

# BASHH: HIV papers

Laura Waters

Consultant GU/HIV Medicine

Mortimer Market Centre, CNWL, London

# Content

- 5 in 1
- A new dawn
- Weight
- Lungs
- But first....

# What do YOU think?

- What has changed most in your discussions with patients?
- PARTNER-2 trial

Literally the best message ever!



U=U

UNDETECTABLE = UNTRANSMITTABLE

Literally the best message ever!

**NEGLIGIBLE IS NOT HELPFUL!**

**U = U**

**UNDETECTABLE = UNTRANSMITTABLE**

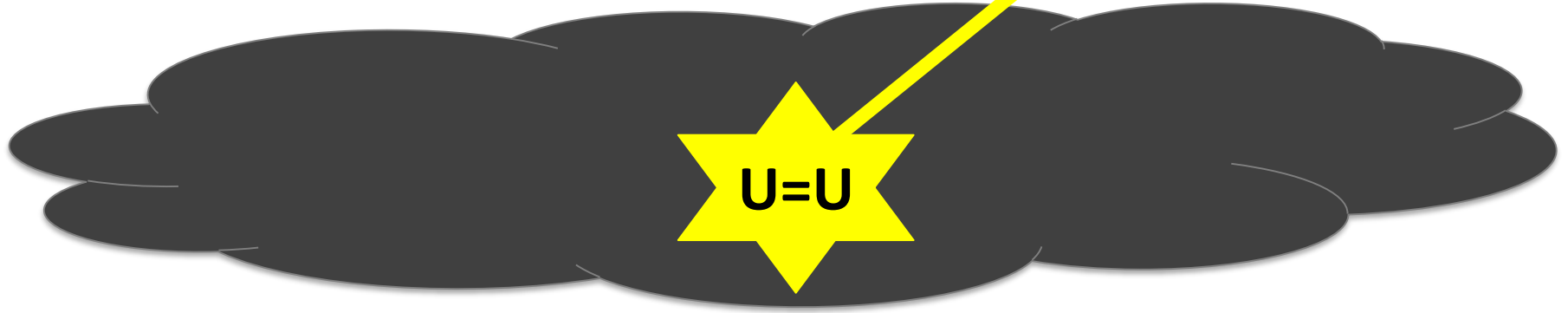
**ZERO! NO RISK! CANNOT PASS IT ON**

**TELL ALL PATIENTS & STAFF, AS MANY TIMES AS NECESSARY**

# Thank you Professor Alison Rodger



# Stigma: a cloud over the HIV cascade



**90:90:90:90**  
DIAGNOSED ON ART VL UD QoL

5 IN 1



5 DRUGS IN 1 SLIDE

# Recent/imminent\*

\*according to your country

**Good for defined groups**  
**Weakness is rilpivirine?**  
**Safety & tolerability driven by comparators**  
**No first-line data**

**GEMINI 96W imminent**  
**FDC in England not imminent?**  
**Caution late presenters**  
**Caution renally adjusted 3TC**

**An ideal first-line regimen?**

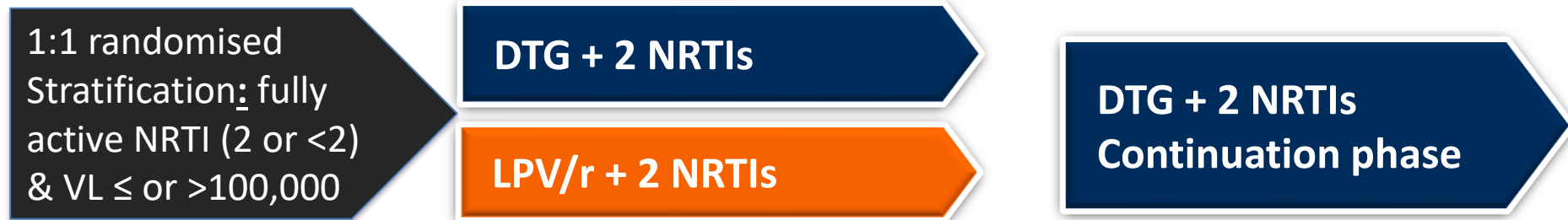
**Role in NNRTI resistance?**  
**Dual therapy?**

**Looks good**  
**Non-TAF indication in England?**  
**Caution resistance data**

A NEW DAWN(ING)

# DAWNING: Study Design

Open-label, randomized noninferiority phase IIIb study



Randomization

W24 interim analysis

Week 52

## Inclusion criteria

- On failing 1st-line 2 NRTIs + NNRTI ≥6M, (VL ≥400 on 2 occasions)
- No primary viral resistance to PIs or INSTIs
- Investigator-selected NRTIs had to include ≥1 fully active NRTI based on viral resistance testing at screening

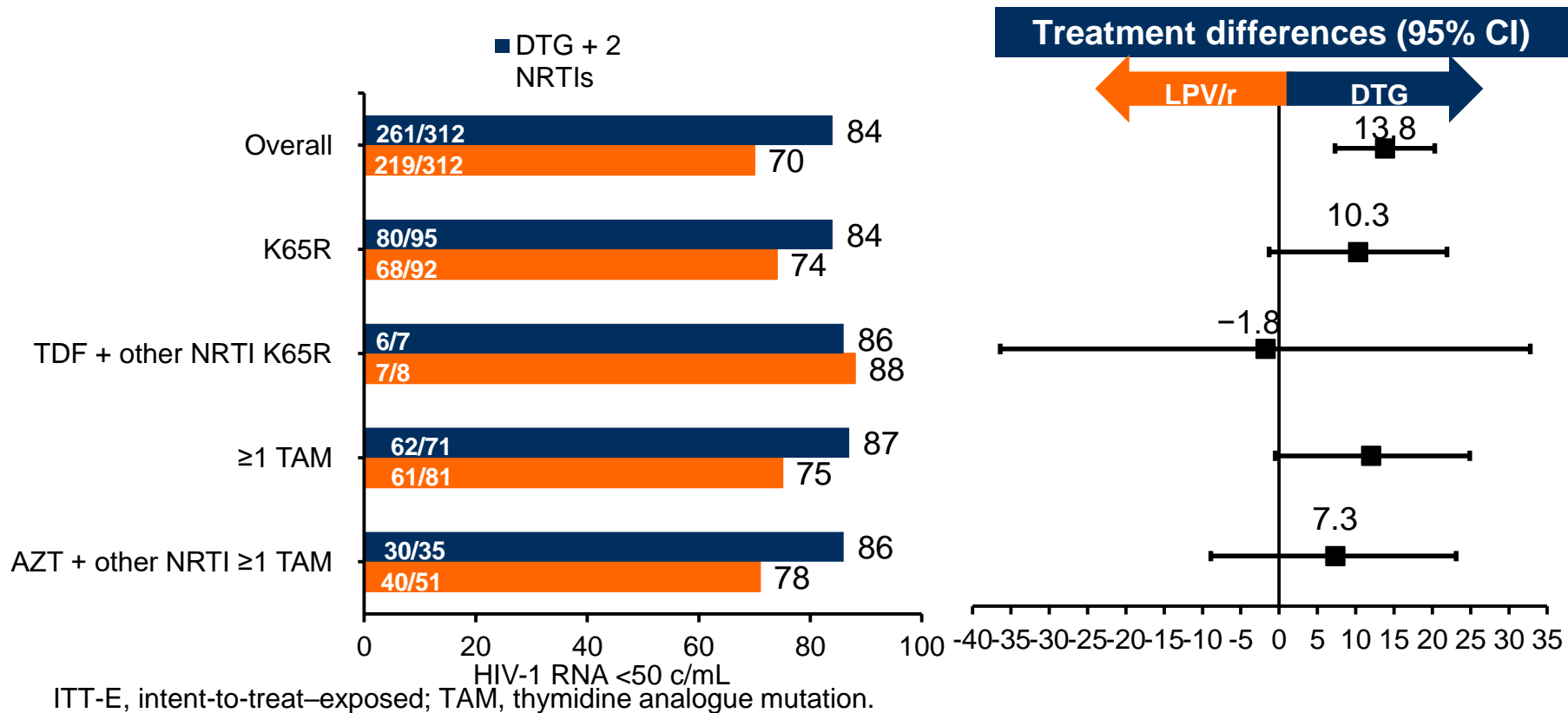
**Primary endpoint at 48 wk: participants with VL <50 c/mL (ITT-E snapshot)<sup>a</sup>**

## Countries

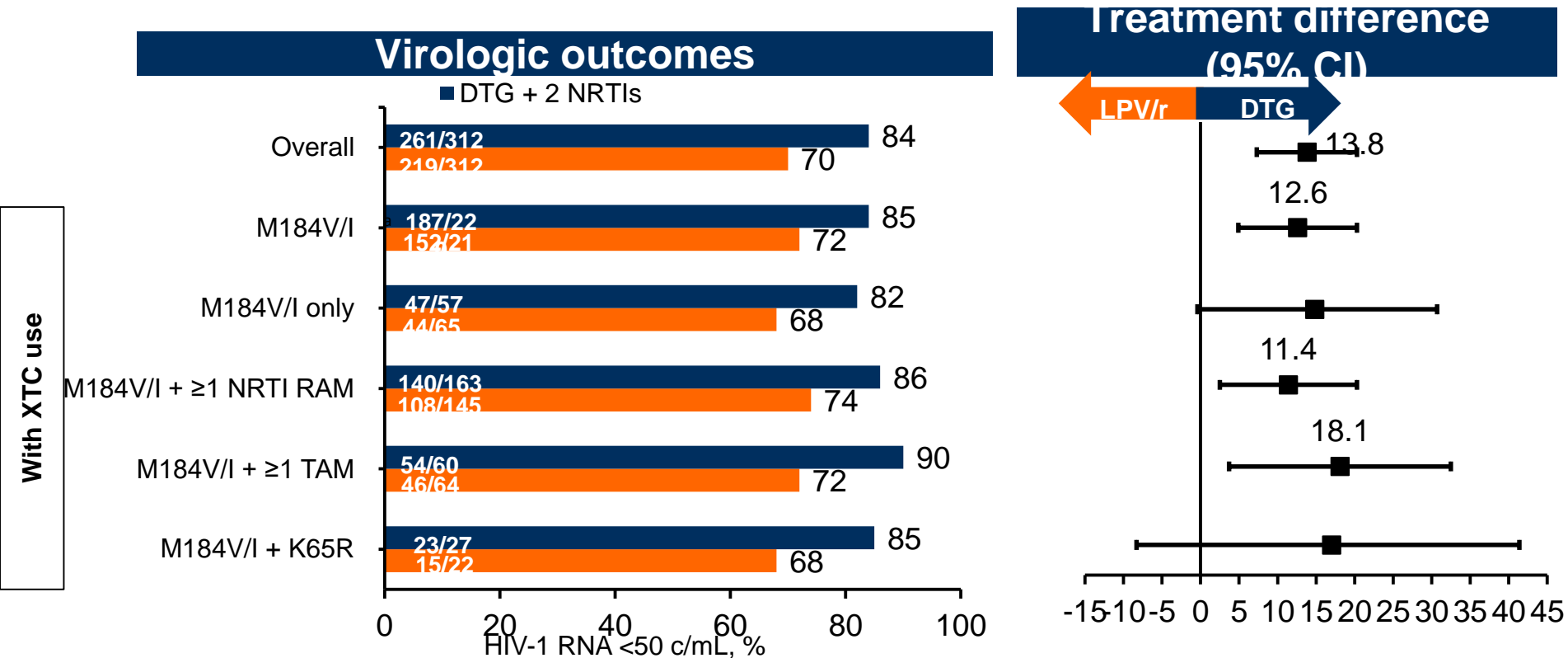
Argentina	Kenya	China	Romania
Brazil	South Africa	Thailand	Russia
Chile			Ukraine
Colombia			
Mexico			
Peru			

<sup>a</sup>–12% noninferiority margin. BL, baseline; ITT-E, intent-to-treat–exposed; VL, viral load.

# W48 ITT-E by K65R & TAMs



# W48 ITT-E by M184V/I +/- other NRTI RAMs

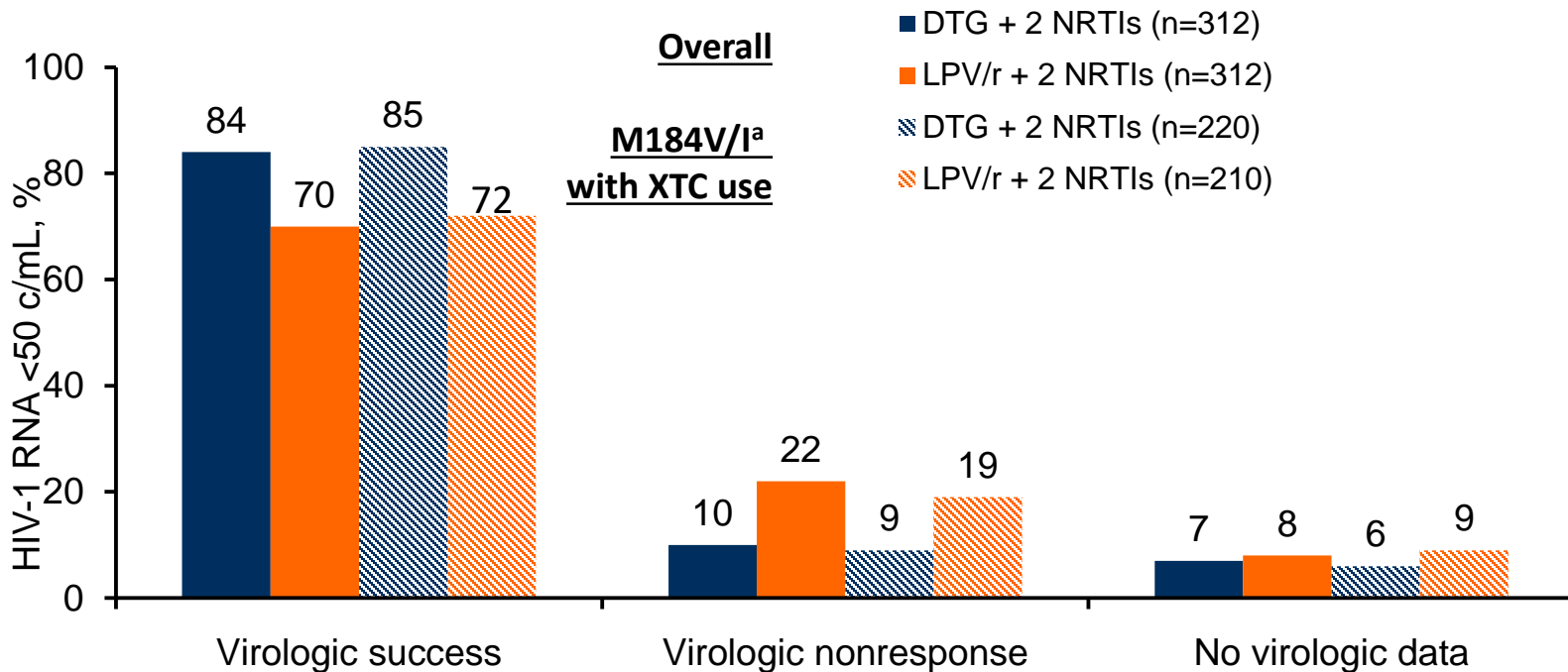


Among the 11 (4%) CVWs in the DTG group, 5/11 (45%) had M184V/I at baseline with use of XTC

Among the 30 (10%) CVWs in the LPV/r group, 15/30 (50%) had M184V/I at baseline with use of XTC

<sup>a</sup>M184V/I alone or plus additional NRTI mutations. TAM, thymidine analogue mutation. XTC, 3TC or FTC.

# Snapshot outcomes overall & M184V/I With XTC population at W48: ITT-E Analysis



<sup>a</sup>M184V/I alone or plus additional NRTI mutations. ITT-E, intent to treat-exposed; XTC, 3TC or FTC use.

# Applying DAWNING to practice

- DTG superior to LPV/r second line
  - Can we extrapolate to DRV/r?
- DTG works well with an impaired NRTI backbone
- EACS guidelines for VF with resistance:
  - Any regimen should use at least 1 fully active boosted plus 1 drug from a new class, or 1 NNRTI assessed by genotypic testing.
  - **Alternatively, DTG (when fully active) + 2 NRTIs, of which at least 1 NRTI is fully active**



WEIGHT

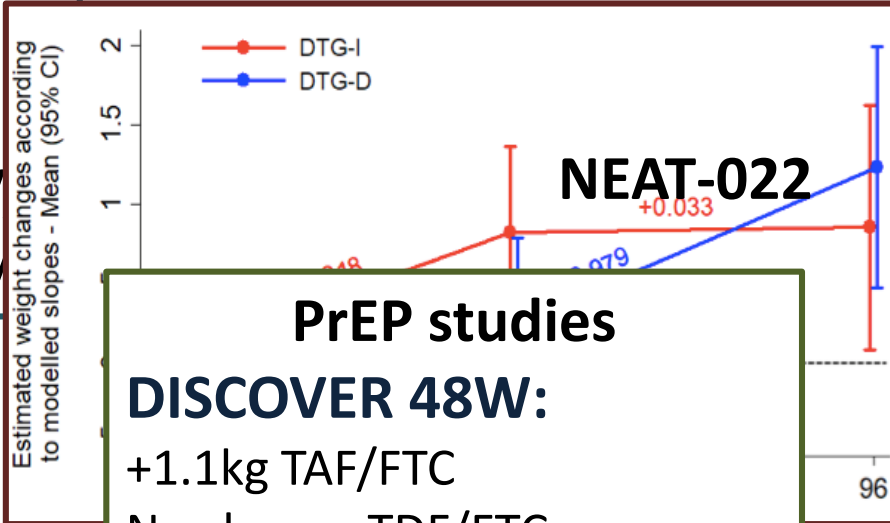
# Weight: randomised studies

## NEAT-001

Trunk fat 7.3%  
more on RAL/DRV  
vs TDF/FTC + DRV

## Spring-1

Greater weight  
rise on all DTG  
doses vs EFV



## PrEP studies

### DISCOVER 48W:

+1.1kg TAF/FTC  
No change TDF/FTC

### HPTN077

No difference CAB vs placebo

## ACTG 5256s

More severe  
Weight gain on  
RAL vs ATV/r

## GS-1490 W96

+3.9 kg on DTG  
+3.5 kg on BIC

# Weight: cohort data

- Several (not all) studies (switch & 1<sup>st</sup> line) report greater weight on INSTI vs other classes
- DTG > earlier INSTI
- ABC & TAF > TDF
- Risk factors
  - Female, non-white, >50 years


# Why?

- Return to health?
- A new lipohypertrophy?
- 'Obesogenic' environment?
- Fewer GI side effects?
- Are people happier (or sadder) on integrases?
- Backbone? Is TDF protective?
- Something else? DTG & melanocortin....
- **Is it clinically important????**

# Every cloud....

June 14, 2019 EDITORIAL

## Could excess body weight be good for cognitive health in chronic HIV infection?

Lucette A. Cysique,  Lambros Messinis, Steven M. Albert

First published June 14, 2019, DOI: <https://doi.org/10.1212/WNL.00000000000007769>

Article

Info & Disclosures

Cognitive health in HIV-infected persons continues to be an important area of investigation, especially as the HIV epidemic is aging. Understanding the factors that may contribute to, or guard against, cognitive decline in the aging HIV population is necessary to develop and evaluate treatments that improve outcomes and reduce elderly dementia risk. In this issue of *Neurology*<sup>®</sup>, a complex study<sup>1</sup> focusing on men's cognitive health using data from the prospective Multicenter AIDS Cohort Study (MACS) shows established but also unexpected relationships among midlife adiposity, and waist circumference, HIV status, and 10-year trajectory of cognitive performance.

# What can we do?

- Counsel people
- Promote healthy lifestyle (NHS Choices!)
- Record weight & waist circumference
- Collate data

LUNGS

# Lung cancer: Kaiser Permanente cohort

Rate ratio (confidence interval) for PLHIV vs HIV-negative PLWHIV = 24,768 (4.9 PYFU); HIV-negative = 257,600 (5.8 PYFU)				<i>P-value trend</i>
<b>Unadjusted</b>	2.0 (1.7-2.2)			<0.001
<b>Adjusted</b>				
Demographics	1.9 (1.5-2.4)			<0.001
+ risk factors	1.4 (1.1-1.7)			0.014
+ prior pneum	1.1 (0.9-1.5)			0.37
<b><i>Recent CD4 (36 months prior)</i></b>				
	<200	200-499	>500	
<b>Unadjusted</b>	2.4 (1.2-4.9)	2.3 (1.6-3.4)	1.4 (0.8-2.4)	<0.001
<b>Adjusted</b>				
Demographics	2.2 (1.1-4.5)	1.9 (1.3-2.8)	1.2 (0.7-2.0)	0.008
+ risk factors	1.4 (0.7-2.9)	1.3 (0.9-1.9)	0.9 (0.5-1.5)	0.58
+ prior pneum	1.2 (0.6-2.5)	1.2 (0.8-1.8)	0.8 (0.5-1.4)	0.98

**Demographics:** age, sex, race/ethnicity, year cohort entry; **Cancer risks:** smoking, drug/alcohol abuse, overweight/obesity



# Lung cancer screening: US

- **USPSTF guidelines:**

- Annual low-dose CT (LDCT) for current/former\* (quit within 15yrs) smokers aged 55-80 yrs with  $\geq 30$  PY history
- Based on NLST trial (n=55,000 PLWH excluded)

- **WIHS/MACS analysis (n=12,339; 7,591 with HIV):**

- F > M, younger age & shorter smoking history
- USPSTF guidelines would have screened only 25% of cases

\*quit less than 15 years prior

# Lung cancer screening: UK

- **UKLS**

- RCT single LDCT vs usual care in high risk (>5% 5-year risk by <http://www.MylungRisk.org>) 50-75 year olds
- Lung cancer: 1.7% baseline, 0.4% at 12-month follow-up
- 86% early stage, 83% resected, £8,466 per QALY gained

- **SUMMIT (started December 2018)**

- Largest ever UK trial, 50,000 50-77 year olds (half high risk)
- Blood marker screening for all, LDCT for high-risk

# Take home message

- People with HIV are at higher risk of lung cancer
- Screening thresholds may differ
- Ensure appropriate follow-up of lung nodules
- **STOP SMOKING, STOP SMOKING, STOP SMOKING**

Ens

fit

Risk of death not caused by smoking
  Excess risk of death from smoking

Hazard Ratio (99% CI)

HIV

0



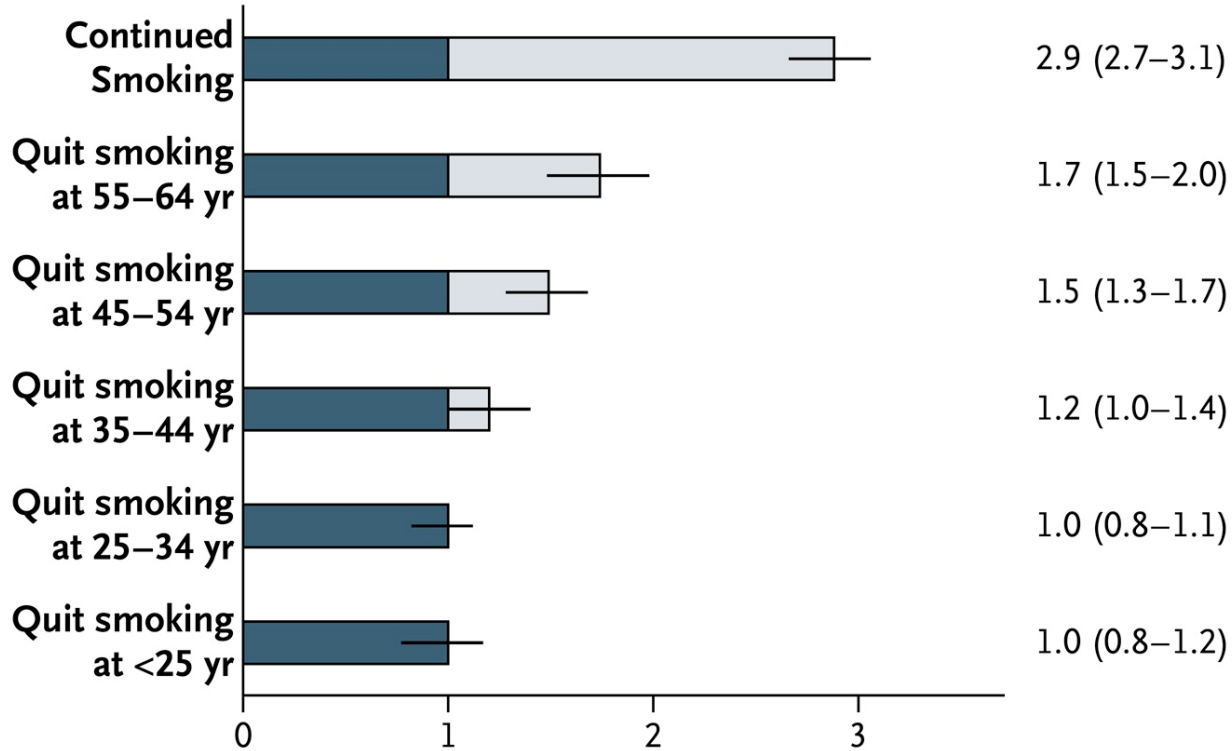
Cu

Sm

Light

Mod

Heav

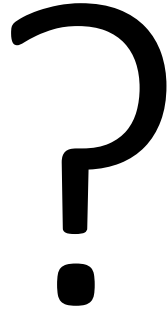


Hazard Ratio

# Summary

- We must talk about U=U uniformly & unambiguously
- New drugs-a-coming (use may be limited in England)
- DAWNING supports use of DTG where previously only PIs dared to treat
- Weight is an emerging issue, aetiology uncertain
- We must all be equipped to discuss smoking cessation

Thank you!



[lwaters@nhs.net](mailto:lwaters@nhs.net)



@drlaurajwaters