

Speed up! Nieuwe wetenschappelijke inzichten in de strijd tegen hiv/aids uit het NCHIV



22 November 2016
Royal Tropical Institute,
Amsterdam



NCHIV 2016

Session 1

Preventing HIV transmission

Chairs: Catherine Hankins & Marc van der Valk

22 November 2016

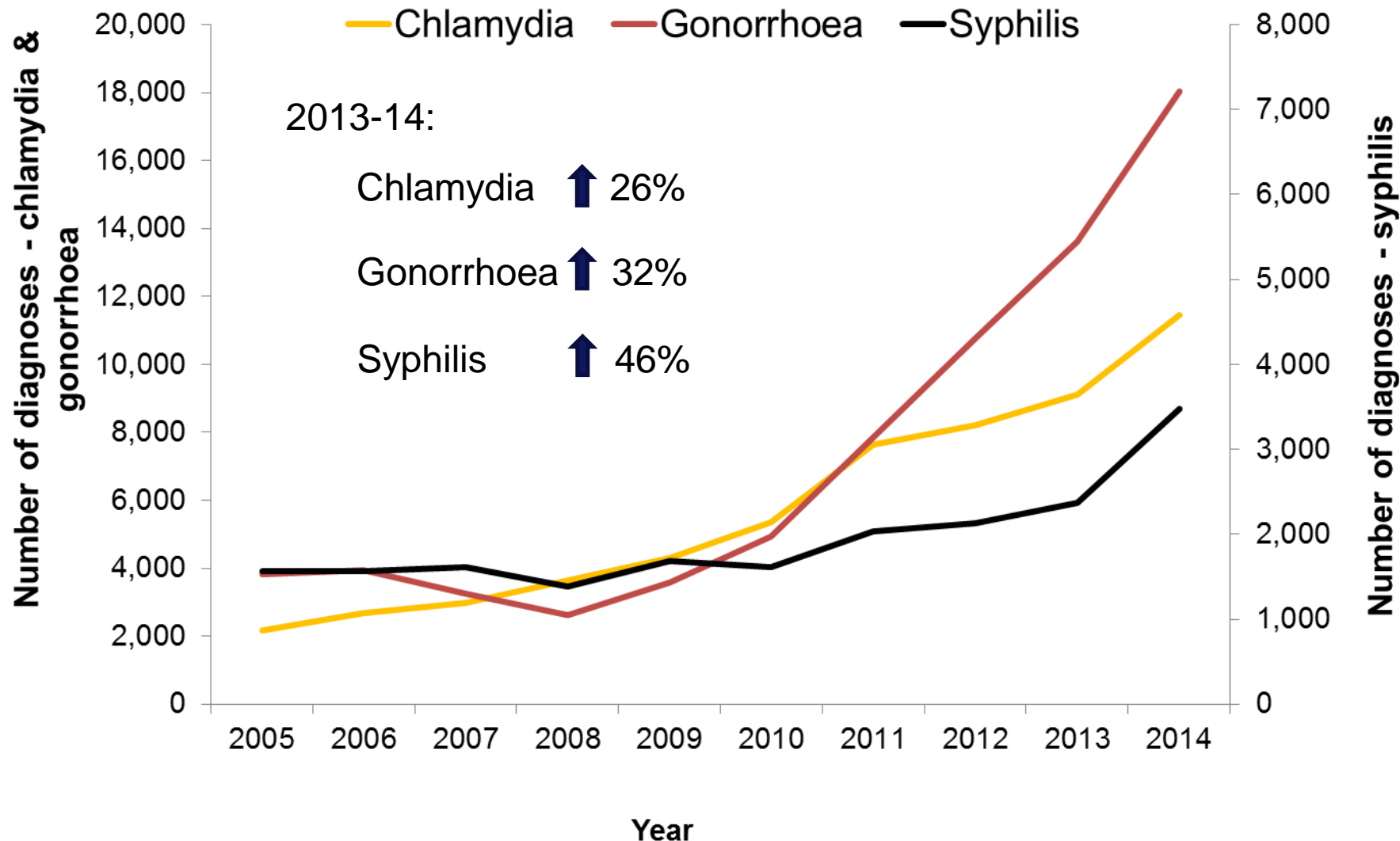
Royal Tropical Institute, Amsterdam



HIV Prevention in Europe Making it Happen

Sheena McCormack

Bacterial STIs in MSM, 2005-14



HIV Prevention in Europe - Making it Happen

Sheena McCormack

So make it happen

- **Make the easy changes**
 - **use champions and social media to promote testing and raise awareness of PrEP**
 - **shorten the time to treatment**
 - **reward staff attitudes that reduce stigma**
- **Partner with community to**
 - **agitate for PrEP and more testing**
 - **deliver PrEP safely**

Informal PrEP use among MSM in Europe – first results from the EU Flash PrEP survey



Medical Check-ups

Kai J. Jonas Maastricht University

Prior (kidney/liver)	N (%)
Yes	150 (48.1)
No	162 (51.9)

Creatine use and informal
PrEP use: 17.7%

During use	overall N (%)	Daily N (%)	Interm. N (%)
Once before start	27 (18.2)	16 (16.2)	9 (25)
Every three months	96 (64.9)	71 (71.7)	16 (44.4)
Irregularly	25 (16.9)	12 (12.1)	11 (30.6)

HIV testing	A lot lower than before N (%)	Lower than before N (%)	The same N (%)	Higher than before N (%)	A lot higher than before N (%)
Daily	2 (1.3)	4 (2.6)	69 (45.4)	51 (33.6)	26 (17.1)
Intermittent	2 (1.4)	3 (2.1)	90 (63.4)	39 (27.5)	8 (5.6)

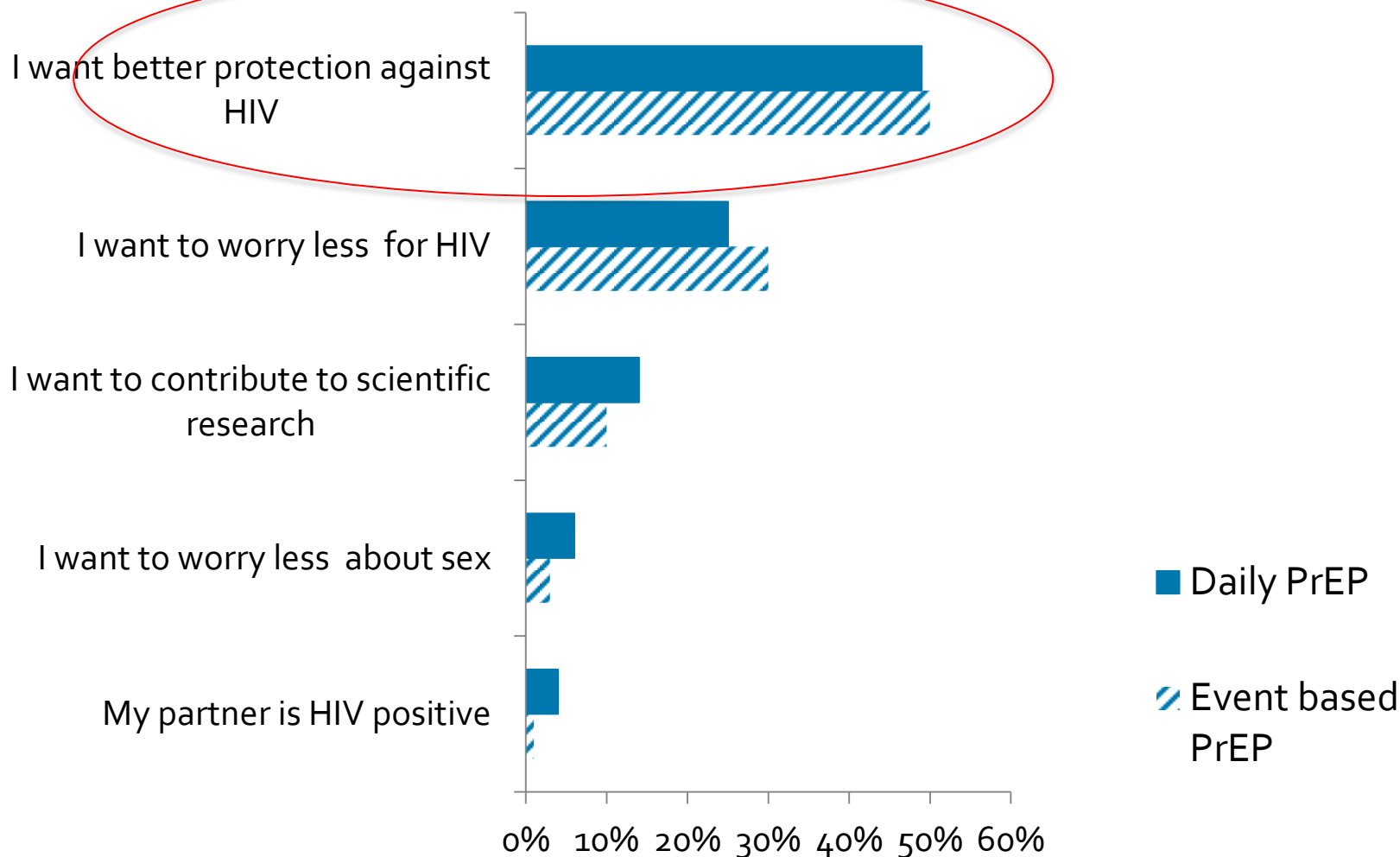


Motivations for joining AMPrEP

Elske Hoornenborg GGD Amsterdam



H-TEAM



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Session 2

Challenging issues in HIV care

Chairs: Eline op de Coul & Guido van den Berk

22 November 2016

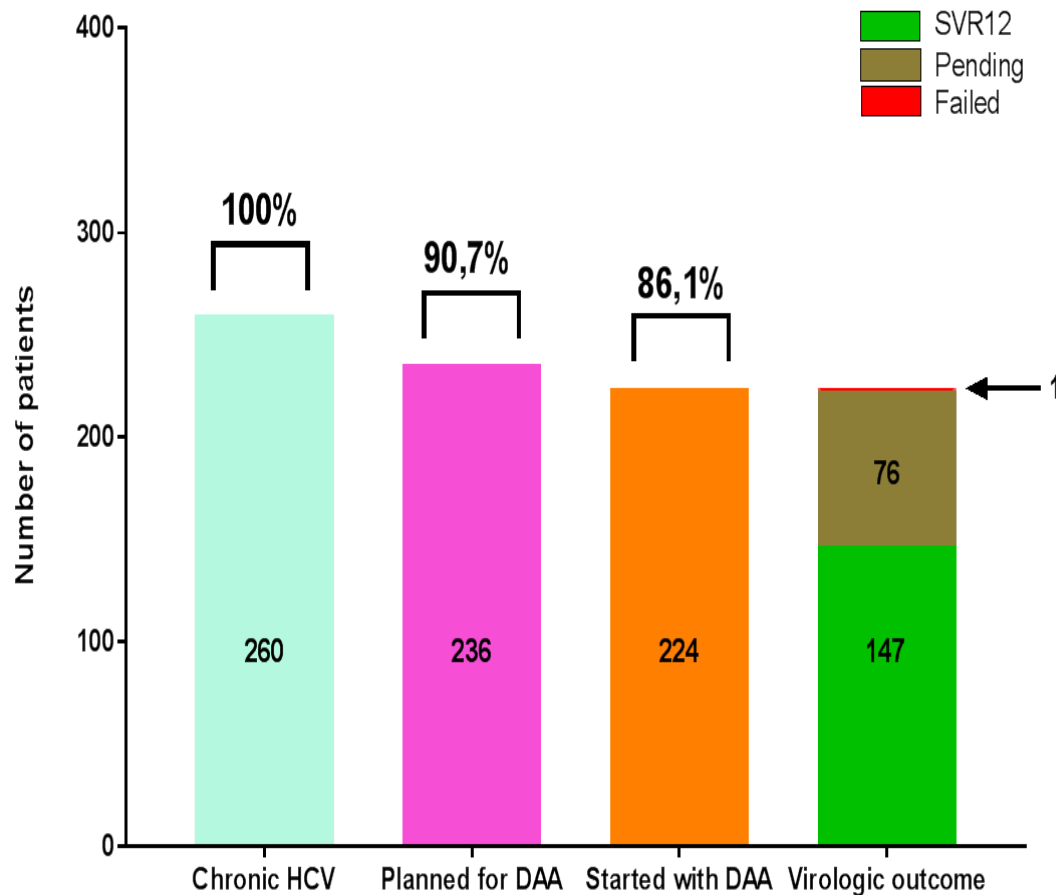
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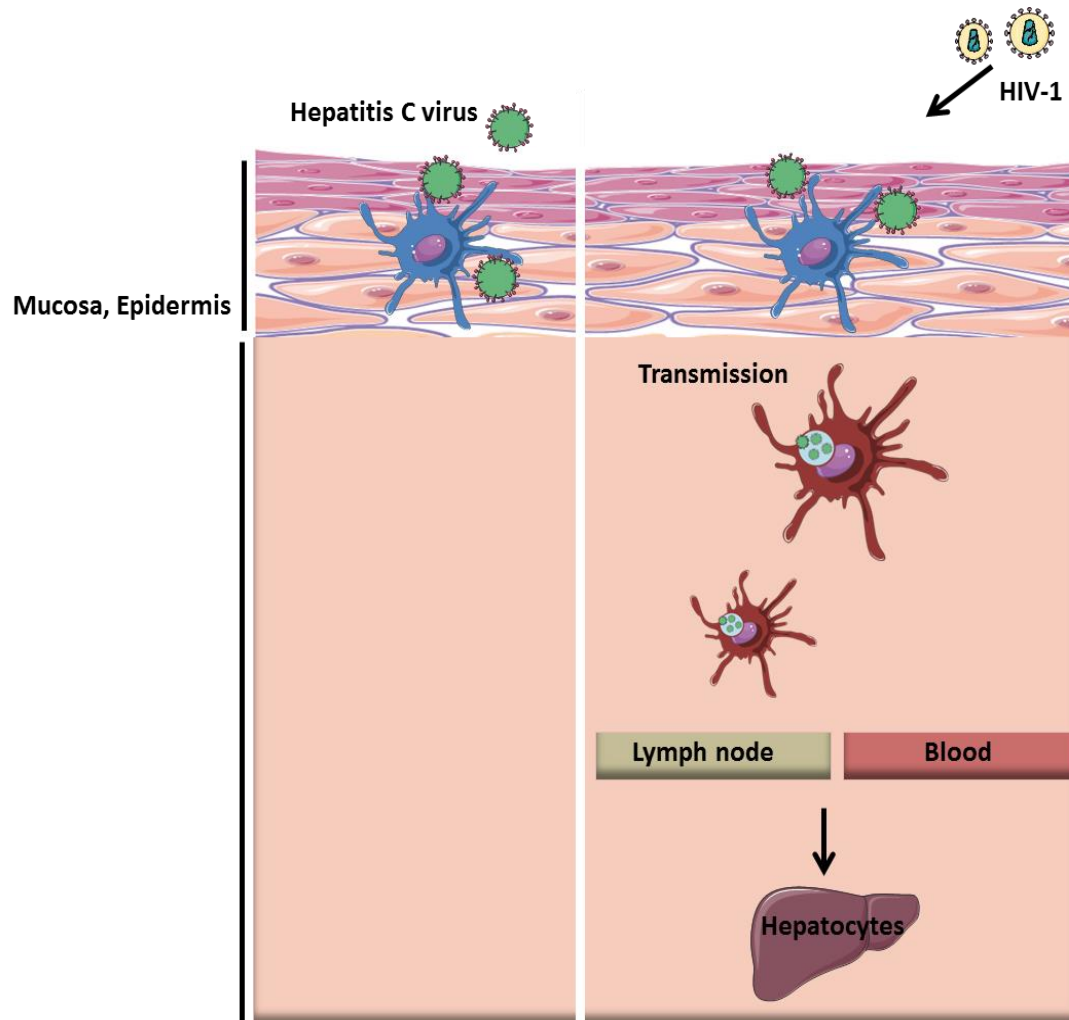


Alexander Pastoors HVN

HCV treatment cascade of care

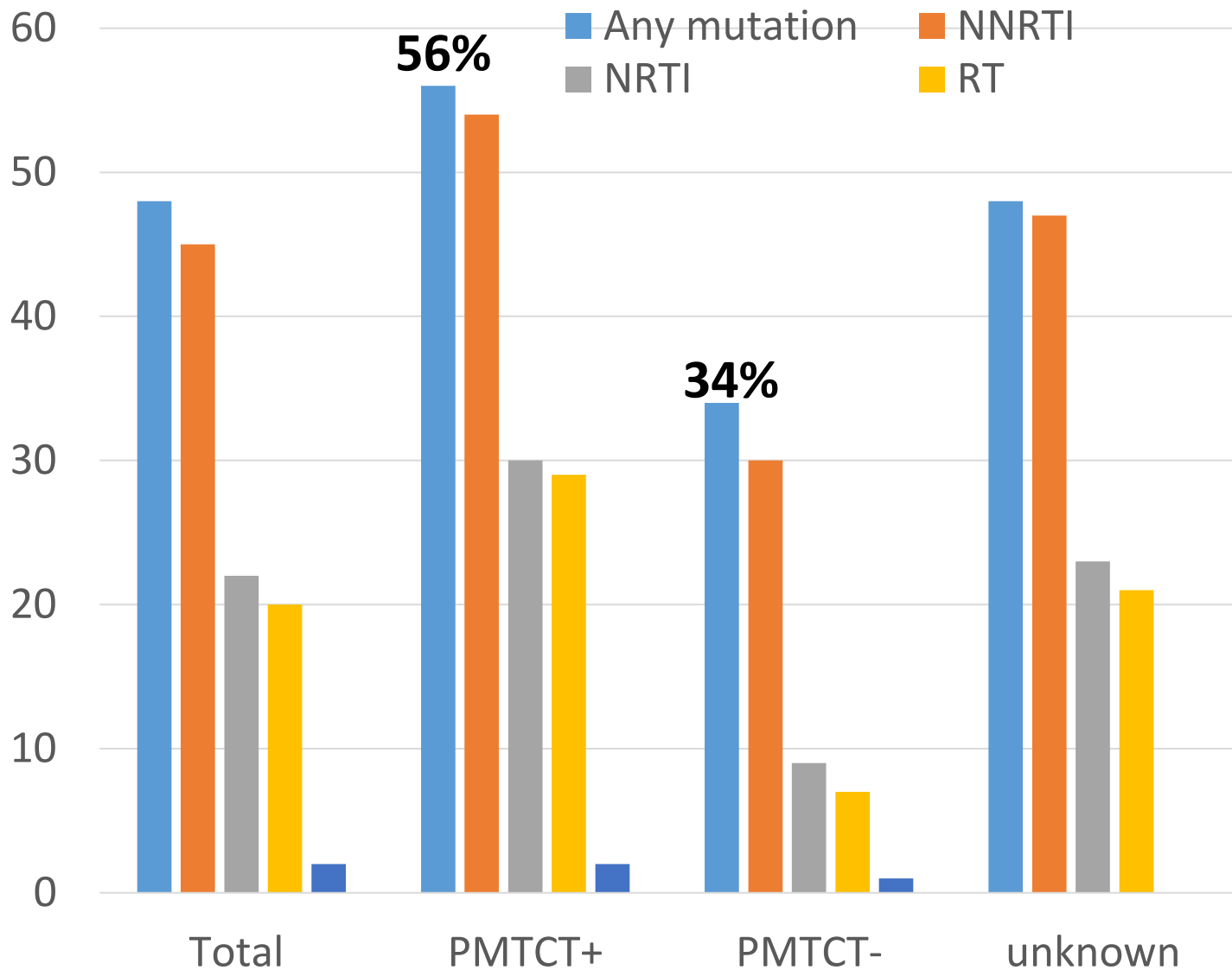


Immune activation by HIV-1 enhances sexual transmission of Hepatitis C virus by human primary Langerhans cells



- Immature LCs do not transmit HCV
- Coinfection with HIV-1 enhances HCV transmission by LCs
- HIV replication is necessary for increased HCV transmission
- Activated LCs transmit HCV to hepatocytes independent of productive HCV replication

Alarming high rate of primary HIV drug resistance in infants in Nigeria



Kim Sigaloff AIGHD/AMC

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Session 3

Optimising the HIV care continuum

Chairs: Suzanne Geerlings & Maarten Schim van der Loeff

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Royal Tropical Institute, Amsterdam



Integrase inhibitor use is an independent risk factor for immune reconstitution inflammatory syndrome (IRIS) in HIV-1 late presenters in the Dutch ATHENA cohort

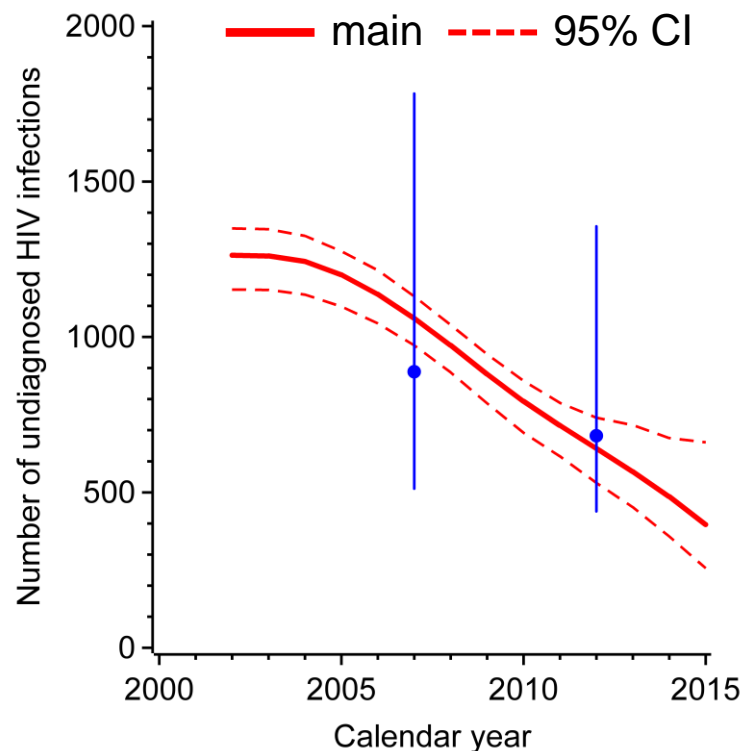
Cox regression analysis:

	IRIS French + clin. HR (95%CI), p-value	IRIS French HR (95%CI), p-value
Use of INI	2.69 (1.63-4.44), 0.0001	2.62 (1.35-5.10), 0.0045
Female gender	1.64 (0.97-2.78), 0.067	-
Diagnosed with CM	3.71 (1.55-8.88), 0.0033	11.6 (4.77-28.3), <0.0001
Diagnosed with MAC	2.46 (1.04-5.84), 0.041	-
Diagnosed with CMV	2.25 (1.06-4.79), 0.035	4.23 (1.84-9.74), 0.0007

No other investigated parameters were significant predictors of IRIS.

No interactions between use of INI and any of the other parameters.

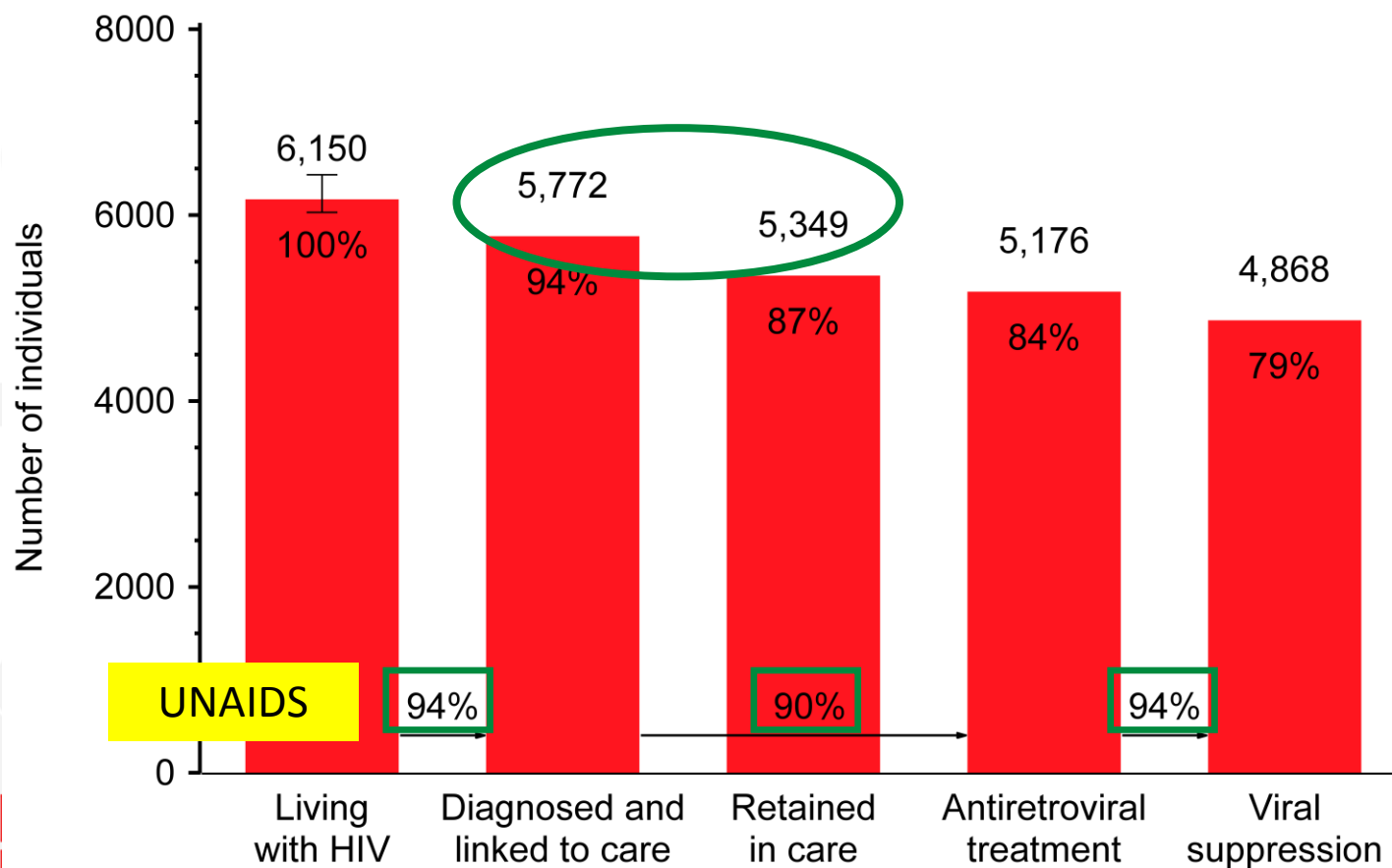
Undiagnosed HIV infections in Amsterdam



- 400 (95% CI, 260 – 660) people living with HIV were still undiagnosed by the end of 2015.
- Number undiagnosed consistent with earlier estimates (Op de Coul *et al*, PLoS One 2015).

Amsterdam HIV care continuum in 2015

Total population



ART Guidelines: Conclusions

- ART today is highly active, safe and tolerable, convenient, increasingly available, and prolongs healthy life.
- ART in 10 years will be:
 - **Highly active, including against drug-resistant strains**
 - Even more safe and tolerable (including long-term)
 - **Even more convenient, including long-acting and implantable formulations**
 - Even more widely available and affordable
 - Associated with a normal life expectancy for HIV-infected people (compared to the general population)

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Session 4

The road to cure

Chairs: Tokameh Mahmoudi & Daniel Kuritzkes

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Viable pathways towards a durable remission/cure: Gene therapy

Viable pathways towards a durable remission/cure: Early ART

Viable pathways towards a durable remission/cure: Shock and kill

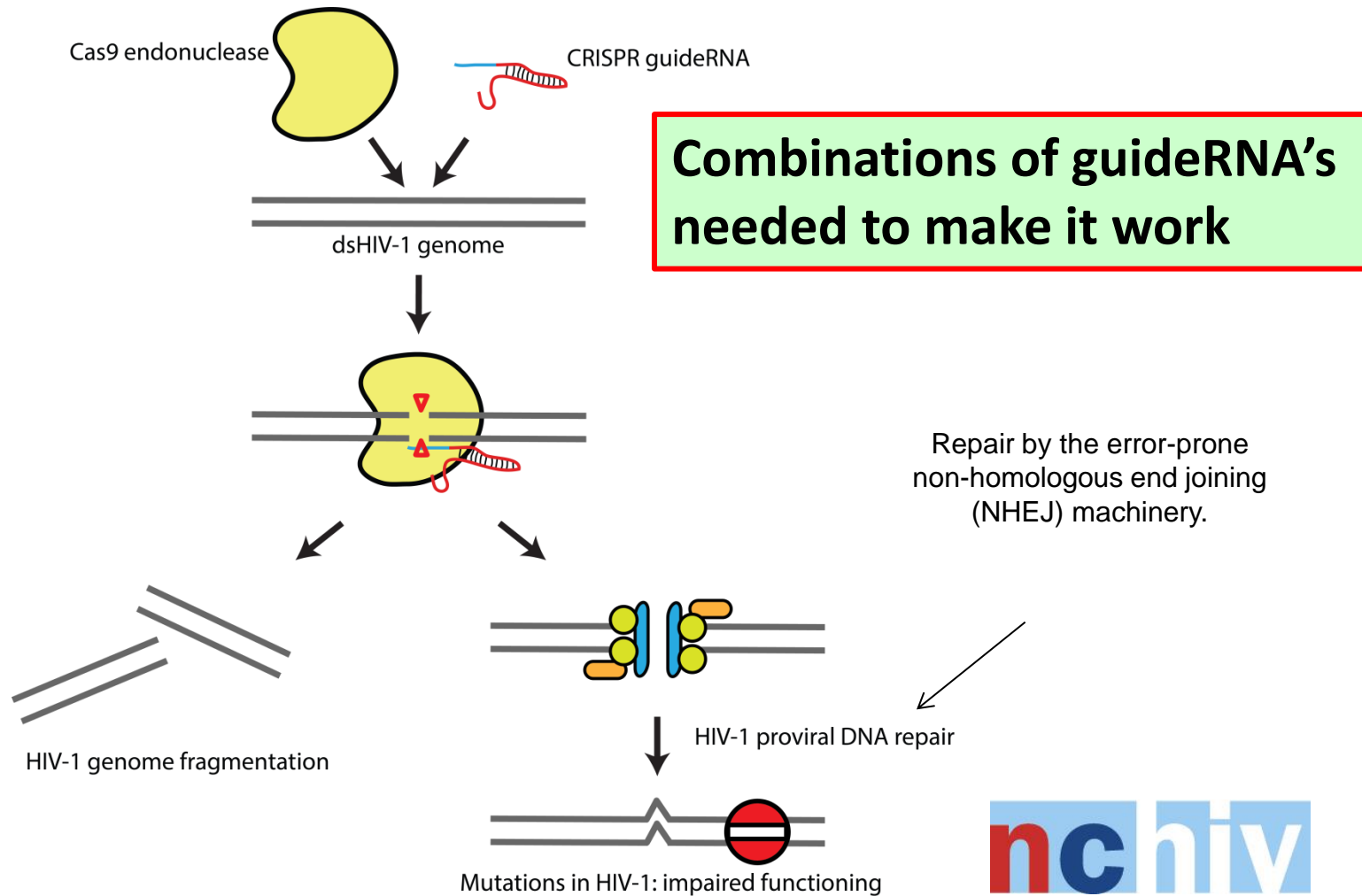
Viable pathways towards a durable remission/cure: Immunotherapy

Combination strategies will likely be needed to achieve a durable remission

A number of viable combinations should be available for testing in a few years

Steven Deeks, San Francisco

gRNA-guided CRISPR/Cas9 nuclease



A bright future for Dutch HIV research

Elevator pitches by recipients of the Aids Fonds' high risk, high-gain grants

- A costimulatory power-boost for HIV-specific T-cells through GITR activation *M. Fernanda Pascutti (Sanquin Research)*
- Development of a natural drug "mimic" derived from dendritic cells that activate latent HIV-1 and potentially could cure infected patients *Thijs van Montfort (AMC)*
- Can the CRISPR-Cas9 system be used to cure HIV-1 infected cells? *Atze Das (AMC)*
- The FIND study: fine-needle biopsies to detect the hidden HIV reservoirs in hard-to-reach tissue compartments of well-controlled and uncontrolled HIV-patients *Annemarie Wensing (UMC Utrecht)*
- New, less cumbersome screening method for anal (pre)cancer, based on DNA changes, in HIV+ men who have sex with men *Olivier Richel (AMC)*
- Peer empowered Voluntary Extended Network Testing for Ethnic Minority-MSM *Eline op de Coul (RIVM)*



A nighttime photograph of a street in Amsterdam. In the foreground, several bicycles are parked along a metal railing. Behind the railing is a canal, and in the background, a bridge with warm lights is visible. The street is lined with historic buildings and street lamps, creating a warm, glowing atmosphere.

23-27 July 2018

AMSTERDAM, NETHERLANDS

**22ND INTERNATIONAL
AIDS CONFERENCE
(AIDS 2018)**

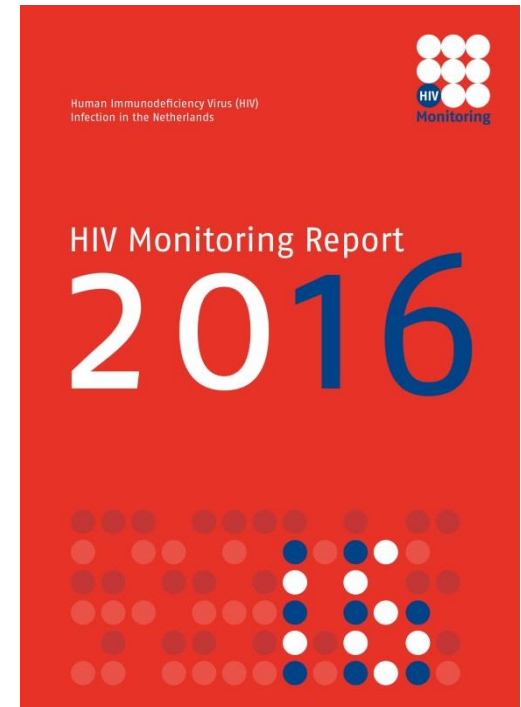
INTERNATIONAL CHAIR: LINDA-GAIL BEKKER, SOUTH AFRICA

LOCAL CHAIR: PETER REISS, NETHERLANDS

For further information

Please visit our website (www.hiv-monitoring.nl) and read or download the new digital HIV Monitoring Report.

- Fully searchable PDF, with appendix figures and tables included
- All figures available separately as powerpoint file at www.hiv-monitoring.nl
- Summary and Recommendations on website & in print (see NCHIV bag)





Anna de Lang (1978-2016)