

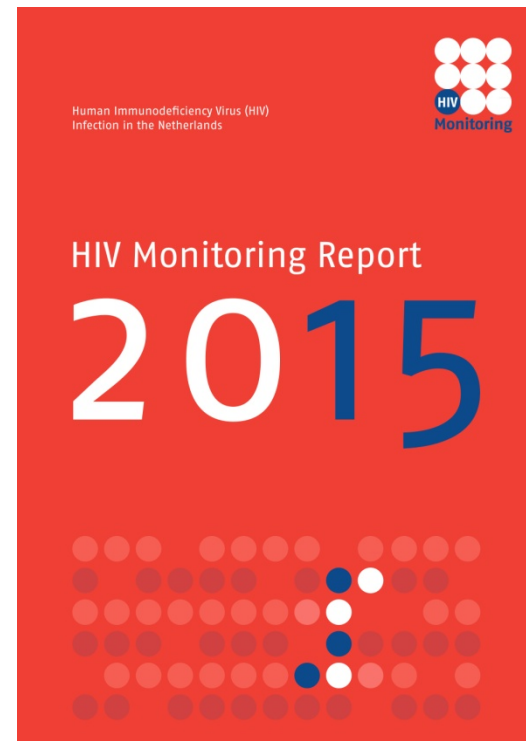


# An update on the HIV epidemic in the Netherlands

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## A selection of findings from the SHM Monitoring Report 2015

Peter Reiss  
NCHIV 2015  
18 November 2015





# A Special Thank You To:

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## **SHM**

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Luuk Gras

Colette Smit

Daniela Bezemer

Sima Zaheri

Mariska Hillebregt

Melanie Sormani

Catriona Ester

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Annemarie van Rossum

Liesbeth van Leeuwen

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Suzanne Geerlings

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# Topics

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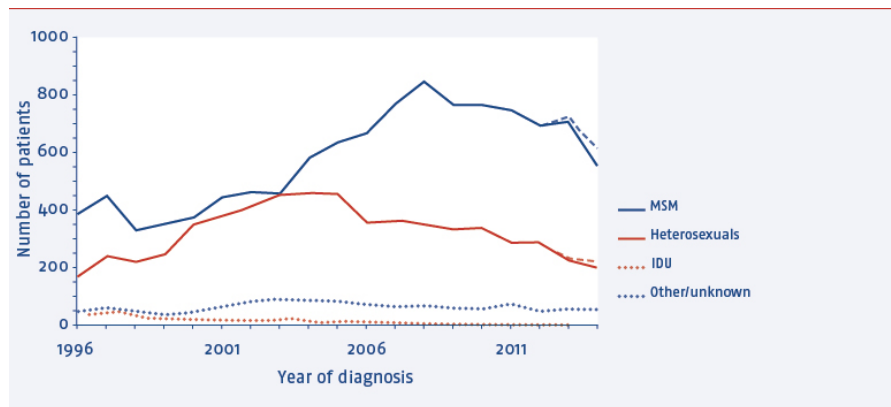
- Epidemic trends over time
- Cascade of care
- Combination antiretroviral treatment outcomes
- Ageing and co-morbidity
- Hepatitis C
- Conclusions

# Registered annual new HIV-1 diagnoses in adults

Around 1000 new diagnoses in 2014

- 600-650 in MSM
- 200-300 in heterosexuals

## According to transmission risk group



MSM

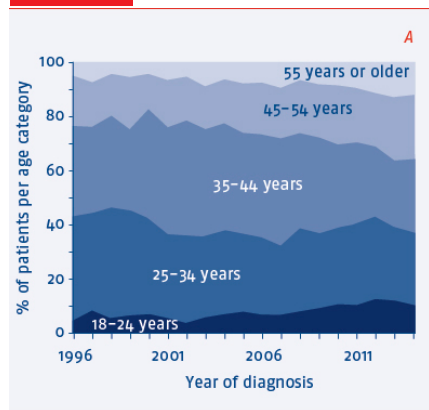
- **≥45 yrs: 36%** (36%)
- 18-24 yrs: **10%** (12%)
- 25-34 yrs: **27%** (29%)

Heterosexuals

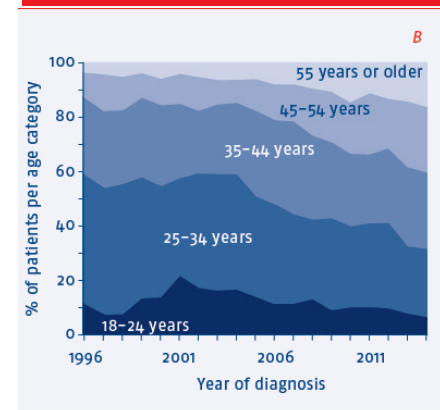
- **≥45 yrs: 40%** (38%)
- 18-24 yrs: **7%** (8%)
- 25-34 yrs: **25%** (30%)

## According to age at time of diagnosis

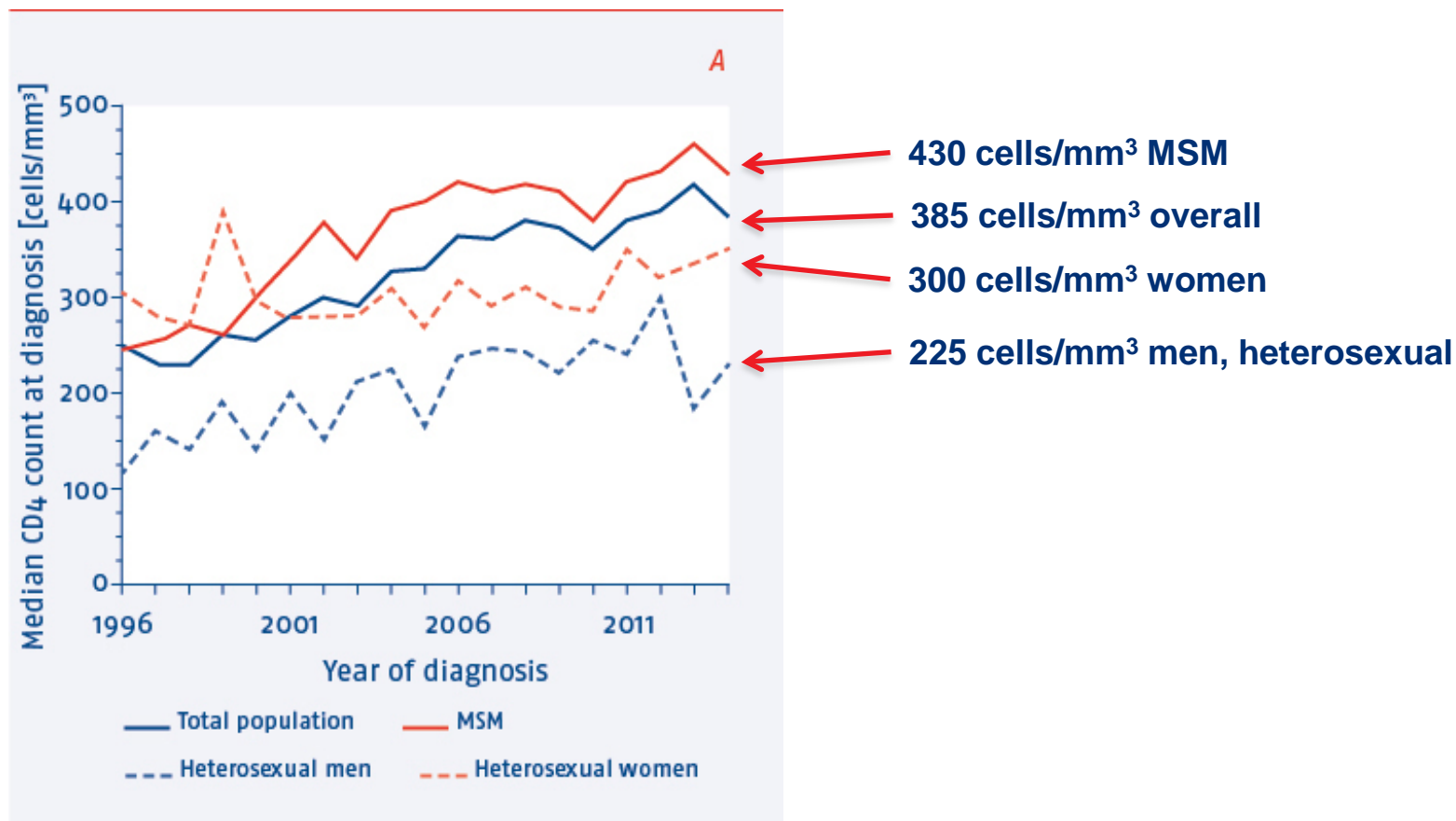
### MSM



### Heterosexual men & women



# CD4 cell count at time of HIV diagnosis has increased over time



...but room for improvement remains across the board, and particularly among men & women with heterosexually acquired infection...

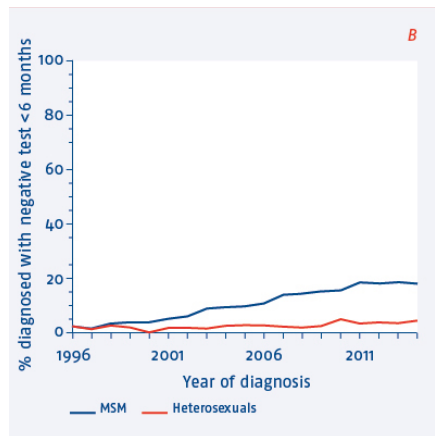
# Diagnosis with recent HIV infection

For MSM, but not for those with heterosexual transmission:

- Earlier diagnosis also reflected in an increasing proportion diagnosed with recent infection
- **In 2014:**  
18% of newly diagnosed MSM, but only 5% of heterosexuals had tested negative within last 6 months

- Expanded testing a prerequisite for further improvement in identifying people earlier in infection

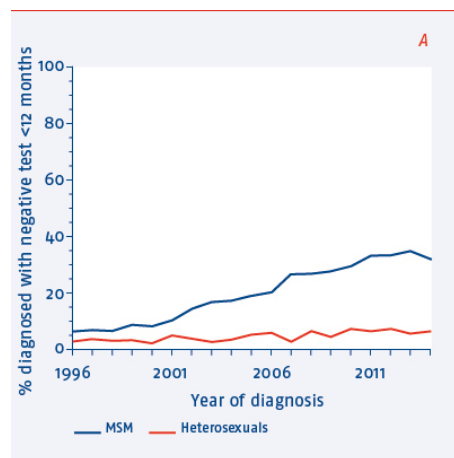
Had tested negative at most 6 mos before HIV diagnosis



18% in 2014

5% in 2014

Had tested negative at most 12 mos before HIV diagnosis

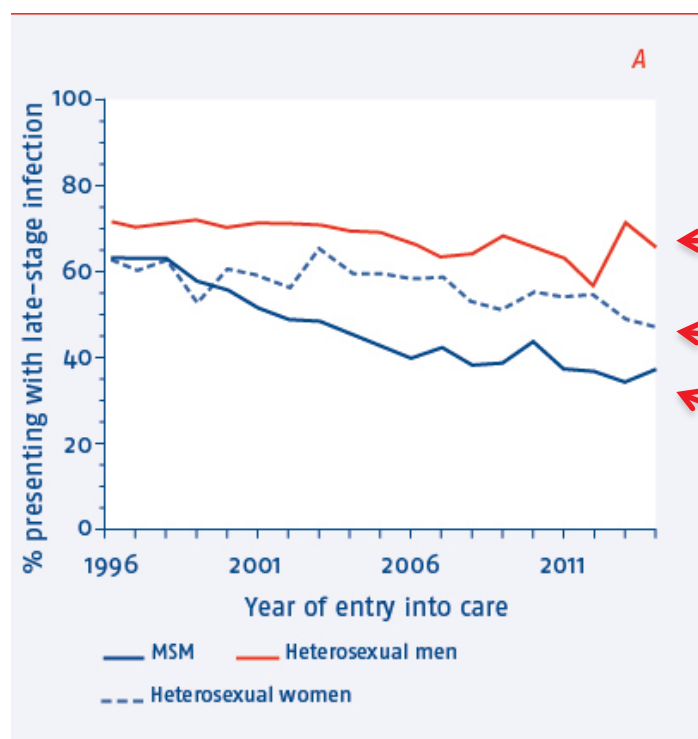


32% in 2014

7% in 2014

# Late presentation at entry into care remains much too common

Proportion presenting with  
CD4 <350/mm<sup>3</sup> or AIDS



Proportion from 2012  
onward: 44% overall

64% heterosexual men

50% heterosexual women

36% MSM



# Topics

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- Epidemic trends over time
- **Cascade of care**
- Combination antiretroviral treatment outcomes
- Aging and co-morbidity
- Conclusions



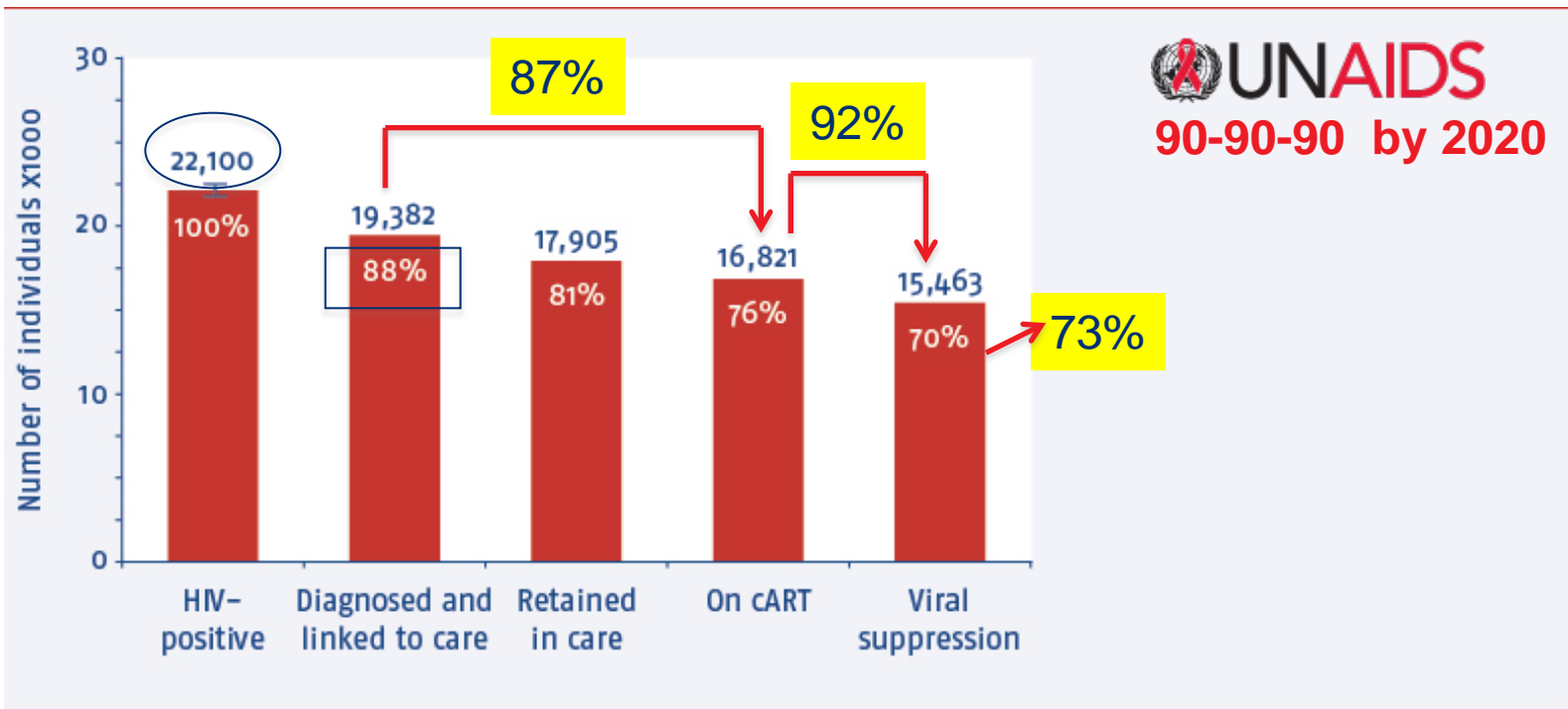
# Cascade of care: adults diagnosed, linked to care, retained in care, on cART, and suppressed



<http://ecdc.europa.eu/en/healthtopics/aids/Pages/hiv-modelling-tool.aspx>



# Cascade of care: adults diagnosed, linked to care, retained in care, on cART, and suppressed





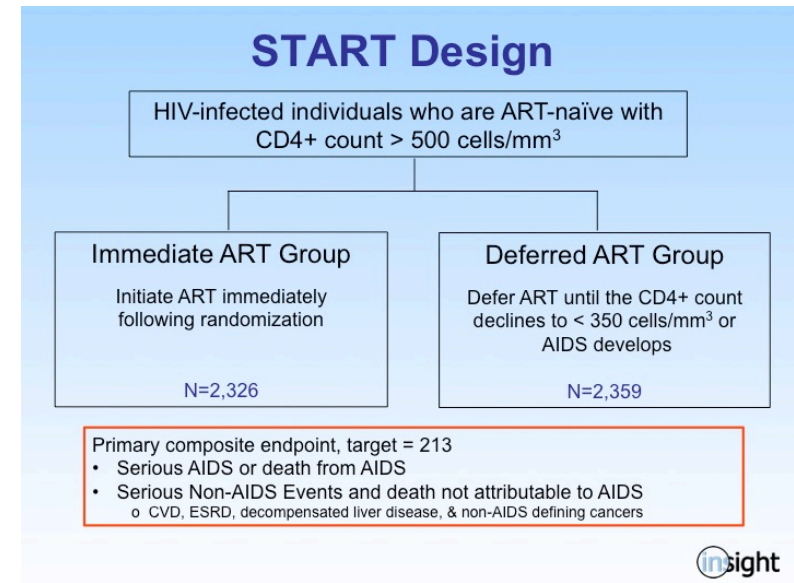
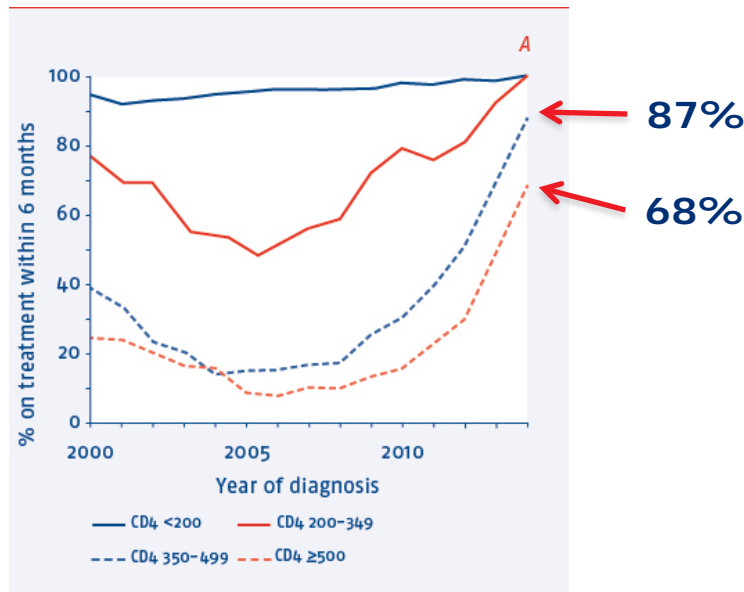
# Topics

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- Epidemic trends over time
- Cascade of care
- **Combination antiretroviral treatment and its outcomes**
- Aging and co-morbidity
- Conclusions

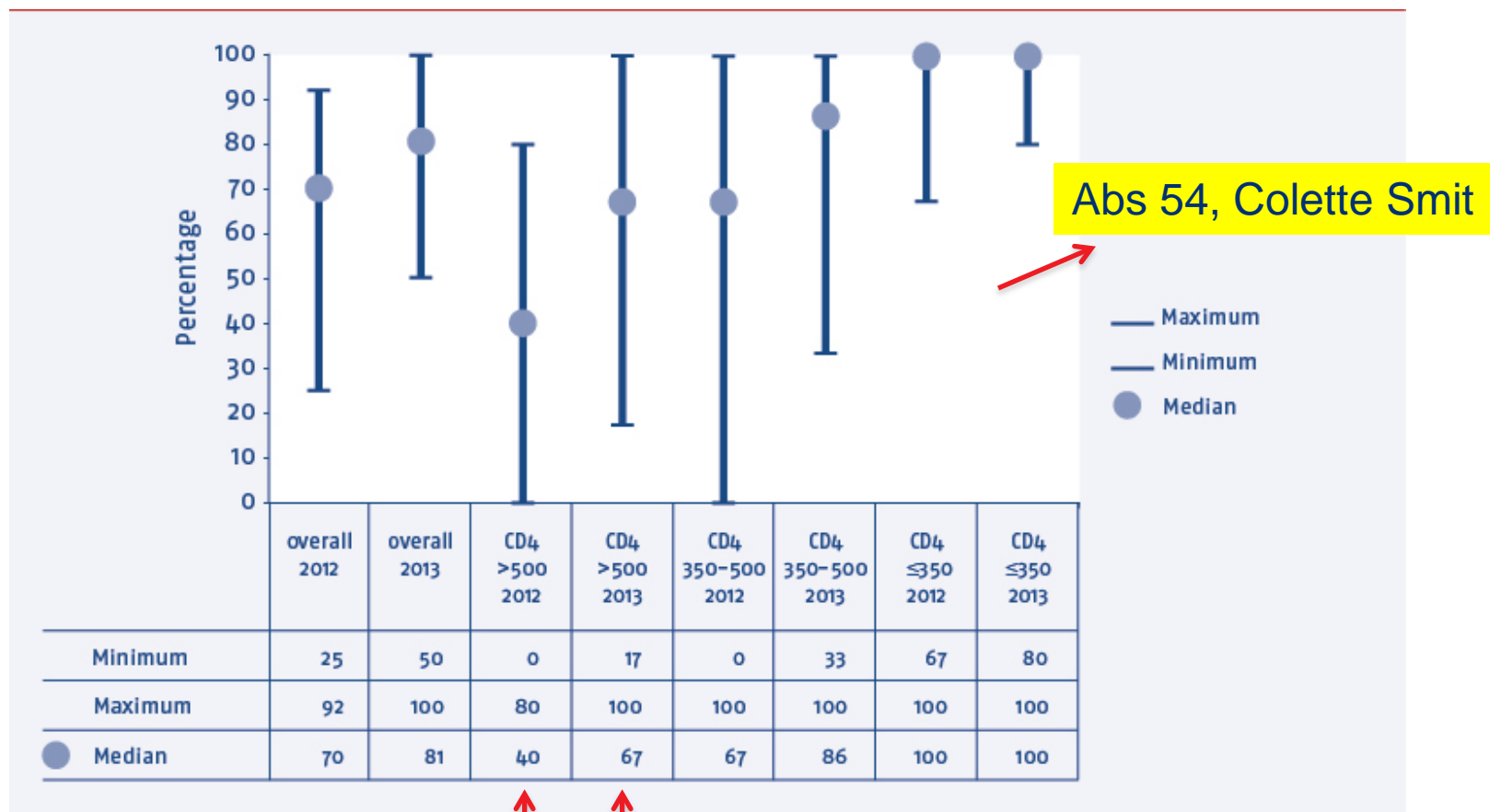
# Following HIV diagnosis, starting cART at higher CD4 count is becoming far more common

## Proportion starting cART $\leq 6$ mos after HIV diagnosis



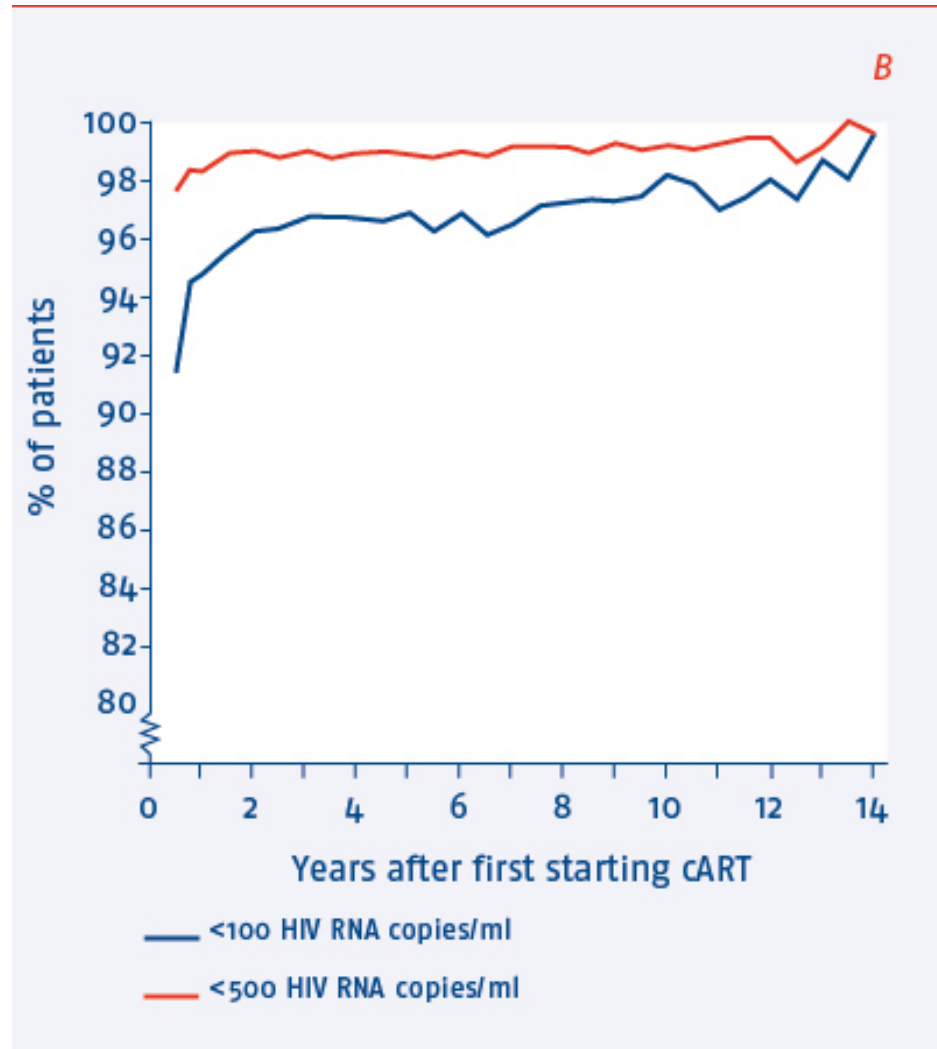
- **2014:**
  - **87% of those diagnosed with a CD4 count of 350-500 cells/mm<sup>3</sup> had started cART within the next 6 months ( 63% in 2013)**
  - **68% of those diagnosed with a CD4 count  $\geq 500$  cells/mm<sup>3</sup> had started cART within the next 6 months ( 41% in 2013)**

# Proportion of patients started on cART within 12 months after entering into care

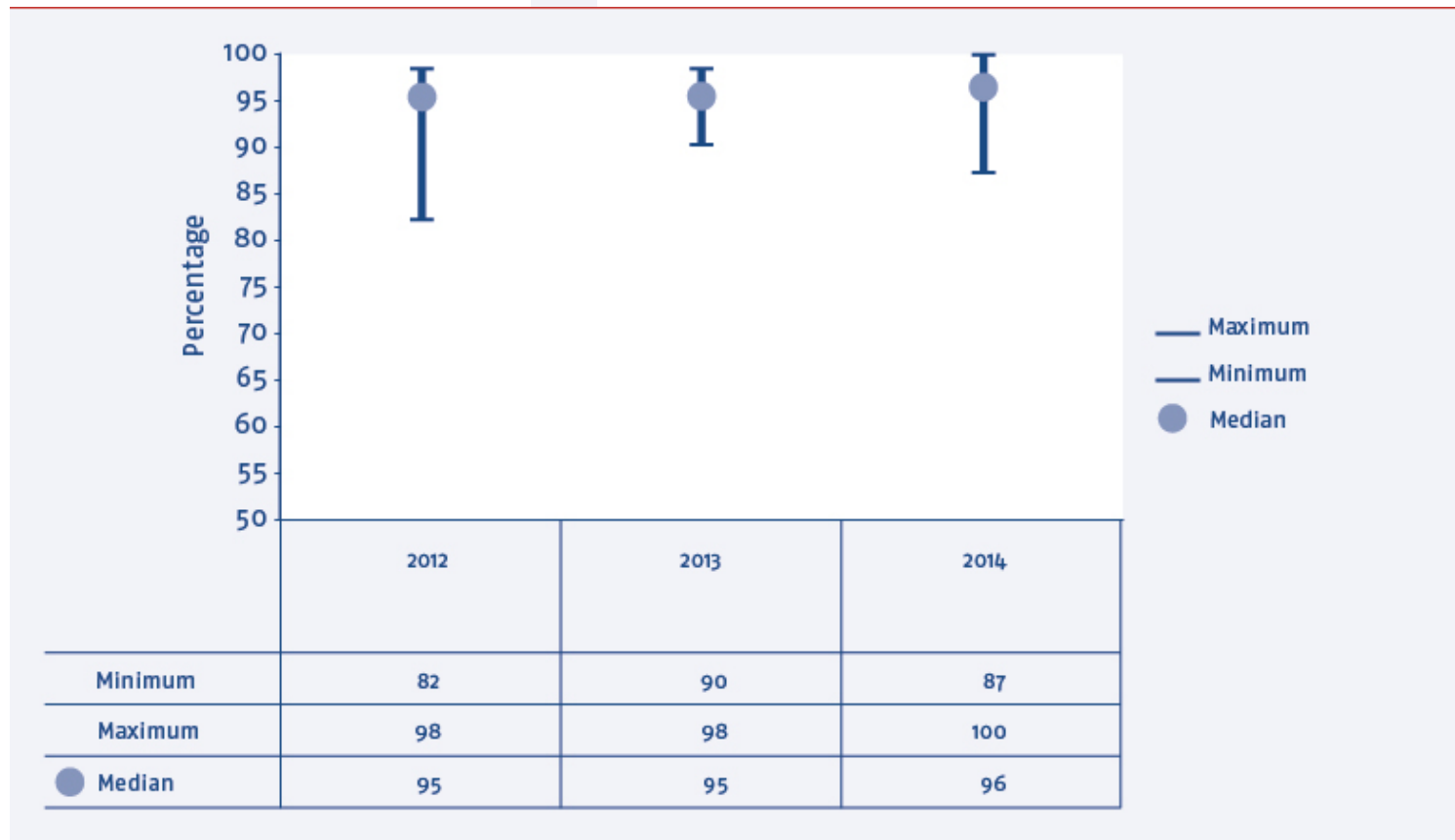




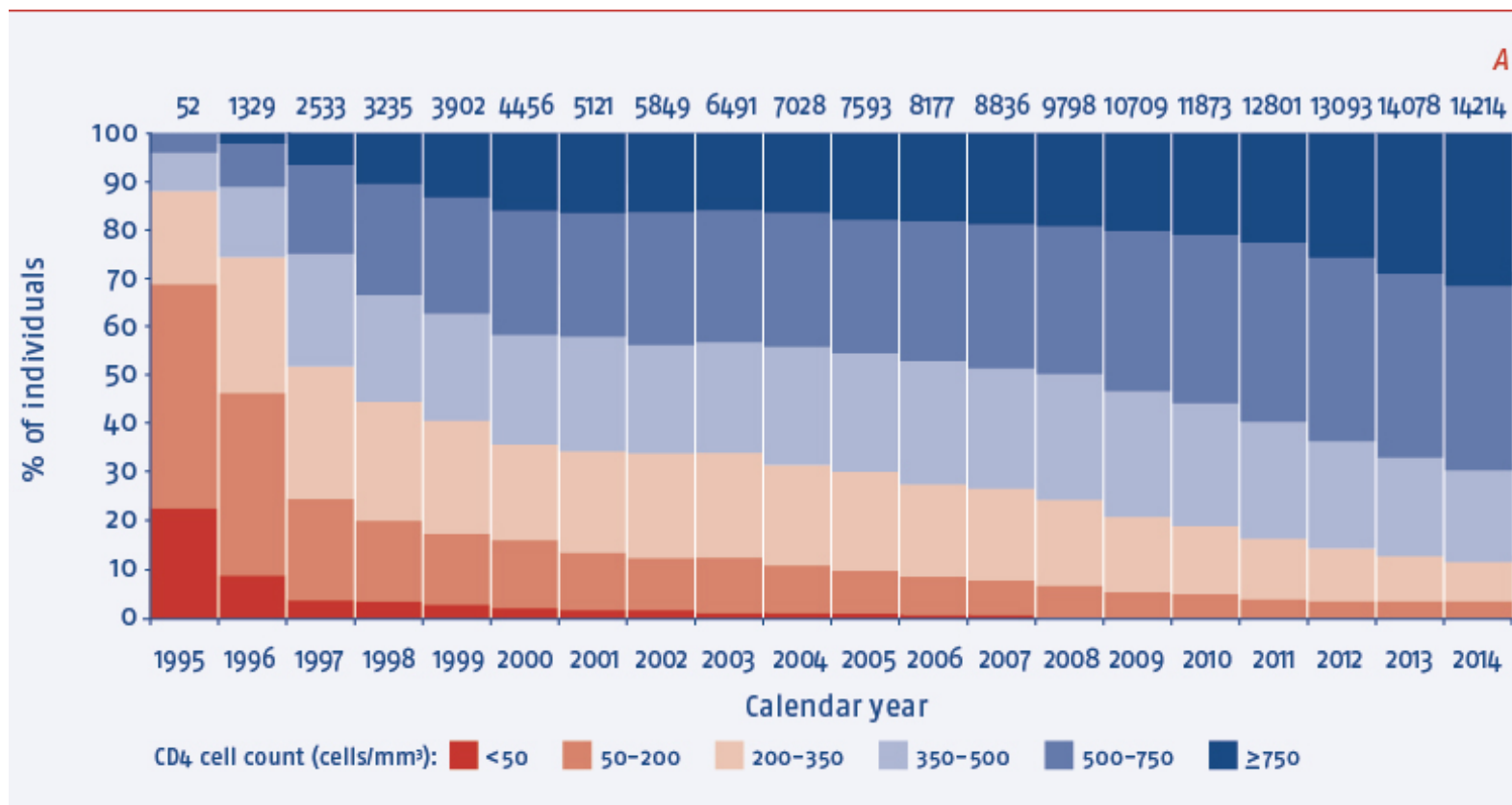
# Patients who manage to use cART continuously achieve high rates of sustained viral suppression\*



# Viral suppression rates on cART are high across the 27 Netherlands treatment centers



# Increasing proportions of patients on cART are living with higher CD4 counts





# Shifts in first-line cART regimens 2009-2014

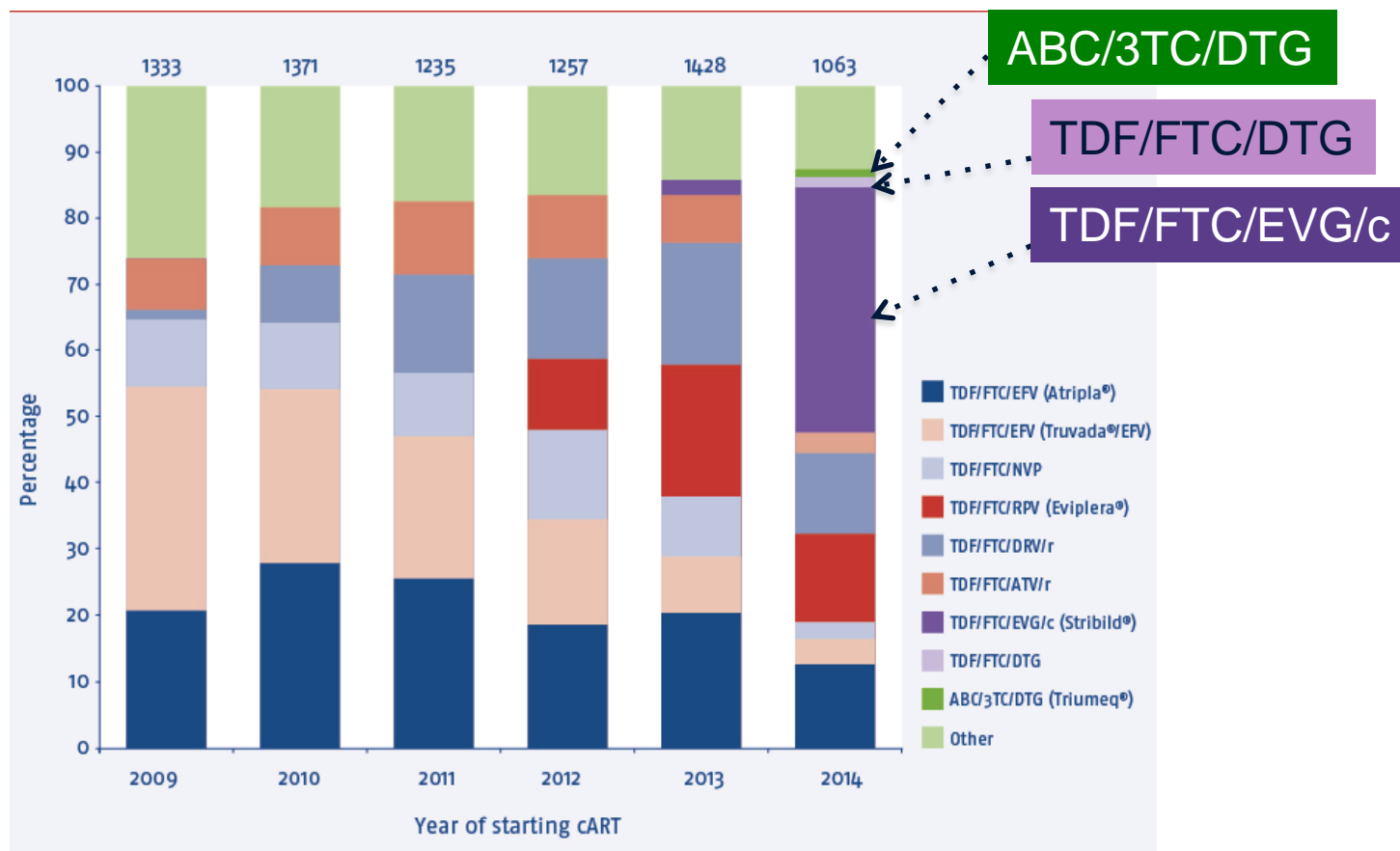
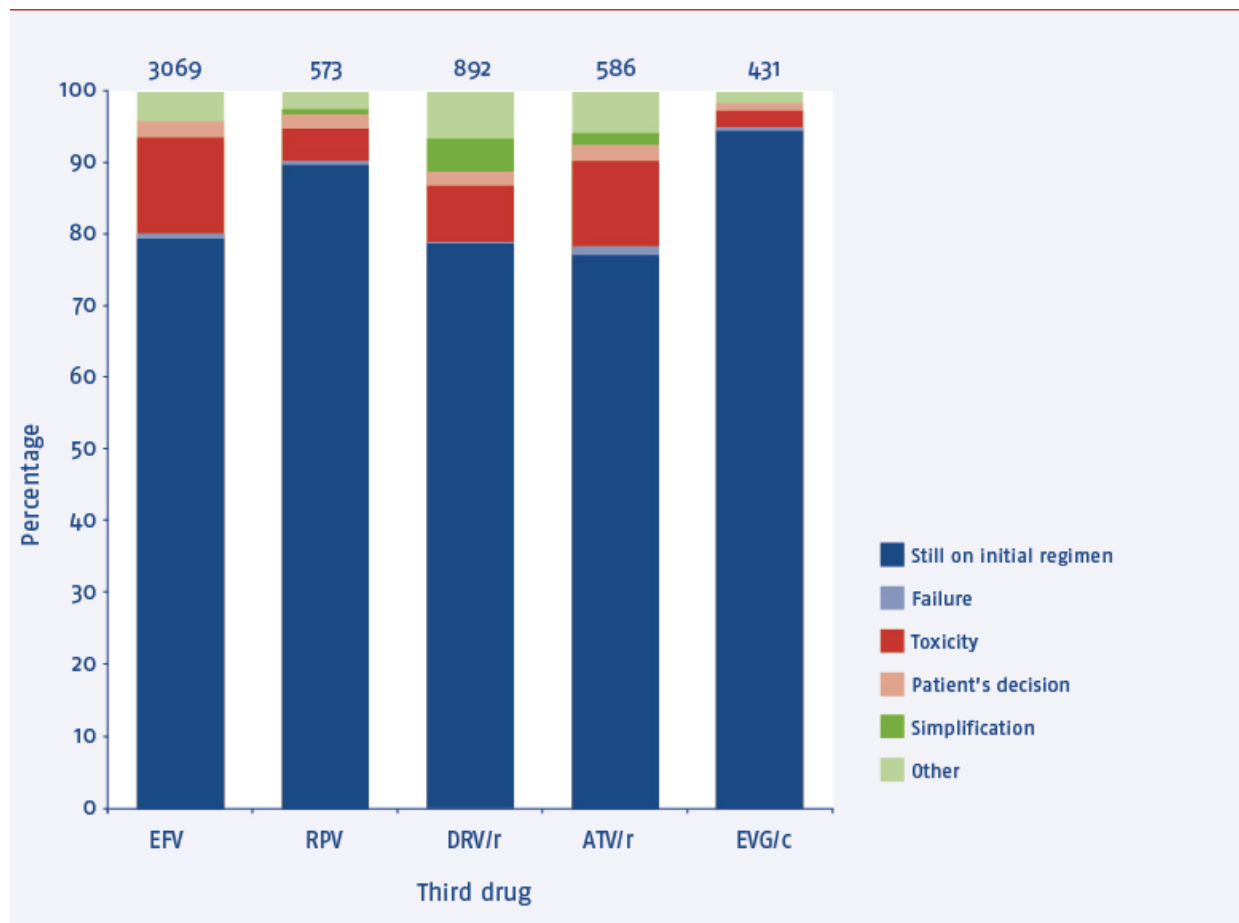


Figure 2.10: Trends in initial combination antiretroviral therapy (cART) regimens. Eviplera®, Stribild®, and Triumeq® were added to the Netherlands drug reimbursement system in June 2012, December 2013, and November 2014, respectively.



# Reasons for changing one or more components of five commonly used TDF/FTC-based regimens within first 12 months (2009-2014)

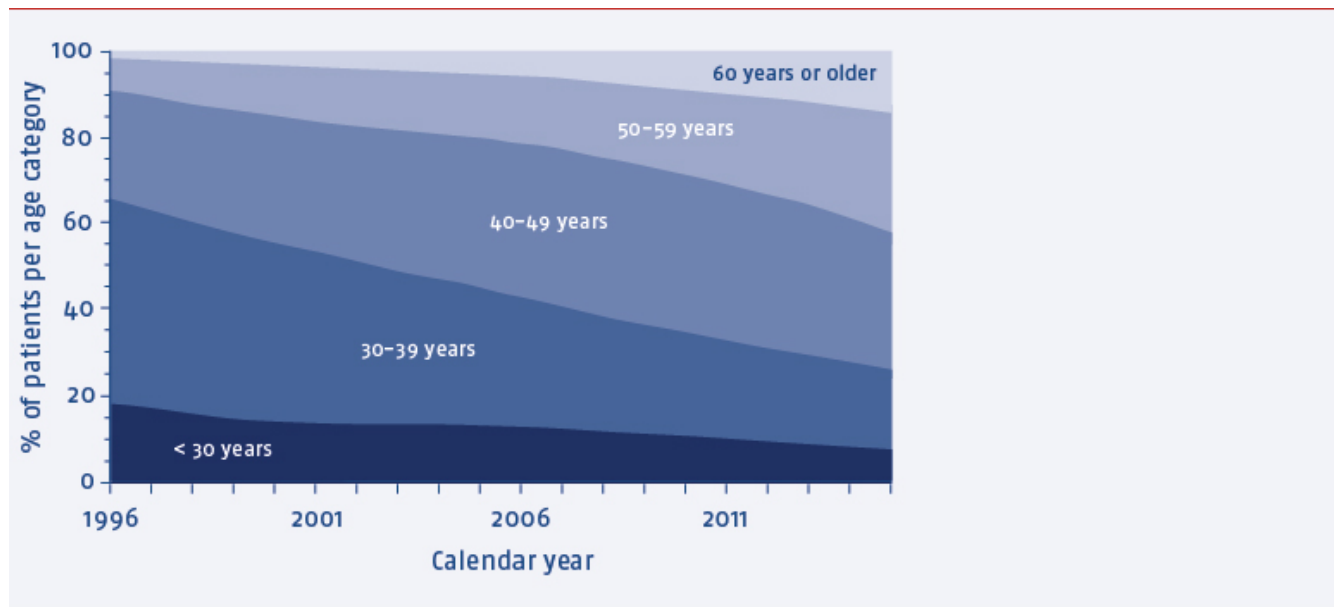


# Topics

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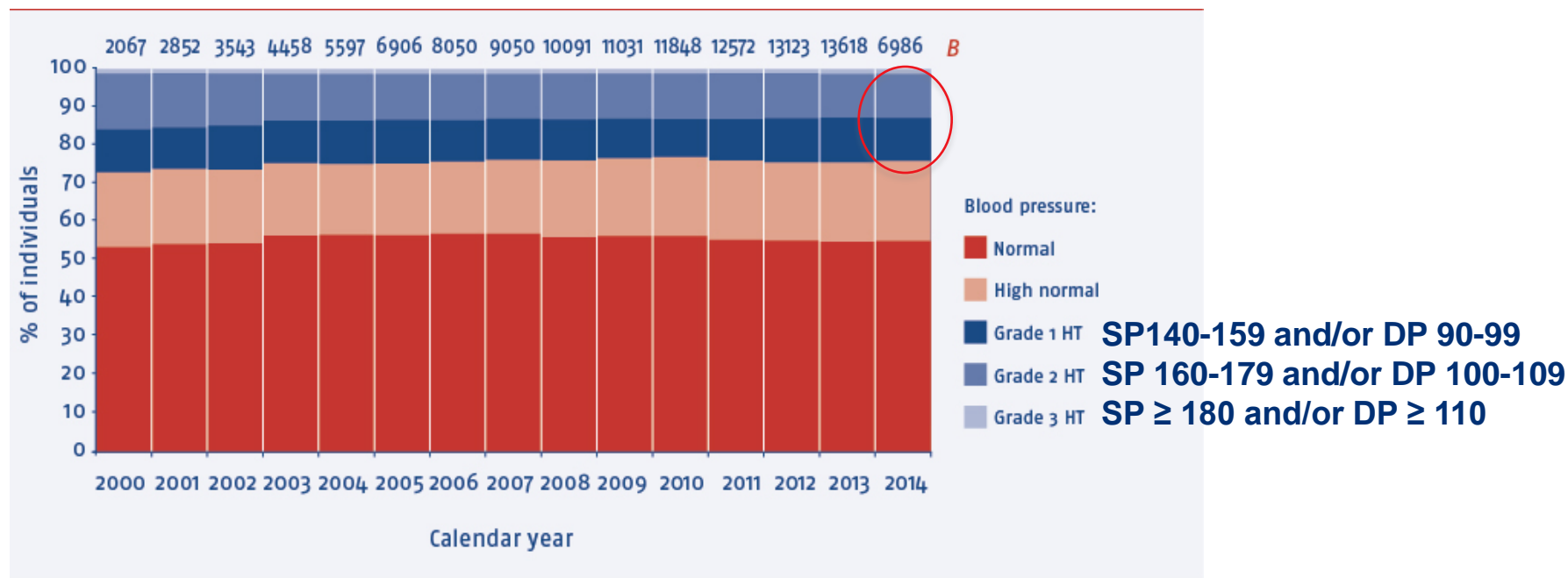
- Epidemic trends over time
- Cascade of care
- Combination antiretroviral treatment and its outcomes
- **Ageing and co-morbidity**
- Conclusions

# Increasing age of patients in care



- Median age of patients in care = 48 years
- 50 years or older
  - 1996: 9%
  - 2015: 42% (39% in 2014)
  - 14% ≥60 years
- Increase in age-related comorbidities

# Hypertension in patients in care in the Netherlands not known to be receiving antihypertensive Rx



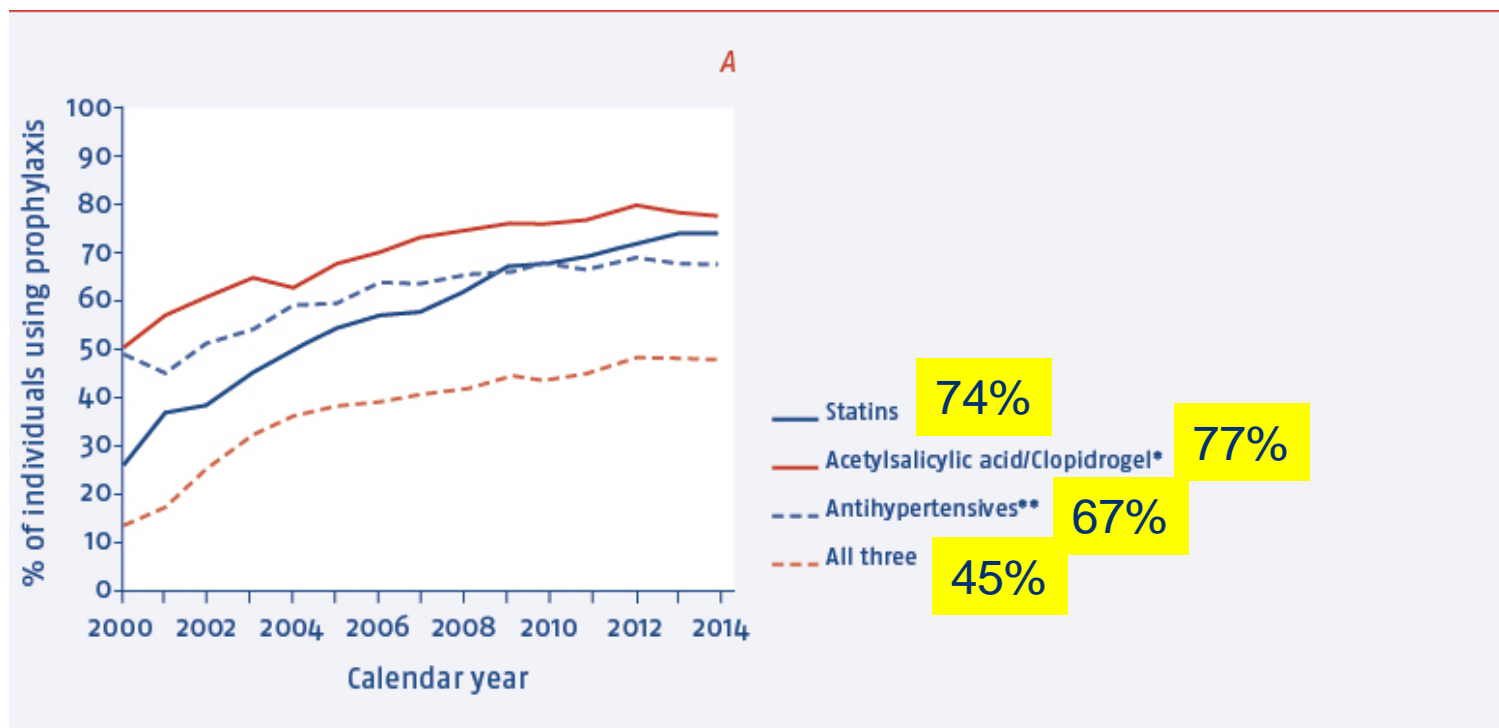
## 2014

- 24% (n=1,687) of patients with a recorded BP and not known to be receiving anti-hypertensive treatment had grade 1-3 hypertension (ESH & ESC criteria)



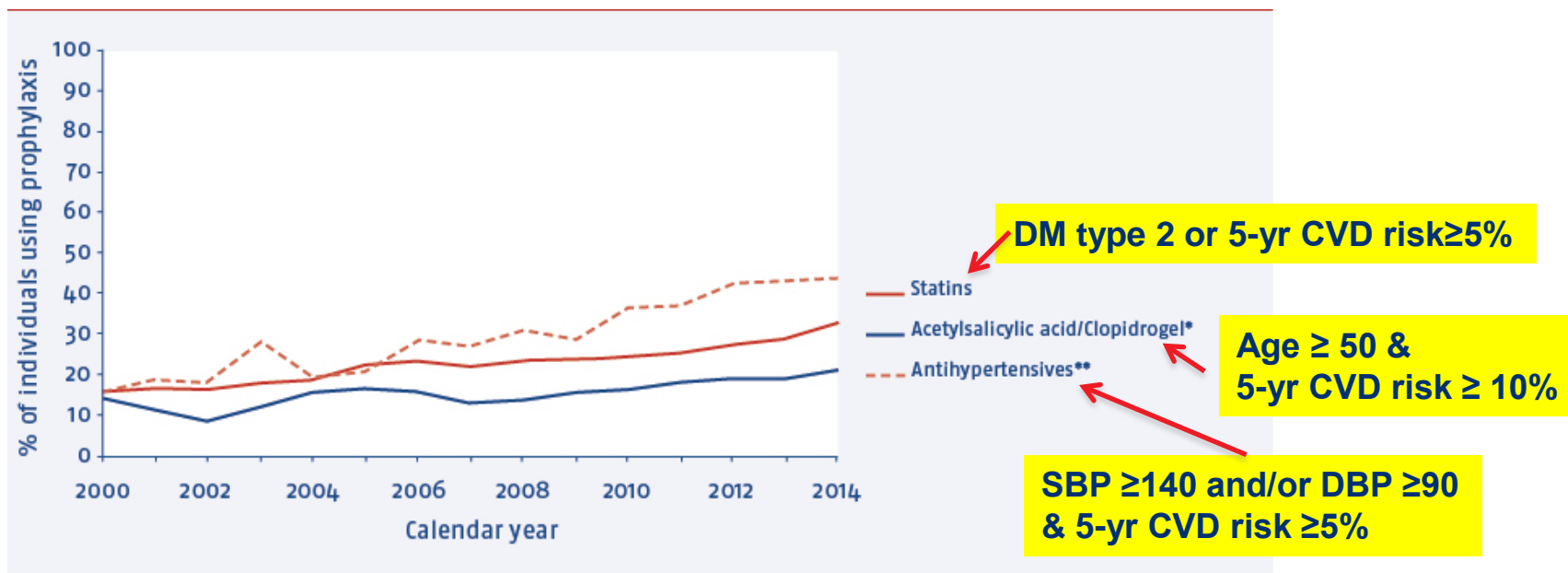
- For 1,345 of these patients, the 5-yr CVD risk (D:A:D) could be calculated and 7 percent had a CVD risk  $\geq 10\%$

# Secondary prophylaxis in patients with known prior myocardial infarction



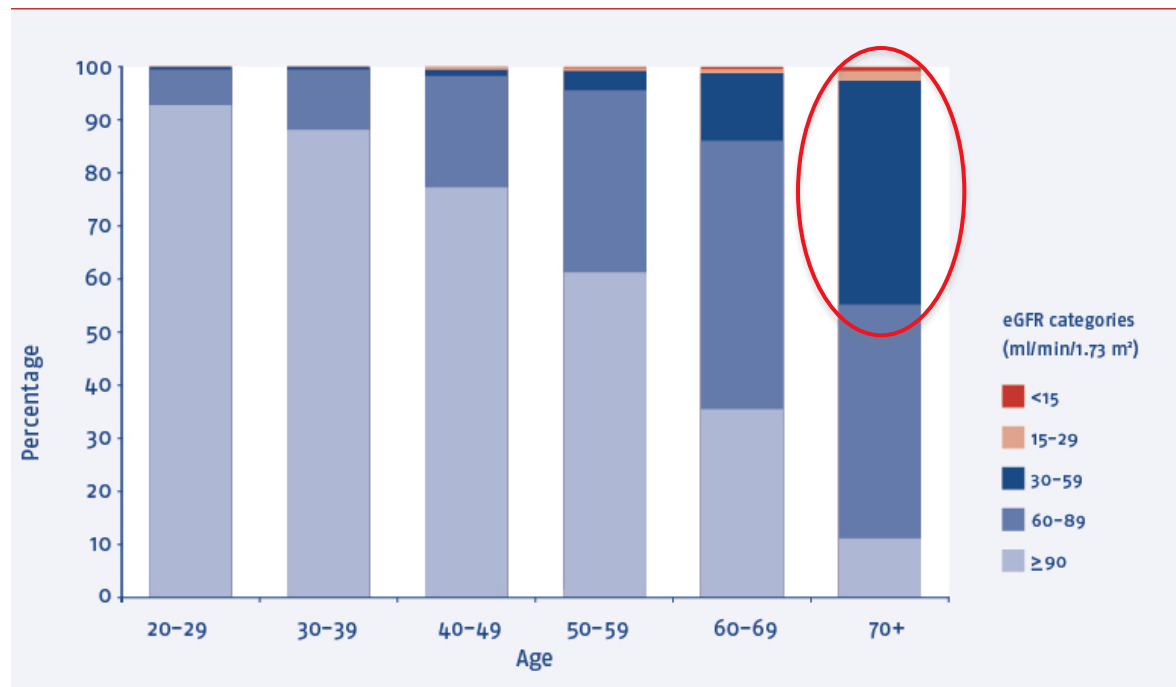
\*\* anti-hypertensives: ACE-inh's or ARB's or beta-blockers

# Primary CVD prophylaxis in patients without known prior MI, stroke, or cardiovascular procedure, eligible for prophylaxis according to EACS guidelines\*



\*<http://www.eacsociety.org/guidelines/eacs-guidelines/eacs-guidelines.html>

# Estimated GFR\* of patients in care in NL according to age



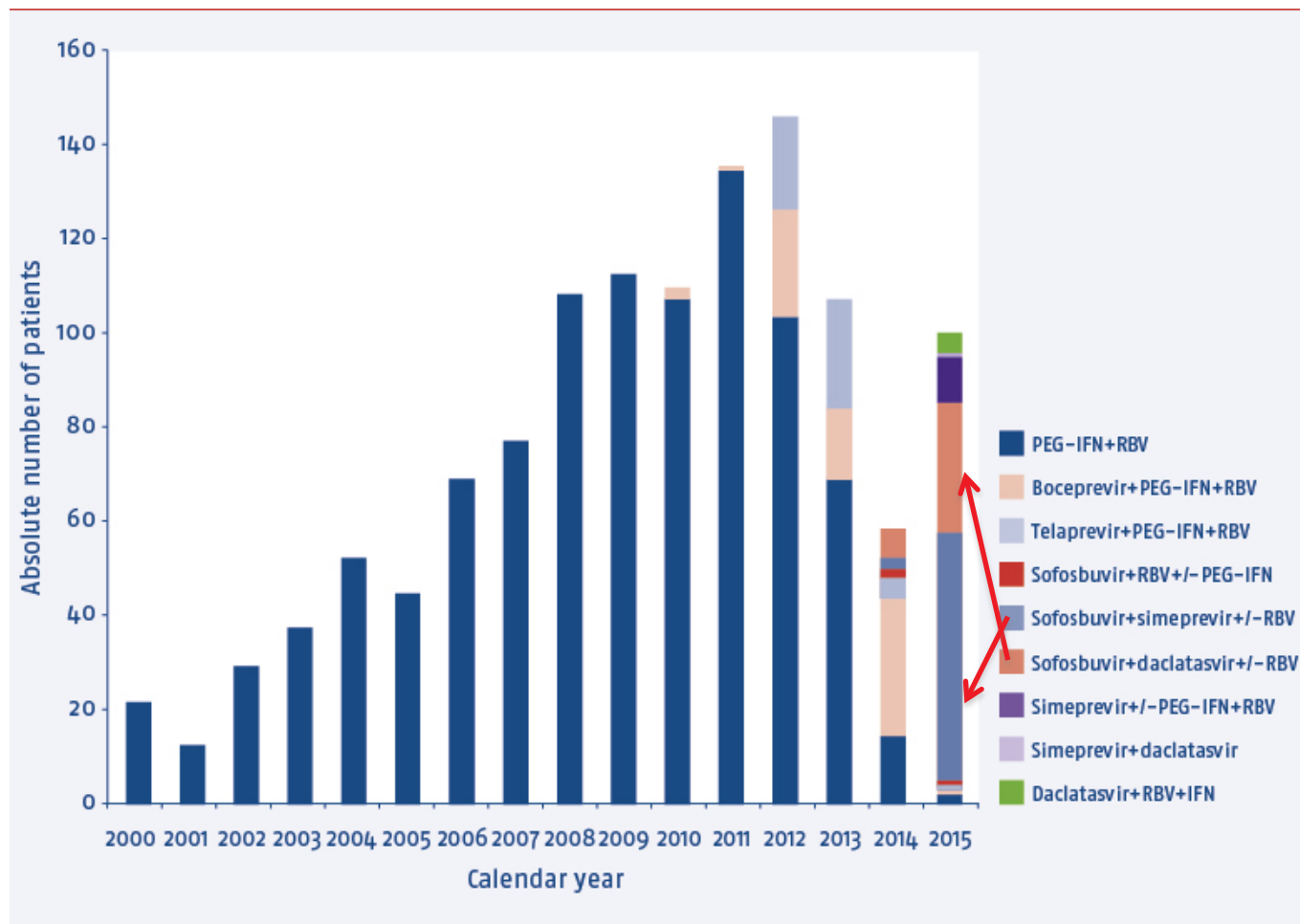
- Approximately 40% with an eGFR < 60 ml/min

\* Cockcroft-Gault equation



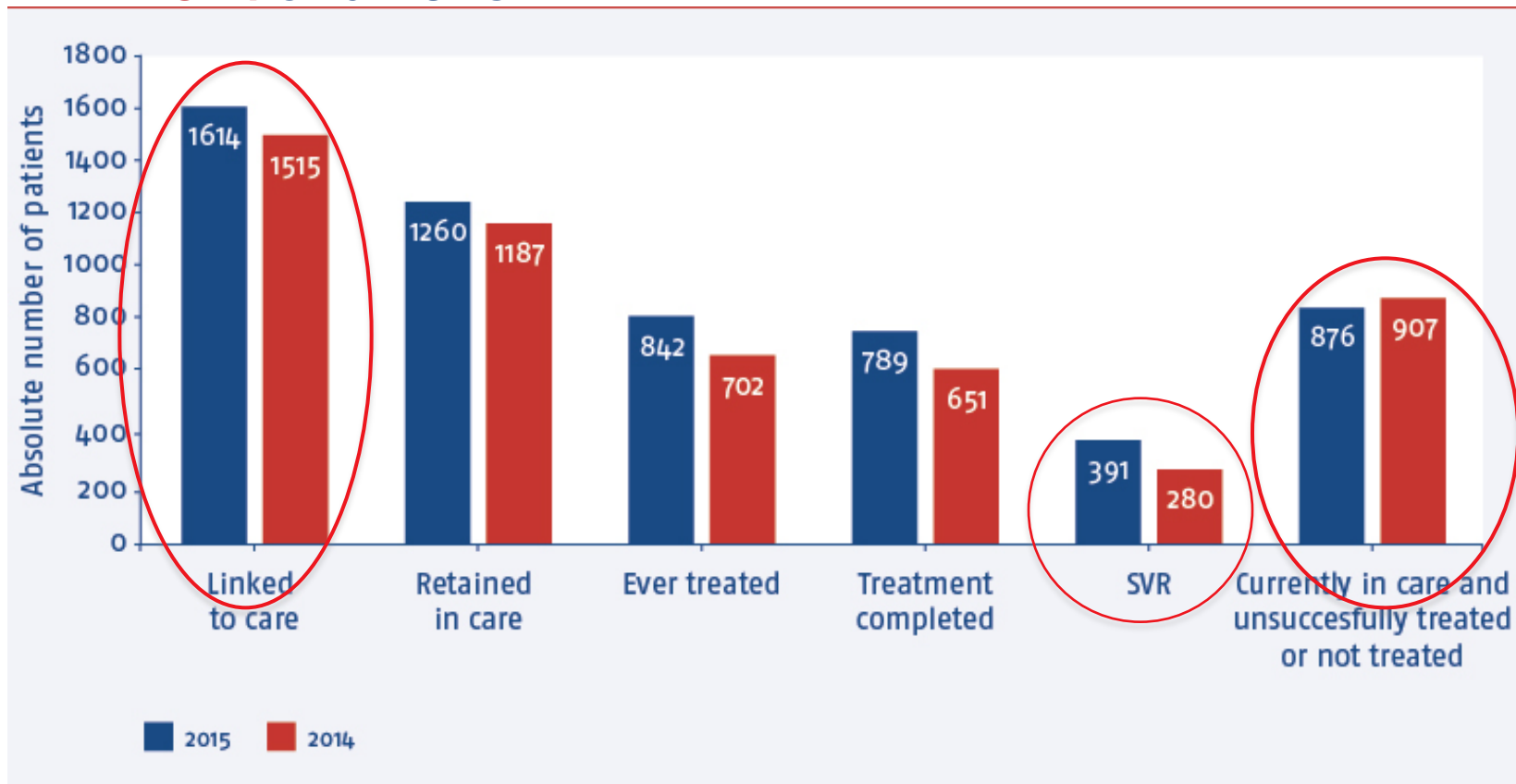
# Treatment for HCV co-infection over time

## Rapid uptake of new direct-acting antivirals



# HCV co-infection continuum of care

## Impact of new direct-acting antivirals comparing 2014 and 2015





# Conclusions

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## Epidemic trends, cascade of care and antiretroviral treatment

- The annual number of newly diagnosed patients seems to show somewhat of a decline, but not nearly fast enough
- Rates of late presentation remain far too high. These are unlikely to improve without expanding HIV testing and a continued fight against stigma
- The Netherlands is close to reaching all three UNAIDS 90-90-90 treatment targets for 2020, but we should already be aiming higher
- Treatment is increasingly being started at higher CD4 counts and efficacy is high across treatment centres
- There's a shift towards use of integrase inhibitors as part of first-line treatment, which is expected to continue



# Conclusions

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## Ageing and comorbidities

- Co-morbidities will continue to increase as the population with HIV in care ages further and will increasingly affect health outcomes and clinical management
- Data suggest that management of hypertension and use of both primary and secondary prevention for cardiovascular disease can be improved further
- There is increased uptake of novel combinations of direct acting antivirals against HCV, and we are seeing the start of a reduction in the number of co-infected individuals who remain in need of effective HCV treatment
- When combined with other preventative interventions, this could mark the beginning of eliminating HCV co-infection from the population with HIV in care in the Netherlands

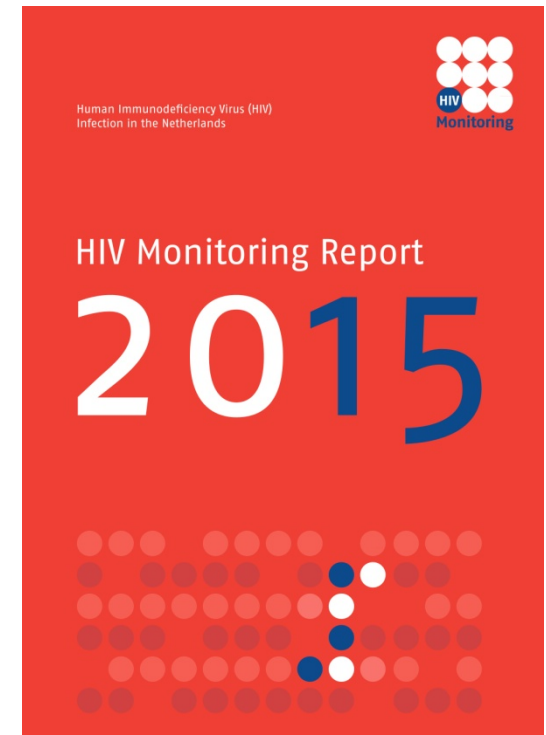


## For further information

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Please visit our website ([www.hiv-monitoring.nl](http://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](http://www.hiv-monitoring.nl)
- Summary and Recommendations on website & in print (see NCHIV bag)



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