# NHIVNA Top 10 2016-17

Kieran Sharkey Liz Williams

#### 19th Annual Conference of the National HIV Nurses Association (NHIVNA)



Speaker Name	Statement
Kieran Sharkey	Assisted by Gilead Sciences to attend NHIVNA 2016
Date : 19/06/2017	June 2017

#### 10. Brexit: when we were offered some kind of future?!





'BECAUSE that's all you're worth'

### 10. PrEP



#### 10. PrEP 🙂

Proud and Ipergay studies report 86% effectiveness in preventing infection – 2015. (99% effective in men taking 4+ doses pw -iPrEx 2014)

- \* NHS decision 10th Nov 2016- UK Court of Appeal showed that attempts by NHS England to avoid the process of evaluating PrEP had no legal basis. Possibly a delaying strategy until patents expire and generics available but 5000 people likely to be diagnosed in the delayed time period!
- Dec 2016 NHS England and PHE announce plans for further study. Details released April 2017 'The PrEP Impact Trial' to assess the need, uptake and duration, will recruit at least 10,000 people.
  - \* Expected to start Summer 2017 in multiple clinics around England
  - Similar trial to happen in Wales
  - \* Scotland announce available on NHS in April 2017
  - \* McCormack S et al. Pre-exposure prophylaxis to prevent the acquisition of HIV-1 infection (PROUD): effectiveness results from the pilot phase of a pragmatic open-label randomised trial. The Lancet, early online publication. DOI: http://dx.doi.org/10.1016/S0140-6736(15)00056-2. 2015.
  - \* Molina J-M et al. On-demand preexposure prophylaxis in man at high risk for HIV-1 infection. NEJM early online publication, DOI: 10.1056/NEJMoa1506273. 2015
  - \* Grant RM et al. Results of the iPrEx open-label extension (iPrEx OLE) in men and transgender women who have sex with men: PrEP uptake, sexual practices, and HIV incidence. 20th International AIDS Conference, Melbourne, abstract TUAC0105LB, 2014.

#### PrEP

- \* Alternative agents being investigated for PrEP: including TAF, Cabotegravir HPTN 083
- \* Small study shows TDF/FTC safe in breast feeding mothers (muganya k et al 2016).
- \* Online availability 'Iwantprepnow, prepster' etc
- \* Many clinics providing monitoring already.
- \* Cost: approx £400 pm for NHS (Cost online to individual £40-50 pm) VS £360,000 approx lifetime cost of a single HIV diagnosis.
- Nursing impact: Nurse Led PrEP clinics, monitoring, education.

#### 10b. PrEP 😊

- Not all good news
  - \* Small number of cases of infection with adequate adherence.
  - \* 2 thought to be due to infection with resistant virus- (New York & Toronto)
  - \* 1 infected with wild type in Holland as part of AmPrEP study. Over 6/12: 141 sexual partners 200 condomless sex acts. Theorised that volume of partners with possible inadequate levels of Truvada in gut may be how infected.
  - \* Elske Hoornenborg<sup>1</sup>, Godelieve J. de Bree<sup>2</sup> 2017 Abstract 953 ACUTE INFECTION WITH A WILD-TYPE HIV-1 VIRUS IN PREP USER WITH HIGH TDF LEVELS. CROI
  - \* Grossman H et al, Knox C et al 2016(ibase nov/dec 2016)

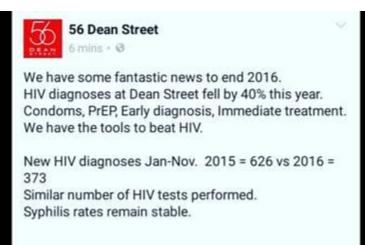
## 9. Are they or aren't they?



## 9. Reduction in HIV diagnoses?



#### 9. Reduction in new diagnoses.





So, joining @56deanstreet and @HomertonSHS we have also seen big decreases in new HIV diagnoses in 2016. More than 50% drop! Wow!! #EndHIV

Raw data from CNWL's Mortimer Market Centre show over a 50% drop in diagnoses. January to September 2016 when compared with the same time period in 2015

This is despite more HIV tests being performed, and a comparable rate of bacterial STI diagnoses

Dr Mags Portman, GUM Lead at Mortimer Market said "We made a decision to actively support those who are choosing to buy PrEP online early in 2016. This approach has been embraced by all staff from nurses to health advisors to doctors. We ensure that our high risk patients are fully informed about the use of PrEP and have access to safe monitoring alongside good sexual health advice and regular STI screening. We remain vigilant for a potential rise in STIs which has been reported elsewhere but so far the rate of bacterial STIs in our clinics are comparable to the same time point last year which is very encouraging. Given that the lionshare of HIV is transmitted by people who are seroconverting to HIV, and who are often untested, we are convinced that PrEP is responsible for the large decreases in new diagnoses being seen. This is fantastic news for all those at risk of HIV and for the wider health economy

#### Reply to Mortimer Market, 56 Dea...











#### Reduction in infections locally

- Locally reduction in infections by 1/3 in gay men.
- \* Unusual increase in heterosexual men!
- \* PHE yet to release figures for 2016 abstract at BASHH 2017
- \* Recent trends in HIV diagnoses and tests among men who have sex with men attending sexual health clinics in england Dana Ogaz et al

### 8. Panda's no longer endangered



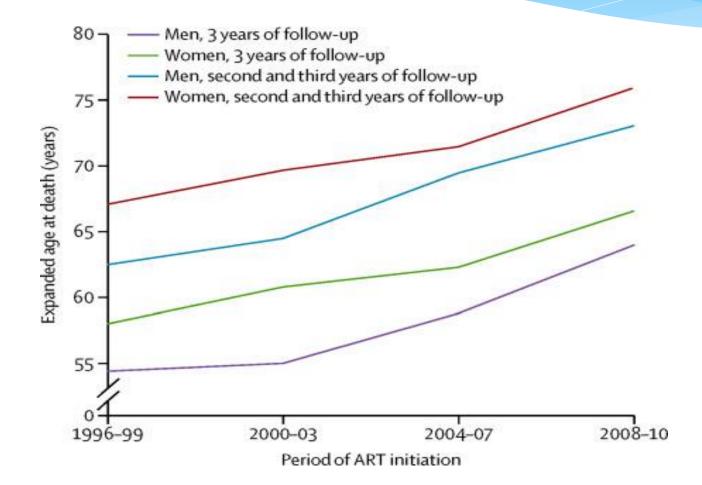
## 8. Life Expectancy



# 8. Survival of HIV-positive patients starting antiretroviral therapy between 1996 and 2013: a collaborative analysis of cohort studies

- \* HIV life expectancy in Europe and US increased by further 10 years:
- \* The Antiretroviral Cohort Collaboration led by Bristol University team examined changes in 3 year survival and life expectancy of patients starting combination antiretroviral therapy (ART) between 1996 and 2013 from 18 European and North American cohorts.
- \* http://www.thelancet.com/journals/lanhiv/article/PIIS2352-3018(17)30066-8/fulltext?elsca1=tlpr
- \* The Antiretroviral Therapy Cohort Collaboration\*

- \* 88 504 patients included
- \* 2106 died during the first year of ART and 2302 died during the second or third year of ART.
- Patients starting ART in 2008–10 had lower all-cause mortality in the first year after ART initiation than did patients starting ART in 2000–03 (adjusted HR 0·71, 95% CI 0.61-0.83).
- \* All-cause mortality in the second and third years after initiation of ART was lower in patients who started ART in 2008–10 than in those who started in 2000–03 (0.57, 0.49–0.67)
- \* Rates of non-AIDS deaths were lower in patients who started ART in 2008–10 (vs 2000–03) in the first year (0.48, 0.34–0.67) and second and third years (0.29, 0.21–0.40) after initiation of ART.
- \* 1996 2010, life expectancy in 20-year-old patients starting ART increased by 9 years in women and 10 years in men.



# 7. Pokemon Go



## 7. Generics



# 7. Generics, is this the end of 1 tablet once a day?

- \* NHS Commissioning for Value guidelines:
- \* Generic: Efavirenz, Kivexa, Truvada(?), Nevirapine, Lamivudine, Abacavir etc
- \* Price changes as prescribing patterns change. Challenges for nurses:
- \* How to effectively 'sell switch' to patients?
- Check out poster 146 BHIVA April 2017
- \* Managing patient choice
  - \* Do they have a choice?

#### 7b. The year of the switch



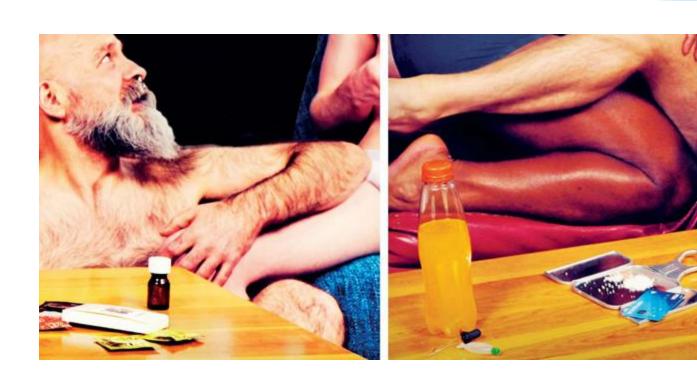
#### The year of the switch

- Not only generics
- \* New formulations of older drugs.
  - \* Rezolsta, Evotaz, Genvoya, Descovy, Odefsey, 'Taf'.

#### 6. Ed Sheeran!



## 6. RIDR (not Grindr)



#### 6. Report Illicit Drug Reaction (RIDR)

- \* New online system for reporting harmful effects of new psychoactive substances (NPS commonly known as 'legal highs' etc.).
- \* https://report-illicit-drug-reaction.phe.gov.uk/
- \* Nursing impact: Similar concept to yellow card scheme for ADR's any health care professional can report.

#### Improving knowledge/treatment of NPS

A new online system called Report Illicit Drug Reaction (RIDR) has been launched to improve the knowledge and treatment of new psychoactive substances (NPS)

Last year, one in 40 young adults aged 16-24 took a NPS. Evidence also suggests widespread use among prisoners and homeless people



#### **About RIDR:**

- Online national system developed by PHE and MHRA
- Accessible to all front-line health staff
- Monitors the negative effects of NPS
- Shares best treatment responses across A&E, sexual & mental health clinics, prisons, GP surgeries etc to improve patient safety

## 5. Phil retires



#### 5. New treatments



#### 5. New treatments

- \* Cabotegravir with Rilpivirine injectables Latte study
- \* Doravarine
- \* Bictegravir
  - \* Some time away yet nursing impact delivery, teaching, prescribing etc.



# Cabotegravir + Rilpivirine Latte 1 & Latte 2

- \* LATTE (Long-Acting Antiretroviral Treatment Enabling) trial evaluated cabotegravir (formerly GSK1265744) and rilpivirine (Edurant): simplified two-drug oral maintenance regimen for people with undetectable viral load using standard three-drug ART.
- \* 96-week findings: 76% of participants who switched maintained viral suppression, Vs 63% on a three-drug regimen containing efavirenz (Sustiva).
- \* Oral combination considered safe and well-tolerated, leading to testing the long-acting injectable formulations of cabotegravir and rilpivirine in the LATTE 2 trial.

#### Latte 2

309 treatment naïve people. >90% were men, 80% white, median age was 35 years. At baseline, the median CD4 cell count was 489 cells/mm<sup>3</sup> and nearly one-fifth had a high viral load >100,000 copies/ml.

- \* Participants started an oral three-drug induction regimen consisting of once-daily Cabotegravir + Abacavir/Lamivudine. Rilpivirine added in last 4 weeks.
- \* 286 achieved viral suppression (<50 copies/ml) and were randomly assigned 2:2:1 to receive IM injections of cabotegravir and rilpivirine every 4 weeks (Q4W) or every 8 weeks (Q8W), or to stay on the oral regimen.
- \* The injectable regimen consists of separate 2-3ml injections of cabotegravir and rilpivirine in the buttocks.

- Week 48: 91% of people on Q4W and 92% on Q8W and 89% of those who stayed on the oral regimen maintained HIV RNA
  <50</li>
- \* Tolerability at 48 weeks mainly injection site reactions (ISRs) –Slightly higher in the 8W approx 30%; 82% mild and 17% moderate: 90% resolved within 7 days. The most common symptoms were pain (67%, nodules (7%) and swelling (6%). Only 2/230 participants (<1%) discontinued due to ISRs.
- \* Virological failure occurred in two people in the 8W arm and 1 person in the oral group. integrase inhibitors Mutations (Q148R) reported in one person in the 8W group.
- \* Patient survey: participants reported higher rates of satisfaction with injections compared to oral drugs and higher preference for continuing with current combination

- \* **Doravirine** Merck once daily NNRTI that does not appear to have the neurologic side effects of efavirenz.
- \* **Bictegravir** Gilead Sciences, integrase inhibitor, appears to be highly potent, well tolerated and works as well as dolutegravir (*Tivicay*) in phase 2 clinical trials, now in phase 3.
- \* David A. Margolis¹; Juan González-García²; Hans-Jürgen Stellbrink³; Joseph J. Eron⁴; Yazdan Yazdanpanah⁵; Sandy Griffith⁶; David Dorey¬; Kimberley Y. Smith¹; Peter Williams˚8; William Spreen¹¹¹ViiV Hlthcare, Research Triangle Park, NC, USA;²Inst for Hlth Rsr of La Paz Univ Hosp, Madrid, Spain;³ICH Study Cntr, Hamburg, Germany;⁴Univ of North Carolina at Chapel Hill, Chapel Hill, NC, USA;⁵INSERM U¹¹37, Paris, France;⁶ViiV Hlthcare, Durham, NC, USA;¬GSK, Mississauga, ON, Canada;⁶Janssen, Beerse, Belgium

#### 4. French Presidential Elections



# 4. Dual Therapies





#### 4. Dual therapy

- \* Monotherapy: dolutegravir (DOMONO study) 24 week data promising, but by 48 weeks study stopped: "The genetic barrier of dolutegravir monotherapy is insufficient to allow for maintenance monotherapy".
  - Blanco J et al. Pathways of resistance in subjects failing dolutegravir monotherapy. CROI 2017,
    13-16 February 2017, Seattle. Oral abstract 42.
    www.croiconference.org/sessions/pathways-resistance-subjects-failing-dolutegravir-monotherapy (abstract)
- 2 drug regimens (CROI)
  - Dolutegravir/rilpivirine: SWORD 1&2 study
  - Dolutegravir/lamivudine: LamiDol
  - Darunavir + other drug
  - \* Other studies NEAT, SALT, PADDLE, GEMINI 1&2 dol +3tc vs dol truvada). EARNES, OLE

#### Dual therapy: Sword 1&2

- Dolutegravir with Rilpivirine as maintenance in patients supressed on 1<sup>st</sup> or 2<sup>nd</sup> regime (first large study looking at dual therapy without boosted protease).
- \* Over 1000 patients randomised to either stay on current treatment or switch to dolutegravir 50 mg with rilpivirine 25mg
- \* 95% of participants in each arm were < 50 c/mL at 48 weeks
- \* 3 participants (<1%) and 6 participant (1%) had virologic nonresponse in the DTG/RPV and continuation ART arms respectively
- \* two participants in each arm met protocol defined virologic failure
- \* Demonstrates non inferiority.

## Limitations and implications

- \* High success, minimal virologic non-response and no clear resistance emergence in over 500 patients treated
- \* Some but not many drug-drug interactions and no renal clearance issues.
- \* Conservative study; Participants could have had no virologic failure, no history of transmitted K103N, PI or NRTI mutations.
- \* Who will benefit? patients suppressed on therapy who are on more cumbersome therapy or therapy with potential for longer term toxicity who have NRTI or PI mutations. However this was not a group that was studied in SWORD 1 and 2.

## Other dual therapies

- \* Lamidol study: patients suppressed on 2 NRTI and a 3rd drug first had the 3<sup>rd</sup> drug switched to dolutegravir for 8 weeks. If remained suppressed they entered second phase in which participants had their two NRTI simplified to 300 mg of 3TC.
- \* Of 104 participants who entered the second part of the study 101 remained suppressed at 48 weeks with only one virologic failure.
- \* Gemini 1&2 larger trials looking at same combination in naïve patients.
- \* Joly V et al. Promising results of dolutegravir + lamivudine maintenance in ANRS 167 LAMIDOL trial. CROI 2017, 13-16 February 2017, Seattle. Poster abstract 458. www.croiconference.org/sessions/promising-results-dolutegravir-lamivudine-maintenance-anrs-167-lamidol-trial (abstract and poster)

3. The Spirit of Britain: "We have far more in common with each other than things that divide us." –Jo Cox

# ONE LXVE MANCHESTER



## 3. Cure?



#### **A Pretty Despicable Man**



**PART THREE Down In The Gutter** 





#### KEN YOU **BELIEVE IT?**

#### Livingstone devours whole horse

LONDON MAYOR and professional communist Ken Livingstone shocked onlookers last night when he ate a horse, it was announced by a source

yester dav.

**HORSE MURDERER: Livingstone** 

Labour man Livingstone, 82, reportedly devoured the beast. twelve-hands-high, at a fundraiser for gays in London's glamorous West End.

But his equine dining has been slammed by animal rights protestors, who described the mayoral meal as "disgraceful".

It is believed that Livingstone arrived at the party "off his face" and announced to the delegates that he was "famished". In an inexplicable turn of events, the starving socialist somehow managed to kill, skin, cook and consume the horse as attendees looked on, gobsmacked.

Ken defended himself in a statement released this morning. branding the stories "Jew-spread lies". But CCTV images clearly show a short, bald man tucking in to the charred carcass, pausing

Continued tomorrow >

#### **EAMONN HOLMES**

"My life as a quivering wreck"

The Jetset star reveals all to the London Shite ... thanks to unauthorised wiretaps

**Full Exclusive Story:** Pages 8,9,10,15,16, 17, 22



**MENTAL WEAKLING: Holmes** 

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## 3. Cure

#### \* Approaches:

- Testing eradication at acute HIV infection
- Antiretroviral intensification
- Reactivation strategies (kick and kill)
- Gene therapy
- Therapeutic immunisation



A combined approach most likely to be effective.

#### **BCN 1&2**

- BCN01 study ART plus vaccine, (using parts of virus least likely to mutate) to produce immune response
- \* BCN02 follow up further doses of above with drug used to wake up viral reservoirs (romedepsin) Mothe B et al. Viral control induced by HIVconsv vaccines & romidepsin in early treated individuals. Conference on Retroviruses and Opportunistic Infections (CROI 2017), Seattle, abstract 119LB, 2017
- \* 40% maintained virological control off treatment but blips occur.(15 patients)
- \* Similar study in London with vorinostat 'shock and kill' approach 'River study.'
- \* Steven Deeks/ Anthony Fauci advocates combination approach to 'functional cure'; possibly within next 5 years.
  - Broadly neutralising antibodies (bNAb), gene editing.

### 2. From Zero to Hero?



## 2. Goodbye NHS?



#### 2. Death knell for NHS?

- \* Sexual health service tendering will we follow?
- \* Remember the Brexit bus?
- Increased privatisation of NHS services
- \* Snap elections!
- \* Media coverage of waiting times, what's wrong rather than right, propaganda, divide and rule!
- \* Call to arms, protect our NHS!

## 1. The future... Lord Bucket Head saves the day?!



## 1. RapIT Trial, Test and Treat



## 10. Rapid ART Initiation(RapIT trial)

- \* A South African study suggests that starting therapy immediately, on the first clinic visit, was more effective at 6 months than going through multiple education and laboratory testing visits that delayed the initiation of antiretroviral therapy for up to six weeks.
- \* BASHH 2017 Dr Gary Whitlock Test and Treat HIV service (Dean St)
- \* Rosen S, Maskew M, Fox MP, et al. Initiating ART at a Patient's First Clinic Visit: The RapIT Randomized Trial.

## Thank you

