

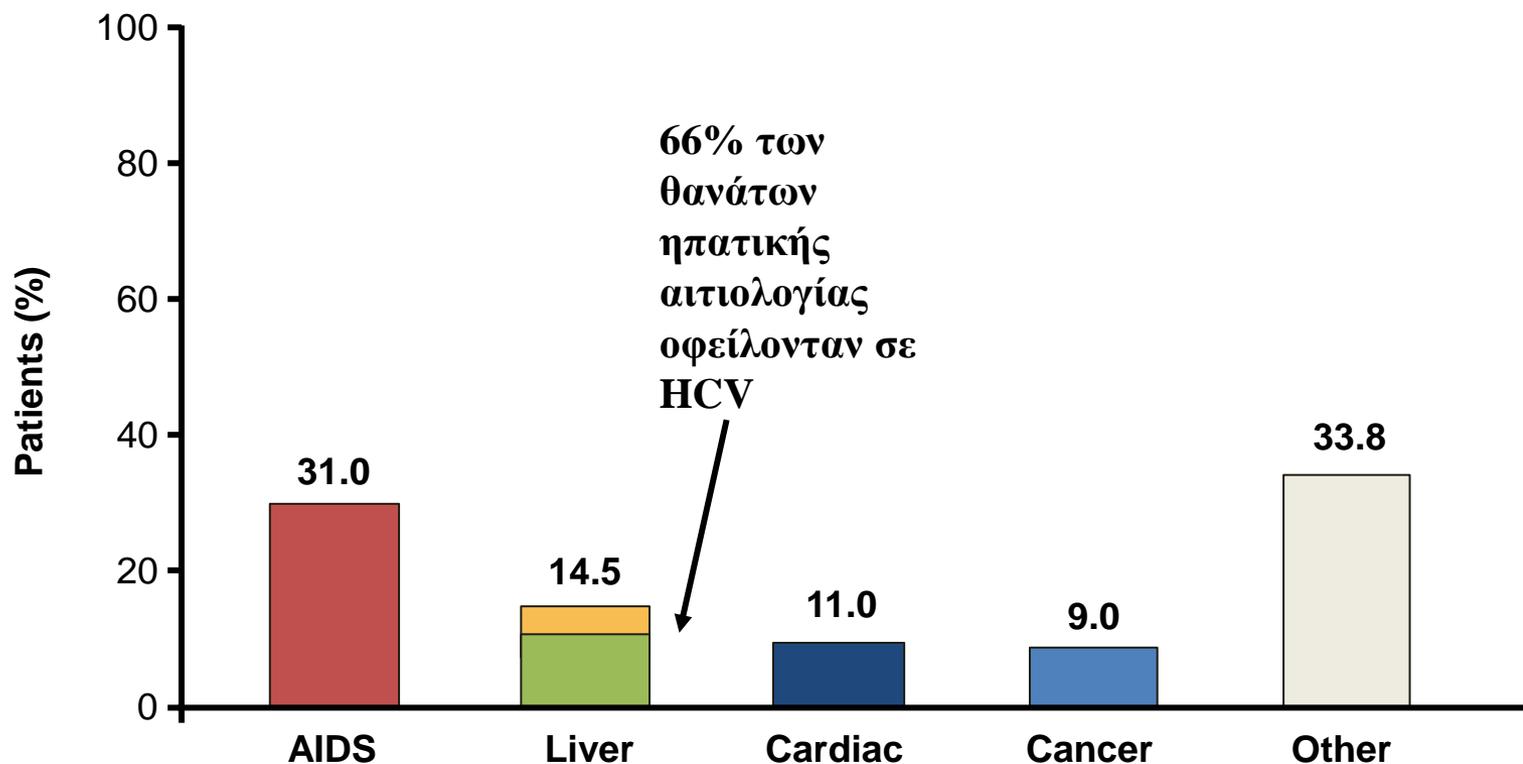
Νέος ασθενής με HIV λοίμωξη: τι να κάνω?



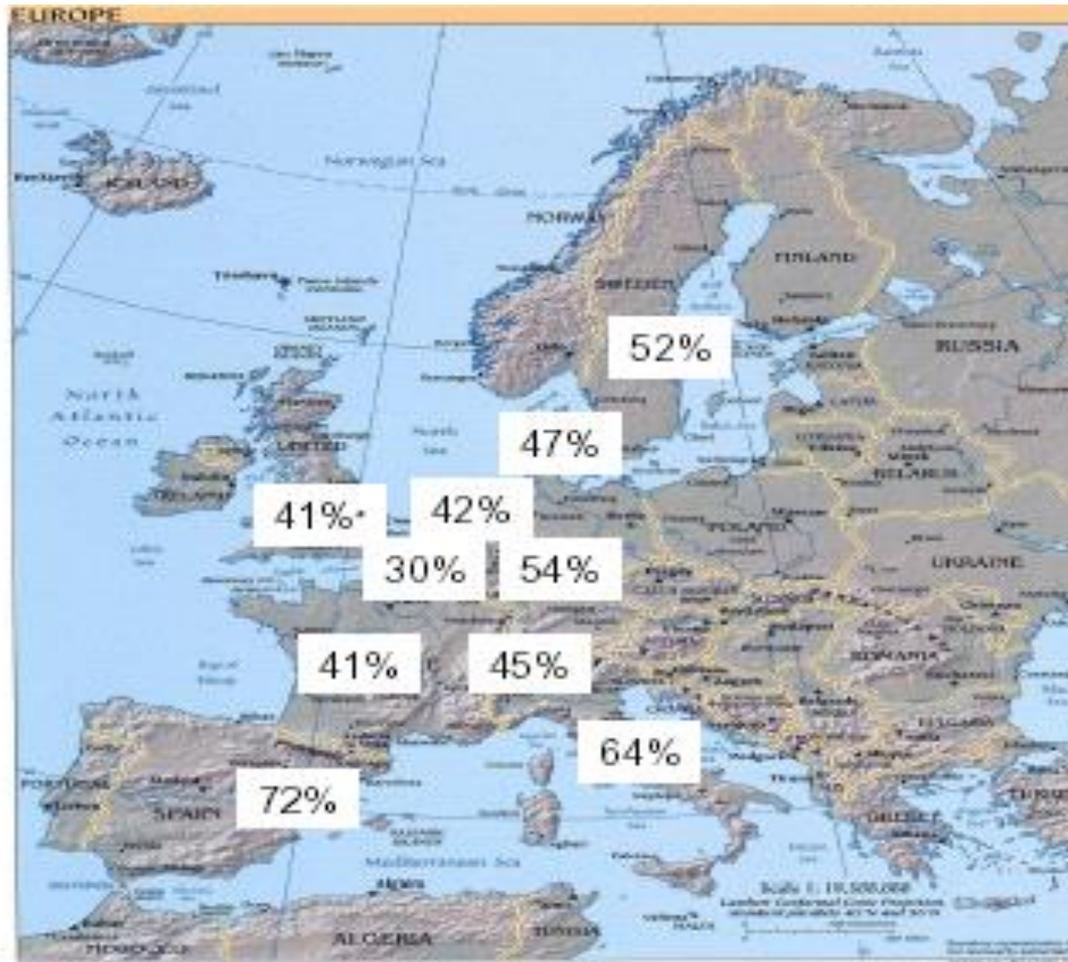
Σαμπατάκου Ελένη
Αν. Καθηγήτρια Παθ/γίας Λοιμώξεων
Β Παν/κή Παθολογική
Πανεπιστήμιο ,



Αιτία θανάτου σε 1246 HIV(+) ασθενείς D:A:D Study (N = 23,441)



Ποσοστά "late presenters" προσερχόμενοι σε Κέντρα το 2008

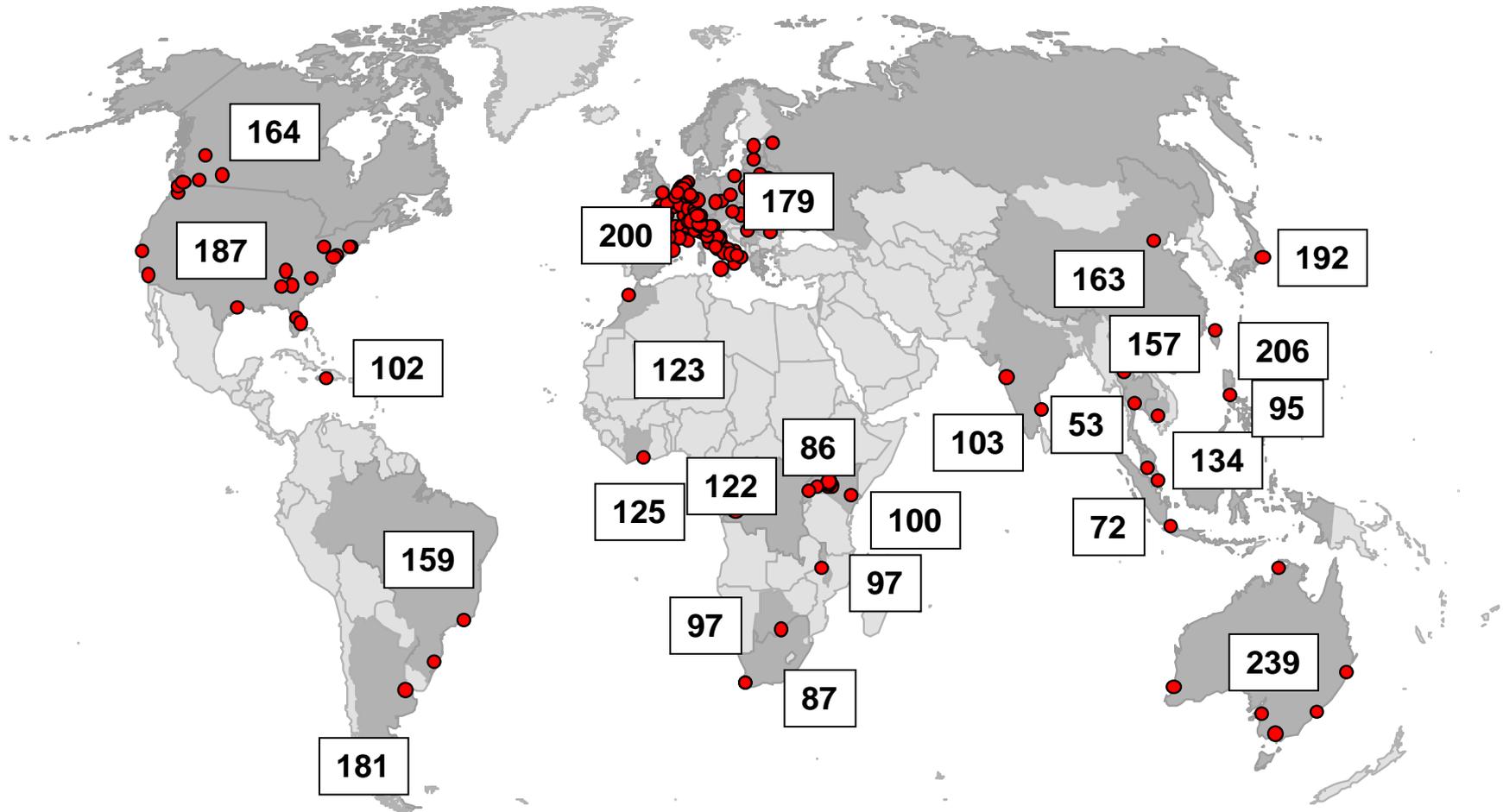


Thanks to:

ATHENA (F de Wolf)
Brussels St Pierre Cohort (S deWit)
Barcelona cohort (J Gatell)
CHIC (C Sabin)
ClinSurv HIV (O Hamouda)
DHCS (F Engsig)
EuroSIDA (J Reekie)
FHDH ANRS CO4 (D Costagliola)
ICONA (A d'Arminio Monforte)
Swedish Cohort (J Brännström)
SHCS (B Ledergerber)

CD4 count at start of ART, 2003-2005

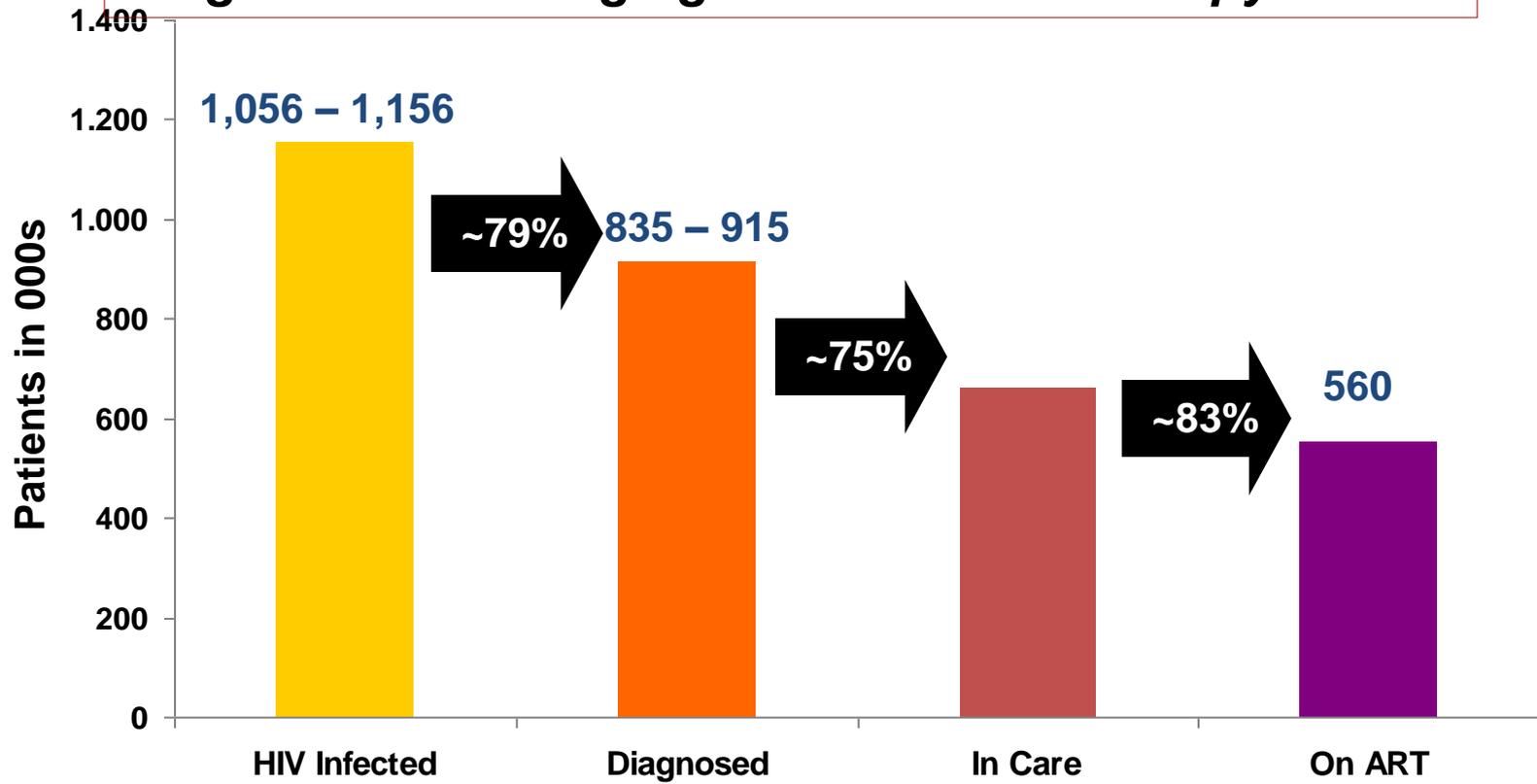
42 countries, 176 sites, 33,008 patients



Numbers are median CD4 counts

U.S. HIV Market Dynamics

Significant Opportunity Remains in Increasing Diagnosis and Bringing Patients onto Therapy



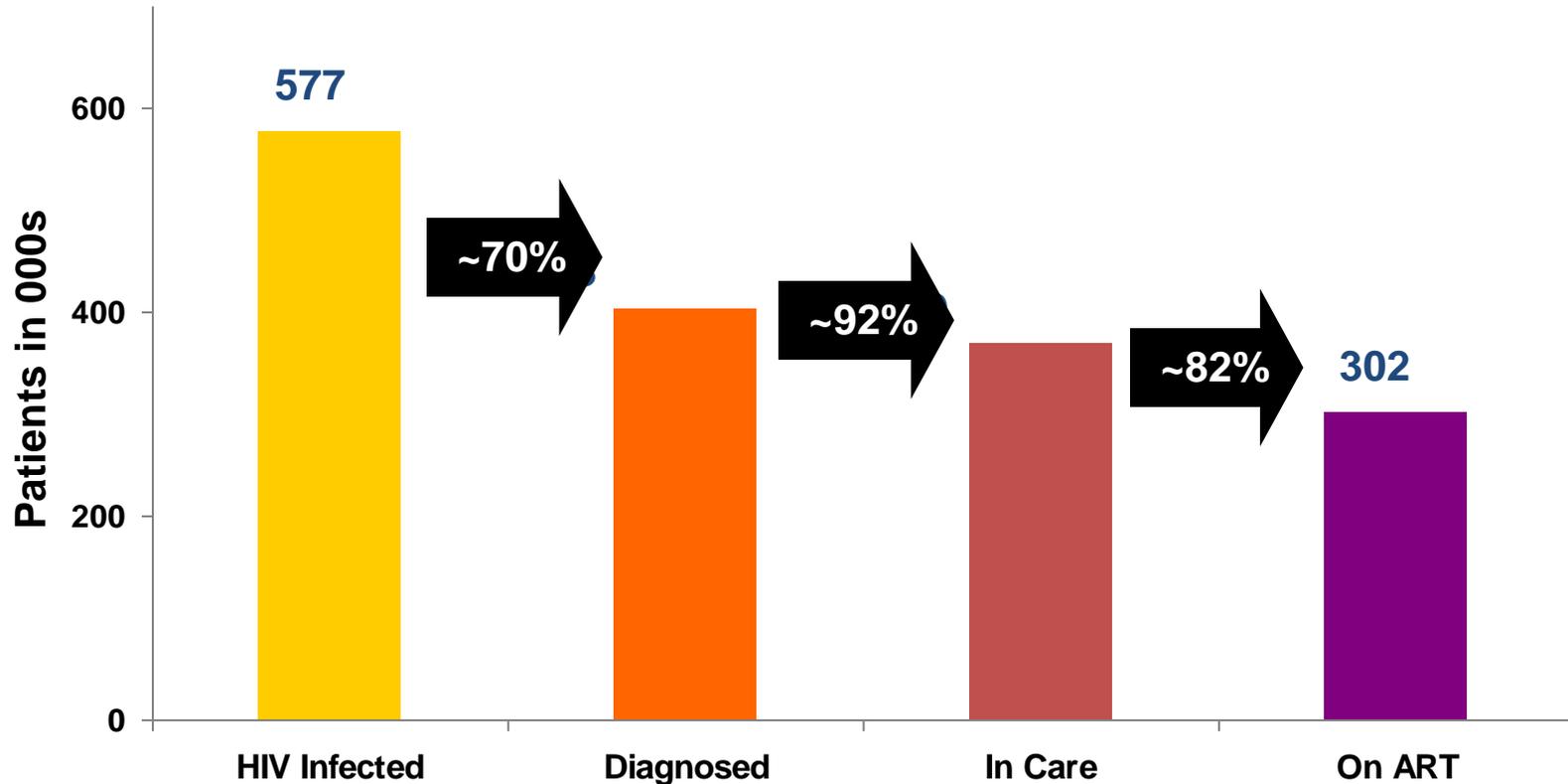
Sources:

* February, 2009 CDC estimates as of the end of 2006

** Synovate Healthcare U.S. HIV Monitor Q3 2008

EU Big 5 HIV Market Dynamics

Similar Dynamics as Seen in the U.S. with Strong Support in the EU for Increased Testing Initiatives and Early Treatment



Sources:

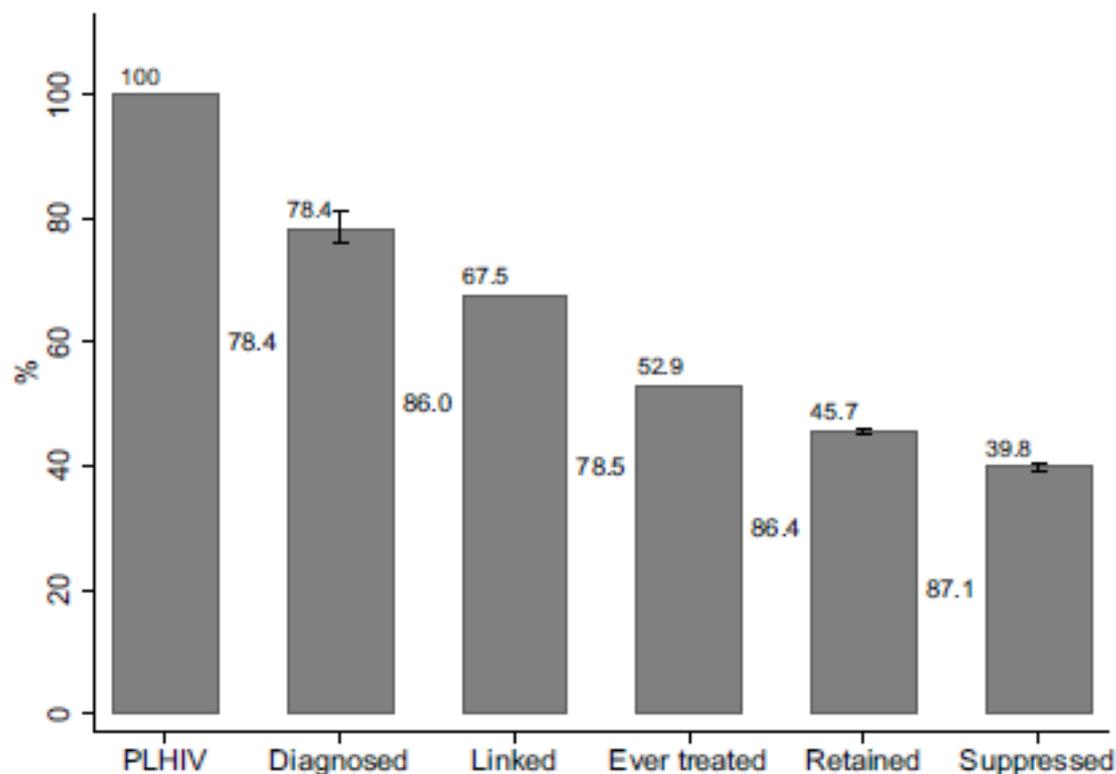
* National Surveillance Units per country & ECDC

** IMS/GERS & Synovate Q3 2008

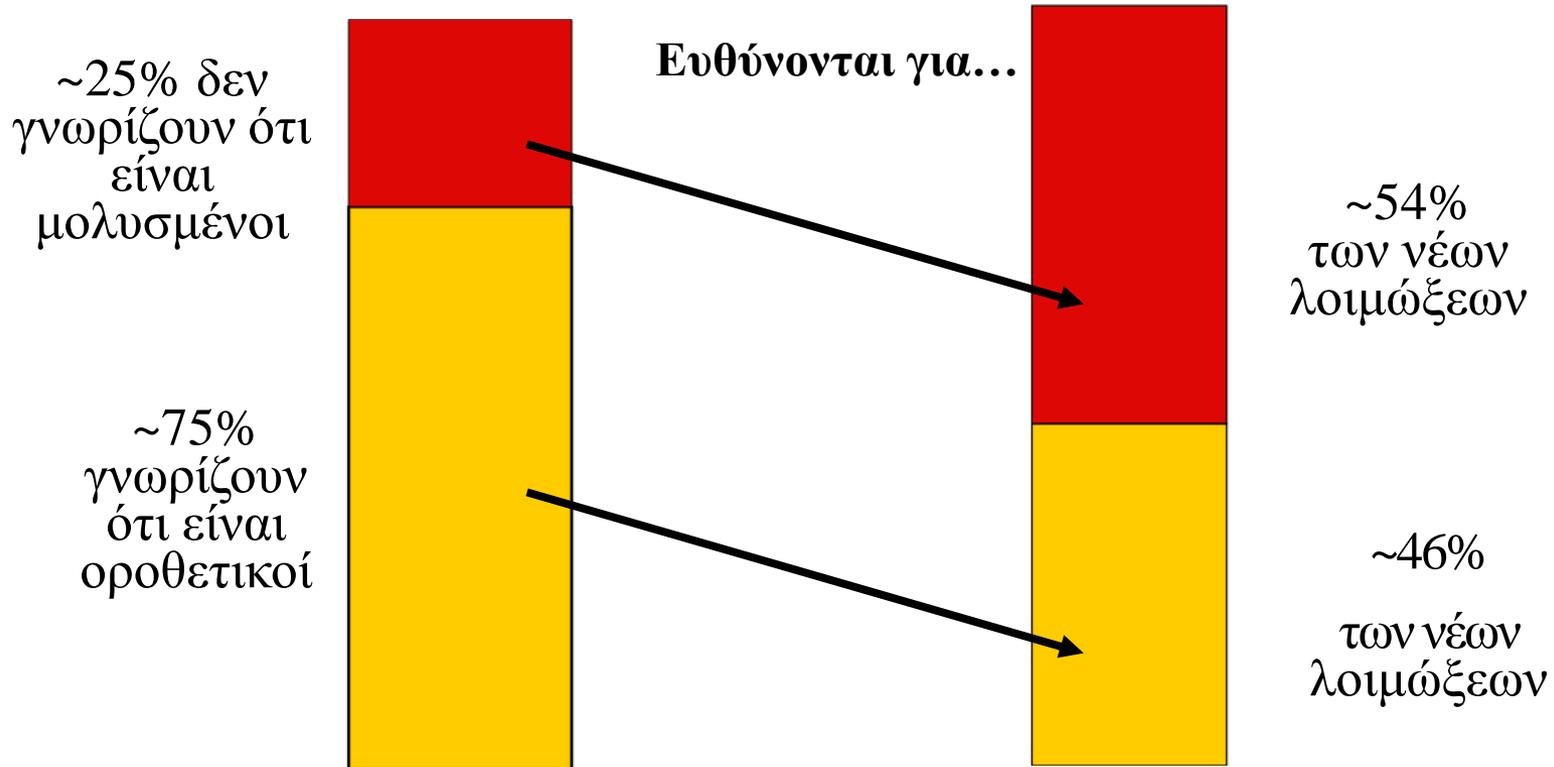
RESEARCH ARTICLE

HIV cascade of care in Greece: Useful insights from additional stages

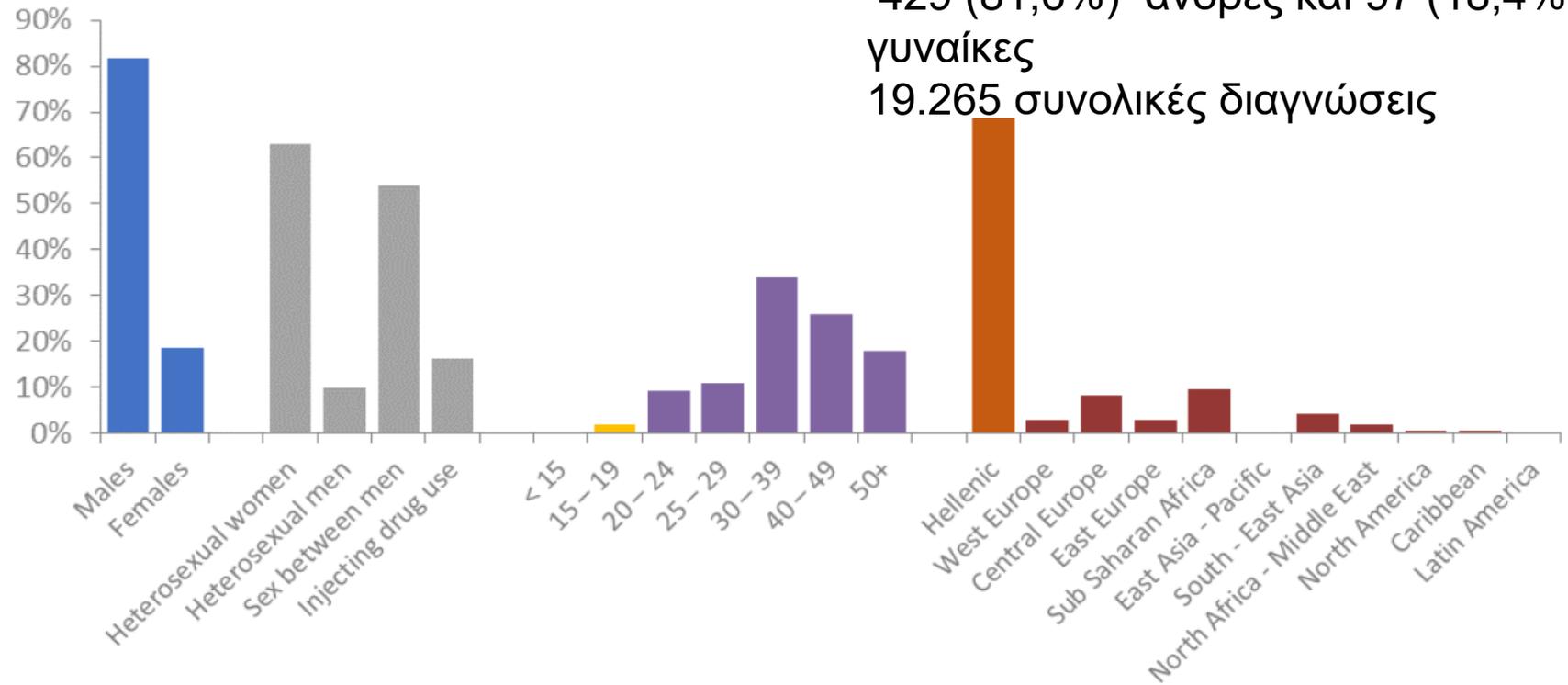
Georgia Vourli^{1*}, Georgios Nikolopoulos², Vasilios Pappas³, Athanasios Skoutelis⁴,
Suzanne Metallidis⁵, Panagiotis Gerasimidis⁶, Antonios Papadopoulos⁷, Maria Chini⁸,
Alexandros Katsis⁹, Georgios Chrysos¹⁰, Helen Sambatakou¹²,
Dimitra Paraskeva¹⁵, Nikos Dedes¹⁶,
for the Greek HIV Prevention Group¹¹



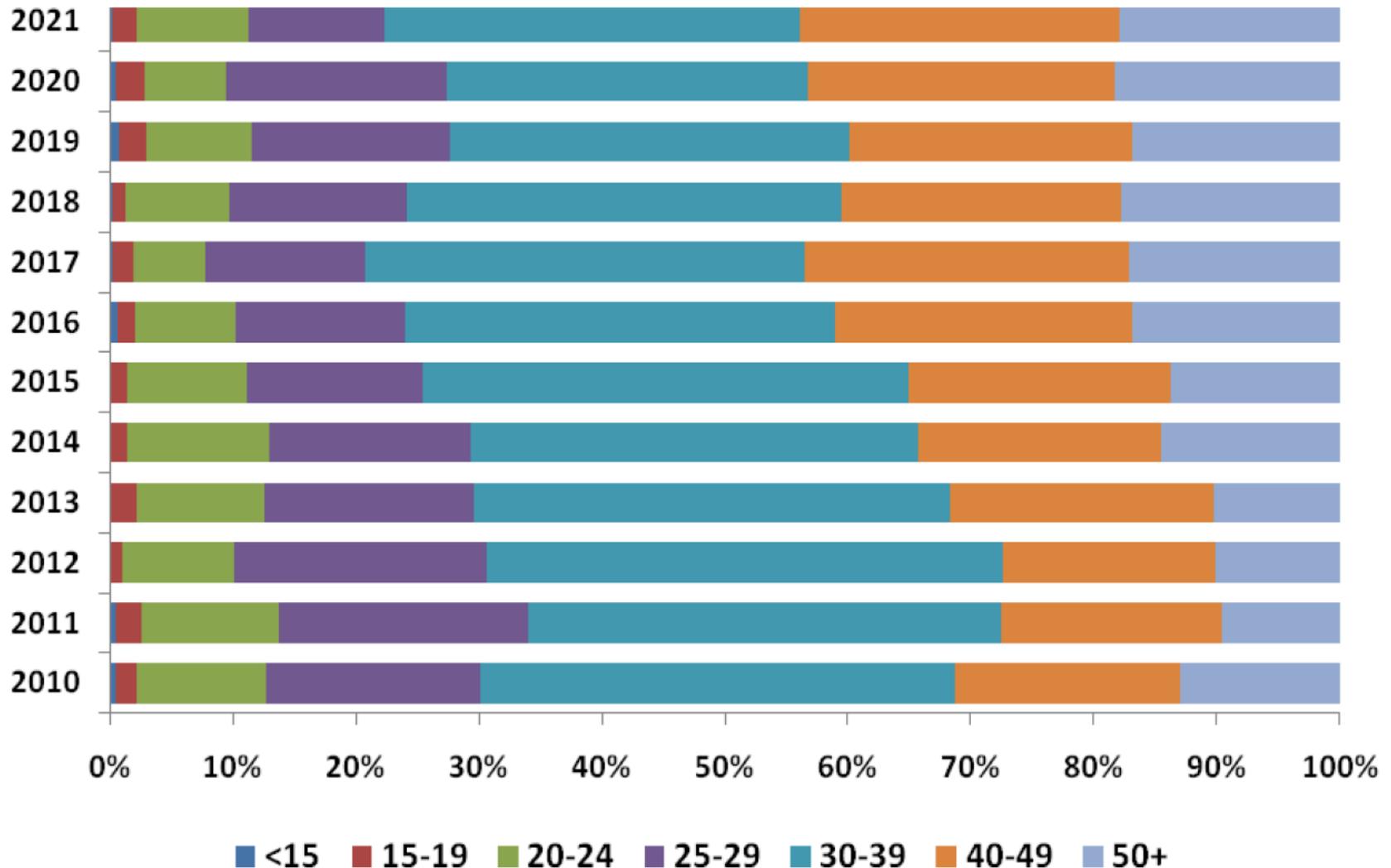
Οι περισσότερες νέες λοιμώξεις μεταδίδονται από άτομα που δεν γνωρίζουν την οροθετικότητά τους



Ποσοστά των νέων διαγνώσεων HIV λοίμωξης κατά φύλο, κατηγορία μετάδοσης, ηλικιακή ομάδα, και εθνικότητα κατά τη διάγνωση, Ελλάδα (1/1/2021 - 31/12/2021)



Ποσοστιαία κατανομή των νέων διαγνώσεων HIV λοίμωξης κατά ηλικιακή ομάδα κατά τη διάγνωση στην Ελλάδα έως 31/12/2021



CDC Recommendations for HIV Testing in Healthcare Settings

Routine voluntary testing for patients ages 13 to 64 y
Not based on patient risk

Opt-out testing

No separate consent for HIV

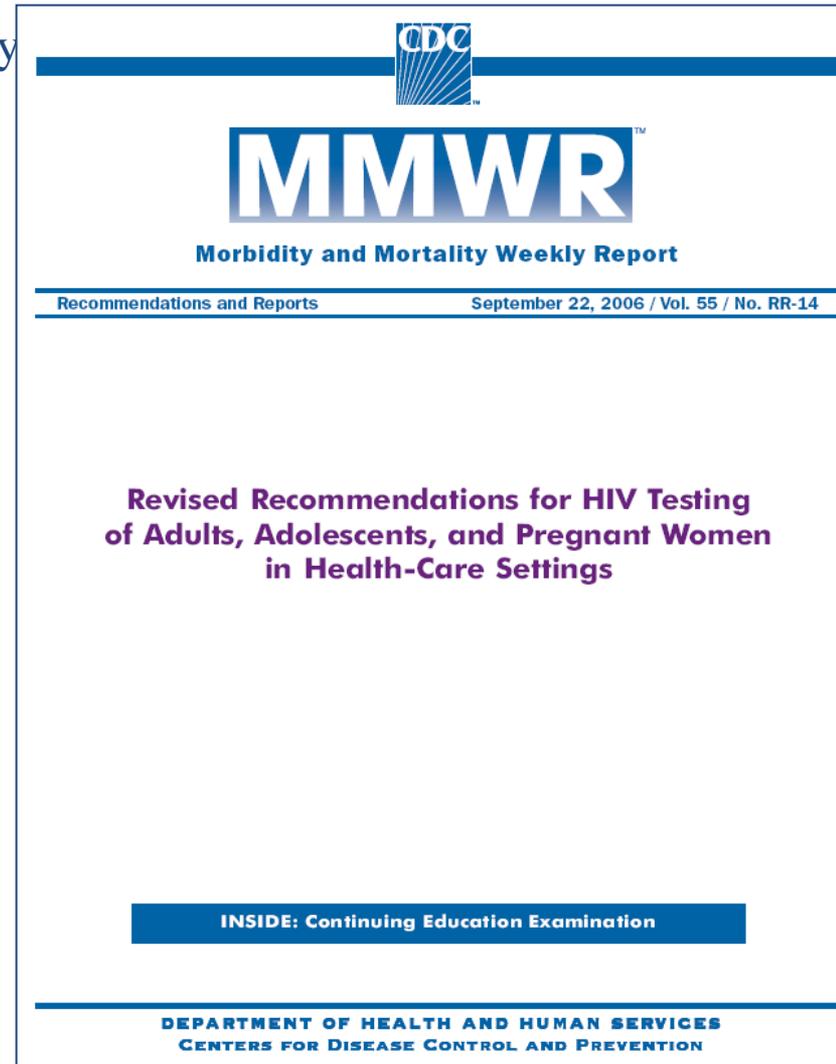
Resulting in increases in HIV testing rates

Pretest counseling not required

Repeat HIV testing left to discretion
of provider, based on risk

Within the US, 34 states are neutral
to supportive of the CDC guidelines
while 11 states have taken steps
to reduce regulatory barriers
6 states passed legislation (2007)

*Branson BM, et al. MMWR Recomm Rep.
2006;55(RR-14):1-17.*





HIV in Europe

Working Together for Optimal
Testing and Earlier Care

HepHIV **2014**
5-7 OCTOBER BARCELONA

HIV and Viral Hepatitis: Challenges of Timely Testing and Care

Which Conditions are Indicators for HIV testing across Europe?: Results from the HIDES II Study

Dr. Galyna Kutsyna on behalf of the HIDES Study Group

HIDES (HIV Indicator Diseases Across Europe Study)
A project under the HIV in Europe initiative





Age is Not a Condom



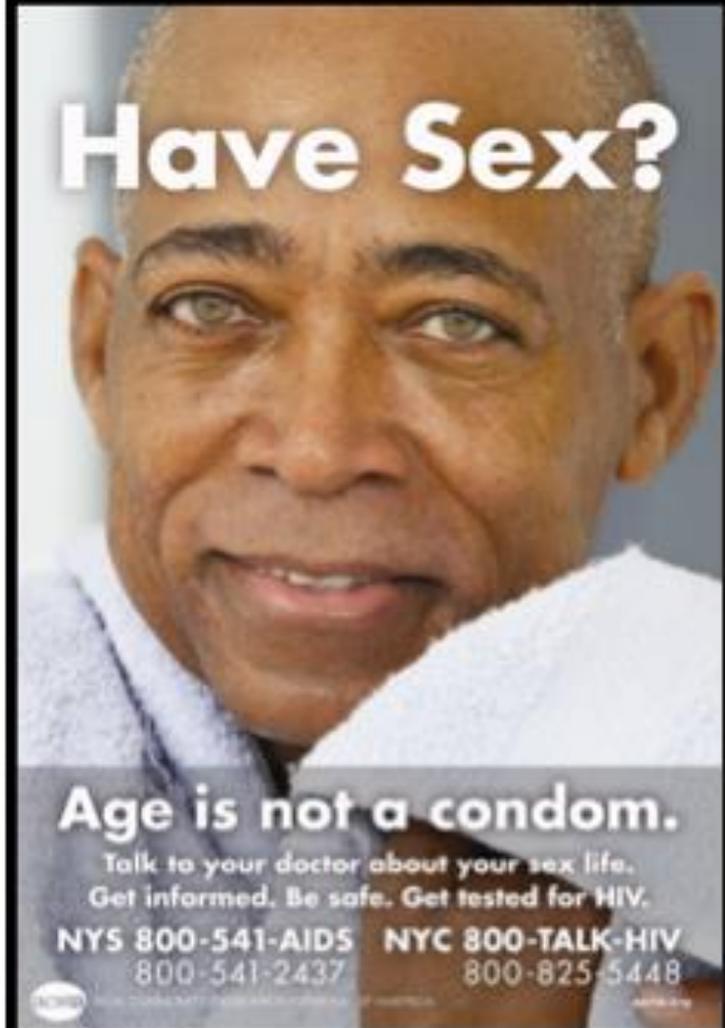
Have Sex?

Age is not a condom.

Talk to your doctor about your sex life.
Get informed. Be safe. Get tested for HIV.

NYS 800-541-AIDS NYC 800-TALK-HIV
800-541-2437 800-825-5448

NYCDOH NEW YORK STATE DEPARTMENT OF HEALTH www.nysdoh.org



Have Sex?

Age is not a condom.

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NYS 800-541-AIDS NYC 800-TALK-HIV
800-541-2437 800-825-5448

NYCDOH NEW YORK STATE DEPARTMENT OF HEALTH www.nysdoh.org

Αρχική εκτίμηση πρωτοδιαγνωσθέντος HIV(+) ασθενούς

Πλήρες ιατρικό ιστορικό

Οικογενειακό ιστορικό (πρώιμη CVD, ΣΔ, υπέρταση, ΧΝΝ)

Χρόνια φαρμακευτική αγωγή

Συννοσηρότητες

Ιστορικό εμβολιασμών

Ψυχοκοινωνική εκτίμηση

Τρέχον “ lifestyle” (χρήση αλκοόλ, κάπνισμα, διατροφή, άσκηση, χρήση φαρμάκων)

Εργασία, κοινωνικό status

Υπαρξη νευρογνωσιακών διαταραχών, κατάθλιψη

Οικογενειακό status: σύντροφος, παιδιά

Σεξουαλική και αναπαραγωγική υγεία

Στυτική δυσλειτουργία, σεξουαλική συμπεριφορά υψηλού κινδύνου

Status συντρόφου και ενημέρωση , μέτρα αντισύλληψης

Εκτίμηση HIV-ασθενών στην αρχική και επόμενες επισκέψεις

| | Assessment | At HIV diagnosis | Prior to starting ART | Follow-up frequency | Comment | See page |
|---------------------------------------|--|------------------|-----------------------|---------------------|---|-----------|
| HISTORY | | | | | | |
| Medical | Complete medical history including: | + | + | First visit | On transfer of care repeat assessment | |
| | • Family history (e.g. premature CVD, diabetes, hypertension, CKD) | + | | First visit | Premature CVD: cardiovascular events in a first degree relative (male < 55, female < 65 years) | 54, 55-56 |
| | • Concomitant medicines ⁽ⁱ⁾ | + | + | Every visit | | |
| | • Past and current co-morbidities | + | + | Every visit | | |
| | • Vaccination history | + | | Annual | Measure antibody titres and offer vaccinations where indicated, see Vaccination | |
| | | | | | | |
| Psychosocial | Current lifestyle (alcohol use, smoking, diet, exercise, drug use) | + | + | 6-12 months | Adverse lifestyle habits should be addressed more frequently | 53 |
| | Employment | + | + | Every visit | Provide advice and support if needed | |
| | Social and welfare | + | + | | Provide counselling if needed | |
| | Psychological morbidity | + | + | | | |
| | Partner and children | + | | | Test partner and children if at risk | |
| Sexual and Reproductive Health | Sexual history | + | | 6-12 months | Address issues concerning sexual dysfunction | 80-83 |
| | Safe sex | + | | | Risk of sexual transmission should be addressed | |
| | Partner status and disclosure | + | | | Recommend starting ART in serodifferent couples | |
| | Conception issues | + | + | | | |
| | Hypogonadism (including menopause) | + | + | As indicated | Persons with complaints of sexual dysfunction | 80, 82 |
| POST-REPRODUCTIVE HEALTH | | | | | | |
| Menopause | | + | + | Annual/as indicated | Screen for perimenopause symptoms in women ≥ 40 years. | 80 |

Εργαστηριακός έλεγχος σχετικός με την HIV λοίμωξη

HIV-VL

Γονοτυπική αντοχή και υπότυπος

R5 τροπισμός

Απόλυτος αριθμός CD4 (%), CD4/CD8

HLA-B*5701 (Screening πριν την έναρξη ABC)

Έλεγχος για συλλοιμώξεις (HBV, HCV, HAV, STDs)

Screening για TB

Εκτίμηση κινδύνου για CVD (Framingham score)

Ηπατική, νεφρική λειτουργία, οστική πυκνότητα

Εμβολιασμοί...

Εργαστηριακός έλεγχος σχετικός με την HIV λοίμωξη

| HIV DISEASE | | | | | | |
|---------------|---|---|-----|------------------------|---|--------|
| Virology | Confirmation of HIV Ab pos | + | | 3-6 months | More frequent monitoring of HIV-VL at start of ART Perform genotypic resistance test before starting ART if not previously tested or if at risk of super-infection | 11-13 |
| | Plasma HIV-VL | + | + | | | |
| | Genotypic resistance test and sub-type | + | +/- | At virological failure | Screen if considering R5 antagonist in regimen | |
| | R5 tropism (if available) | | +/- | | | |
| Immunology | CD4 absolute count and %, CD4/CD8 ratio (optional: CD8 and %) | + | + | 3-6 months | Annual CD4 count if stable on ART and CD4 count > 350 cells/ μ L ⁽ⁱⁱ⁾ CD4/CD8 ratio is a stronger predictor of serious outcomes | 11-13 |
| | HLA-B*57:01 (if available) | + | +/- | | Screen before starting ABC containing ART, if not previously tested, pages 11-12, 24 | |
| CO-INFECTIONS | | | | | | |
| STIs | Syphilis serology | + | | Annual/ as indicated | Consider more frequent screening if at risk | 14, 80 |
| | STI screen | + | | Annual/ as indicated | Screen if at risk and during pregnancy | |



ΕΛΕΓΧΟΣ ΓΟΝΟΤΥΠΙΚΗΣ ΑΝΤΟΧΗΣ ΣΕ ΑΝΤΙΡΕΤΡΟΪΚΗ ΘΕΡΑΠΕΙΑ

ΑΡΧΙΚΑ (Επίθετο - Ονομα) : ΜΠ. ΚΩ. ΗΜ/ΝΙΑ ΓΕΝ: 8/1/1965 ΦΥΛΟ: ΑΡΡΕΝ

ΑΡΙΘΜΟΣ ΑΤΟΜΟΥ: ΗΙΥRES -000014

ΑΡ.ΚΕΕΛΠΝΟ:

ΗΜ/ΝΙΑ ΛΗΨΗΣ ΔΕΙΓΜΑΤΟΣ: 14/11/2011 ΩΡΑ: ΠΑΡΑΛΑΒΗ : 14/11/2011 ΩΡΑ:

ΙΑΤΡΟΣ: ΣΑΜΠΑΤΑΚΟΥ Ε.

ΝΟΣΟΚΟΜΕΙΟ/ΜΟΝ. ΥΓΕΙΑΣ: ΙΠΠΟΚΡΑΤΕΙΟ-ΜΕΛ

Εγινε RT-PCR στην περιοχή της πρωτεάσης (PR) και στο τμήμα (κωδικόνια 35 - 244) της αντίστροφης μεταγραφάσης (RT).

Στη συνέχεια ταυτοποιήθηκε η νουκλεοτιδική αλληλουχία των παραπάνω περιοχών και ανιχνεύθηκαν οι ακόλουθες μεταλλαγές που συνδέονται με ανθεκτικότητα σε αντιρετροϊκή θεραπεία :

☉ Περιοχή Αντίστροφης Μεταγραφάσης (RT)

E138A,K70G,M184V

☉ Περιοχή Πρωτεάσης (PR)

H69K,I13V,I62V,K20R,L89M,M36I,V77I

Εκτιμώμενη ανθεκτικότητα σε σχέση με τις παρατηρούμενες μεταλλαγές.

| <u>Φάρμακο</u> | <u>Χαρακτηρισμός</u> | <u>Φάρμακο</u> | <u>Χαρακτηρισμός</u> | <u>Φάρμακο</u> | <u>Χαρακτηρισμός</u> | <u>Φάρμακο</u> | <u>Χαρακτηρισμός</u> |
|----------------|----------------------|-----------------|----------------------|----------------|----------------------|----------------|----------------------|
| NELFINAVIR | S | KALETRA | S | ZIDOVUDINE | S | EFAVIRENZ | S |
| ATAZANAVIR | S | SAQUINAVIR/R | S | DIDANOSINE | I | NEVIRAPINE | S |
| FOSAMPRENAVIR | S | INDINAVIR/R | S | LAMIVUDINE | R | ETRAVIRINE | S |
| | | TIPRANAVIR/R | S | STAVUDINE | S | | |
| | | DARUNAVIR/R | S | ABACAVIR | I | | |
| | | ATAZANAVIR/R | S | TENOFOVIR | I | | |
| | | FOSAMPRENAVIR/R | S | EMTRICITABINE | R | | |

Επεξήγηση

R

Ισχυρή αντοχή ή στη διαδικασία ανάπτυξης ισχυρής αντοχής.



ΕΘΝΙΚΟ ΚΑΙ ΚΑΠΟΔΙΣΤΡΙΑΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ
ΙΑΤΡΙΚΗ ΣΧΟΛΗ
ΕΡΓΑΣΤΗΡΙΟ ΥΓΙΕΙΝΗΣ, ΕΠΙΔΗΜΙΟΛΟΓΙΑΣ ΚΑΙ ΙΑΤΡΙΚΗΣ ΣΤΑΤΙΣΤΙΚΗΣ

ΕΛΕΓΧΟΣ ΤΡΟΠΙΣΜΟΥ ΤΟΥ HIV-1

ΑΡΧΙΚΑ (Επίθετο - Ονομα) : ΜΠ. ΚΩ. **ΗΜ/ΝΙΑ ΓΕΝ:** 8/1/1965 **ΦΥΛΟ:** ΑΡΡΕΝ

ΑΡΙΘΜΟΣ ΑΤΟΜΟΥ: HIVTROP -000079

ΑΡ.ΚΕΕΛΠΝΟ:

ΗΜ/ΝΙΑ ΛΗΨΗΣ ΔΕΙΓΜΑΤΟΣ: 24/1/2012 **ΩΡΑ:** **ΠΑΡΑΛΑΒΗ :** 24/1/2012 **ΩΡΑ:**

ΙΑΤΡΟΣ: ΣΑΜΠΑΤΑΚΟΥ Ε.

ΝΟΣΟΚΟΜΕΙΟ/ΜΟΝ. ΥΓΕΙΑΣ: ΙΠΠΟΚΡΑΤΕΙΟ-ΜΕΛ

ΣΥΜΠΕΡΑΣΜΑ : Κατόπιν ταυτοποίησης της νουκλεοτιδικής αλληλουχίας της περιοχής V3 της πρωτεΐνης gp120 από δείγμα HIV-RNA βρέθηκε ότι ο ιός έχει τροπισμό για τον συνυποδοχέα CXCR4.

screening για ΤΒ, ηπατίτιδες

| | Assessment | At HIV diagnosis | Prior to starting ART | Follow-up frequency | Comment | See page |
|-----------------|---|------------------|-----------------------|-----------------------|--|-----------|
| Viral Hepatitis | HAV screen | + | | As indicated | Screen if ongoing risk (e.g. MSM); vaccinate if non-immune | 79, 95-97 |
| | HBV screen | + | + | | Annual screen if ongoing risk; vaccinate if non-immune. Use ART containing TDF or TAF in vaccine non-responders | |
| | HCV screen | + | | | Further screen based on risk behaviour and local epidemiology. Measure HCV-RNA if HCV Ab pos or if recently acquired infection suspected | |
| | HDV screen | | | As indicated | All Persons with positive HBs-Ag should also be screened for HDV co-infection | 95, 103 |
| | HEV screen | | | As indicated | Screen persons with symptoms consistent with acute hepatitis, unexplained flares of aminotransferases or elevated liver function tests, neuralgic amyotrophy, Guillain-Barré, encephalitis or proteinuria. Include anti-HEV IgG and IgM and NAT for HEV-RNA in blood and if possible in stool | 103 |
| Tuberculosis | CXR | + | | Re-screen if exposure | Consider routine CXR in persons from high TB prevalence populations. Some national guidelines consider the ethnicity, CD4 count and ART usage to define indication for latent tuberculosis infection screening. Use of PPD/IGRA depending on availability and local standard of care. IGRA should, however, be tested before PPD if both are to be used, given the potential for a false positive IGRA after PPD. See Diagnosis and Treatment of TB in PLWH | 20, 114 |
| | PPD | + | | | | |
| | IGRA in selected high-risk populations (if available) | + | | | | |

screening για άλλες συλλοιμώξεις

| | | | | | | |
|--------|---|-----|--|--------------|--|----|
| Others | Varicella zoster virus serology | + | | | Offer vaccination where indicated | 79 |
| | Measles/Rubella serology | + | | | Offer vaccination where indicated | |
| | Toxoplasmosis serology | + | | | | |
| | CMV serology | + | | | | 79 |
| | Cryptococcus antigen | +/- | | | Consider screening for cryptococcus antigen in serum in persons with CD4 count < 100 cells/μL | |
| | Leishmania serology | +/- | | | Screen according to travel history/origin | |
| | Tropical screen (e.g. Schistosoma serology) | +/- | | | Screen according to travel history/origin | |
| | Influenza virus | + | | Annual | In all PLWH, see Vaccination | 79 |
| | <i>Streptococcus pneumoniae</i> | + | | | No recommendations available regarding the need for a booster dose, see Vaccination | 79 |
| | Human papilloma virus | + | | As indicated | Vaccinate all PLWH with 3 doses between ages 9 and 40. If HPV infection is established, efficacy of vaccine is questionable, see Vaccination | 79 |

Μεγαλώνοντας με τον HIV.....

Ανακατανομή λίπους

Δυσλιπιδαιμία

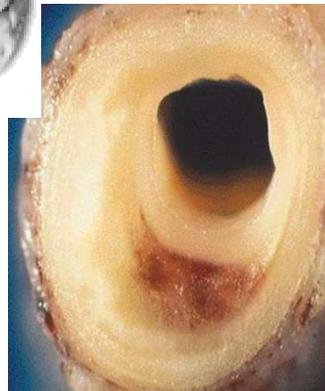
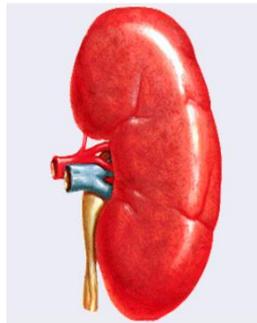
Σακχαρώδης διαβήτης

> Κίνδυνος ΣΝ

Νεφρική νόσος

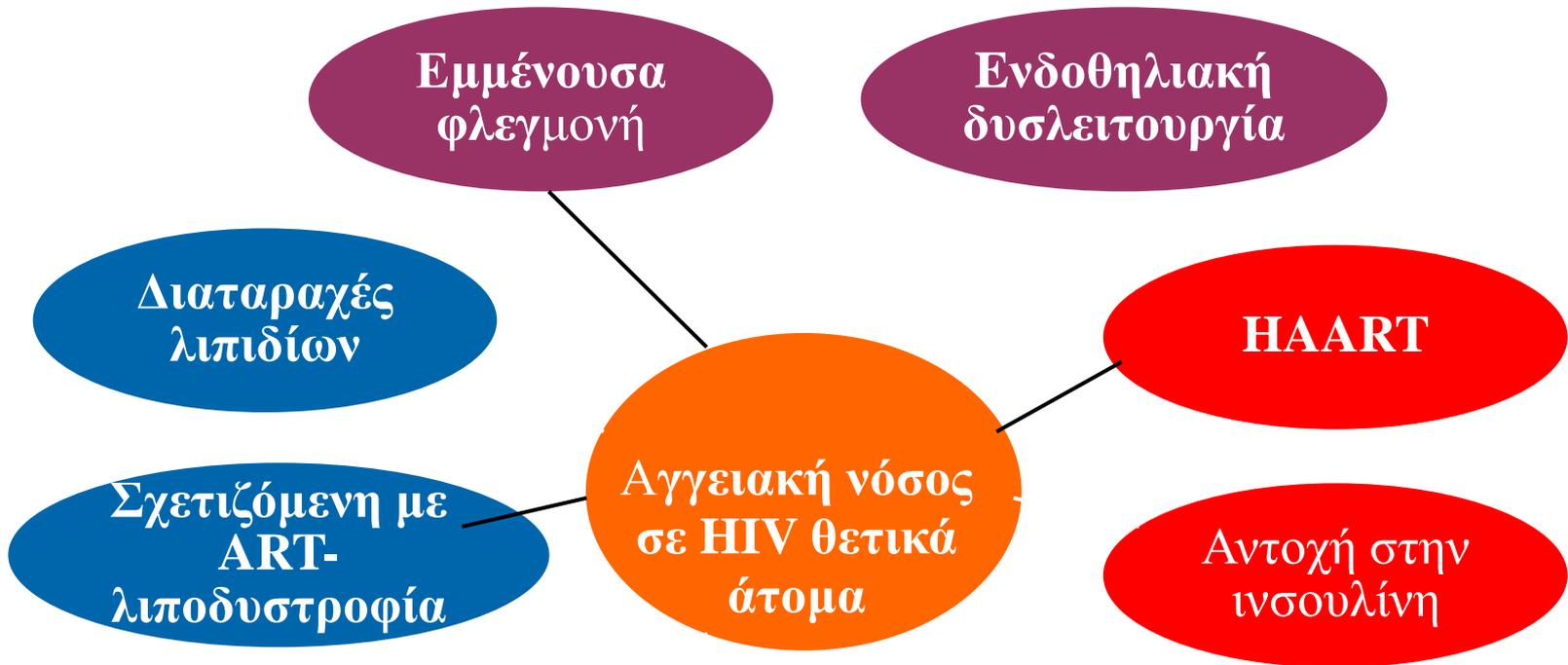
Οστεοπενία, οστεοπόρωση

Ηπατοτοξικότητα





Παράγοντες που σχετίζονται με την HIV λοίμωξη που μπορεί να συμβάλουν σε καρδιαγγειακή



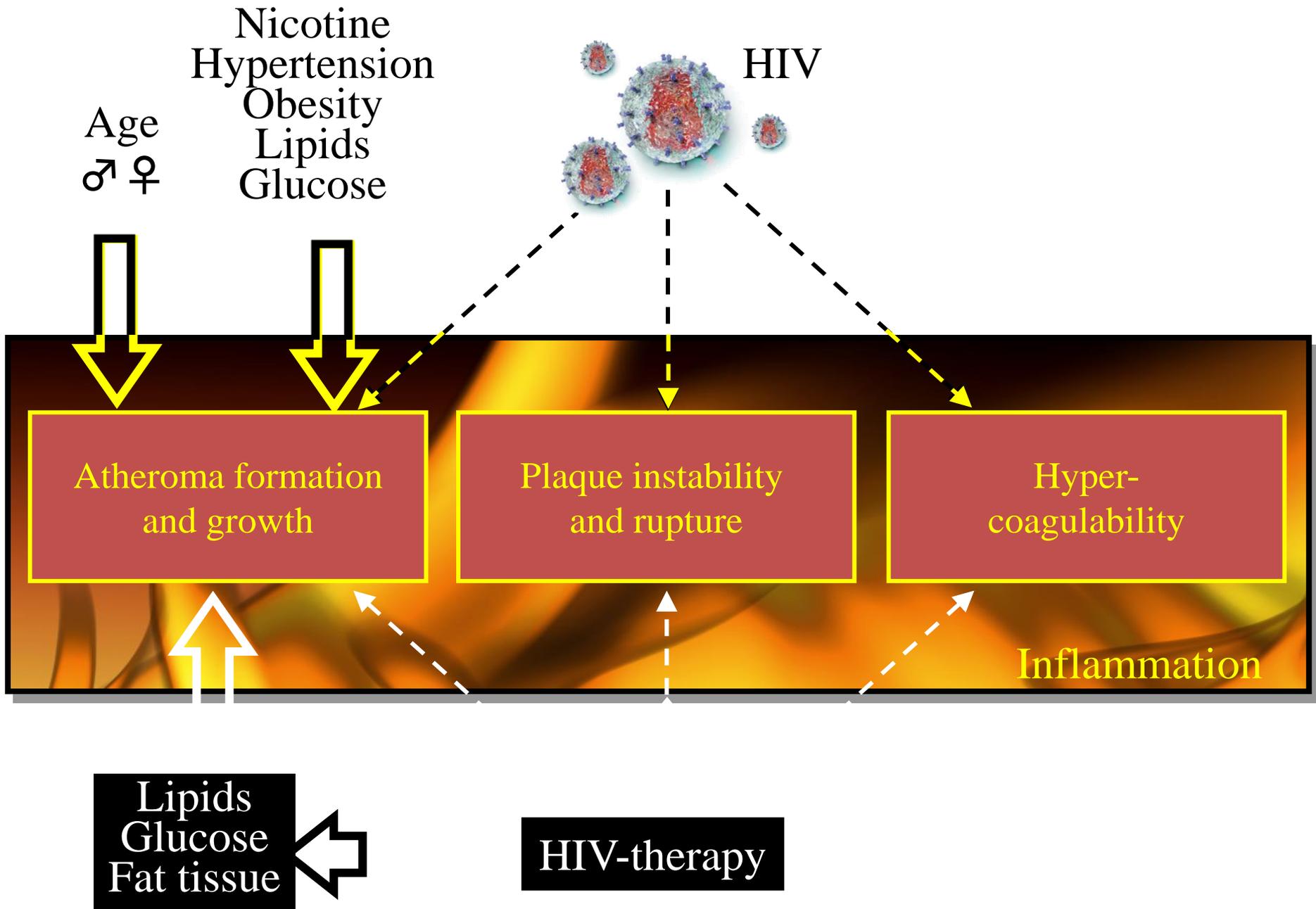
= ART



= HIV λοίμωξη



= HIV λοίμωξη & ART



Παράγοντες κινδύνου για καρδιαγγειακή νόσο

Μη μεταβλητοί

ηλικία

οικογενειακό ιστορικό

Εθνικότητα

φύλο

Άλλοι παράγοντες δυνητικά
σχετιζόμενοι με την HIV

- Αυξημένα επίπεδα τριγλυκεριδίων
 - Φλεγμονώδεις δείκτες
 - Δυσλειτουργία ενδοθηλίου
 - Αντοχή στην ινσουλίνη

Μεταβλητοί

Κάπνισμα

υπέρταση

αυξημένα επίπεδα ολικής και LDL-C
χαμηλά επίπεδα HDL-C
σακχαρώδης διαβήτης

Έλλειψη σωματικής άσκησης
παχυσαρκία

Με κόκκινα γράμματα, οι σημαντικοί παράγοντες

Δυνητικά συσχετιζόμενοι με την HIV και την HAART



ELSEVIER

available at www.sciencedirect.com



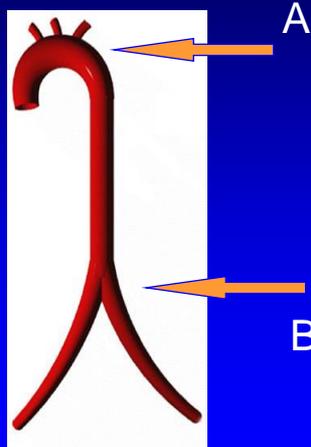
journal homepage: www.elsevier.com/locate/artres



Impact of human immunodeficiency virus infection on arterial stiffness and wave reflections in the early disease stages

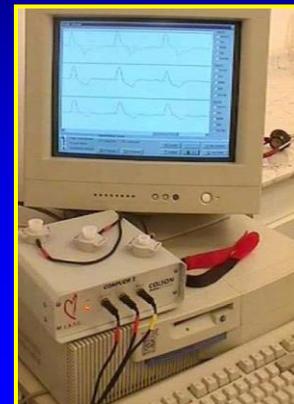
Charalambos Vlachopoulos^{a,*}, Helen Sambatakou^b, Dimitris Tsiachris^a, Ilias Mariolis^b, Konstantinos Aznaouridis^a, Nikolaos Ioakeimidis^a, Athanasios J. Archimandritis^b, Christodoulos Stefanadis^a

Pulse Wave Velocity (PWV)



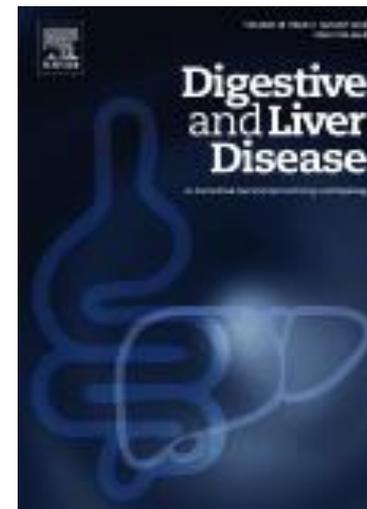
$$PWV = \frac{\text{distance}}{\text{time}}$$

Non-invasive
evaluation



Prevalence and predictors of liver steatosis and fibrosis in unselected patients with HIV mono-infection

Rosa Lombardi, H. Sambatakou, I. Mariolis, D. Cokkinos
, G. Papatheodoridis, E. Tsochatzis
Dig Liver Dis 2016



Νεοδιαγνωσθείς HIV ασθενής

Συγχορηγούμενα φάρμακα?

Συννοσηρότητες

Συλλοιμώξεις (HCV, HBV, TB)?

Κληρονομικό ιστορικό?

Έξεις, συνήθειες?

Ψυχιατρική κατάσταση?

Ετοιμότητα για έναρξη, συμμόρφωση στην HAART?

Περίπτωση ασθενούς Ι

Ασθενής 47 ετών με νεοδιαγνωσθείσα HIV λοίμωξη τελικού σταδίου C3 (πνευμονία από *Pneumocystis jirovecii*)

Ιικό φορτίο: 120.000 cop/ml, CD4: 120

Υπερλιπιδαιμία (tot cholest: 240mg/dl, HDL: 39mg/dl)

ΑΠ: 136/90mmHg (δεν λαμβάνει αντιυπερτασική αγωγή)

Καπνιστής ~ 25 pack-yrs

BMI:29

Γονοτυπική αντοχή: wild type

Τι θα προτείνουμε για μεταβολικό σύνδρομο?

Τι είδους HAART θα χορηγήσουμε?

- Τι άλλο συμπληρωματικό έλεγχο χρειαζόμαστε?
- Έχει υπέρταση με βάση μία μέτρηση (συστήνω καταγραφή πρωί-βράδυ για 1 εβδομάδα)?
- Ποιός είναι ο καρδιαγγειακός κίνδυνος?
- Ποιός είναι ο καλύτερος προγνωστικός δείκτης στο γενικό πληθυσμό
- Θα πρέπει να ξεκινήσουμε αντιυπερτασικά, στατίνες κλπ ή αρχικά δίαιτα, άσκηση, διακοπή καπνίσματος και επαναξιολόγηση?
- Ποιοί είναι οι στόχοι της θεραπείας (φυσιολογικές τιμές?)
- Στην επιλογή α΄ γραμμής αντιυπερτασικών πόσο ρόλο παίζει νεαρής ηλικίας σε σχέση με μεσήλικες και άνω?

KA - ATP

Information about your risk score:

Age: 47

Gender: male

Total Cholesterol: 240 mg/dL

HDL Cholesterol: 39 mg/dL

Smoker: Yes

Systolic Blood Pressure: 136 mm/Hg

On medication for HBP: No

Risk Score* 19%

Means 19 of 100 people with this level of risk will have a heart attack in the next 10 years.

* Your risk score was calculated using an equation. Other NCEP products, such as printed ATP III materials, use a point system to determine a risk score that is close to the equation score.

Αφαίρεση του καπνίσματος....

23

Systolic Blood Pressure: 136 mm/Hg

On medication for HBP: No

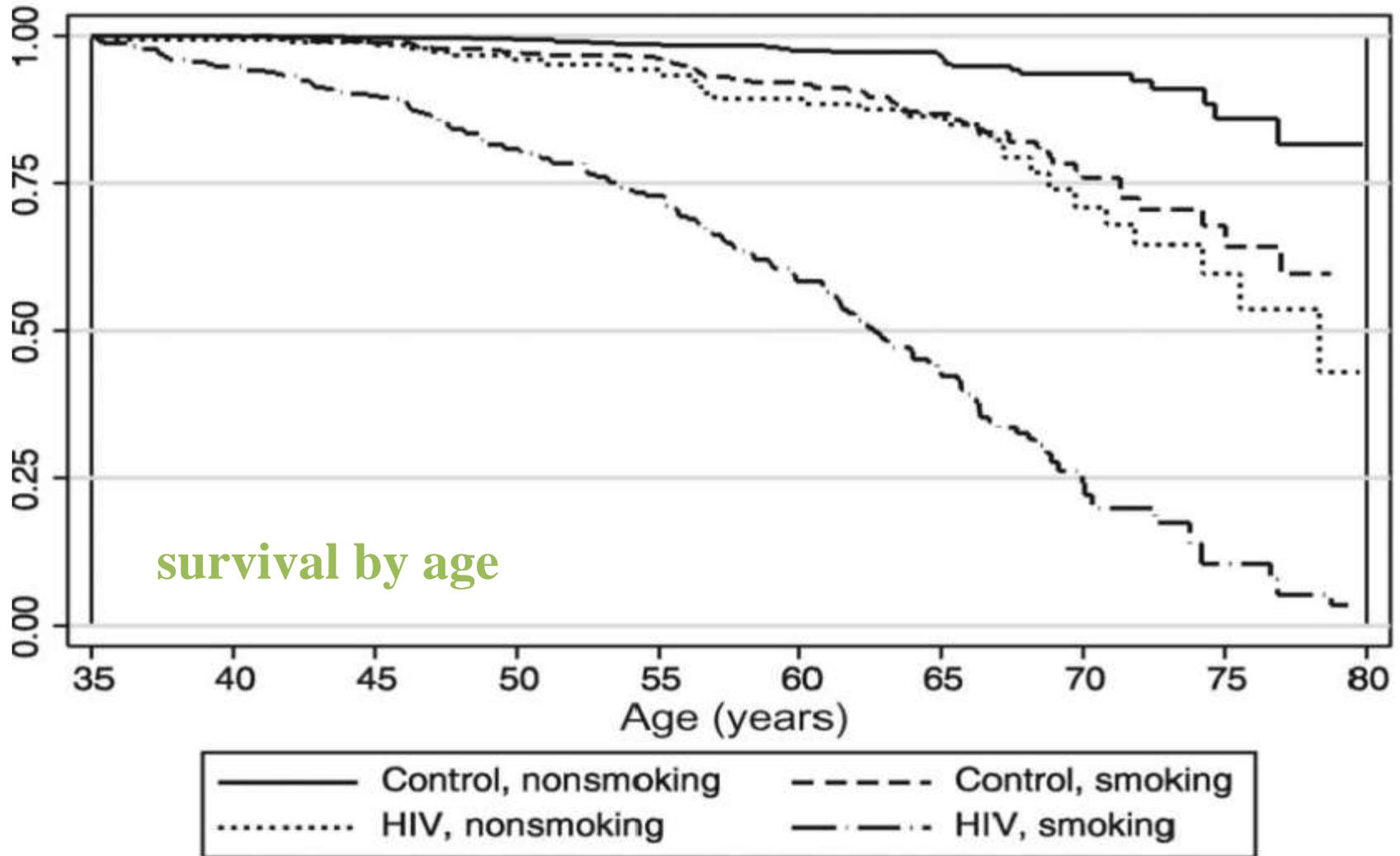
Risk Score*

6%

Means 6 of 100 people with this level of risk will have a heart attack in

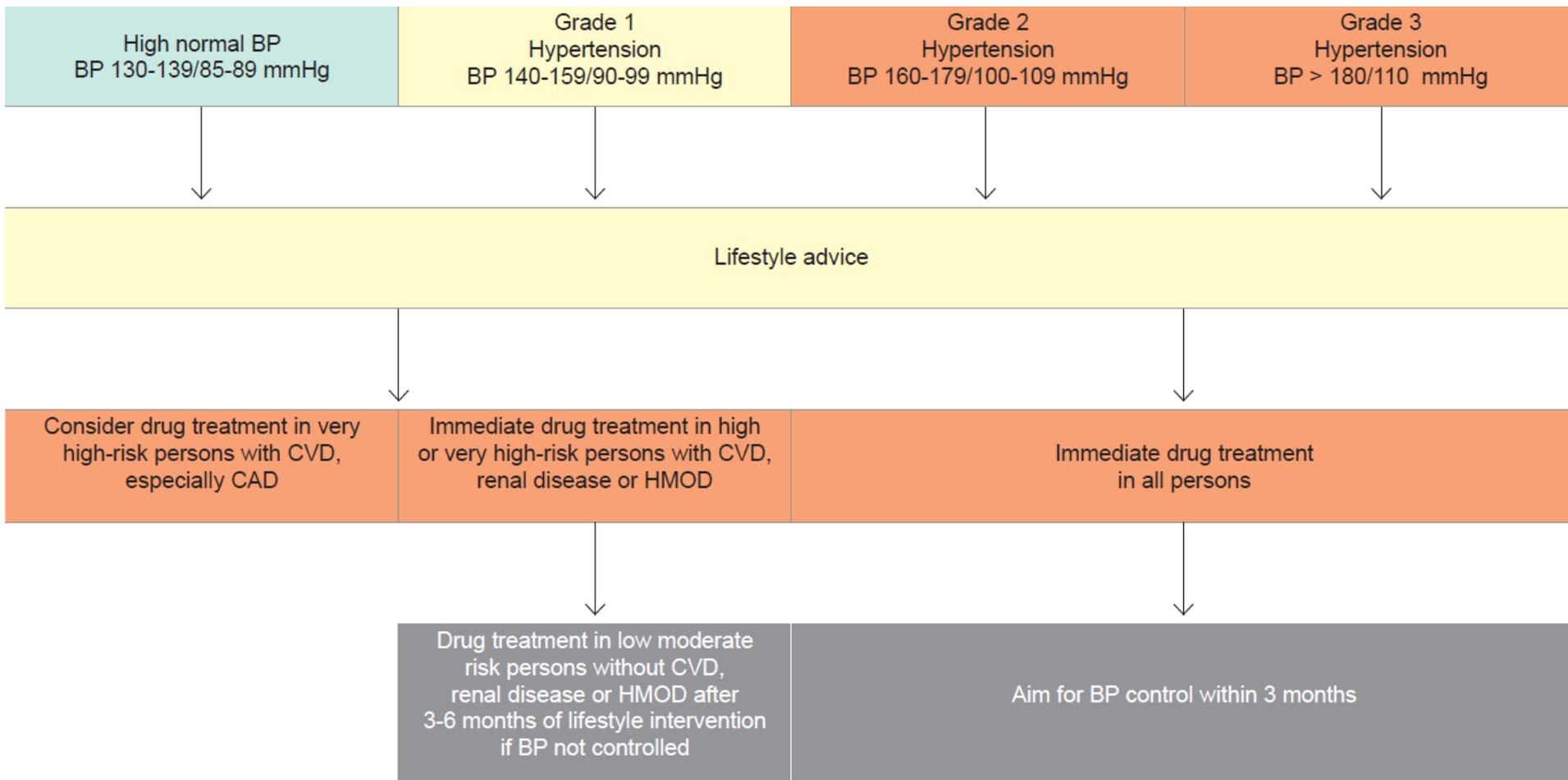
Εκτός από τη HAART...

A HIV-infected smokers lose more life-years to smoking than to HIV



2921 HIV patients and 10 642 controls were followed for 14 281 and 45 122 person-years, respectively

Υπέρταση: Διάγνωση, διαβάθμιση και θεραπεία



Hypertension Management in Persons With HIV

< 55 Yrs of Age

≥ 55 Yrs of Age or Black (Any Age)

First Line*[†]

A: ACE inhibitor or angiotensin receptor blockers

C: Dihydropyridine calcium channel blocker[‡]

Second Line[†]

White: A + C

Black: A + C or C + thiazide-type diuretic (**D**)

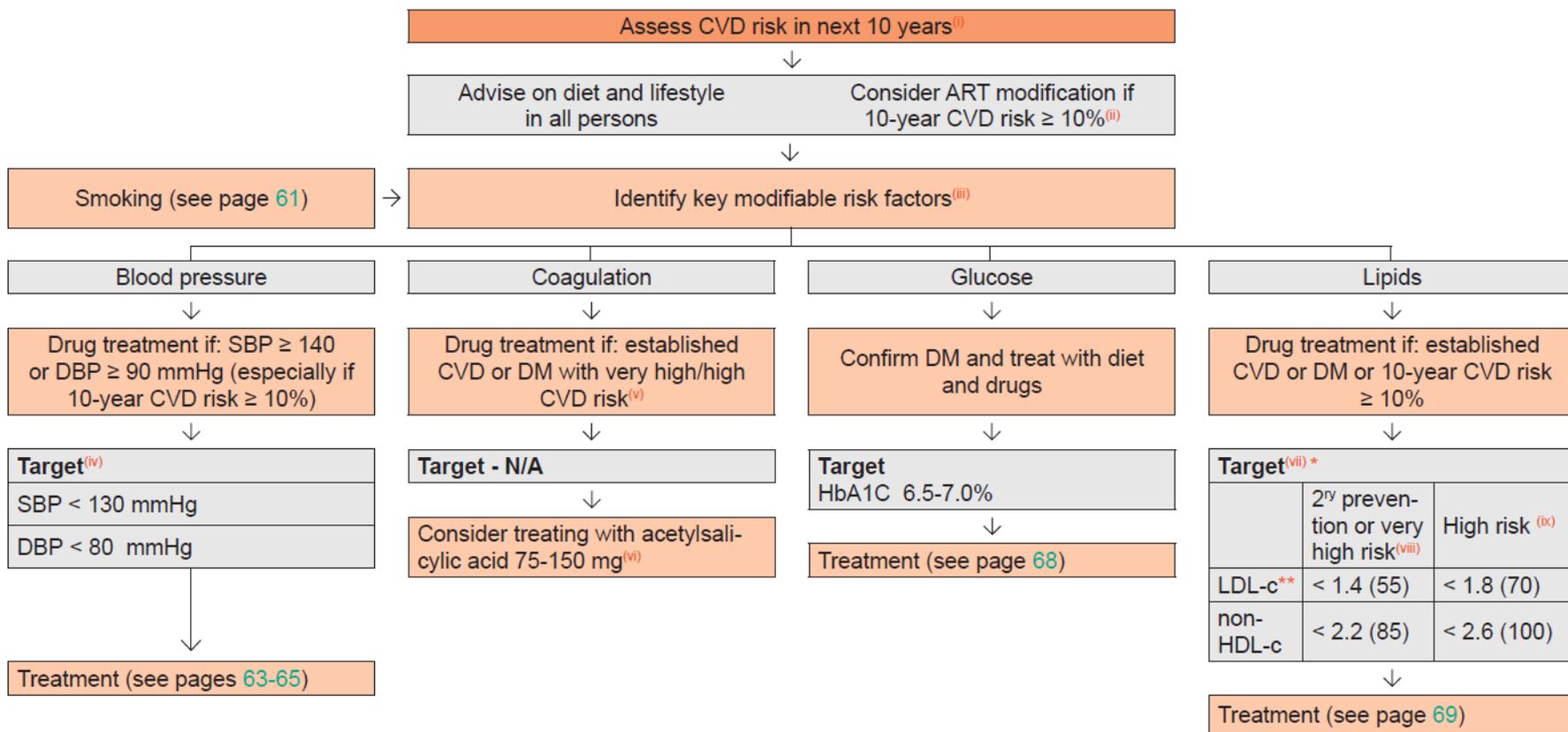
Third Line[†]

A + C + D + Spirolactone (12.5-50 mg)

Add α -blocker or β -blocker and refer to specialist

*2 antihypertensive drugs are increasingly recommended as first-line and second-line therapy, particularly if pretreatment SBP is ≥ 160 mm Hg. [†]Wait 4-6 wks to assess if target is achieved; if not, proceed to next step. [‡]If not tolerated or if deemed high risk of heart failure, a thiazide-type diuretic can be used instead. If dihydropyridine calcium channel blocker is preferred but not tolerated, verapamil or diltiazem may be used.

Πρόληψη καρδιαγγειακής νόσου (CVD)



Use Framingham equation or similar annually in all men with HIV > 40 yrs of age and all women with HIV > 50 yrs of age without CVD.

* Fasting or non-fasting samples may be used
** and ≥ 50% reduction from baseline

†Replace with ARV known to cause less metabolic disturbances; consider replacing ZDV or ABC with TDF or use an NRTI-sparing regimen

Στατίνες, αντιυπερτασικά: Αλληλεπιδράσεις με HAART

| Non-ARV drugs | ATV/c | ATV/r | DRV/c | DRV/r | LPV/r | EFV | ETV | NVP | RPV | MVC | DTG | EVG/c | RAL | ABC | FTC | 3TC | TAF | TDF | ZDV |
|---------------|----------------|----------------|-------|-------|----------------|--------|------|--------|-----|-----|-----|-------|-----|-----|-----|-----|-----|-----|-----|
| atorvastatin | ↑822% | ↑ | ↑290% | ↑ | ↑490% | ↓43% | ↓37% | ↓ | ↔ | ↔ | ↔ | ↑ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| fluvastatin | ↑ | ↑ | ↑ | ↔ | ↔ | ↑ | ↑ | ↔ | ↔ | ↔ | ↔ | ↑ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| pravastatin | ↑ | ↑ | ↑ | ↑81% | ↔ | ↓44% | ↓ | ↔ | ↔ | ↔ | ↔ | ↑ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| rosuvastatin | ↑242% | ↑213% | ↑93% | ↑48% | ↑107% | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↑38% | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| simvastatin | ↑ | ↑ | ↑ | ↑ | ↑ | ↓68% | ↓ | ↓ | ↔ | ↔ | ↔ | ↑ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| amlodipine | ↑ ^o | ↑ ^o | ↑ | ↑ | ↑ ^o | ↓ | ↓ | ↓ | ↔ | ↔ | ↔ | ↑ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| diltiazem | ↑ ^o | ↑ ^o | ↑ | ↑ | ↑ ^o | ↓69% | ↓E | ↓ | E | E | ↔ | ↑ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| metoprolol | ↑ ^o | ↑ ^o | ↑ | ↑ | ↑ ^o | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↑ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| verapamil | ↑ ^o | ↑ ^o | ↑ | ↑ | ↑ ^o | ↓ | ↓E | ↓ | E | E | ↔ | ↑ | ↔ | ↔ | ↔ | ↔ | E | E | ↔ |
| warfarin | ↑ | ↑ or ↓ | ↑ | ↓ | ↓ | ↑ or ↓ | ↑ | ↑ or ↓ | ↔ | ↔ | ↔ | ↓ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |

Αλληλεπιδράσεις ART με στατίνες

| Antiretroviral | Contraindicated | Titrate Dose | No Dose Adjustment |
|-------------------------------------|---------------------------|--|------------------------------|
| RPV ^[1] | | | Atorvastatin Pitavastatin |
| EVG/COBI/FTC/ TDF ^[1] | Lovastatin Simvastatin | Atorvastatin Rosuvastatin | |
| DTG ^[1,2] | | Metformin | |
| ATV/RTV ^[1] | Lovastatin Simvastatin | Atorvastatin Rosuvastatin | Pitavastatin |
| DRV/RTV ^[1] | Lovastatin Simvastatin | Atorvastatin Pravastatin Rosuvastatin | Pitavastatin |
| EFV ^[1] | | Atorvastatin Simvastatin Pravastatin Rosuvastatin | Pitavastatin |
| RAL ^[1] | | | |
| ATV/COBI or DRV/COBI | Lovastatin Simvastatin | | |

www.hiv-druginteractions.org



Interaction Report

Report ID: DE EY
Date Produced: 09 June 2016

Antiretroviral Treatment

Cobicistat (with ATV or DRV)
Darunavir

Co-medications

Clopidogrel
Diltiazem
Fish oils
Perindopril
Rosuvastatin
Trazodone

Table 1. Co-morbidities (1)

| | Assessment | At HIV diagnosis | Prior to starting ART | Follow-up frequency | Comment | See page |
|-------------------------------|--|------------------|-----------------------|---------------------|--|----------|
| CO-MORBIDITIES | | | | | | |
| Haematology | FBC | + | + | 3-12 months | | |
| | Haemoglobinopathies | + | | | Screen at risk persons | |
| | G6PD | + | | | Screen at risk persons | |
| Body Composition | Body-mass index | + | + | Annual | | 53 |
| Cardiovascular Disease | Risk assessment (Framingham score ⁽ⁱⁱⁱ⁾) | + | + | 2 years | Should be performed in all men > 40 years and women > 50 years without CVD | 54 |
| | ECG | + | +/- | As indicated | Consider baseline ECG prior to starting ARVs associated with potential conduction problems | |
| Hypertension | Blood pressure | + | + | Annual | | 55-56 |
| Lipids | TC, HDL-c, LDL-c, TG ^(iv) | + | + | Annual | Repeat in fasting state if used for medical intervention (i.e. ≥ 8h without caloric intake) | 60 |
| Glucose | Serum glucose | + | + | Annual | Consider oral glucose tolerance test / HbA1c if fasting glucose levels of 5.7-6.9 mmol/L (100-125 mg/dL) | 58-59 |
| Pulmonary Disease | Respiratory symptoms and risk factors ^(xii) | + | + | Annual | If severe shortness of breath is reported with preserved spirometry, echocardiography may be performed to rule out heart failure and/or pulmonary hypertension | 89 |
| | Spirometry | | | As indicated | Spirometry should be performed in all symptomatic persons ^(xii) | |
| Liver Disease | Risk assessment ^(v) | + | + | Annual | | 69-72 |
| | ALT/AST, ALP, Bilirubin | + | + | 3-12 months | More frequent monitoring prior to starting and on treatment with hepatotoxic drugs | |
| | Staging of liver fibrosis | | | 12 months | In HCV and/or HBV co-infected persons (e.g. FibroScan, serum fibrosis markers) | 69-72 |
| | Hepatic ultrasound | | | 6 months | Persons with liver cirrhosis ^(xiii) | 69-72 |

Έλεγχος για συννοσηρότητες (2)

| | Assessment | At HIV diagnosis | Prior to starting ART | Follow-up frequency | Comment | See page |
|----------------------|--|------------------|-----------------------|---------------------|--|----------|
| Renal Disease | Risk assessment ^(vi) | + | + | Annual | More frequent monitoring if eGFR < 90mL/min, CKD risk factors present ^(vi) and/or prior to starting and on treatment with nephrotoxic drugs ^(ix) | 64-65 |
| | eGFR (CKD-EPI) ^(vii) | + | + | 3-12 months | | |
| | Urine dipstick analysis ^(viii) | + | + | Annual | | |
| Bone Disease | Bone profile: calcium, PO ₄ , ALP | + | + | 6-12 months | | 61-63 |
| | Risk assessment ^(x) (FRAX ^{®(xi)} in persons > 40 years) | + | + | 2 years | Consider DXA in specific persons (see page 61 for details) | |
| Vitamin D | 25(OH) vitamin D | + | | As indicated | Screen at risk persons | 62 |
| Cognitive impairment | Screening questionnaire | + | + | As indicated | Screen all persons without highly confounding conditions. If abnormal or symptomatic, see algorithm page 88 for further assessment. | 88 |
| Depression | Questionnaire | + | + | As indicated | Screen at risk persons | 84-85 |
| Cancer | Mammography | | | 1-3 years | Women 50-70 years | 52 |
| | Cervical PAP or liquid based cytology | | | 1-3 years | HIV-positive women > 21 years | |
| | Rectal exam and anoscopy | | | 1-3 years | MSM and persons with HPV-associated dysplasia. Evidence of benefit not known | |
| | Ultrasound and alpha-foe-toprotein | | | 6 months | Controversial; persons with cirrhosis and persons with HBV co-infection at high risk of HCC ^(xiii) | |
| | Others | | | | Controversial | |

Επιλογή αρχικής θεραπείας

Παράγοντες του φαρμάκου

Αριθμός χαπιών, μέγεθος, συχνότητα και διατροφικές ανάγκες αποτελεσματικότητα

Προφίλ ανοχής/τοξικότητας

Παράγοντες ασθενούς

Προ θεραπείας αριθμός **CD4+** κυττάρων

Συννοσηρότητες (καρδιαγγειακός κίνδυνος, ψυχιατρική νόσος)

Συγχορηγούμενα φάρμακα (αντιφυματικά, PPI για γαστρίτιδα,...), συλλοίμωξη

Προτίμηση ασθενούς, συμμόρφωση

Προοπτική εγκυμοσύνης

Παράγοντες του ιού

Ύπαρξη πρωτογενούς αντοχής

HIV-1 RNA προ της έναρξης



International Guidance on First-line ART

| DHHS ¹ | IAS-USA ² | EACS ³ | WHO ⁴ |
|--|---|---|---|
| <p><i>Recommended Initial Regimens for Most PWH</i></p> <ul style="list-style-type: none"> ▪ BIC/FTC/TAF ▪ DTG/ABC/3TC* ▪ DTG + XTC + (TAF or TDF) ▪ DTG/3TC[†] | <p><i>Recommended Initial Regimens for Most PWH</i></p> <ul style="list-style-type: none"> ▪ BIC/FTC/TAF ▪ DTG + FTC/TAF or XTC/TDF ▪ DTG + 3TC^{†‡} | <p><i>Recommended</i></p> <ul style="list-style-type: none"> ▪ BIC/FTC/TAF ▪ DTG/ABC/3TC* ▪ DTG + FTC/TAF or XTC/TDF ▪ RAL + FTC/TAF or XTC/TDF ▪ DTG + 3TC[§] ▪ DOR + FTC/TAF or XTC/TDF or DOR/3TC/TDF | <p><i>Recommended</i></p> <ul style="list-style-type: none"> ▪ DTG + XTC/TDF <p><i>Alternative</i></p> <ul style="list-style-type: none"> ▪ EFV + 3TC + TDF |

*Only if HLA-B*5701 negative. †Except when HIV-1 RNA >500,000 copies/mL, HBV coinfecting, or ART to be started before

RT genotypic resistance testing or HBV testing results available. ‡“Perhaps” not recommended for patients with a CD4+ cell count <200 cells/mm³. §Only if HBsAg negative and HIV-1 RNA <500,000 copies/mL.

1. DHHS. Guidelines for the use of antiretroviral agents in adults and adolescents living with HIV.

2. Saag. JAMA. 2020;324:1651. 3. EACS Guidelines v11.0, October 2021. 4.

who.int/publications/i/item/9789240031593.



Initial Combination Regimen for ART-naïve Adult PLWH

| Regimen | Main requirements | Additional guidance (see footnotes) |
|--|--|---|
| Recommended regimens | | |
| 2 NRTIs + INSTI | | |
| ABC/3TC + DTG ABC/3TC/DTG | HLA-B*57:01 negative HBsAg negative | I (ABC: HLA-B*57:01, cardiovascular risk) II (Weight increase (DTG)) |
| TAF/FTC/BIC | | II (Weight increase (BIC, TAF)) |
| TAF/FTC or TDF/XTC + DTG | | II (Weight increase (DTG, TAF)) III (TDF: prodrug types. Renal and bone toxicity. TAF dosing) |
| TAF/FTC or TDF/XTC + RAL qd or bid | | II (Weight increase (RAL, TAF)) III (TDF: prodrug types. Renal and bone toxicity. TAF dosing) IV (RAL: dosing) |
| 1 NRTI + INSTI | | |
| XTC + DTG or 3TC/DTG | HBsAg negative HIV-VL < 500,000 copies/mL Not recommended after PrEP failure | II (Weight increase (DTG)) V (3TC/DTG not after PrEP failure) |
| 2 NRTIs + NNRTI | | |
| TAF/FTC or TDF/XTC + DOR or TDF/3TC/DOR | | II (Weight increase (TAF)) III (TDF: prodrug types. Renal and bone toxicity. TAF dosing) VI (DOR: caveats, HIV-2) |

Initial Combination Regimen for ART-naïve Adult PLWH (cont')

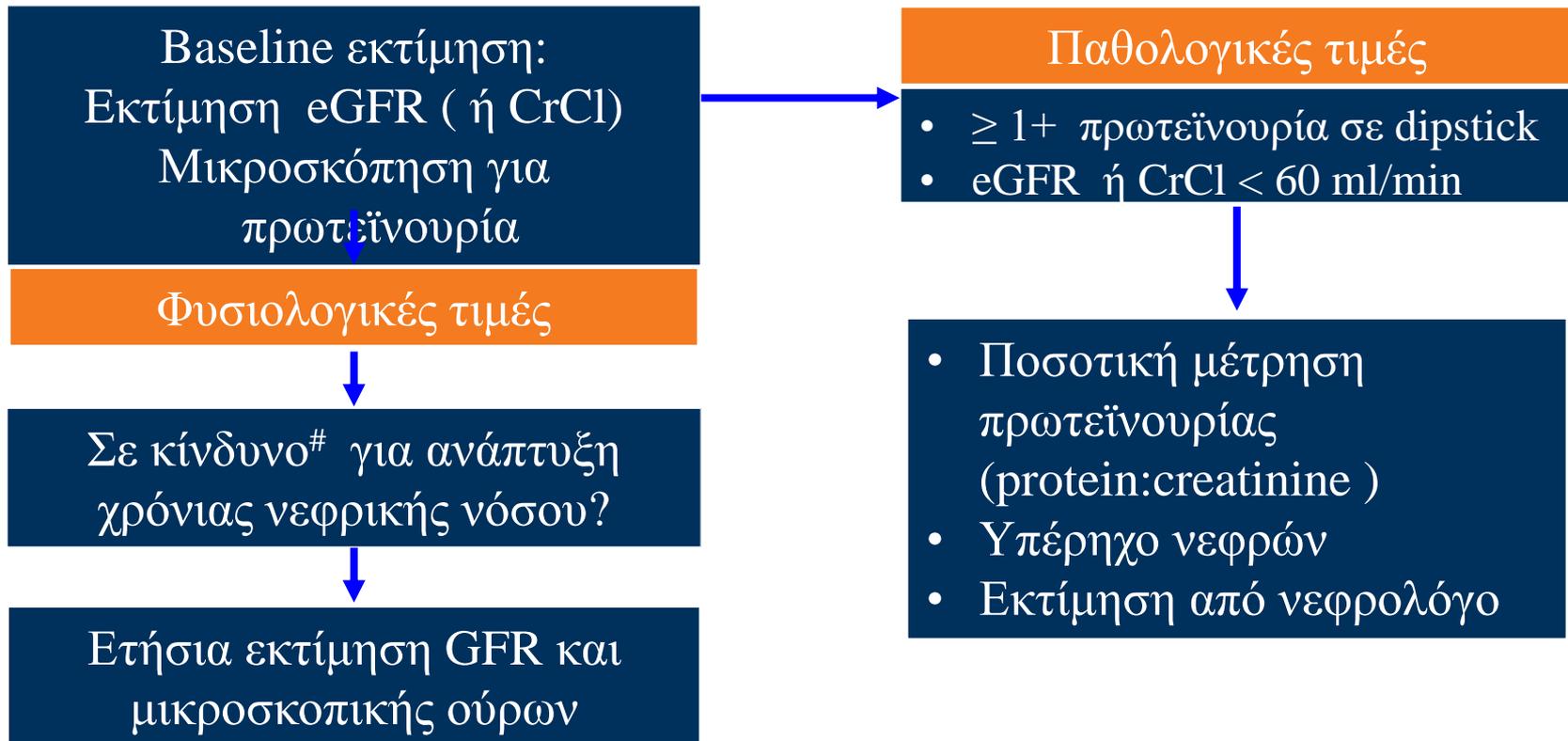
| Regimen | Main requirements | Additional guidance (see footnotes) |
|--|--|---|
| Alternative regimens | | |
| 2 NRTIs + NNRTI | | |
| TAF/FTC or TDF/XTC + EFV or TDF/FTC/EFV | At bedtime or 2 hours before dinner | <ul style="list-style-type: none"> II (Weight increase (TAF)) III (TDF: prodrug types. Renal and bone toxicity. TAF dosing) VII (EFV: neuro-psychiatric adverse events. HIV-2 or HIV-1 group 0) |
| TAF/FTC or TDF/XTC + RPV or TAF/FTC/RPV or TDF/FTC/RPV | CD4 count > 200 cells/ μ L HIV-VL < 100,000 copies/mL Not on gastric pH increasing agents With food | <ul style="list-style-type: none"> II (Weight increase (TAF)) III (TDF: prodrug types. Renal and bone toxicity. TAF dosing) VIII (RPV: HIV-2) |
| 2 NRTIs + PI/r or PI/c | | |
| TAF/FTC or TDF/XTC + DRV/c or DRV/r or TAF/FTC/DRV/c | With food | <ul style="list-style-type: none"> II (Weight increase (TAF)) III (TDF: prodrug types. Renal and bone toxicity. TAF dosing) IX (DRV/r: cardiovascular risk) X (Boosted regimens and drug-drug interactions) |

Μελέτες που διερευνούν συσχέτιση Abacavir και εμφράγματος

| Study | Association? | Description |
|---|--------------|---|
| D:A:D ^[1] | ✓ | Cohort collaboration (prospective) |
| Danish HIV Cohort ^[2] | ✓ | Cohort (linked with registries) |
| Montreal study ^[3] | ✓ | Nested case-control study |
| SMART ^[4] | ✓ | Post hoc subgroup analysis of RCT (use of ABC not randomised) |
| STEAL ^[5] | ✓ | Preplanned secondary analysis of RCT (use of ABC randomised) |
| Desai et al ^[6] | ✓ | Cohort (retrospective) |
| Swiss HIV Cohort ^[7] | ✓ | Cohort (prospective) |
| FHDH ANRS CO4 ^[8] | ? | Nested case-control study |
| NA-ACCORD ^[9] | ? | Cohort (retrospective) |
| VA Clinical Case Registry ^[10] | × | Cohort (retrospective) |
| Brothers et al. analysis ^[11] | × | Post hoc meta-analysis of RCTs |
| ACTG A5001/ALLRT ^[12] | × | Post hoc meta-analysis of RCTs |
| FDA meta-analysis ^[13] | × | Post hoc meta-analysis of RCTs |

1. Friis-Møller N, et al. N Engl J Med. 2003;349:1993-2003. 2. Obel N, et al. HIV Med. 2010;11:130-136. 3. Durand M, et al. J Acquir Immune Defic Syndr. 2011;57:245-253. 4. Phillips AN, et al. Antiv Ther. 2008;13:177-187. 5. Martin A, et al. AIDS. 2010;24:2657-2663. 6. Desai M, et al. Clin Infect Dis. 2015;[Epub ahead of print]. 7. Young J, et al. J Acquir Immune Defic Syndr. 2015;[Epub ahead of print]. 8. Lang S, et al. AIDS. 2010;24:1228-1230. 9. Palella F, et al. CROI 2015. Abstract 749LB. 10. Bedimo RJ, et al. Clin Infect Dis. 2011;53:84-91. 11. Brothers CH, et al. J Acquir Immune Defic Syndr. 2009;51:20-28. 12. Ribaldo HJ, et al. Clin Infect Dis. 2011;52:929-940. 13. Ding X, et al. J Acquir Immune Defic Syndr. 2012;61:441-447.

Screening για νεφρική νόσο σε HIV (+) ασθενείς



παράγοντες κινδύνου για ΧΝΝ: έγχρωμος, Σ.Δ., υπέρταση, HCV, CD4 counts < 200 cells/mm³, HIV RNA > 4000 copies/ml

CrCl Cutoffs for Single-Tablet Regimens

| Single-Tablet Regimen | FDA Approved for Pts With CrCl, mL/min |
|---------------------------------------|--|
| EVG/COBI/TDF/FTC^[1] | ≥ 70 |
| EFV/TDF/FTC^[2] | ≥ 50 |
| RPV/TDF/FTC^[3] | ≥ 50 |
| DTG/ABC/3TC^[4] | ≥ 50 |
| EVG/COBI/TAF/FTC^[5] | ≥ 30 |

Vaccination

- Vaccinate according to national guidelines for healthy population, preferably after having achieved suppressed viraemia and immune reconstitution (CD4 count > 200 cells/ μ L)
 - Consider repeating vaccinations performed at CD4 count < 200 cells/ μ L (< 14%) or unsuppressed viraemia once adequate immune reconstitution is achieved (HIV-VL undetectable and CD4 count > 200 cells/ μ L)
 - As vaccine responses may be significantly lower in PLWH (i.e. lower seroconversion rates, faster titer decline), do not use rapid schedules and consider antibody titers to assess their effectiveness if vaccinated at CD4 count < 200 cells/ μ L or unsuppressed viraemia (e.g. rabies, tick-borne encephalitis, HAV, meningococci)
 - Avoid polysaccharide vaccination
 - For background data, see <http://www.bhiva.org/vaccination-guidelines.aspx>
- For attenuated live vaccines⁽ⁱ⁾
(in addition to restrictions for general population):
 - ***Varicella, measles, mumps, rubella, yellow fever**
Contraindicated if CD4 count < 200 cells/ μ L (14%) and/or AIDS. Impaired protection after vaccination with unsuppressed viraemia
 - **Oral live typhoid**
Contraindicated if CD4 count < 200 cells/ μ L (14%): give inactivated parenteral polysaccharide vaccine. Preferred if CD4 count > 200 cells/ μ L (> 14%)

Vaccination

| Infection | |
|-------------------------------|--|
| Influenza Virus | Yearly |
| Human Papilloma Virus (HPV) | Vaccinate with 3 doses for all HIV-positive persons up to age 9 / age 40 if MSM. Use 9-valent vaccine if available. |
| Hepatitis B Virus (HBV) | Vaccinate if seronegative. Repeat doses until anti-HBs antibodies ≥ 10 IU/L / ≥ 100 IU/L |
| Hepatitis A Virus (HAV) | Vaccinate if seronegative.. Weaker immune response expected with HAV/HBV co-vaccine. |
| <i>Neisseria meningitidis</i> | Use conjugated vaccine (2 doses 1-2 months apart) if available. Booster every five years if exposure continues. Polysaccharide vaccine not recommended anymore |

Ανταπόκριση σε εμβολιασμό έναντι HBV σε συλλοίμωξη

87% σε CD4 > 500

33% σε CD4 200-500

Σε ασθενείς με χαμηλό αριθμό CD4 (< 200/ μ L)
και HIV ιαιμία, θα πρέπει προ του εμβολιασμού
να γίνεται έναρξη ART

Σε CD4 200-500, συστήνονται 4 δόσεις εμβολίου:
Μήνας 0, 1, 2, and 6-12

Σε μη ανταπόκριση, επανάληψη με 40 μ g (διπλή δόση)

Απώλεια προστατευτικών αντισωμάτων έως 30% /έτος

Vaccination

| | |
|---------------------------------|--|
| <i>Streptococcus pneumoniae</i> | One dose of conjugated(iii) 13-valent vaccine (CPV-13) for all individuals, also if pre-vaccinated with PPV-23 polysaccharide vaccine. No general recommendation for any booster dose. |
| Varicella Zoster Virus (VZV) | Vaccinate if seronegative |
| Yellow Fever Virus | Contraindicated if past or current haematological neoplasia or thymus affection (thymoma, resection/radiation). Booster q 10 years. |

Drug-drug Interactions between Antimalarial Drugs and ARVs

| Antimalarial drugs | ATV/c | ATV/r | DRV/c | DRV/r | LPV/r | EFV | ETV | NVP | RPV | MVC | BIC | DTG | EVG/c | RAL | ABC | FTC | 3TC | TAF | TDF | |
|----------------------------------|---------------|----------------|-------------------|-------|----------------|-------------------|-------------------|--------------------|----------------|----------------|-----|-----|-------|-----|-----|-----|-----|-----|-----|---|
| First line and second line drugs | amodiaquine | ↔ | ↑ | ↔ | ↑ | ↑ ^c | ↓? | ↓29% ^c | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | |
| | artemisinin | ↑ | ↑ | ↑ | ↑ | ↓=50% | ↓D | ↓D | D | D | D | ↔ | ↑ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | |
| | atovaquone | ↔ | ↓46% ^a | ↔ | ↓ ^a | ↓74% ^a | ↓75% ^a | ↓E55% ^a | ↓ ^a | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| | chloroquine | ↔ ^b | ↔ ^b | ↔ | ↔ | ↔ ^b | ↔ | ↔ | ↔ | ↔ ^e | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| | clindamycin | ↑ | ↑ | ↑ | ↑ | ↑ | ↓ | ↓ | ↓ | ↔ | ↔ | ↔ | ↔ | ↑ | ↔ | ↔ | ↔ | ↔ | ↔ | |
| | doxycycline | ↔ | ↔ | ↔ | ↔ | ↔ | ↓? | ↓? | ↓? | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| | lumefantrine | ↑ ^b | ↑ ^b | ↑ | ↑ | ↑ ^b | ↓=40% | ↓ | ↓D46% | ↔ ^e | ↔ | ↔ | ↔ | ↑ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| | metfloquine | ↑ ^b | ↑ ^b | ↑ | ↑ | ↑ ^b | ↓ | ↓ | ↓ | ↔ ^e | ↔ | ↔ | ↔ | ↑ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| | primaquine | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ ^d | ↔ ^d | ↔ ^d | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| | proguanil | ↔ | ↓41% ^a | ↔ | ↓ ^a | ↓38% ^a | ↓44% ^a | ↓E55% ^a | ↓ ^a | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| | pyrimethamine | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | E | E | ↔ |
| | quinine | ↑ ^b | ↑ ^b | ↑ | ↑ | ↑ ^b | ↓ | ↓ | ↓ | ↔ ^e | E | ↔ | ↔ | ↑ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ |
| | sulfadoxine | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | ↔ | E | E | ↔ |

ORIGINAL RESEARCH

Acute systemic inflammation induced by influenza A (H1N1) vaccination causes a deterioration in endothelial function in HIV-infected patients

C Vlachopoulos,¹ P Xaplanteris,¹ H Sambatakou,² E Mariolis,² A Bratsas,¹ E Christoforidou,¹ A Miliou,¹ K Aznaouridis¹ and C Stefanadis¹

Conclusions

Acute systemic inflammation induced by vaccination against the influenza A/H1N1 virus resulted in a deterioration in endothelial function in HIV-infected patients, and this effect was sustained for at least 48 h. Our findings may have important implications in view of the high cardiovascular risk that HIV infection carries. The effect of the novel vaccine on endothelial function should be weighed against the immunological protection that it confers.

Επιλογή αρχικής HAART. Σε ποιόν ασθενή?

- Έναρξη σε πρόσφατη λοίμωξη
- Έναρξη σε ασθενή με συννοσηρότητες
- Έναρξη σε ασθενή με προχωρημένη HIV λοίμωξη

Νεοδιαγνωσθείς HIV ασθενής

Συγχορηγούμενα φάρμακα?

Συννοσηρότητες

Συλλοιμώξεις (HCV, HBV, TB)?

Κληρονομικό ιστορικό?

Έξεις, συνήθειες?

Ψυχιατρική κατάσταση?

Ετοιμότητα για έναρξη, συμμόρφωση στην HAART?

Σταδιοποίηση HIV/AIDS κατά CDC

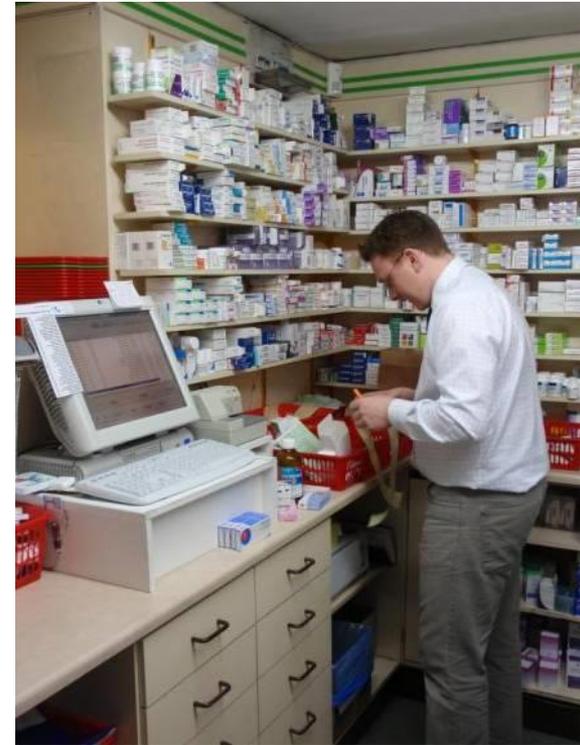
| CD4 cell | ασυμπτωματικοί, ή ΠΓΛ ή οξεία HIV λοίμωξη | συμπτωματικοί (μη A ή C) | νόσος που ορίζει AIDS |
|---|---|-----------------------------|-----------------------------|
| >500/mm ³ (>29%) | A1 | B1 | C1 |
| 200 - 499/mm ³ (14 - 28%) | A2 | B2 | C2 |
| <200/mm ³ (<14%) | A3 | B3 | C3 |



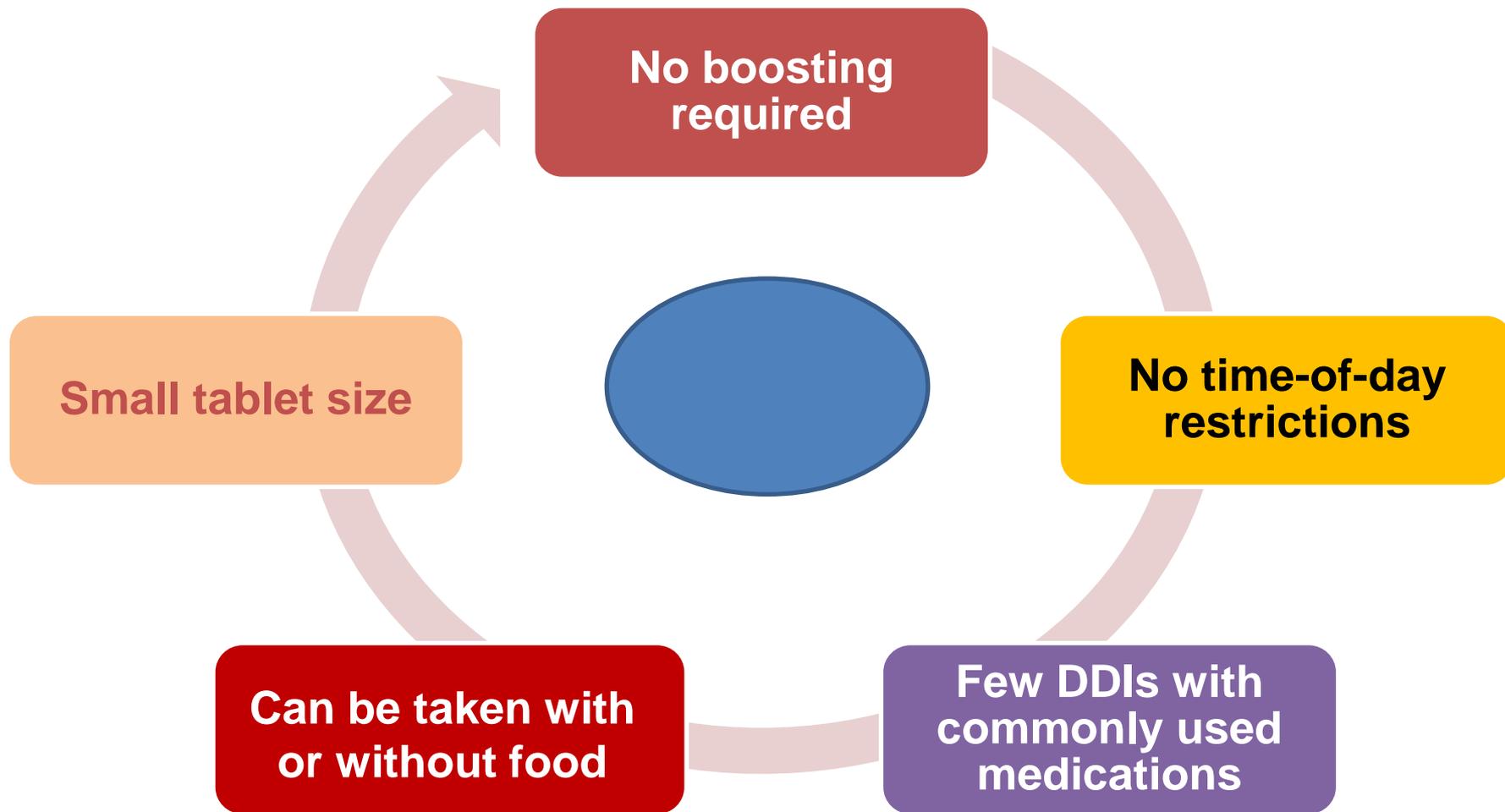
Ετοιμότητα για έναρξη, συμμόρφωση στην HAART

(adherence vs compliance)

- i. Χαρακτηριστικά νόσου
- ii. Κοινωνική στήριξη
- iii. Σχέση ασθενούς-γιατρού
- iv. Πηγές πληροφόρησης
- v. Περιβάλλον παροχής υγείας



CONVENIENCE BEYOND ONCE-DAILY DOSING



Should TDF-Based Regimens Still Be Considered as Initial Therapy?

Two-drug HIV therapy just as effective as three-drug therapy

Gagliardini R et al. *ATLAS-M trial*. abstract 0121, 2016



Same day HIV diagnosis and antiretroviral therapy initiation affects retention in Option B+ prevention of mother-to-child transmission services at antenatal care in Zomba District, Malawi

Adrienne K Chan^{1,2,3}, Emmanuel Kanike¹, Richard Bedell¹, Isabel Mayuni¹, Ruth Manyera¹, William Mlotha⁴,

Results and discussion: A total of 10,528 women were newly registered at ANC between October 2011 and March 2012 in 23 rural health facilities (12 were Model 1 and 11 Model 2). HIV status was ascertained in 8,572 (81%) women. Among 914/8,572 (9%) HIV-positive women enrolling at ANC, 101/914 (11%) were already on ART; of those not on treatment, 456/813 (56%) were started on ART. There was significantly higher ART uptake in Model 1 compared with Model 2 sites (63% vs. 51%; $p = 0.001$), but significantly lower ART retention in Model 1 compared with Model 2 sites (79% vs. 87%; $p = 0.02$). Multivariable analysis showed that initiation of ART on the same day as HIV diagnosis, but not model of care, was independently associated with reduced retention in the first six months (adjusted odds ratio 2.27; 95% CI: 1.34–3.85; $p = 0.002$).

Conclusions: HIV diagnosis and treatment on the same day was associated with reduced retention on ART, independent of the level of PMTCT service integration at ANC.

Trends in the San Francisco Human Immunodeficiency Virus Epidemic in the “Getting to Zero” Era

Susan Scheer,¹ Ling Hsu,¹ Sandra Schwarcz,¹ Sharon Pipkin,¹ Diane Havlir,² Susan Buchbinder,^{2,3,5} and Nancy A. Hessel^{2,4}

¹HIV Epidemiology Section, San Francisco Department of Public Health, and Departments of ²Medicine, ³Epidemiology and Biostatistics, and ⁴Clinical Pharmacy, University of California, and ⁵Bridge HIV, San Francisco Department of Public Health

These initiatives included the San Francisco Department of Public Health (SFDPH) recommendation for **universal antiretroviral therapy (ART)** irrespective of CD4+ lymphocyte count (CD4 cell count) in **2010**, increased **coverage** of and targeted **HIV testing** beginning in **2011** (Tracey Packer, SFDPH, personal communication), same-day initiation of ART at HIV diagnosis in 2012 [2], and **scale-up of HIV PrEP** to prevent HIV acquisition for high risk HIV-negative adults beginning in 2013

Clinical Infectious Diseases

EDITORIAL COMMENTARY



OXFORD

Rapid Antiretroviral Therapy: Time for a new Standard of Care

Susa Coffey,¹ Jason Halperin,² Aadia I. Rana,³ and Jonathan A. Colasanti^{4,5}

Clinical Infectious Diseases® 2020;

ART is recommended in all adults with chronic HIV infection, irrespective of CD4 counts¹⁰

- i ART is recommended irrespective of the CD4 count. In certain situations (i.e lower CD4 count or pregnancy), there is a greater urgency to start ART immediately
- In persons with OIs, ART initiation may have to be deferred, see page 104, for ART initiation in the presence of specific OIs. For ART initiation in persons with TB, see page 20
 - A possible exception to immediate start of ART might be HIV controllers, persons with high CD4 counts and HIV-VL < 1000 copies/mL, although even in such persons ART initiation has been shown to increase CD4 count, decrease inflammation, lower the risk of clinical events and prevent HIV transmission
 - Genotypic resistance testing is recommended prior to initiation of ART, ideally at the time of HIV diagnosis; otherwise before initiation of ART
 - If ART needs to be initiated before genotypic testing results are available, it is recommended to select a first-line regimen with a high barrier to resistance (e.g. a PI/b, DTG or BIC combined with TDF/FTC, TAF/FTC, TDF/3TC or ABC/3TC)
 - Whether rapid, possibly same-day ART start is proposed to newly diagnosed persons or postponed until complementary assessments depends on the setting and medical circumstances, medical indications to start ART more urgently and risk of loss from care. To reduce loss to follow-up between diagnosis and ART initiation, structural barriers delaying the process should be addressed

Recommended Regimens for Rapid ART

DHHS¹

Recommended Regimens

BIC/FTC/TAF

DTG + (TAF or TDF) + (3TC or FTC)
(DRV/RTV or DRV/COBI) + (TAF or
TDF) + (3TC or FTC)

Regimens Not Recommended

NNRTI-based regimens or DTG/3TC
due higher rate of transmitted NNRTI
and NTRI drug resistance

Regimens requiring ABC until HLA-
B*5701 test results received

EACS²

Recommended Regimens

BIC/FTC/TAF

DTG + TDF/FTC, TAF/FTC, TDF/3TC, or
ABC/3TC

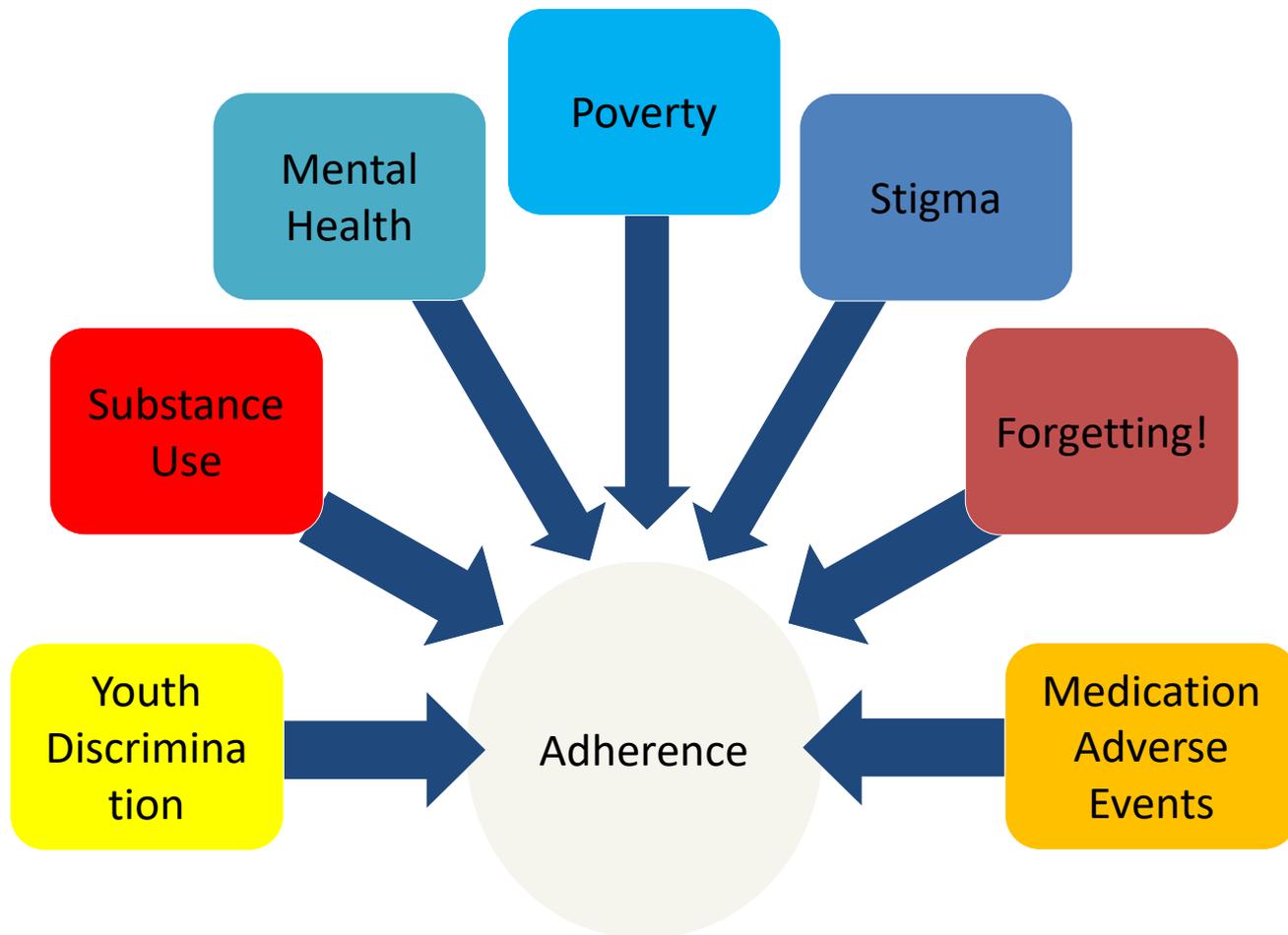
Boosted PI + TDF/FTC, TAF/FTC,
TDF/3TC, or ABC/3TC

Regimens Not Recommended

DTG/3TC requires evaluation of
baseline laboratory test results before
initiation



Assessing Barriers to Care and Treatment



Επιλογή αρχικής θεραπείας

Παράγοντες του φαρμάκου

Αριθμός χαπιών, μέγεθος, συχνότητα και διατροφικές ανάγκες
αποτελεσματικότητα

Προφίλ ανοχής/τοξικότητας

Παράγοντες ασθενούς

Προ θεραπείας αριθμός CD4+ κυττάρων

Συννοσηρότητες (καρδιαγγειακός κίνδυνος, ψυχιατρική νόσος)

Συγχορηγούμενα φάρμακα (αντιφυματικά, PPI,...), συλλοίμωξη

Προτίμηση ασθενούς, συμμόρφωση

Προοπτική εγκυμοσύνης

Παράγοντες του ιού

Ύπαρξη πρωτογενούς αντοχής

HIV-1 RNA προ της έναρξης



Πώς επιλέγω HAART?

- **Ανεπιθύμητες ενέργειες ή επιθυμία για απλούστευση**
- **Γνωστή ή αναμενόμενη μη συμμόρφωση**
- **Προοπτική εγκυμοσύνης**
- **Συλλοίμωξη (HCV, TB)**
- **Συννοσηρότητες**



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αντιμετώπισης HIV και
συννοσηροτήτων σε HIV ασθενείς