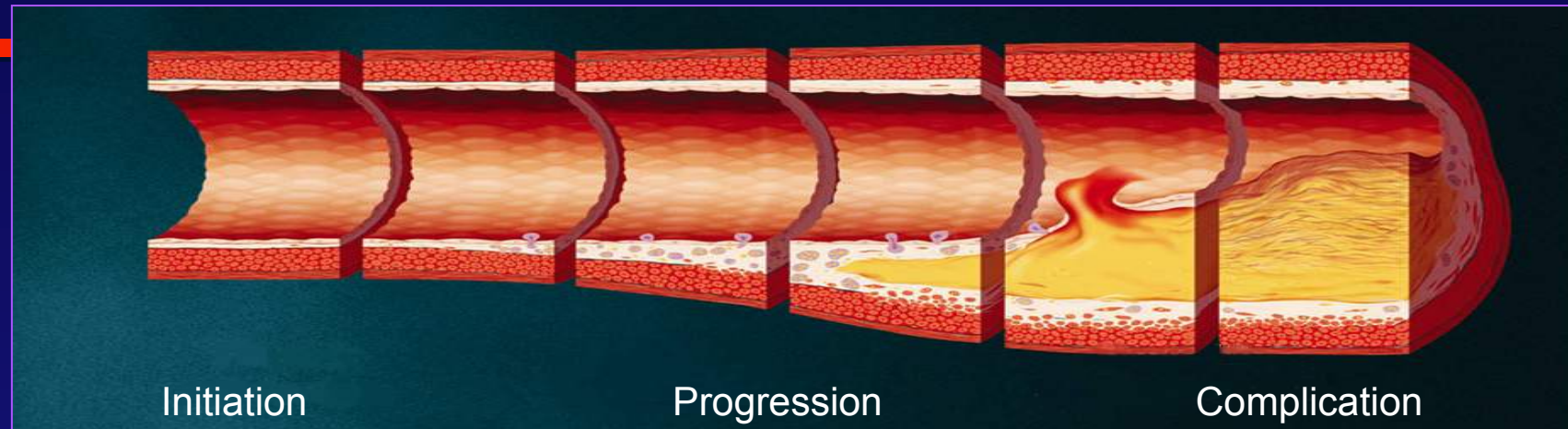


Chronic inflammation Immuneactivation/ senescence



Inflammation

hsCRP, MCP-1
OPG, IL-6
TNF-alpha, IL-10

Endothelial dysfunction
Insulin resistance

ICAM-1, VCAM-1
E-Selectin, P-Selectin
Insulin, Adiponectin

Hypercoagulability

D-dimer

CD38+HLA-DR+CD8 T cells

CD28-CD57+ CD8 T cells, resit. to apoptosis, shortened telomers

Switching strategies (monotherapy & double therapy) in suppressed patients usually consist on:

In the past and now:

Replacing 2NRTI+1IP/r by

LPV/r monotherapy

(OKT4, PIVOT)

DRV/r monotherapy

(MONET, MONOI,
PROTEA, PIVOT)

LPV/r+3TC

(OLE)

ATV/r+3TC

(SALT)

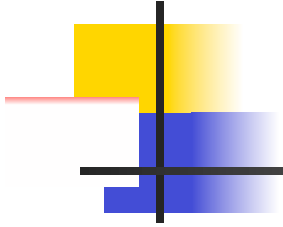
DRV/r+3TC

(DUAL)

DTG +3TC

(DOLAM,.....)

Approaches to HIV management: Horizon 2020



A. The HIV infected individual

B. The pandemic

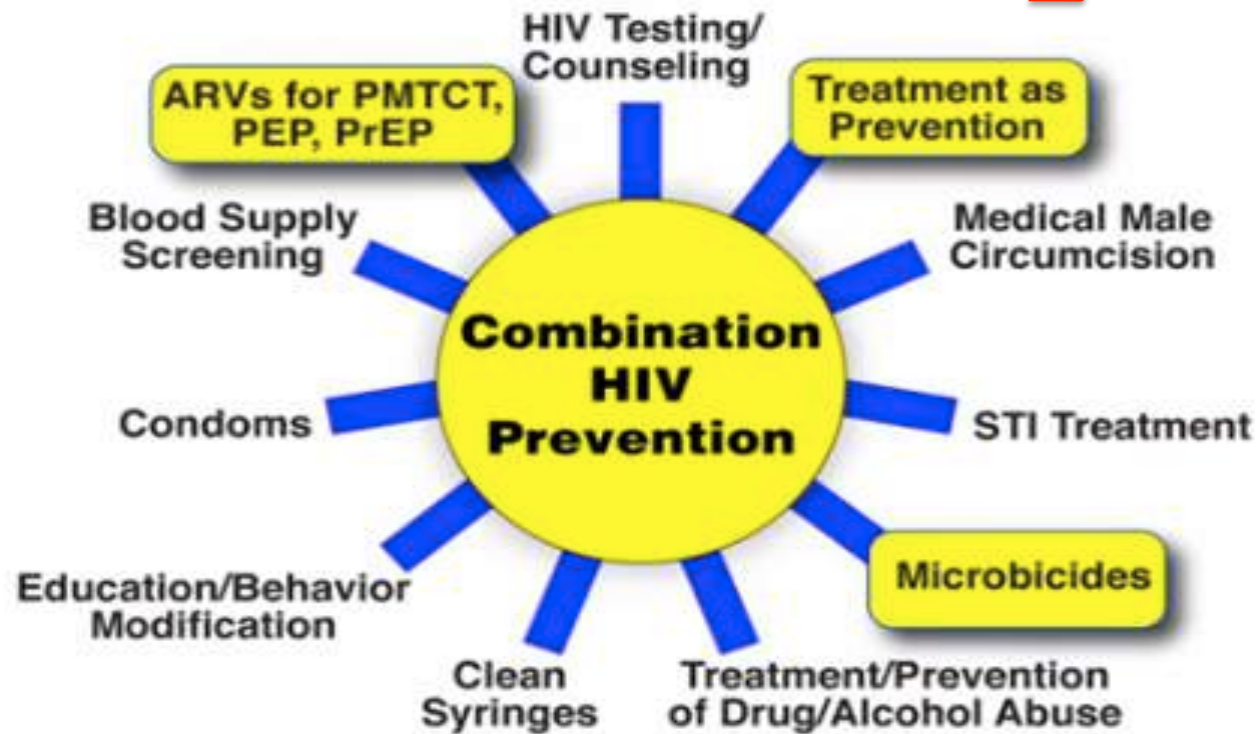
C. In summary....

Approaches to HIV management: Horizon 2020

B. The pandemic

Towards an AIDS free generation
in 2030 ?





HPTN 052: HIV Transmission Reduced by 96% in Serodiscordant Couples

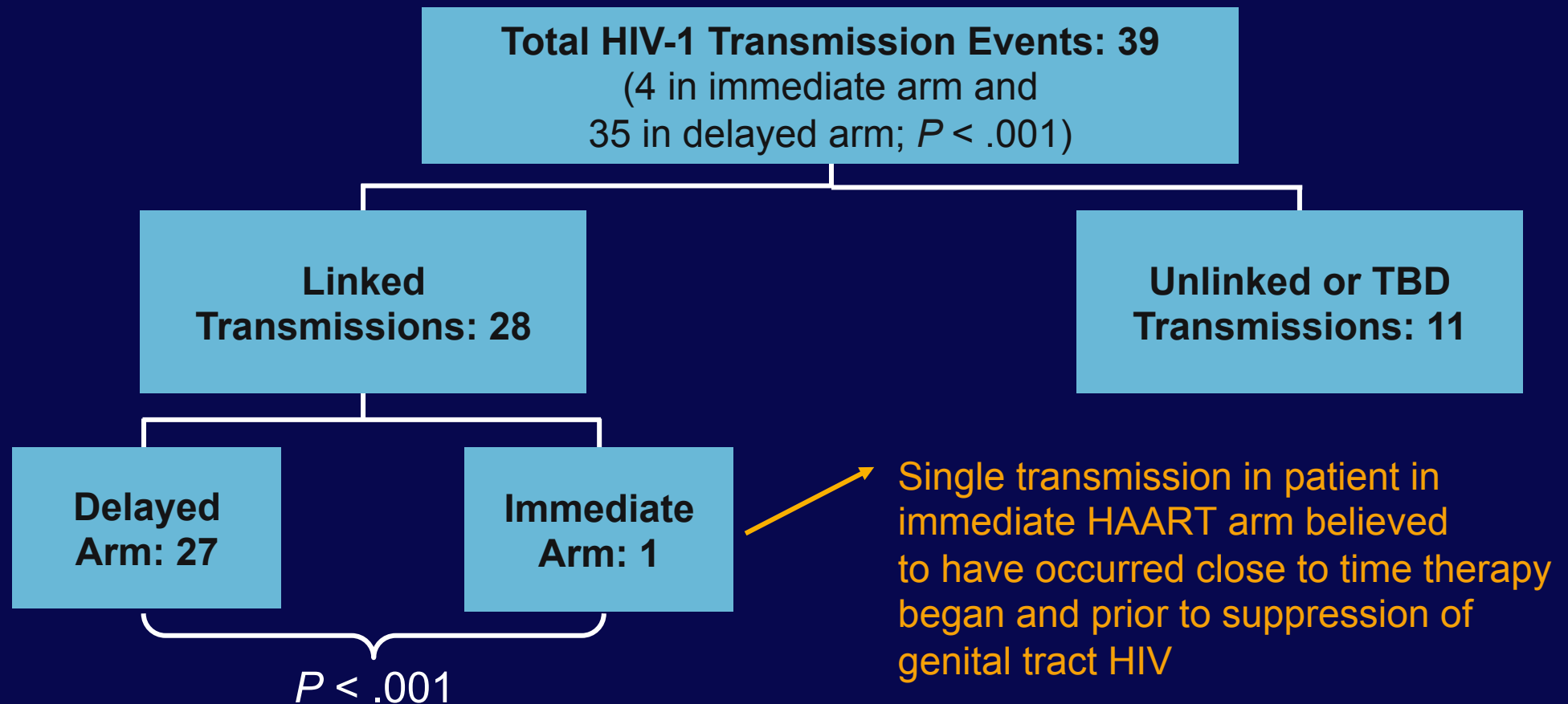


Fig. 5 Objetivos para poner fin a la epidemia de sida

**para el
año 2020**

90-90-90

Tratamiento

500 000

Nuevas infecciones entre adultos

CERO

Discriminación

**para el
año 2030**

95-95-95

Tratamiento

200 000

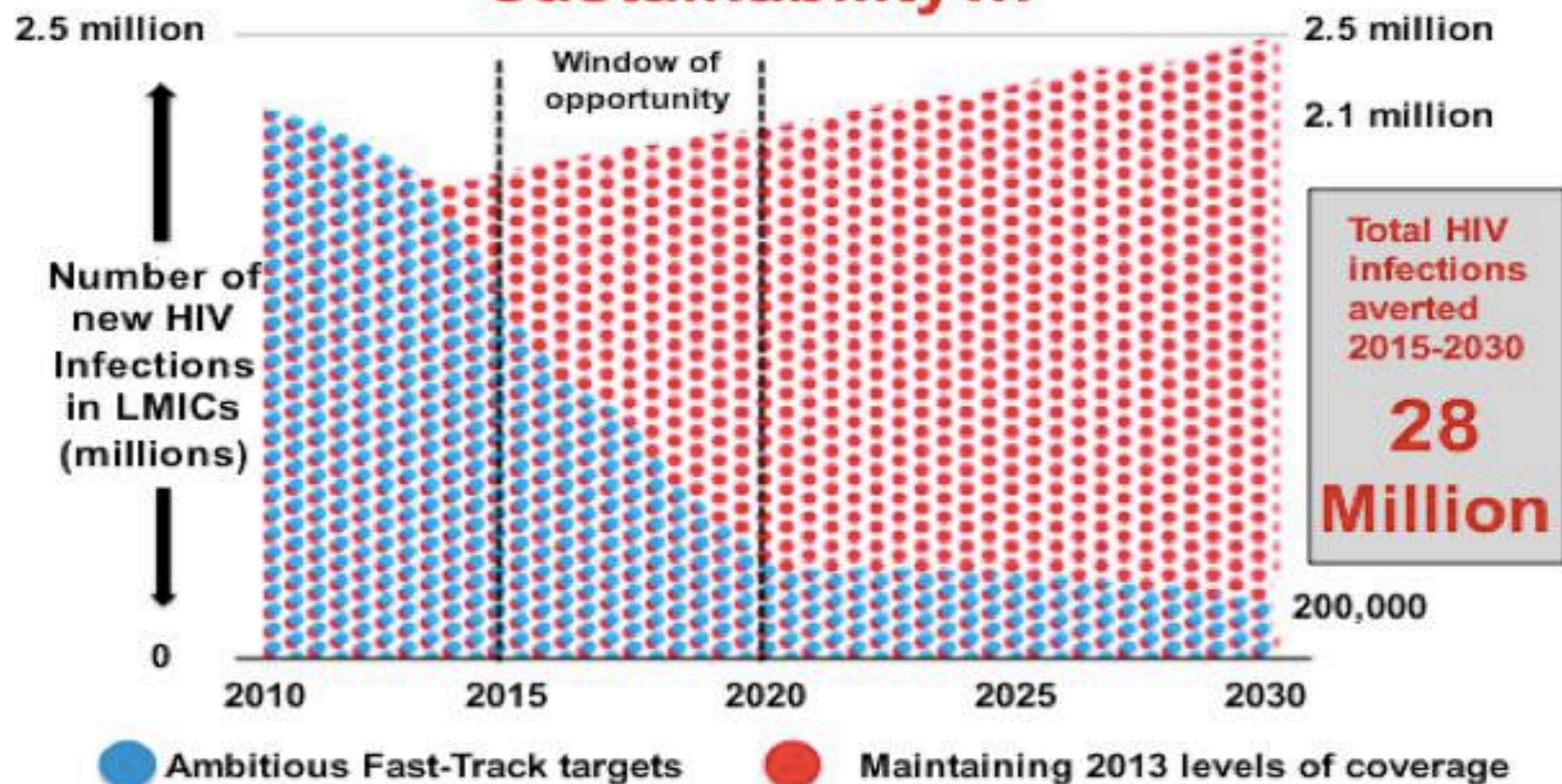
Nuevas infecciones entre adultos

CERO

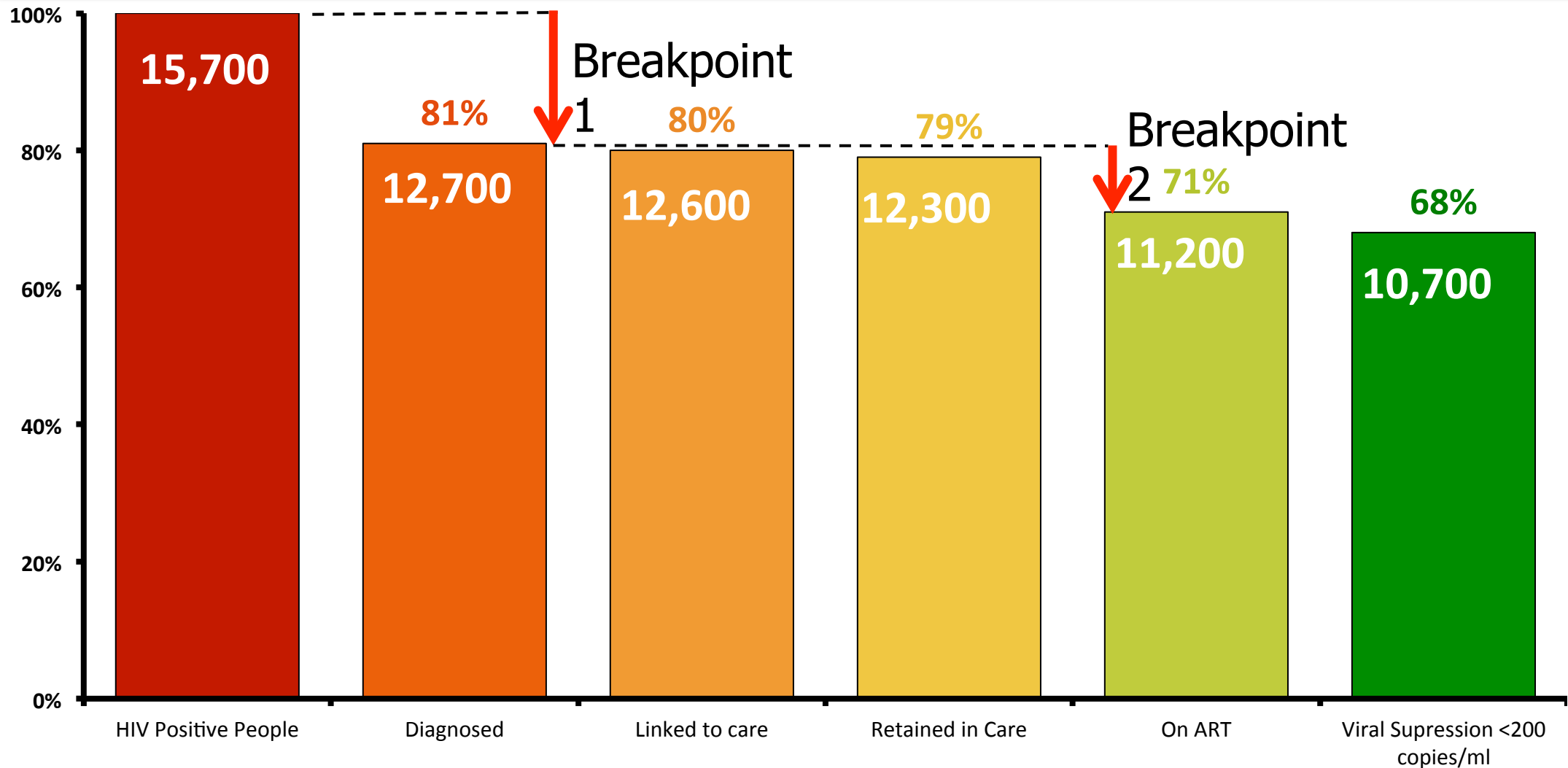
Discriminación

- “Modelling by UNAIDS indicates that the world has a brief, five-year window of opportunity to lay the foundation to end the AIDS epidemic as a public health threat.”

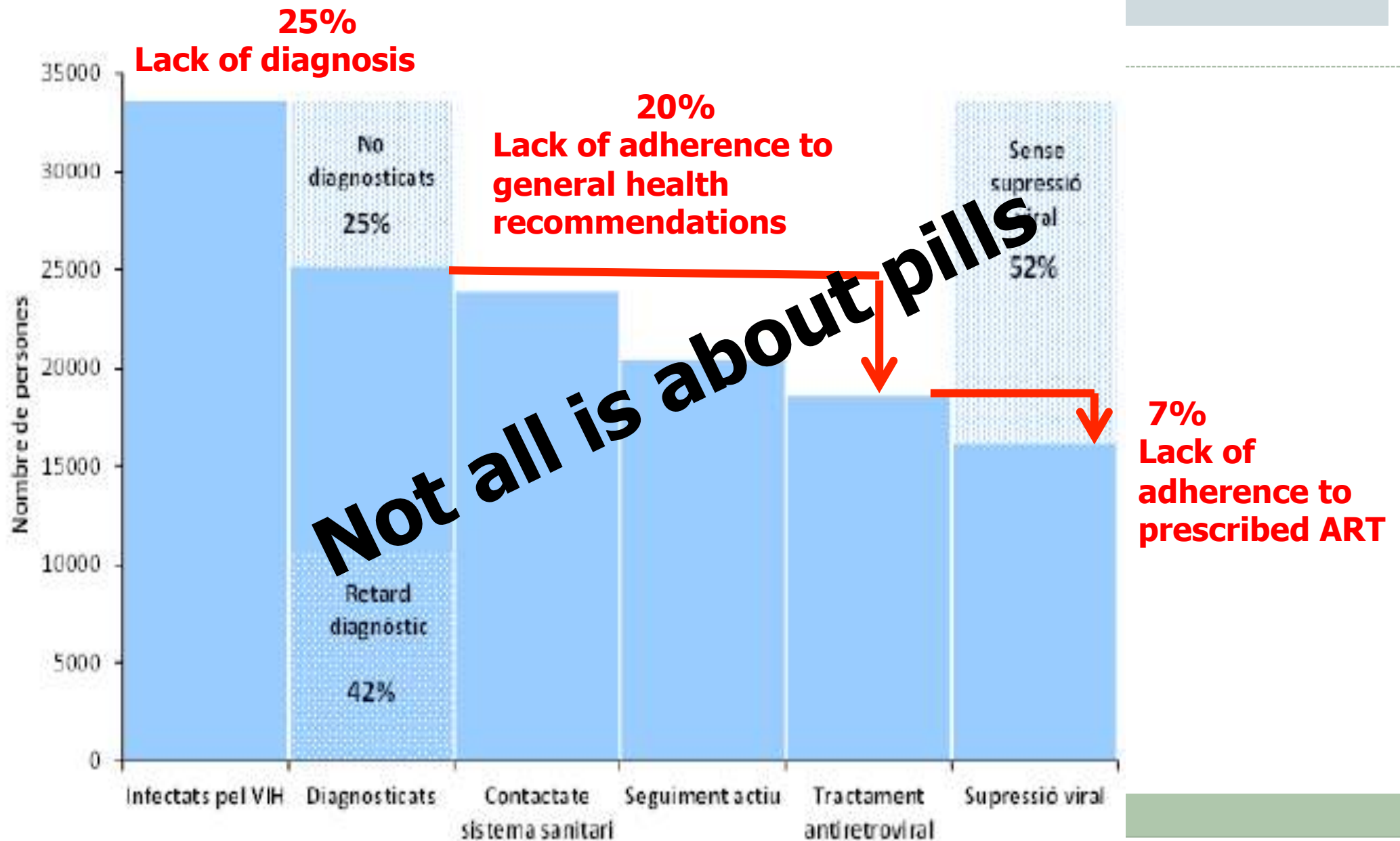
**“The AIDS response is at a crucial juncture,
both in its immediate trajectory and its
sustainability...”**



Cascade of HIV care, Switzerland 2012



SIVES, Catalunya june 2013

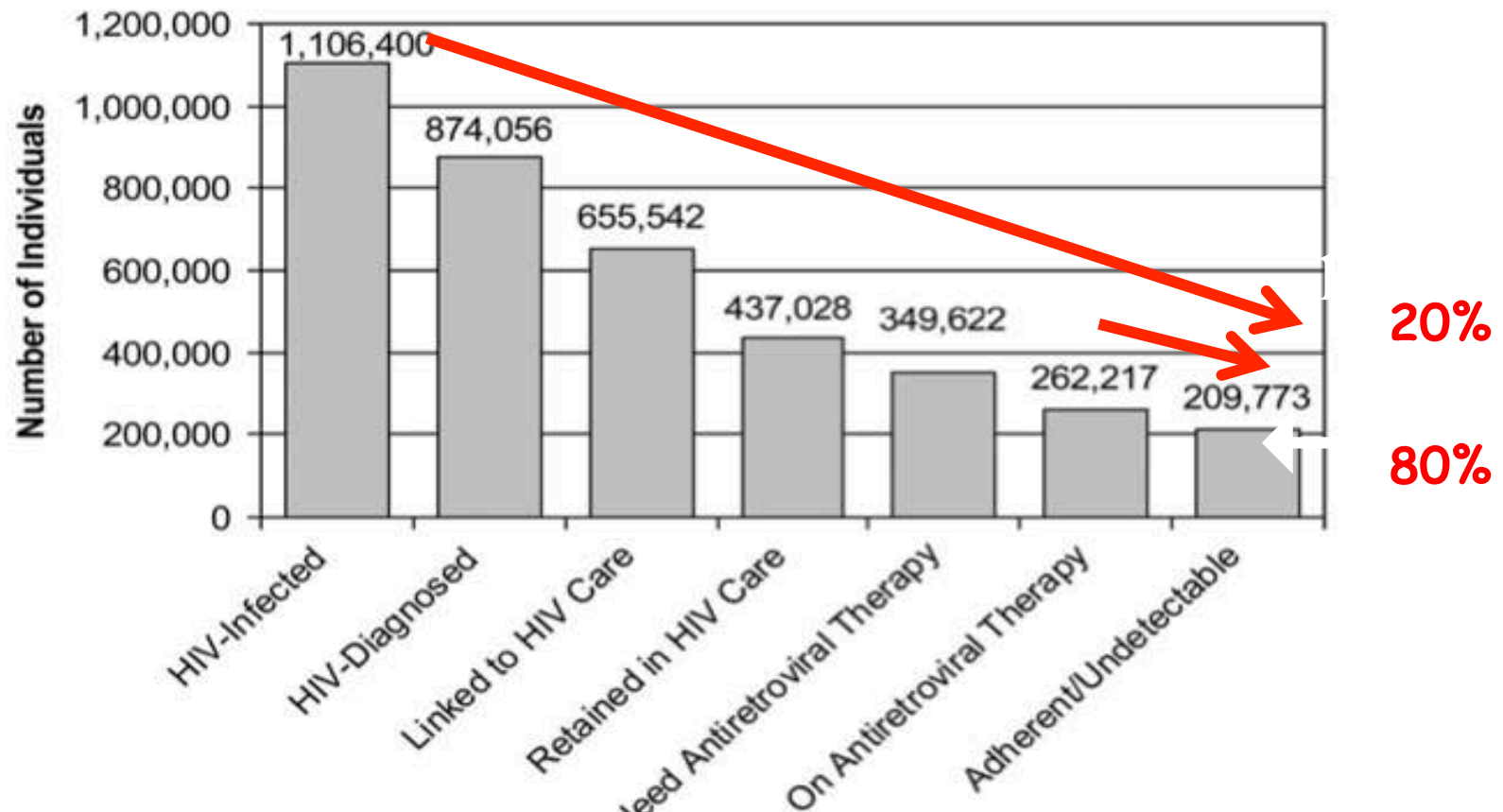


The Spectrum of Engagement in HIV Care and its Relevance to Test-and-Treat Strategies for Prevention of HIV Infection

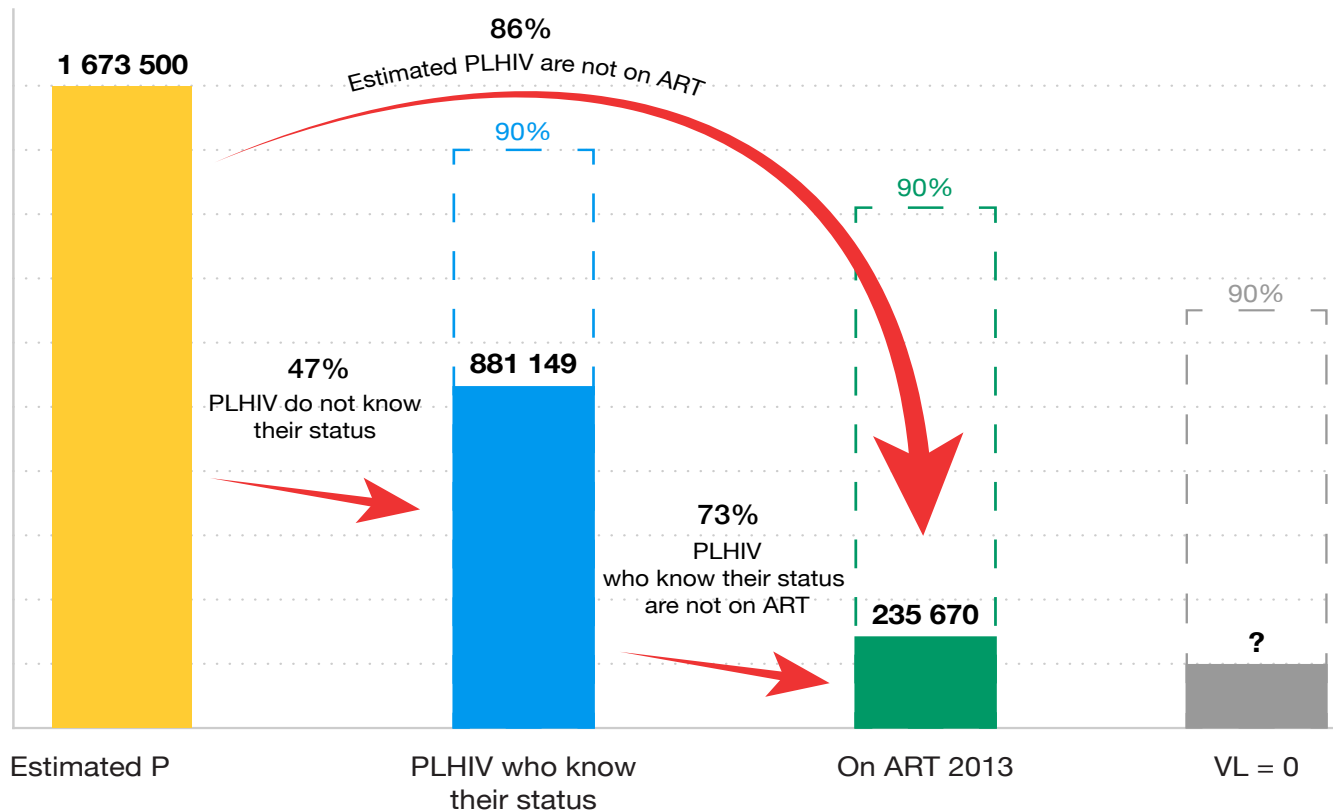
Edward M. Gardner,^{1,3} Margaret P. McLees,^{1,3} John F. Steiner,² Carlos del Rio,^{4,5} and William J. Burman^{1,3}

¹Denver Public Health and ²Kaiser Permanente Colorado, Denver, ³University of Colorado Denver, Aurora, Colorado, and ⁴Rollins School of Public Health of Emory University, and ⁵Emory Center for AIDS Research, Atlanta, Georgia

(See the editorial commentary by Lange, on pages 801–802.)

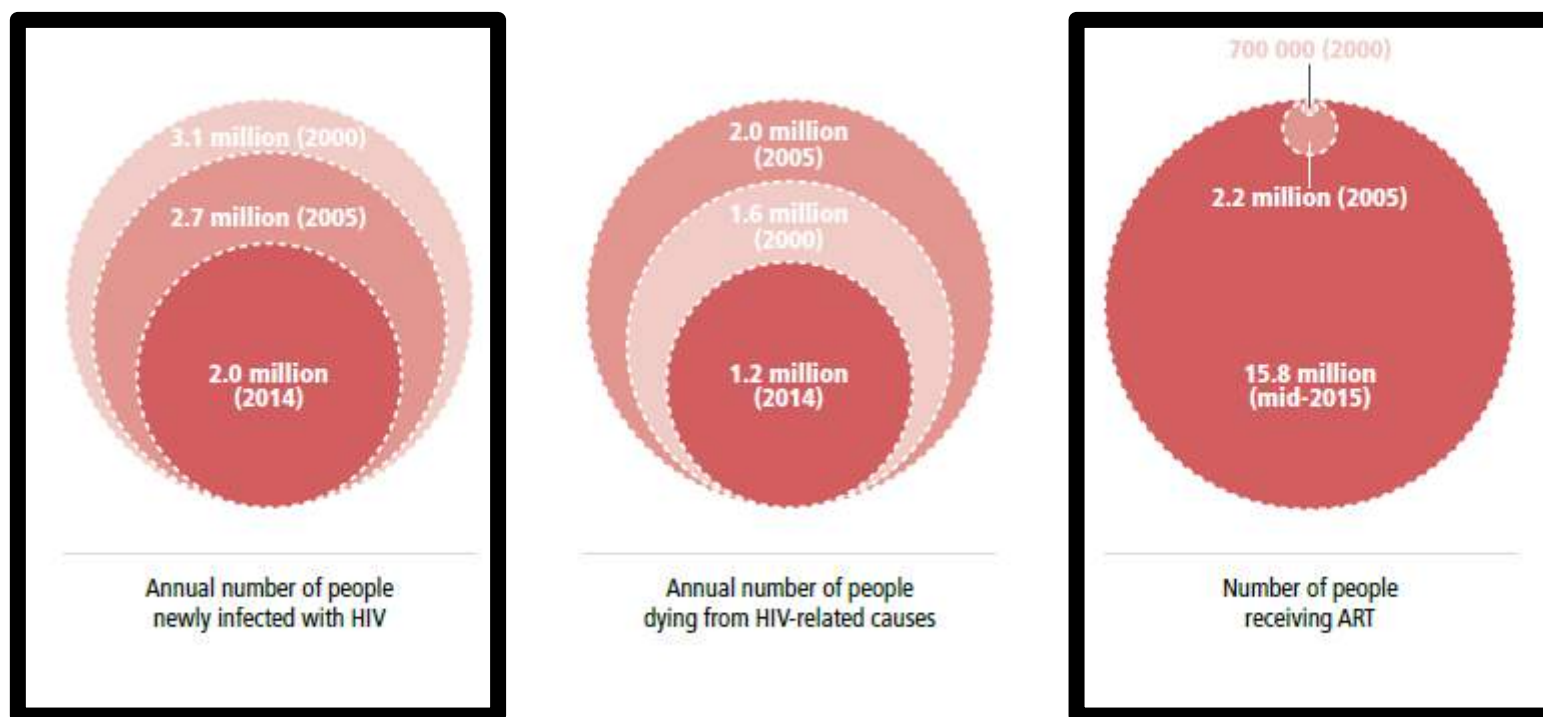


EECA: 90-90-90



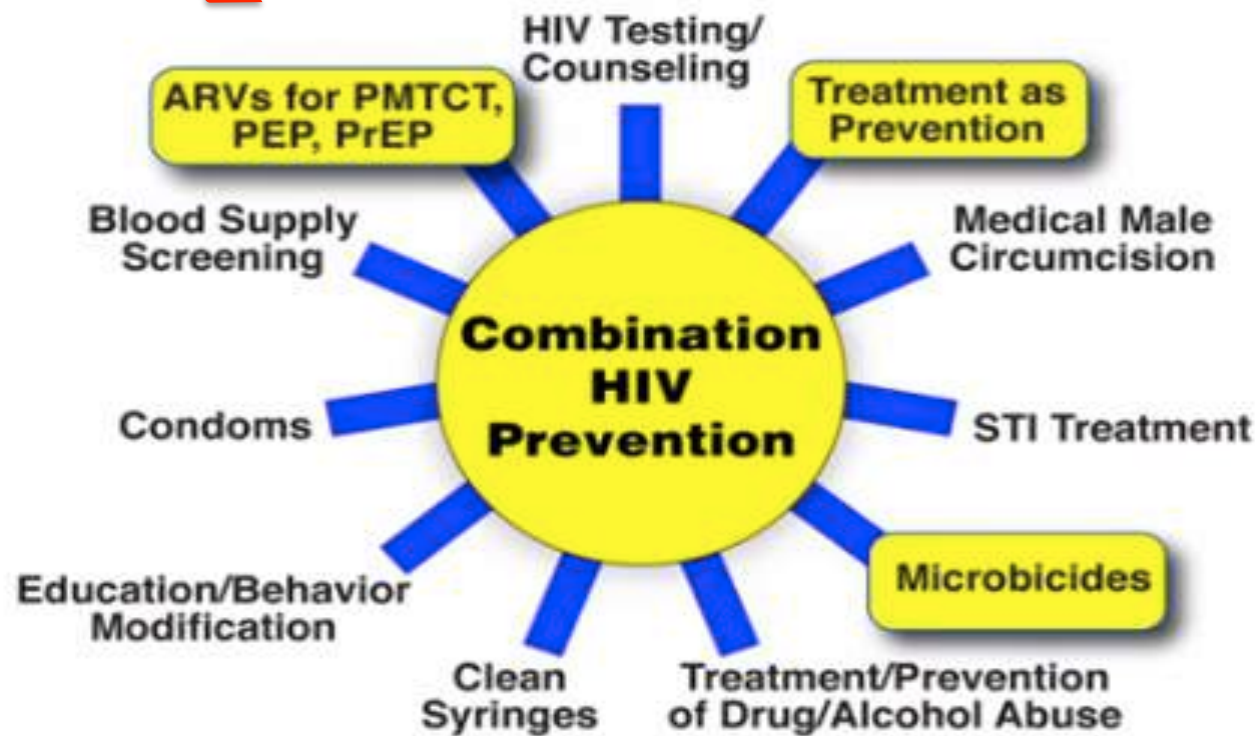
Source: See Annex 1

Fig. 1. Progress in the global HIV response, 2000–2015



Source: Global AIDS Response Progress Reporting (UNAIDS/UNICEF/WHO) and UNAIDS/WHO estimates.

Source: UNAIDS



Source: UNAIDS

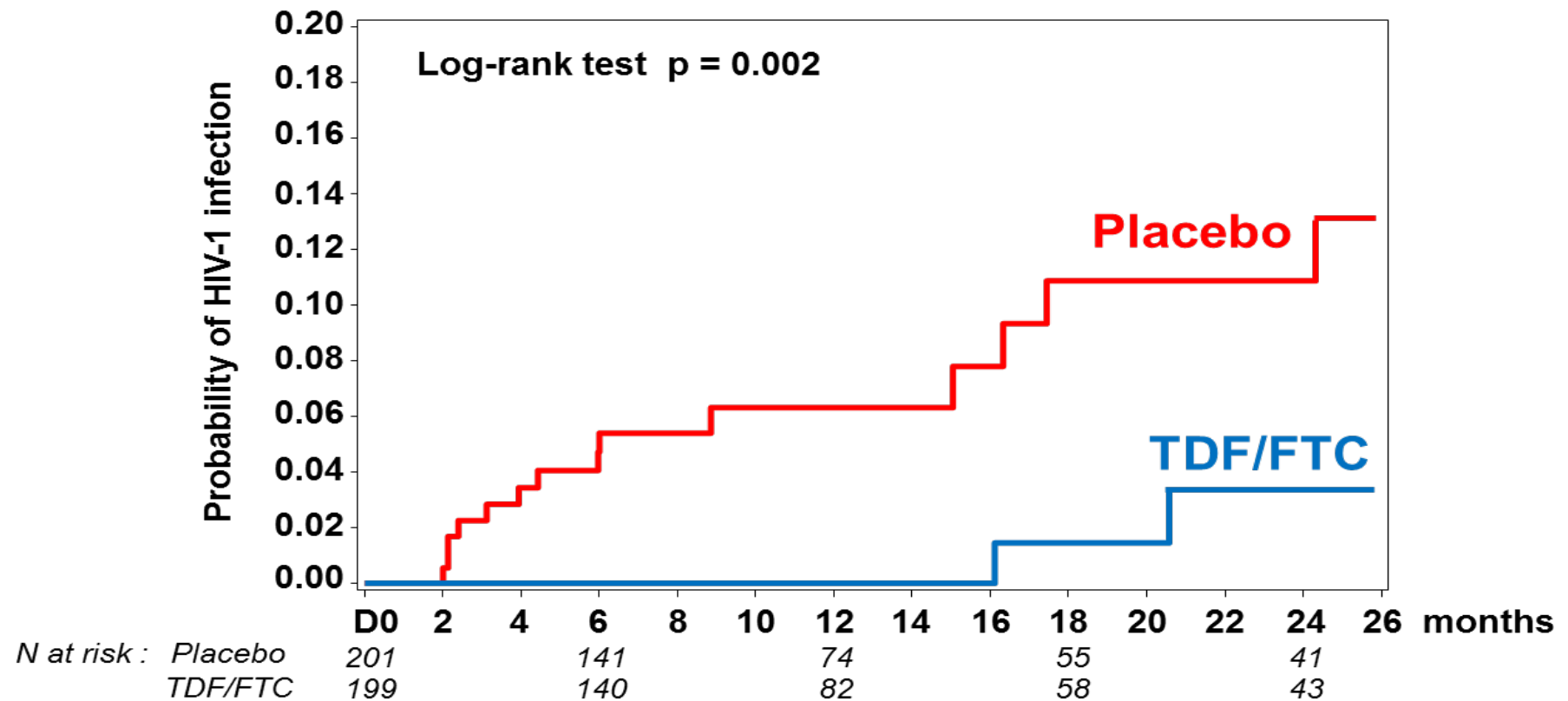


ipergay

ANRS

Intervention Préventive
de l'Exposition aux Risques
avec et pour les Gays

KM Estimates of Time to HIV-1 Infection (mITT Population)



Mean follow-up of 13 months: 16 subjects infected

14 in placebo arm (incidence: 6.6 per 100 PY), **2 in TDF/FTC arm** (incidence: 0.94 per 100 PY)

86% relative reduction in the incidence of HIV-1 (95% CI: 40-99, $p=0.002$)

NNT for one year to prevent one infection : 18

CROI 2015, Seattle, WA. #23LB.



Facing the challenge of the HIV patient in the near future / co-morbidities

A. The HIV infected individual

B. The pandemic

C. In summary....

In summary....



For HIV infected individuals ...

- Ultimate goal of ART is an adjusted life expectancy close/ identical to the general population. This would require managing the non-AIDS co-morbidities
- Achieving and sustaining an undetectable plasma VL is mandatory. II's like Dolutegravir have an important role
- Objectives beyond undetectable plasma viral load should be considered
- The situation of many stable & suppressed patients can be potentially improved (including lowering the costs) without increasing the risk of losing the virological suppression
- Functional cure may be an achievable goal

In summary....



For the AIDS pandemic

- Ultimate goal is an AIDS free generation in 2030.....?
- A combination of preventive strategies will be required including:

Classical prevention approaches

More testing and more treating

Likely PrEP (intermittent ?) in selected settings

Possibly a preventative vaccine (even one only partially effective)

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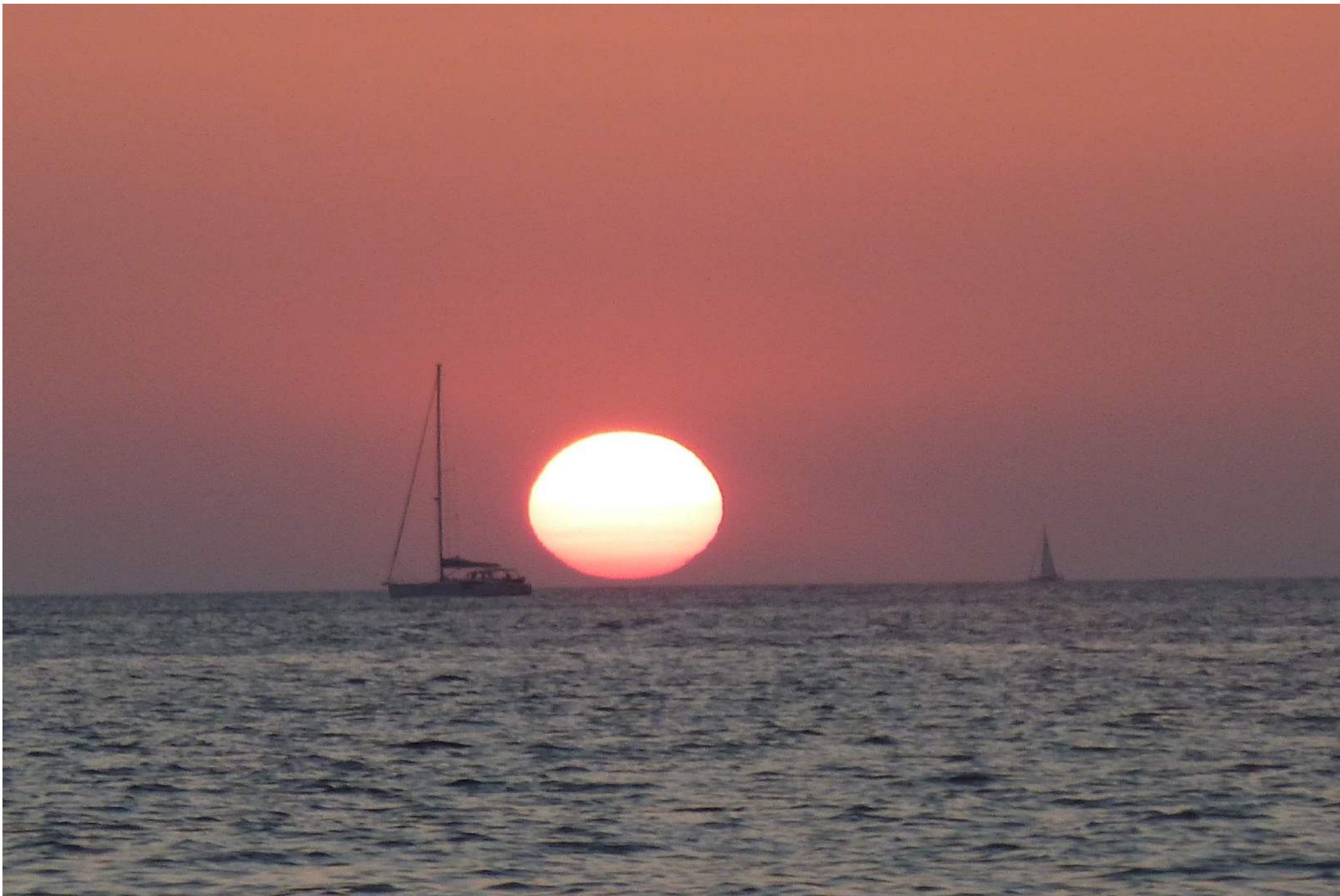
S Varea

Pharma companies



Infectious Diseases & AIDS Units. Hospital Clinic. Barcelona. Spain









EACS European
AIDS Clinical Society

15th EUROPEAN AIDS CONFERENCE

October 21–24, 2015 Barcelona, Spain

www.eacs-conference2015.com



Guía práctica del sida

Clínica, diagnóstico y tratamiento

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edición 2013



www.escofetzamora.com

The need for novel drugs and novel classes

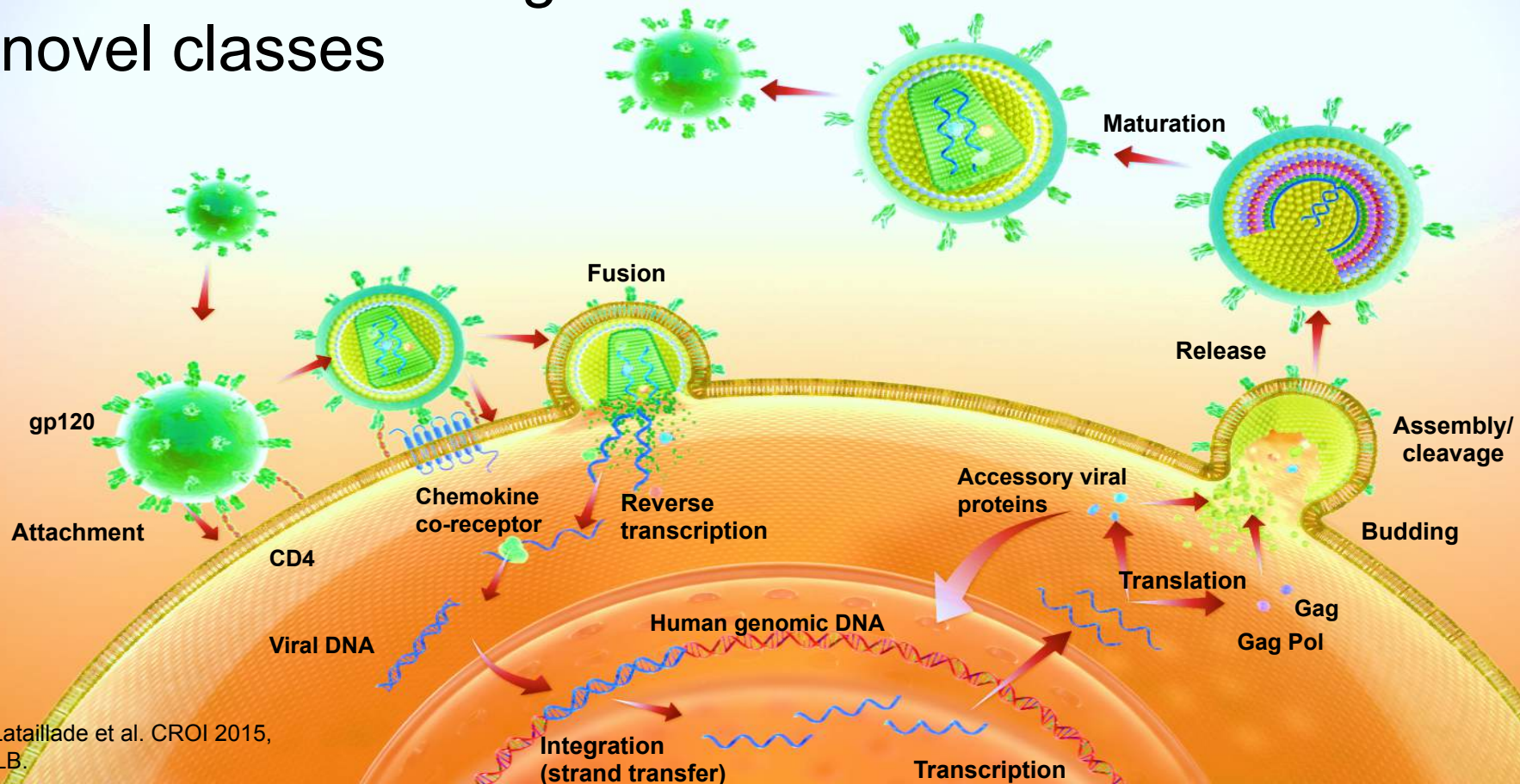


Figure from Lataillade et al. CROI 2015, Abstract 114LB.

New drugs targeting different stages of the HIV-1 life cycle are needed to^{1,2}

Provide options for treatment-experienced and -naïve patients

Reduce drug-drug interactions

Improve tolerability and toxicity

Provide novel formulations/delivery systems

Reduce pill burden

1. Dau et al. Drugs 2009;1:31–50. 2. Andrieux-Meyer et al. J Int AIDS Soc 2012;15:17986.