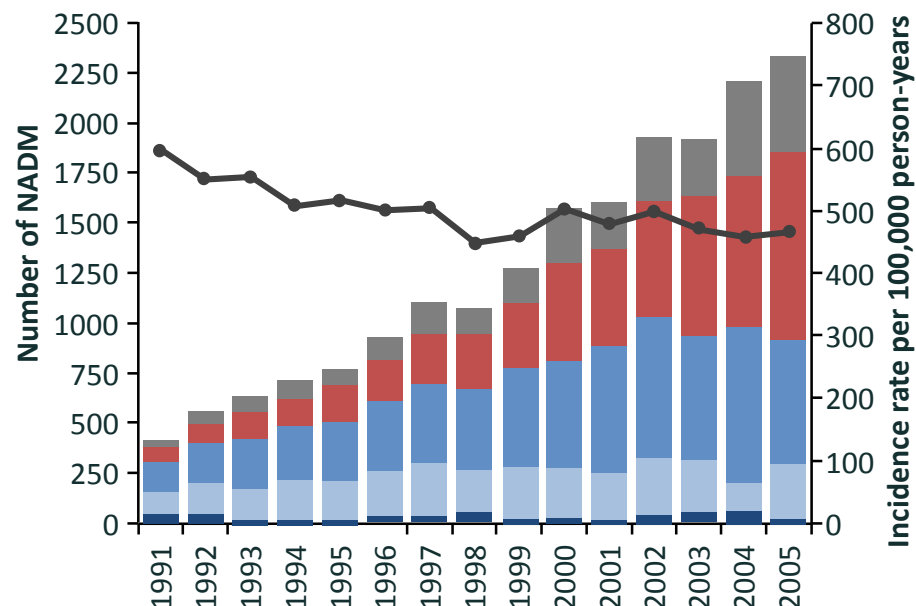


# Increase in non-AIDS-defining malignancies (NADM)

## AIDS-defining malignancy

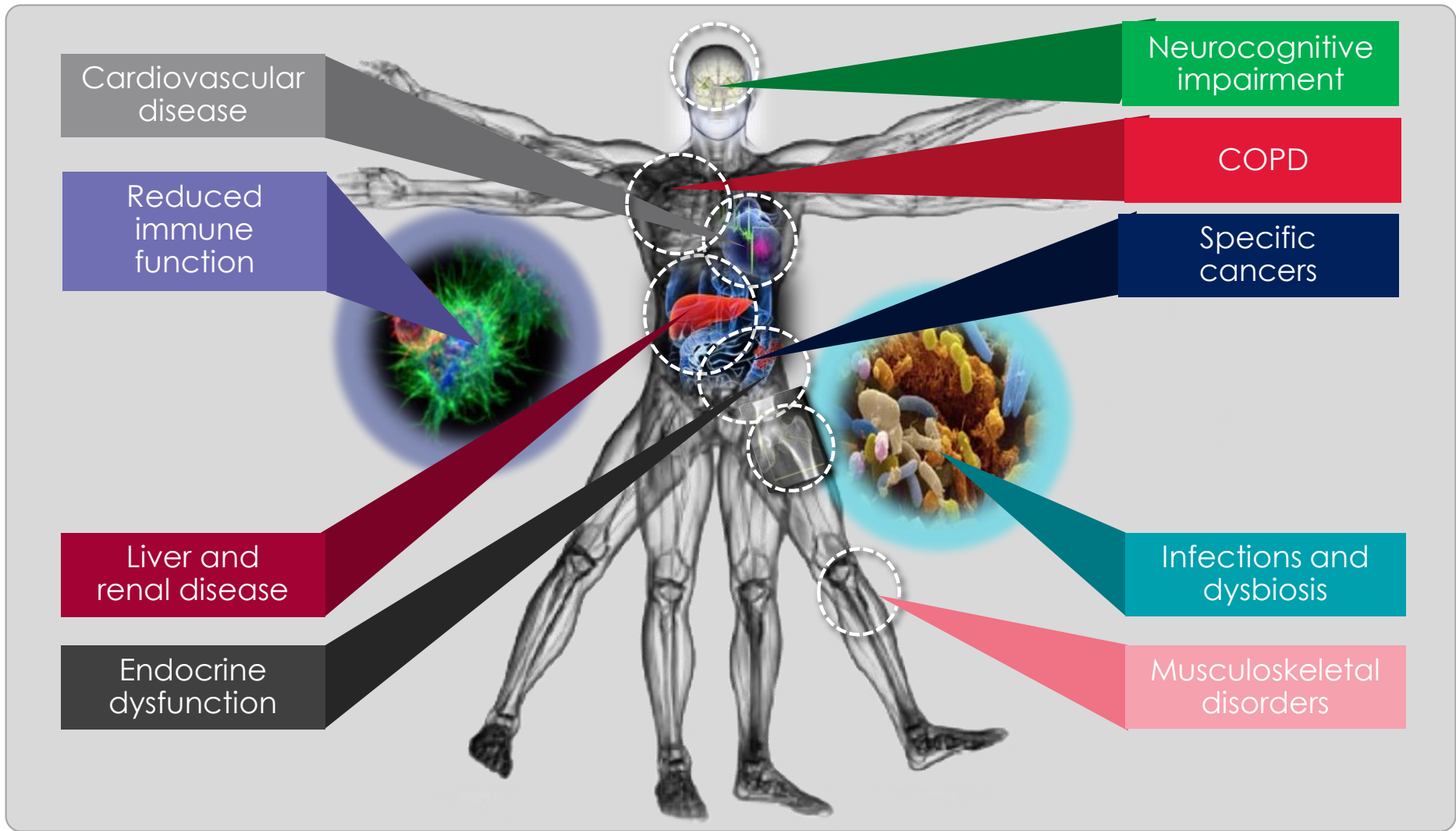


## NADM



0–12 years      13–19 years       20–29 years  
 30–39 years       40–49 years       50–59 years       60 years and older

**CO-MORBIDITA' ED EVENTI AVVERSI**



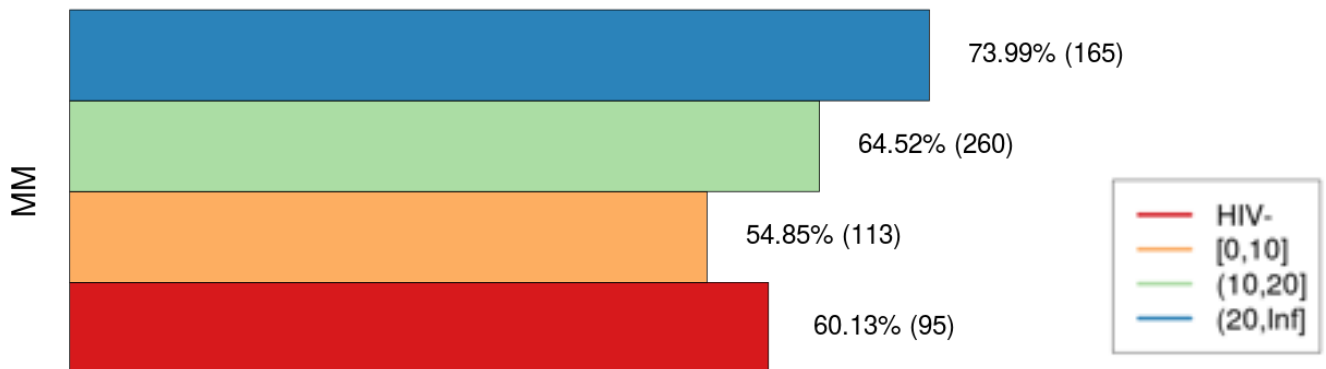
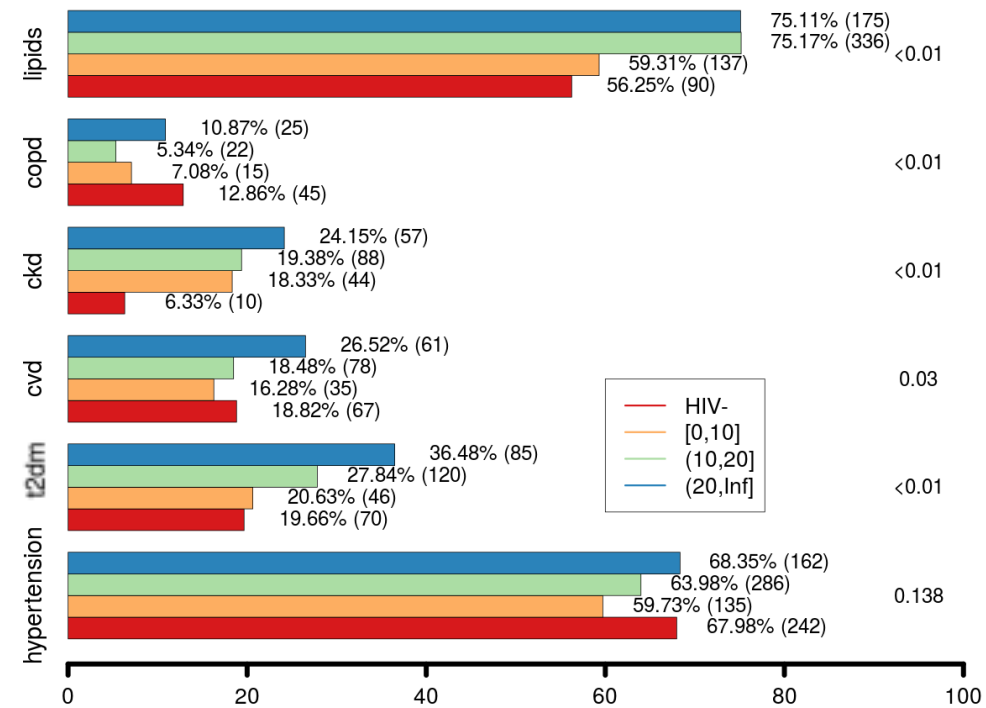
# Caratteristiche Clinico-terapeutiche

- Fast progression
- Fast decline in CD4+ T lymphocytes
- Late-presentation
- Several comorbidities (cardiovascular, renal, metabolic, cognitive) → lower organ function/reserve
- Polipharmacy → DDIs
- High hospitalization rates
- High AIDS- and non AIDS-related mortality

# GEPP0 Demographics

	Total (n=1679)	HIV- (n=356)	HIV+ (n=1323)	P-Value
	Mean (SD)[n]	Mean (SD)[n]	Mean (SD)[n]	
- F	24.78% [416]	54.21% [193]	16.86% [223]	<0.01
- M	75.22% [1263]	45.79% [163]	83.14% [1100]	
Age median (ds)	71.37 (5.04)[1679]	71.62 (5.27)[ <b>356</b> ]	71.3 (4.98)[ <b>1323</b> ]	0,293
- [65,69)	45.07% [755]	43.82% [156]	45.41% [599]	
- [70,74)	30.15% [505]	29.21% [104]	30.4% [401]	
- [75,Inf]	24.78% [415]	26.97% [ <b>96</b> ]	24.18% [ <b>319</b> ]	
Current smoker	22.65% [325]	14.71% [49]	25.05% [276]	<0.0001
BMI	26.62 (8.39)[1318]	28.75 (4.38)[345]	25.86 (9.29)[973]	<0.01
HIV duration (years)			16.55 (7.5)[1302]	
<10 years			424 (33.11%)	
10-20 years			596 (46.5%)	
>20 years			<b>261 (20%)</b>	
CD4 Nadir			218.84 (175.77)[1231]	
Current CD4			641.31 (287.62)[1294]	
CD4 / CD8 median e SD			0.97 (1.42)[1077]	
Viral Load <= 40			94.07% [1078]	
Viral Load Undetecable			86.37% [963]	
HBV co-infection			9.6% [105]	
HCV co-infection			12.61% [147]	

# Comorbidity and Multimorbidity



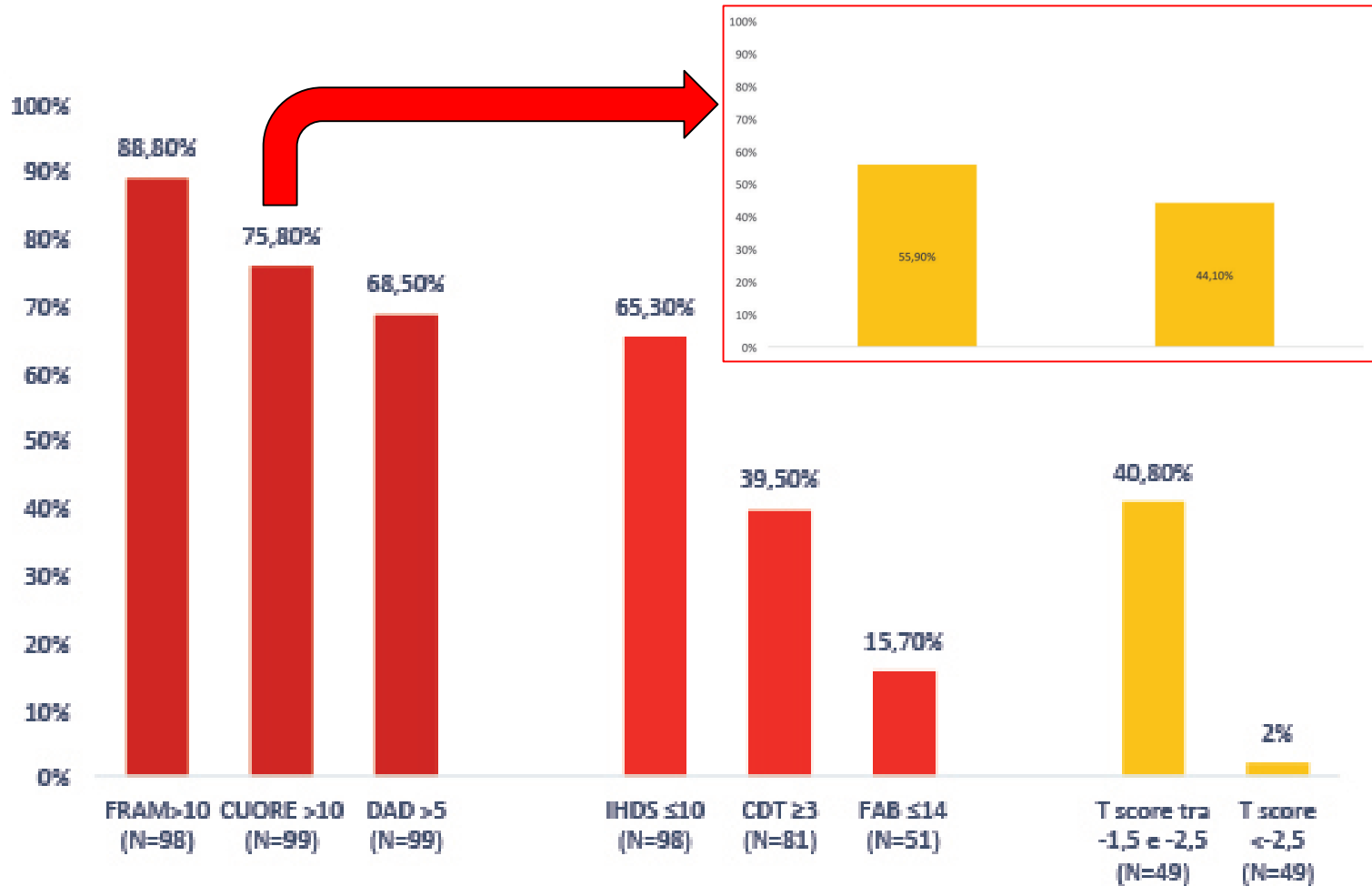
# Screening Pazienti >65yy

<b>n=107</b>	<b>Mediana o N</b>	<b>IQR o %</b>
Età (med, IQR)	71,66	68,51-76,00
Sesso M (n, %)	86	77,6%
Etnia caucasica (n, %)	107	100%
BMI kg/m <sup>2</sup> (med, IQR)	25,70	22,80-29,15
Fumatori (n, %)	25	24,27%
Alcol (n, %)	36	34,95%
Sostanze (n, %)	1	0,97%
CD4+ cell/μL (med, IQR)	537,5	395-681, 75
NADIR cell/μL (med, IQR)	192	76-209
CV copie/mL (med, IQR)	19	1-19
Pazienti con CV < 20 cp/mL (n, %)	83	77,57%
Anni terapia (med, IQR)	14,30	7,30-18,00
Anni soppressione (med, IQR)	9,50	3,475-14,50

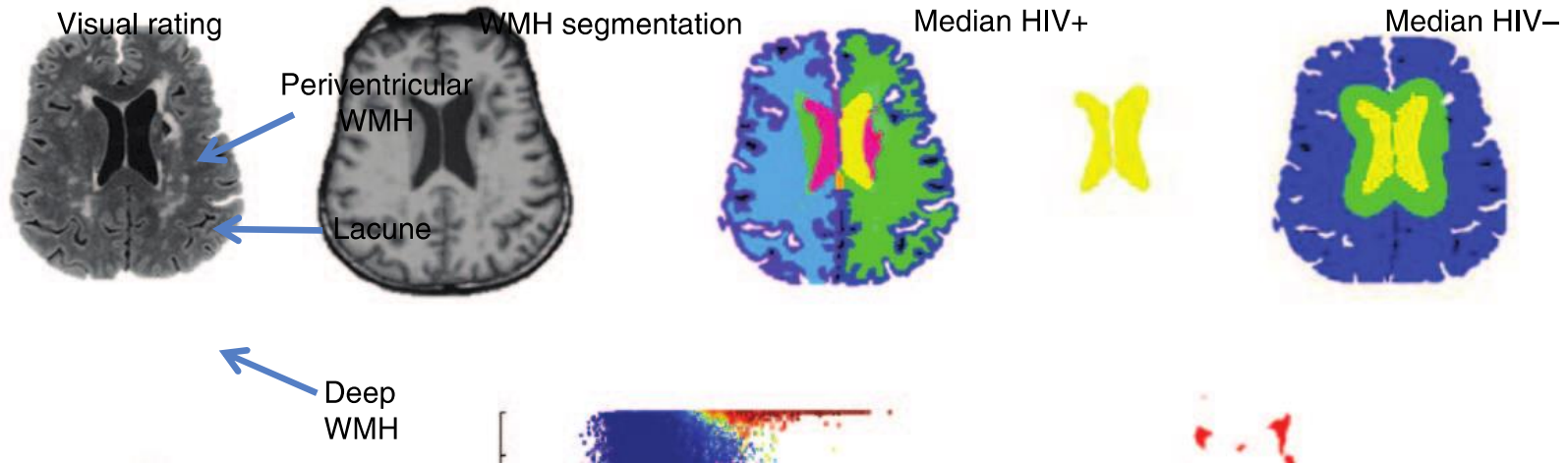
Iperensione (n, %)	62	57,94%
Osteoporosi (n, %)	2	1,86%
BPCO (n, %)	6	5,60%
Neoplasie (n, %)	4	3,73%
IRC (n, %)	7	6,54%
HAND (n, %)	4	3,73%
Dislipidemia (n, %)	52	48,59%
Diabete (n, %)	18	16,82%
Precedenti CV (n, %)	13	12,14%
IP (n, %)	42	39,6%
NNRTI (n, %)	48	45,3%
CCR5 (n, %)	7	6,6%
NRTI (n, %)	73	68,9%
INI (n, %)	32	30,2%
Terapia ipertensione (n, %)	57	53,27%
Terapia diabete (n, %)	13	12,14%
Terapia dislipidemia (n, %)	45	42,05%
ASA (n, %)	22	21,8%
TAO (n, %)	5	4,9%



# Screening Pazienti >65yy



# WMA and cognition



Outcome measure: cognitive function<sup>a</sup>

	Model 1			Model 2*			Model 3 <sup>#</sup>		
	$\beta$ (95% CI)	<i>P</i>	$\eta^2$	$\beta$ (95% CI)	<i>P</i>	$\eta^2$	$\beta$ (95% CI)	<i>P</i>	$\eta^2$
HIV serostatus (0/1) <sup>b</sup>	-0.29 (-0.55--0.03)	0.03	0.03	-0.29 (-0.55--0.04)	<b>0.03</b>	0.03	-0.23 (-0.49-0.02)	<b>0.07</b>	0.02
Diabetes mellitus (0/1) <sup>c</sup>	-	-	-	-0.60 (-1.17--0.03)	<b>0.04</b>	0.02	-0.56 (-1.13-0.01)	<b>0.05</b>	0.02
Age (years)	-	-	-	-0.011 (-0.028-0.006)	0.20	0.01	0.00 (-0.020-0.020)	0.99	0.0001
D-dimer (mg/l)	-	-	-	-0.43 (-1.04-0.19)	0.17	0.01	-0.28 (-0.90-0.34)	0.37	0.005
DBP (mmHg)	-	-	-	0.004 (-0.010-0.017)	0.60	0.002	0.006 (-0.007-0.020)	0.35	0.005
Total WMH load <sup>d</sup>	-	-	-	-	-	-	-0.33 (-0.64--0.02)	<b>0.04</b>	0.03

# **TERAPIA ANTIRETROVIRALE**

# Obiettivi della HAART in pazienti >65 anni

Efficacia virologica	
Efficacia immunologica	
Tollerabilità soggettiva	
Ridotto numero di compresse	
Ridotte Interazioni farmacologiche	
Non tossicità renale	
Non tossicità ossea	
Non tossicità cardiovascolare	
Non alterazioni metaboliche	

# Età e tossicità

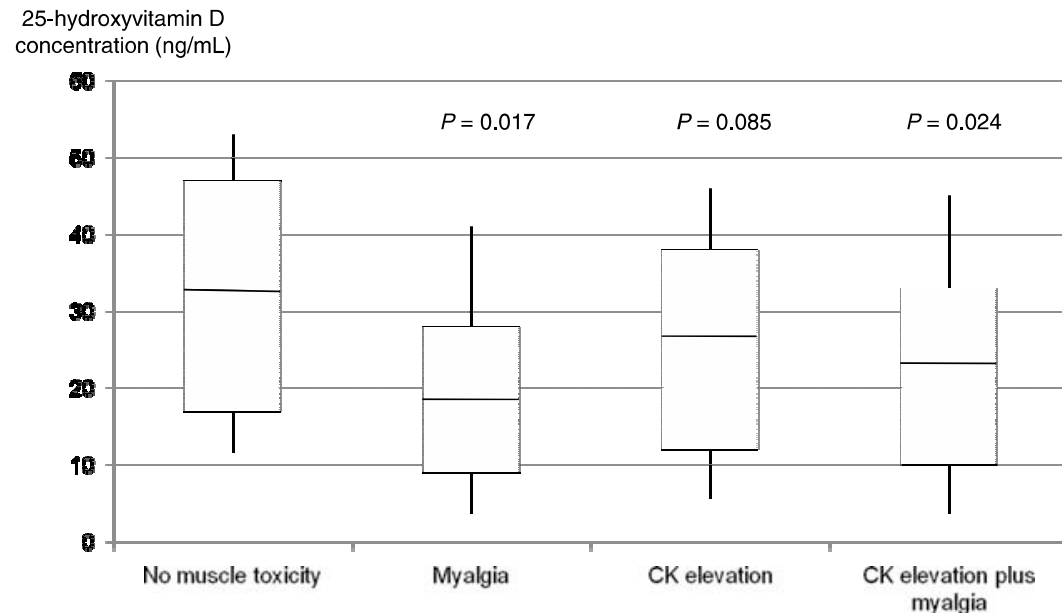
**Table 5** Estimates of relationship between increased age (per 5 years older) and the development of a laboratory abnormality from unadjusted and adjusted analyses of the risk of an abnormal laboratory measurement

	All patients			Patients receiving drugs known to be related to specific toxicities <sup>†</sup>		
	OR	95% CI	P-value	OR	95% CI	P-value
<b>Abnormal triglycerides</b>						
Unadjusted	1.11	1.06, 1.15	0.0001	1.11	1.06, 1.16	0.0001
Adjusted for baseline characteristics*	1.07	1.02, 1.12	0.004	1.07	1.02, 1.12	0.005
Also adjusted for pre-HAART triglycerides	0.98	0.92, 1.05	0.53	0.98	0.91, 1.05	0.56
<b>Abnormal cholesterol</b>						
Unadjusted	1.21	1.16, 1.26	0.0001	1.21	1.16, 1.27	0.0001
Adjusted for baseline characteristics	1.23	1.17, 1.28	0.0001	1.23	1.17, 1.29	0.0001
Also adjusted for pre-HAART cholesterol	1.12	1.05, 1.20	0.0009	1.14	1.06, 1.22	0.0004
<b>Abnormal bilirubin</b>						
Unadjusted	1.03	0.99, 1.08	0.19	1.10	0.89, 1.35	0.38
Adjusted for baseline characteristics	1.02	0.97, 1.77	0.51	1.06	0.85, 1.32	0.61
Also adjusted for pre-HAART bilirubin	1.01	0.95, 1.06	0.82	1.01	0.77, 1.31	0.97
<b>Abnormal haemoglobin</b>						
Unadjusted	1.10	1.05, 1.16	0.0002	1.09	1.02, 1.16	0.02
Adjusted for baseline characteristics	1.11	1.06, 1.17	0.0001	1.11	1.03, 1.19	0.005
Also adjusted for pre-HAART haemoglobin	1.07	1.01, 1.14	0.03	1.06	0.98, 1.16	0.15
<b>Abnormal ALT</b>						
Unadjusted	1.05	1.00, 1.09	0.04	1.09	0.98, 1.20	0.11
Adjusted for baseline characteristics	1.02	0.98, 1.07	0.38	1.03	0.92, 1.15	0.58
Also adjusted for pre-HAART ALT	1.00	0.95, 1.06	0.97	1.01	0.89, 1.15	0.85

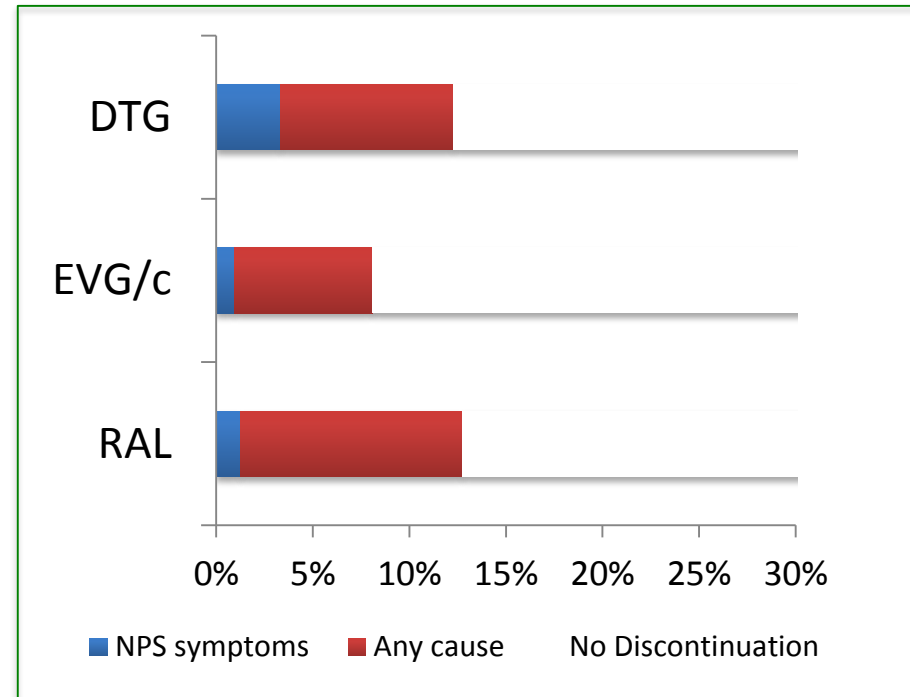
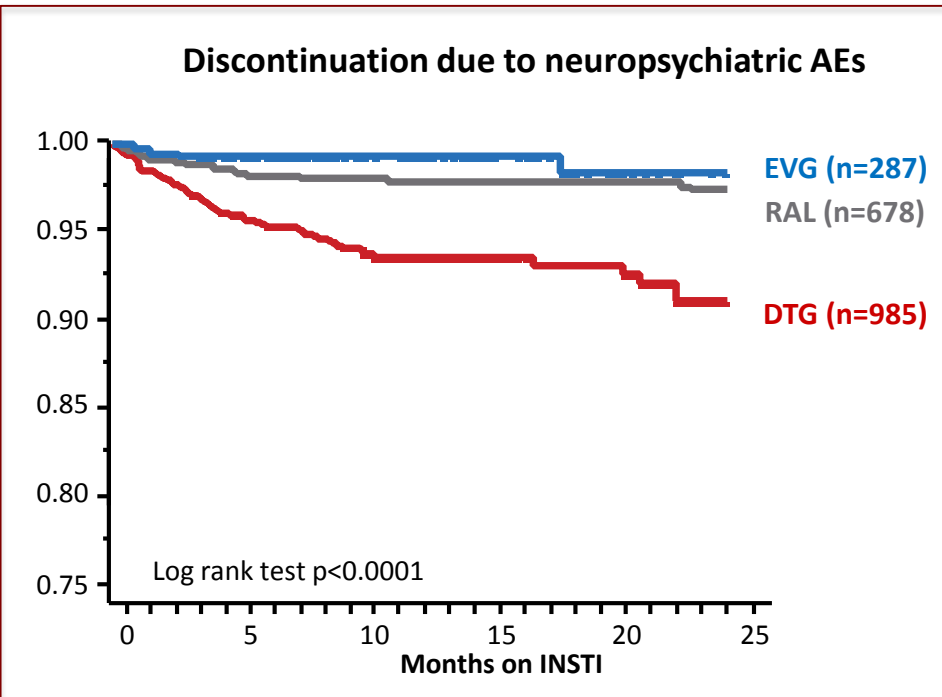
# Significant association between statin-associated myalgia and vitamin D deficiency among treated HIV-infected patients

In stratified multivariable-adjusted logistic regression models:

- vitamin D deficiency
- duration of statin therapy more than 24 months
- history of myalgia
- age >60 years.



# Tollerabilità INSTIs



- ⦿ Contrasting data on DTG neuropsychiatric side effects (RCTs vs observational)
  - mild and reversible
  - Female gender, ABC, age > 60 years

# PP e outcome negativi

1. Riduzione dell'aderenza
2. Aumento degli eventi avversi gravi
3. Aumento dell'ospedalizzazione
  - in HIV dati sul numero di compresse (STR vs. others)
4. Aumento delle sindromi geriatriche (cadute, fratture, declino cognitivo)
5. Mortalità



# Attenzione ai farmaci!

*Tabella 2 - Gestione delle interazioni farmacologiche nel paziente con politerapia.*

<b>AZIONI</b>	<b>RACCOMANDAZIONE (FORZA/EVIDENZA)</b>
Tenere traccia nella cartella clinica di tutti i farmaci assunti dal paziente, non solo della cART.	[BII]
Sensibilizzare il paziente sul rischio associato alle interazioni farmacologiche: istruirlo con chiarezza in merito a chi rivolgersi, in caso di modifica di prescrizioni terapeutiche.	[AII]
Considerare che il rischio di reazioni avverse aumenta del 10% ogni nuovo principio attivo introdotto nel regime terapeutico complessivo. Tenere conto dell'uso di alcol, fumo e sostanze di abuso.	[AII]
Considerare percorsi individualizzati di supervisione della gestione della terapia complessiva, a causa di deficit neurocognitivi e/o demenza sovente presenti.	[BII]
Coinvolgere attivamente il farmacista, che deve essere parte integrante del team multidisciplinare di presa in carico del paziente.	[BII]
Revisionare periodicamente l'appropriatezza prescrittiva, con valutazione delle indicazioni e del rapporto costo-beneficio di ogni trattamento prescritto.	[BII]

# Le cadute

20-40%  
Numero di farmaci  
Uso Cannabis

Sincope

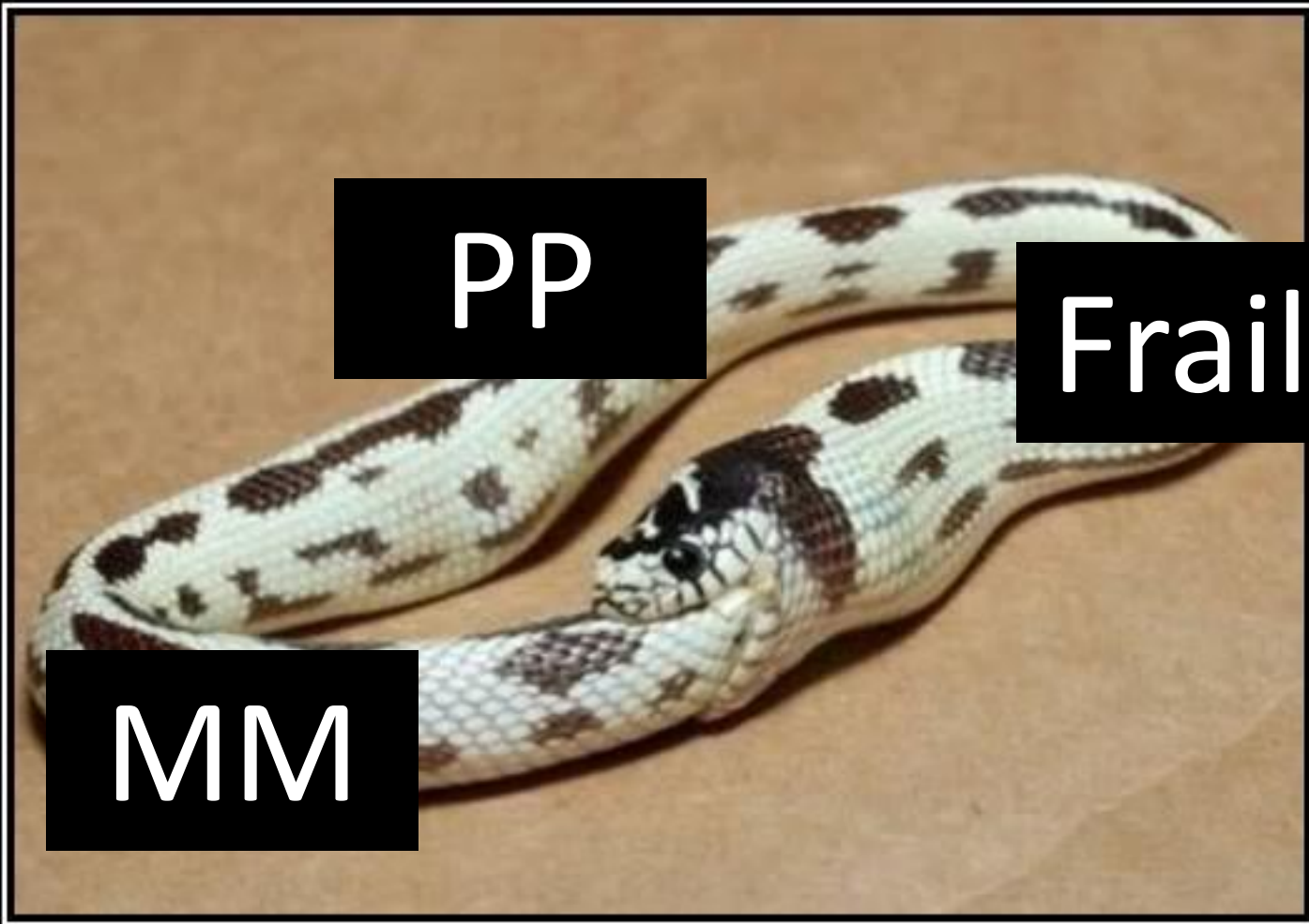
Cause accidentali



Problemi di  
andatura/equilibrio

**IIPOTENSIONE  
ORTOSTATICA**  
Antiipertensivi: alfa-  
bloccanti e diuretici  
Antidepressivi  
Antipsicotici  
Nitrati  
Antiaritmici  
Antiparkinson

Effetto diretto  
trauma/**FRATTURA**  
**AUTO-LIMITAZIONE**  
Post-fall anxiety  
**DECLINO FUNZIONALE**  
**DISABILITA'**



PP

Frailty

MM

MMMMMM

Nom..Nom..Nom..Nom

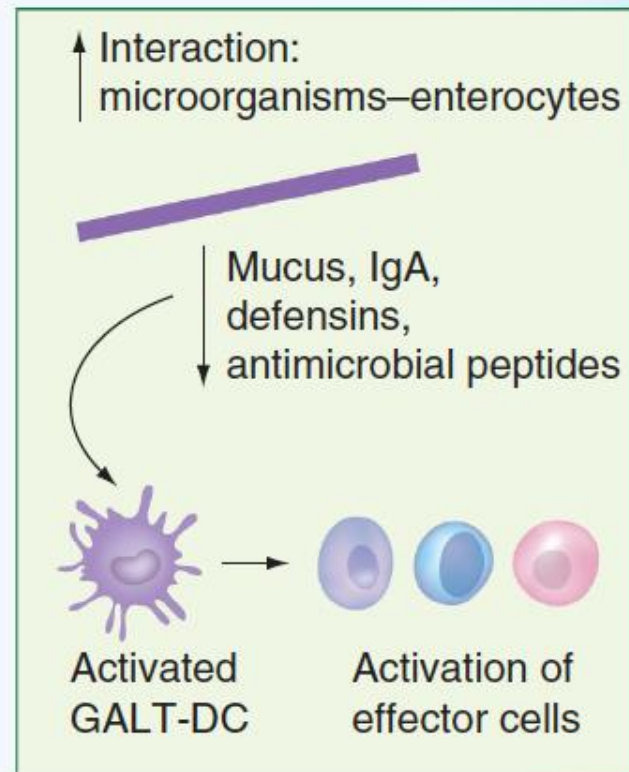
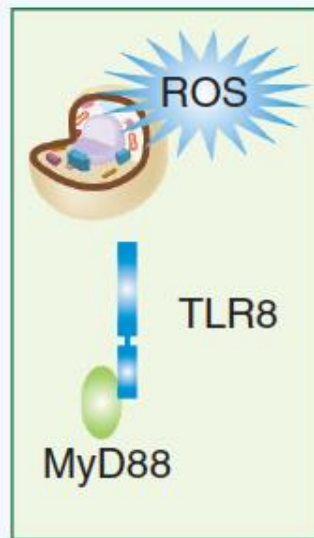
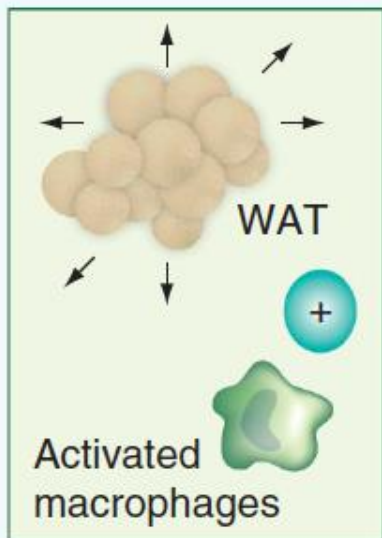
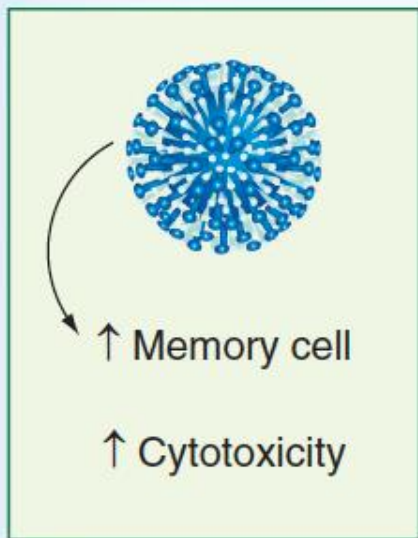
**IMMUNITA'?**

CMV

↑ Adiposity

↑ ROS

↓ Microbiota diversity



Senescence

↑ IL-6, TNF- $\alpha$ , CRP, ↓ IL-10

**INFLAMMAGING**

**CVD, neurocognitive disorders, diabetes, cancer...**

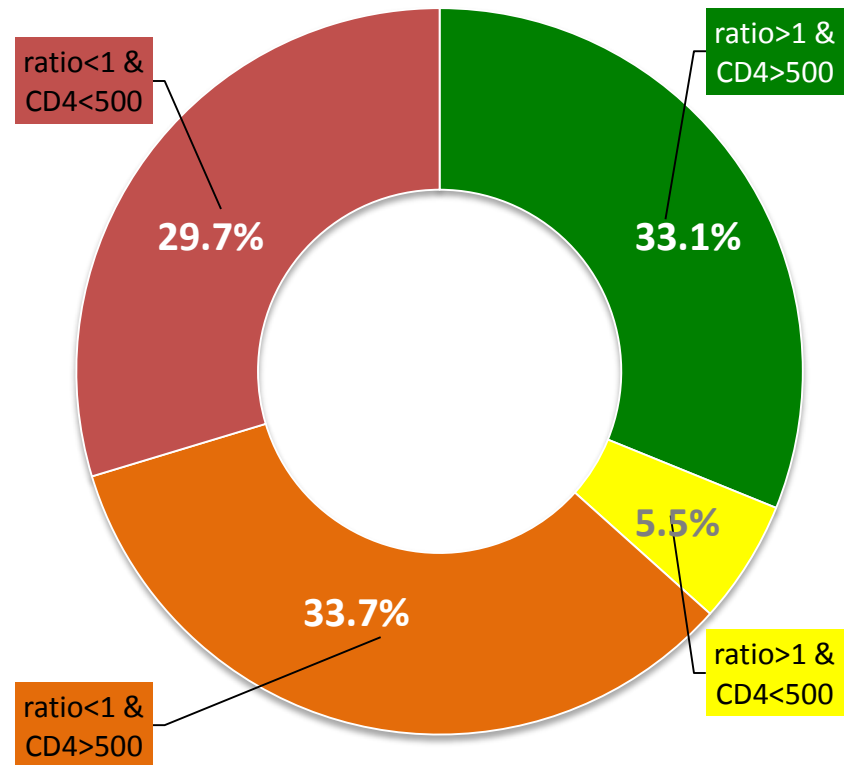
AL de Araujo  
Future  
Medicine 2013

**Figure 2. The main factors contributing to inflammaging.** Chronic viral infections, such as CMV,

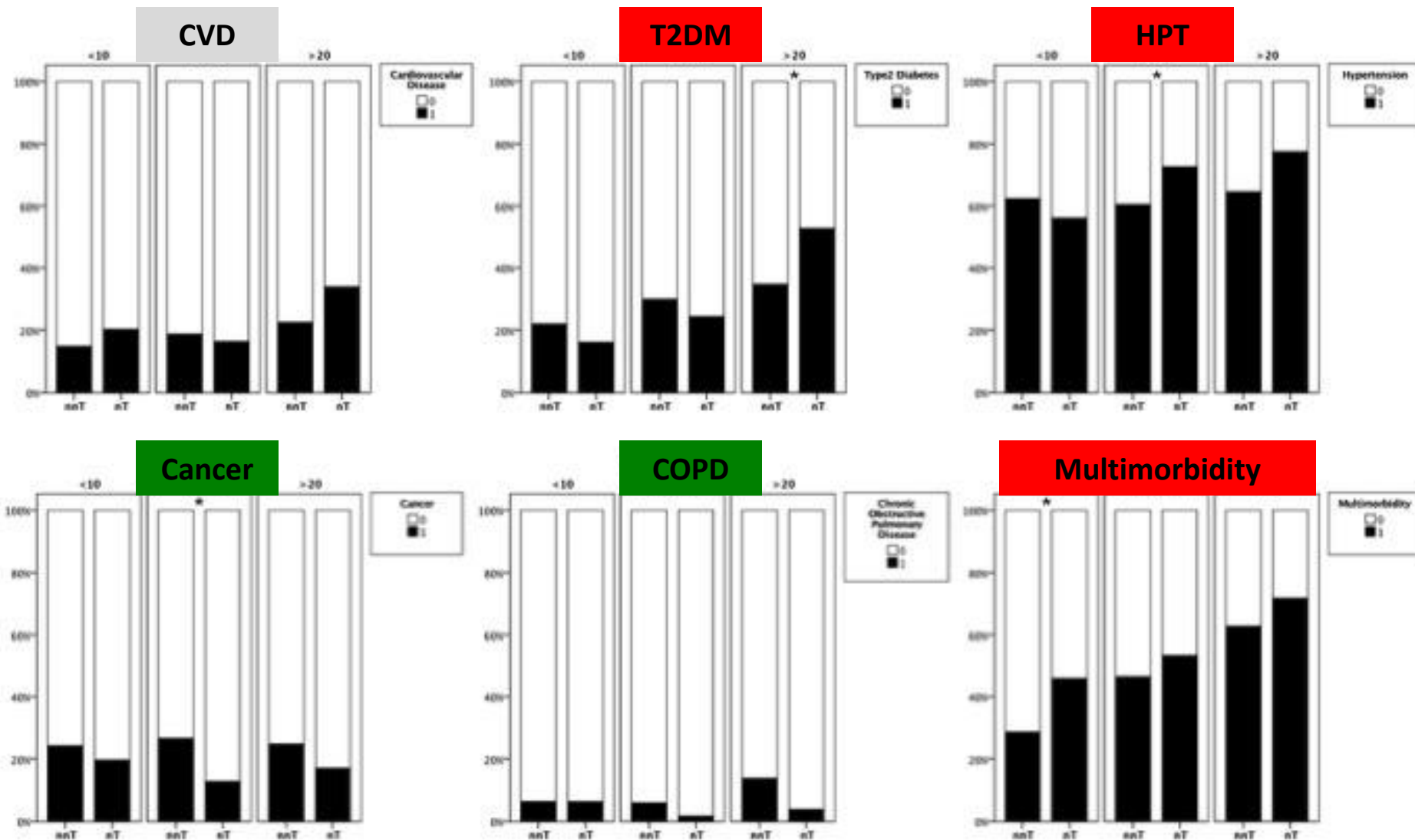
# CD4/CD8 ratio

- CD4/CD8 ratio  $<1$  has been associated with poor survival in HIV- older subjects

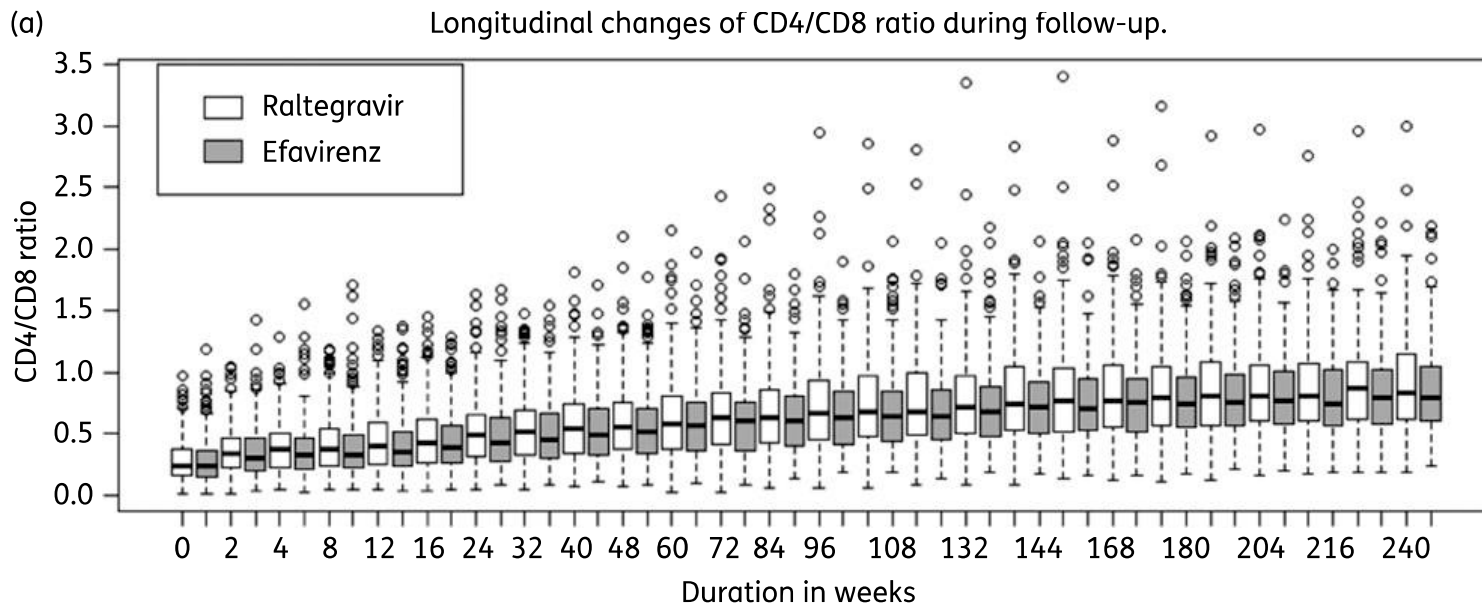
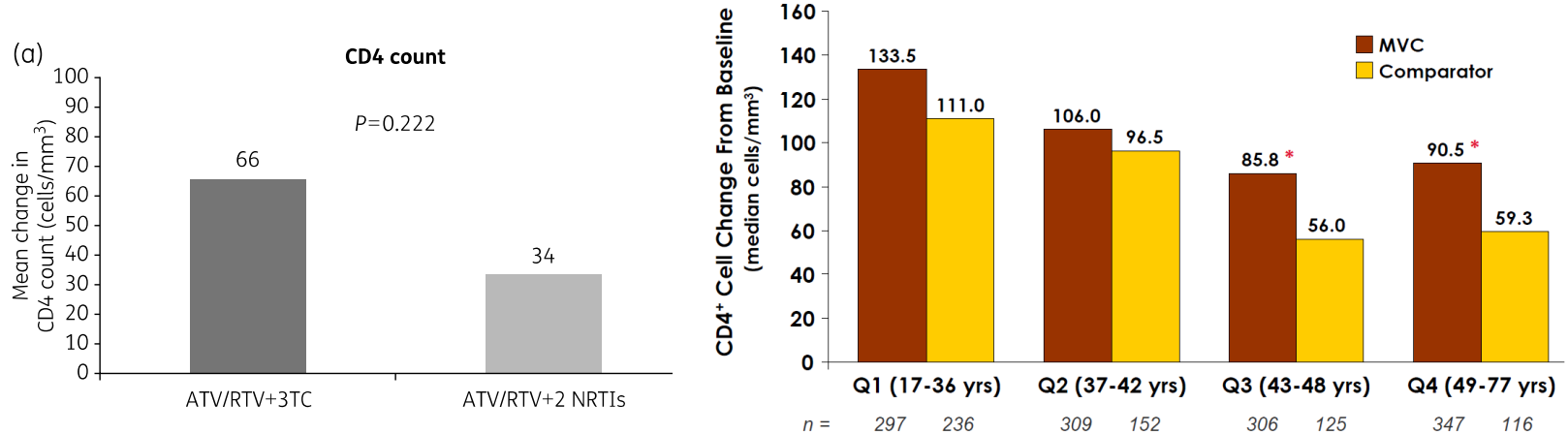
- In 1092 GEPPPO participants, 95.1% HIV RNA $<50$  copies/mL



# CD4/CD8 ratio (2)



# ARVs e conta dei CD4?





**STRATEGIE TERAPEUTICHE?**

# Strategie

- **Utilizzo di farmaci con il minor potenziale di interazione**
  - rilpivirina, raltegravir, dolutegravir, maraviroc, lamivudina/emtricitabina
- **Utilizzo di farmaci con la migliore tollerabilità**
  - rilpivirina, raltegravir, dolutegravir, maraviroc, lamivudina/emtricitabina
- **Risparmio di tossicità**
  - TDF e NRTI-sparing, PI-sparing

# Strategie (3)

Utilizzo di farmaci con il minor potenziale di interazione

Standard of care

Utilizzo di farmaci con buona tollerabilità

Regimi TAF-based

Less Drug Regimens

Long-acting

E/C/F/TAF

PI/r + 3TC

nanoformulated CABO + RPV?

R/F/TAF

DTG + 3TC?

BIC/F/TAF??

DTG + RPV

F/TAF + RAL  
F/TAF + DTG

Risparmio di tossicità?

# Switching from TDF to TAF in HIV-Infected Adults with Low BMD: A Pooled Analysis

## Outcomes in Subjects with Low Baseline BMD Switched from TDF to TAF

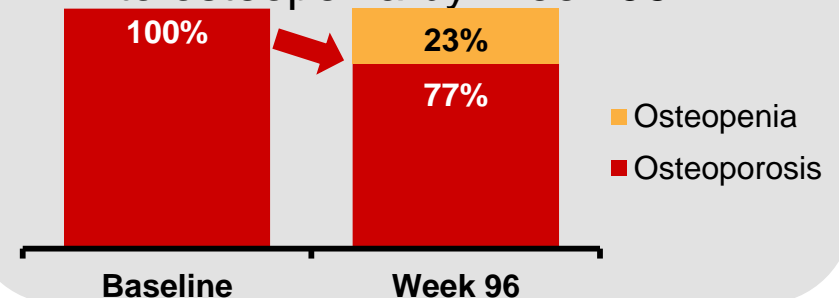
**Analysis of outcomes and predictors of clinically significant BMD increases ( $\geq 5\%$ ) at W96 in the 214 subjects with low baseline BMD (T-score  $\leq -2.0$ ) in pooled TAF studies (E/C/F/TAF Studies 109 and 112)**

### Baseline T-score $\leq -2.0$

- Significant BMD increases observed
  - Spine: +2.53% ( $p < 0.001$ )
  - Hip: +2.39% ( $p < 0.001$ )
- Proportion of low BMD participants experiencing  $\geq 5\%$  BMD increase
  - Spine: 27% (52/193)
  - Hip: 16% (32/195)

### Baseline T-score $\leq -2.5$

- 86 subjects with low baseline BMD also had osteoporosis\*
  - 23% of these subjects improved to osteopenia by Week 96

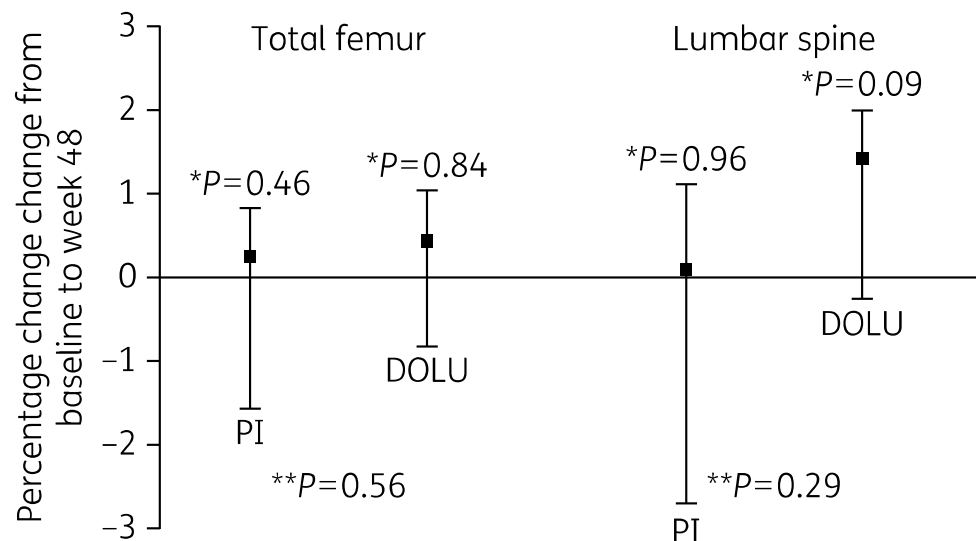


- Factors predicting  $\geq 5\%$  BMD increase after a switch from TDF to TAF:
  - Urinary phosphate wasting ( $\text{FEPO}_4 \geq 10\%$ ) or
  - High bone turnover (P1NP levels  $> 1.72 \log_{10}$  ng/mL)

**Switching from TDF to TAF is an important treatment strategy to increase BMD in PLWHIV**

# KVX + PI/r → KVX + DTG?

	DOLU group (n = 37)	PI group (n = 36)
Age (years), median (IQR)	46.8 (39.3; 53.8)	49.2 (45.7; 53.9)
Male, %	81	89
Route of HIV transmission, %		
MSM relations	57	53
heterosexual relations	26	25
intravenous drug use	17	22
Time since diagnosis of HIV (years), median (IQR)	12.6 (7.5; 17.3)	16.9 (9.6; 22.8)
Baseline PI, %		
LPV/r	16.2	13.9
ATV/r	27.0	25.0
DRV/r <sup>a</sup>	54.1	58.3
FosAPV/r	2.7	2.8
Hepatitis C, %	18.9	22.2

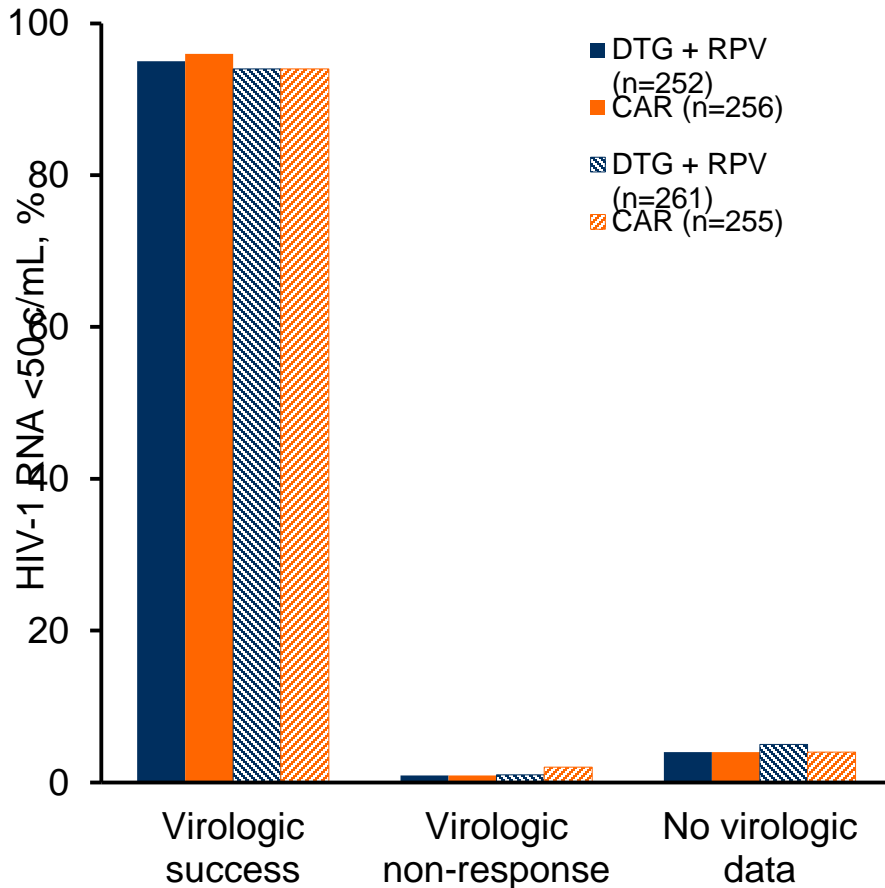


	DOLU group (n=37)		PI group (n=36)		P value between groups at week 48
	baseline	week 48	baseline	week 48	
CD4 (cells/mm <sup>3</sup> )	556 (556; 788)	546 (470; 698)	610 (395; 894)	628 (445; 931)	0.158
CD4 (%)	29 (23; 35)	29 (23; 36)	28 (21; 35)	29 (22; 33)	0.878
Total cholesterol (mmol/L)	5.6 (4.8; 6.1)	4.7 (4.0; 5.0)	5.2 (4.3; 5.4)	5.3 (4.8; 6.0)	<b>0.009</b>
HDL cholesterol (mmol/L)	1.3 (1.2; 1.7)	1.4 (1.1; 1.7)	1.3 (1.1; 1.4)	1.2 (1.1; 1.7)	<b>0.027</b>
LDL cholesterol (mmol/L)	3.4 (2.7; 4.1)	2.7 (2.2; 3.3)	2.9 (2.5; 3.4)	3.0 (2.6; 3.9)	0.151
Triglycerides (mmol/L)	1.5 (1.2; 2.1)	0.9 (0.8; 1.3)	1.6 (1.4; 2.1)	1.9 (1.4; 2.4)	<b>&lt;0.001</b>
Creatinine (mg/dL)	0.88 (0.8; 1.0)	0.97 (0.9; 1.1)	0.96 (0.8; 1.1)	0.83 (0.8; 1.0)	<b>0.022</b>
CKD EPI (mL/min/1.73 m <sup>2</sup> )	98 (85; 103)	93 (82; 99)	90 (79; 103)	99 (88; 105)	<b>0.048</b>
Protein/creatinine ratio (mg/g)	105 (60; 199)	109 (51; 199)	66 (54; 126)	74 (53; 199)	0.489

# DTG-based LDRs

## DTG + RPV (SWORD)

## DTG + RPV (SWORD)

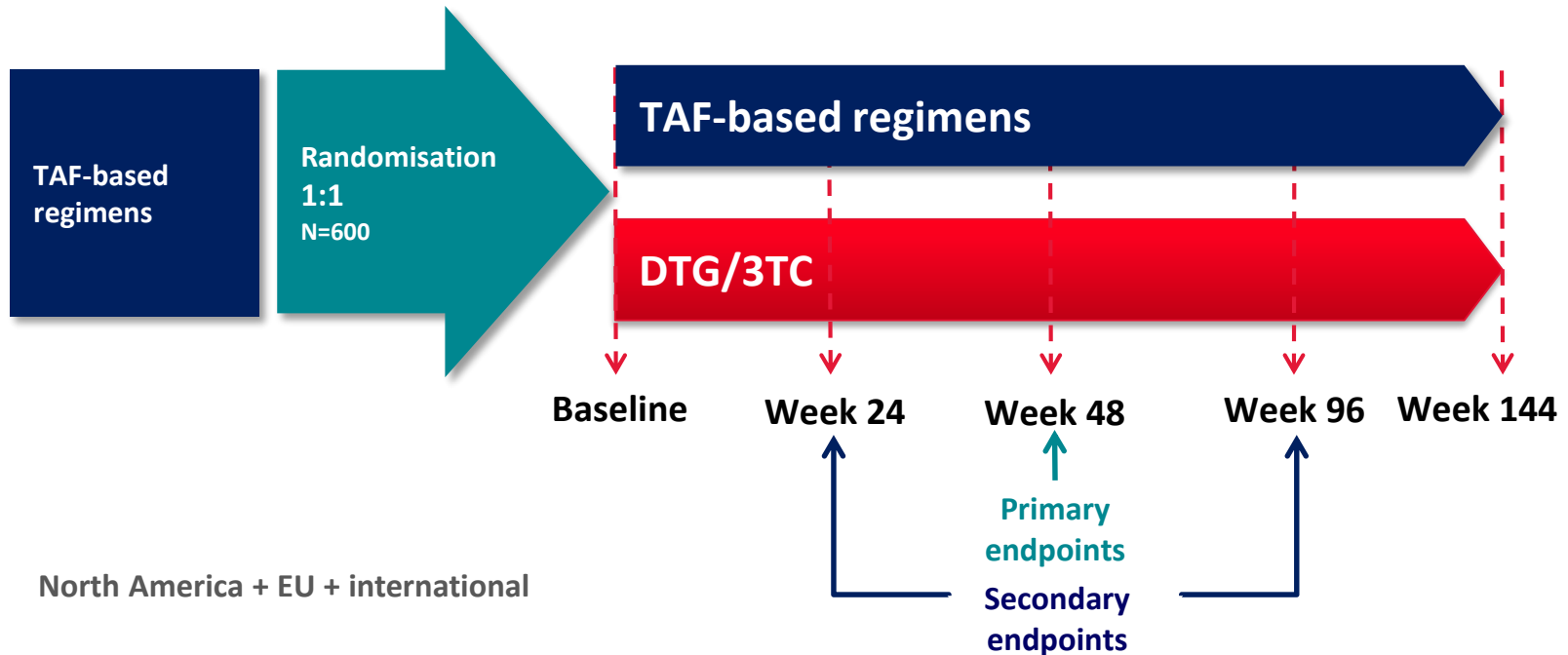


- PADDLE: 90% soppressione virologica alla W48
- ACTG A5353, GEMINI1 e 2: in corso
- In switch in pazienti soppressi (Borghetti, Maggiolo, LAMIDOL) → 97-100%

# Switch study (TANGO)

## Phase III, randomised, multicentre, parallel-group, non-inferiority study

- **Objective:** To demonstrate the non-inferior antiviral activity of switching to DTG/3TC QD compared with continuation of current ARV regimen over 48 weeks in HIV-1-infected ART-experienced subjects
- **Primary endpoint:** The proportion of participants who meet the snapshot virological failure criteria at week 48 using the ITT-E population
  - Non-inferiority margin = 4%; week 48 primary endpoint



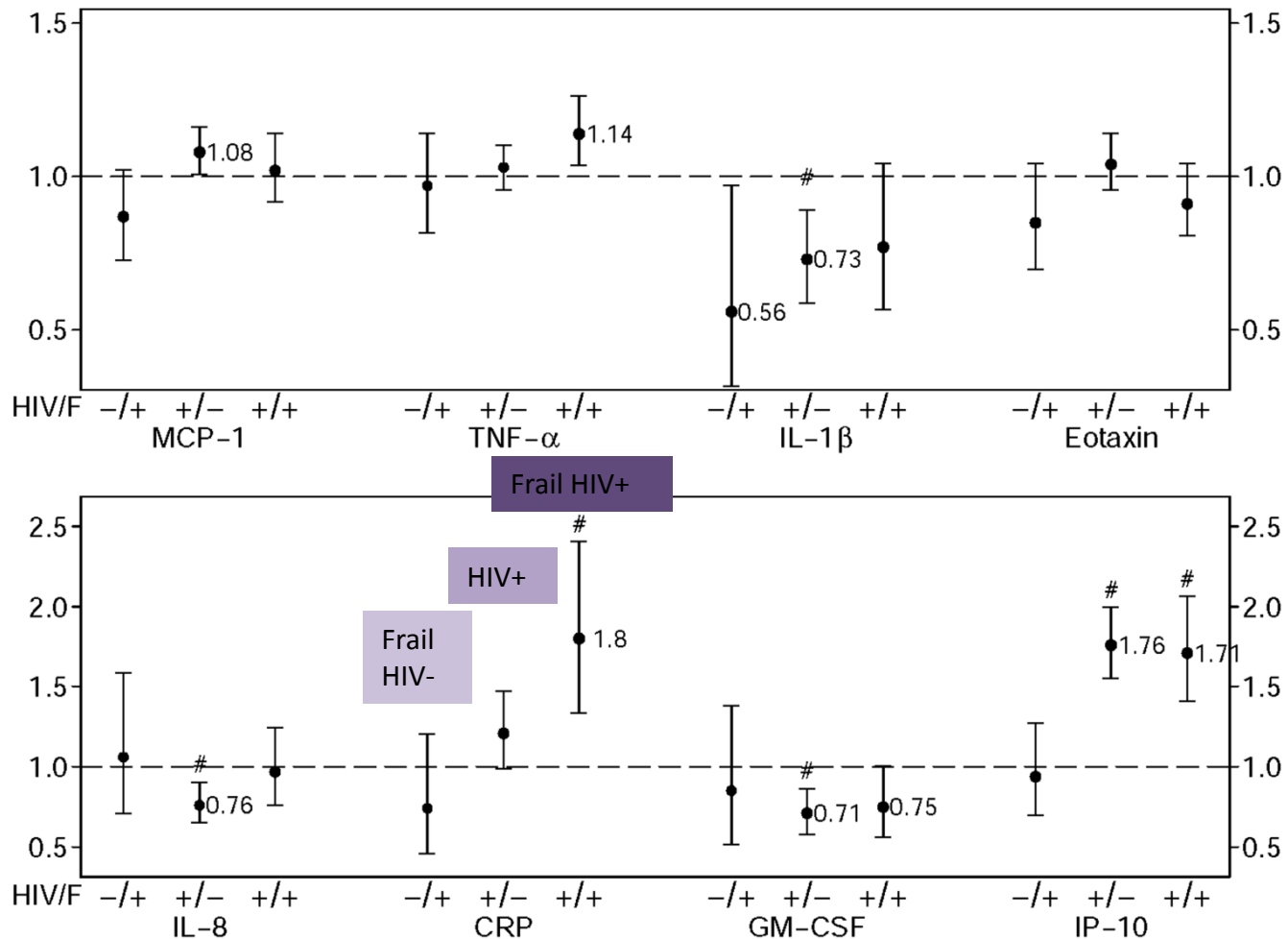
# Altre strategie?

- Maraviroc? (R5+ expression in frail patients)
- anti CMV? (Riduzione immunoattivazione?)
- anti HCV...
- Statine (Lipidi e immunoattivazione)
- Vitamina D? (riduzione immunoattivazione)
- Dieta e Attività fisica
- Riduzione della Polypharmacy?



# Frailty and Inflammation

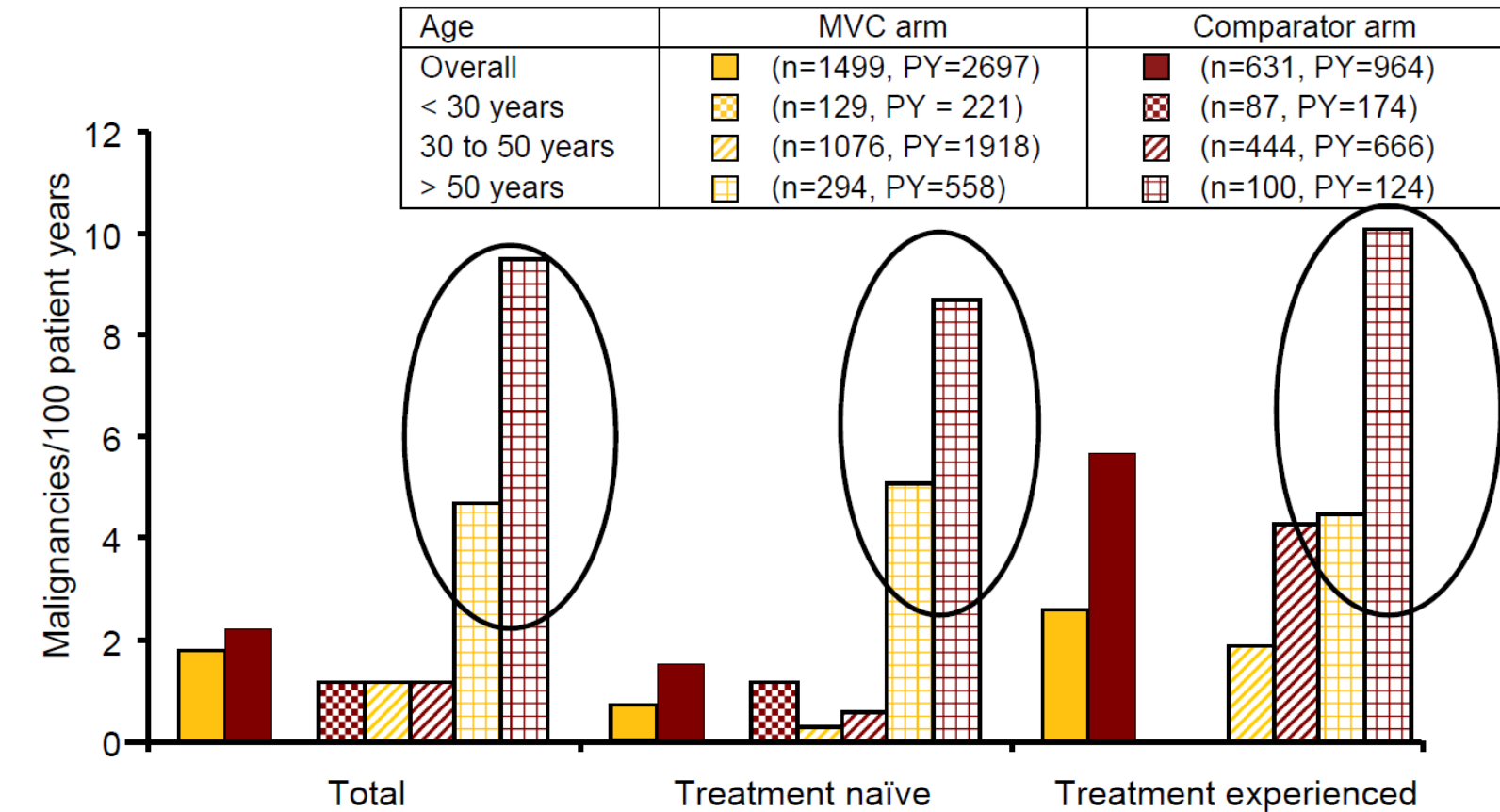
Adjusted adjusted for age, race, study sites, and education, and BMI, current smoking, depressive symptoms, HCV infection, hypertension, diabetes, dyslipidemia, kidney disease, liver disease, and cancer



# Altre strategie?

- Maraviroc? (R5+ expression in frail patients)
- anti CMV? (Riduzione immunoattivazione?)
- anti HCV...
- Statine (Lipidi e immunoattivazione)
- Vitamina D? (riduzione immunoattivazione)
- Dieta e Attività fisica
- Riduzione della Polypharmacy?

# Malignancies and MVC



# DAAAs e trattamento “real life”

Simeprevir Trial



PHOTON-1 Trial



TURQUOISE-1 Trial






ION-4 Trial



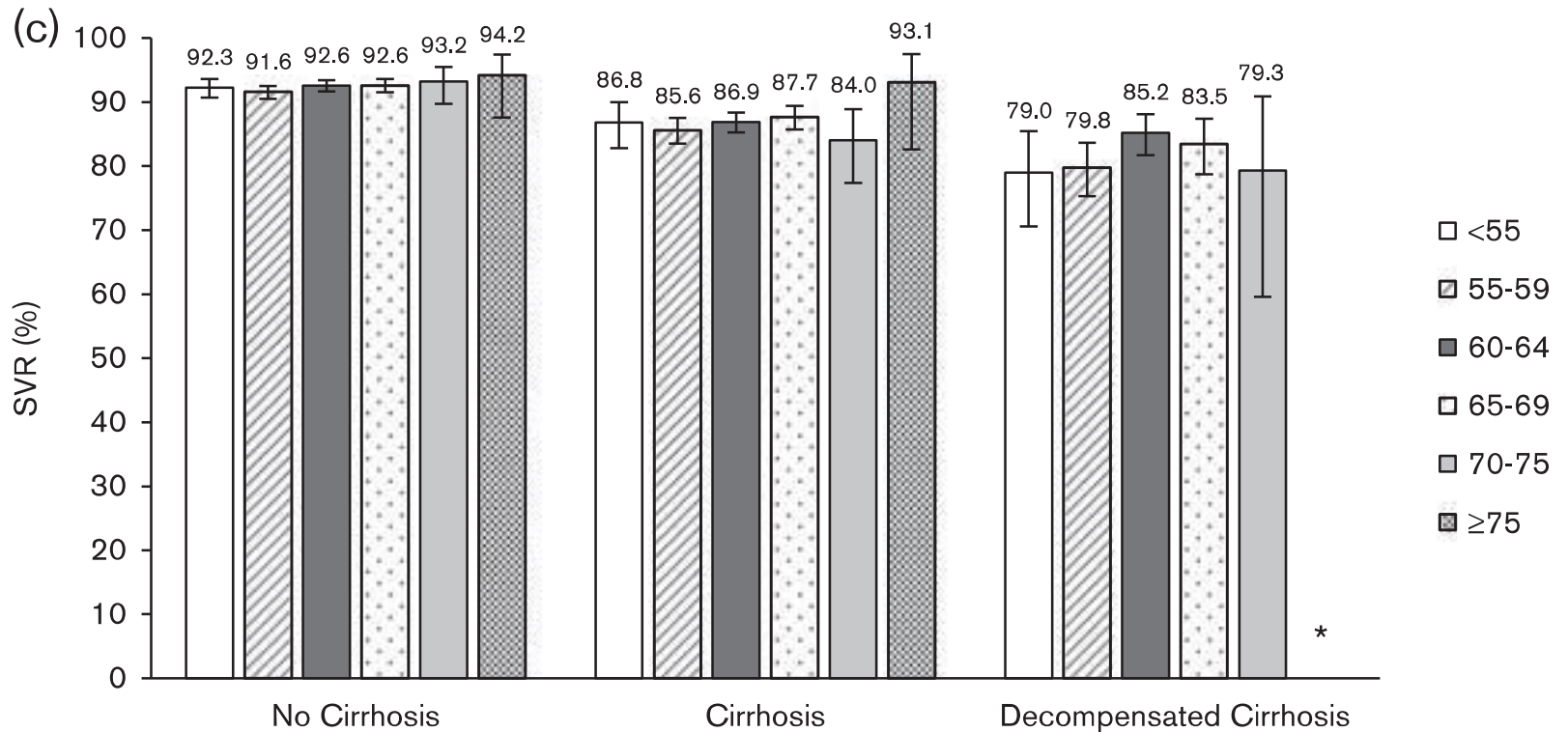
ALLY-2 Trial



-  **Not Eligible:**  
At least 1 exclusion criteria other than ARV restriction
-  **Not Eligible:**  
Only exclusion is ARV restriction
-  **Eligible**

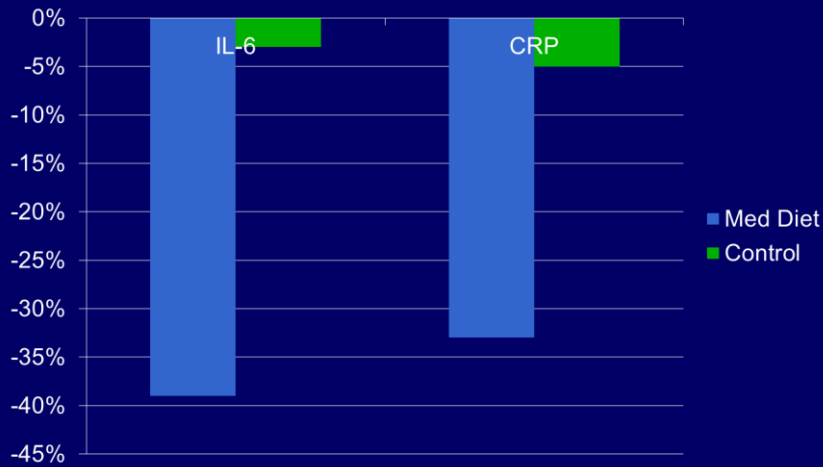
>70 anni  
<1%

# DAAs e trattamento pazienti >65 anni



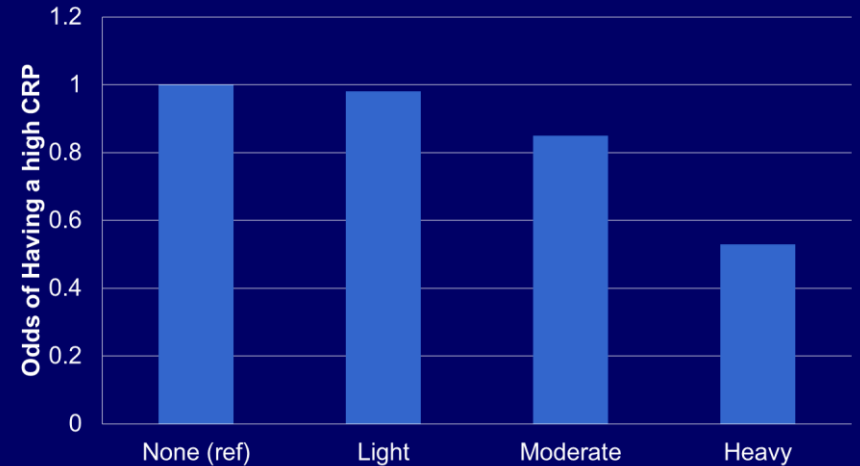
# Dieta ed esercizio fisico

## Effect of Mediterranean Diet on Inflammation



Esposito, JAMA, 2004

## More Physical Activity is Associated with Less Inflammation



Adjusted for age, sex, ethnicity, education, work status, smoking status, HTN, BMI, HDL, ASA

Ford, Epidemiology, 2002

# EMPOWERMENT: Wellness checklist

## Daily

1. Could I exercise more today?
2. Have I bought the right food?
3. Should I drink less alcohol today?
4. Am I doing the right thing to help me sleep properly?
5. Am I doing something new today?
6. Am I keeping my brain active?

## Weekly

1. Am I doing something nice with a friend this week?
2. What is my weight and is it changing?
3. Have I planned an active weekend?
4. Am I eating healthy?

## Every three to four months

1. Do I feel well or unwell?
2. Have I had my checkup at the clinic?
3. What are my blood results?
4. Have I stopped smoking?
5. Are my finances in order?
6. How has my mood been recently?
7. What are my plans for the next few months?

## Coming of Age



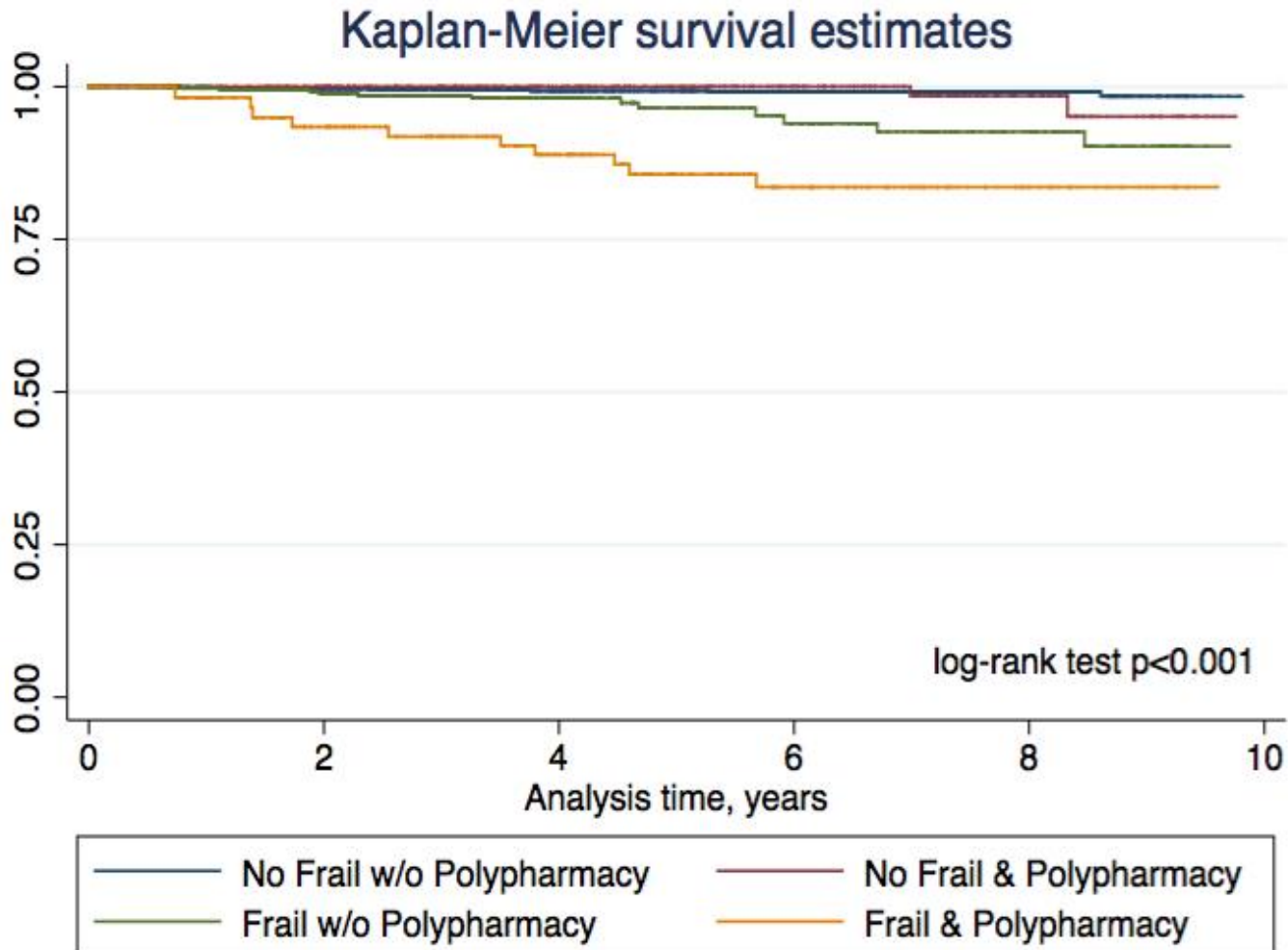
a guide to ageing well with HIV



**justri.**  
www.justri.org

new version  
**2014**

# Frailty + Polypharmacy





# Si può ridurre il numero di farmaci?

## STOPP/START criteria for potentially inappropriate prescribing in older people: version 2

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### Abstract

**Purpose:** screening tool of older people's prescriptions (STOPP) and screening tool to alert to right treatment (START) criteria were first published in 2008. Due to an expanding therapeutics evidence base, updating of the criteria was required.

**Methods:** we reviewed the 2008 STOPP/START criteria to add new evidence-based criteria and remove any obsolete criteria. A thorough literature review was performed to reassess the evidence base of the 2008 criteria and the proposed new criteria. Nineteen experts from 13 European countries reviewed a new draft of STOPP & START criteria including proposed new criteria. These experts were also asked to propose additional criteria they considered important to include in the revised STOPP & START criteria and to highlight any criteria from the 2008 list they considered less important or lacking an evidence base. The revised list of criteria was then validated using the Delphi consensus methodology.

**Results:** the expert panel agreed a final list of 114 criteria after two Delphi validation rounds, i.e. 80 STOPP criteria and 34 START criteria. This represents an overall 31% increase in STOPP/START criteria compared with version 1. Several new STOPP categories were created in version 2, namely antiplatelet/anticoagulant drugs, drugs affecting, or affected by, renal function and drugs that increase anticholinergic burden; new START categories include urogenital system drugs, analgesics and vaccines.

**Conclusion:** STOPP/START version 2 criteria have been expanded and updated for the purpose of minimizing inappropriate prescribing in older people. These criteria are based on an up-to-date literature review and consensus validation among a European panel of experts.

# Conclusioni

- Necessità di utilizzare farmaci a ridotta tossicità (prevenzione primaria/secondaria!)
- Grande attenzione alla polifarmacia (revisione periodica/astensione da alcuni come alfa-litici, BDZ e diuretici) e alle interazioni farmacologiche
- Studi adeguati in pazienti HIV+ >65 anni combinando approcci diversi (farmacologici/non farmacologici) per ottenere un invecchiamento sano

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