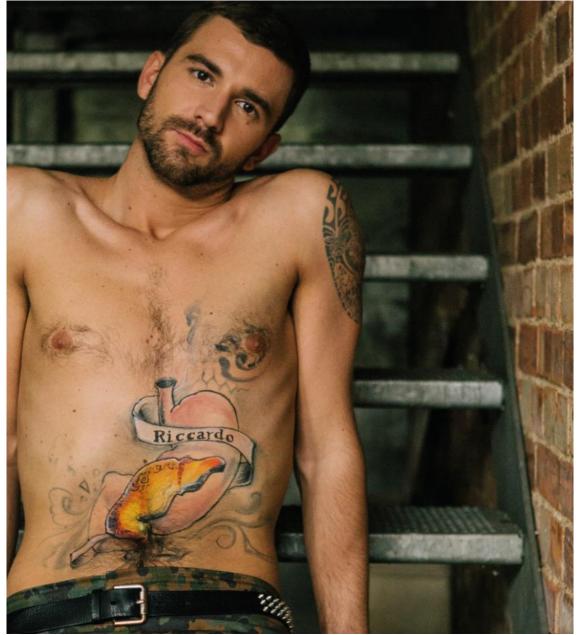
#### HIV 2018

Shaun Watson, Clinical Nurse Specialist, HIV Community

#### **HIV 1988**

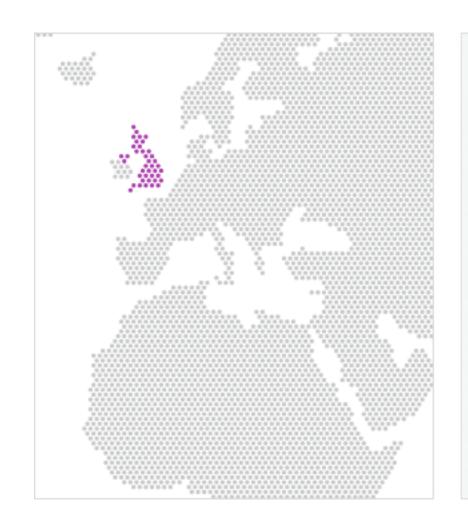
- Mainly affected young, gay men between the ages of 24 – 39
- Poor prognosis less than 5 years
- Very little treatment available caused severe side-effects.
- WHO declares 1st December World AIDS Day





#### **HIV 2018**

- Ageing HIV population (long term-health)
- Falling rates of new positives
- Effective treatment (many as single tablet)
- London signs up to be a fast track city



UK (2015)

101,200 people living with HIV

0.16% adult HIV prevalence

6,095 new HIV infections

594 AIDS-related deaths

96% adults on antiretroviral treatment

Source: Public Health England HIV in the UK 2016 report

## 1. PrEP Trial

- The Impact trial will support 10000 people using generic Truvada (Tenvir) to be taken everyday or event based. Monitored for 2 years and results published, most London places are now full but should be a second wave of places.
- Participation
  - You are HIV negative
  - You are over the age of 16
  - You are considered to be at high risk of HIV
  - You are willing to adhere to the recommended PrEP regimen and re-attend the clinic every 3 months

www.prepimpacttrial.org.uk

## 2. Generic ART

- There are now several generic versions of ART with many more in the pipeline saving the NHS millions of pounds (unfortunately none of this is ploughed back into HIV care)
- When drugs are first approved, the company that developed them gets a license to be the only manufacturer. This usually provides 10-15 years to profit from the investment costs.
- After the patent ends, other companies can make the same drugs. These are called generic drugs.
- In the UK, 60-85% of all NHS prescriptions are for generic medicines.
- These savings enable the NHS to continue to provide free health care.

### Rise of the Generics

- Generic drugs are just as carefully made as the originals. They are the same high quality with the same active ingredients.
- Generic drugs are just as effective as the original versions.
- Generic drugs might be a different shape and/or colour to the original drug. The packaging, manufacturer and brand name are different but the active ingredients are the same.

#### 3. U=U

- "A person living with HIV who has undetectable viral load does not transmit HIV to their partners"
- A comprehensive body of evidence now supports the U=U statement. This ranges from early clinical and theoretical studies, through small observational studies, randomised trials and the large prospective cohorts.
- In addition, no cases of HIV transmission have been reported, over nine years since the Swiss Statement set this challenge. This includes data for gay men, for couples that have anal sex, over periods when low-level viral blips are likely and even when STIs are present.

http://i-base.info/htb/32308

## 4. HIV Vaccine

- Making an HIV vaccine has proved so difficult in the past due to the variability of the virus
- The new study is testing a two-vaccine combination developed by Johnson & Johnson with the U.S. National Institutes of Health and the Bill & Melinda Gates Foundation.
- The new vaccines require one dose to prime the immune system and a second shot to boost the body's response.
- For the first time in more than a decade there are now two big HIV vaccine clinical trials taking place at the same time.
- Several AIDS vaccines have had some success in monkey models, which typically use SIV, a simian cousin of HIV that causes AIDS in rhesus macaques.

# 5. Test & Treat (Immediate start)

- Everyone with HIV who is prepared to take antiretroviral treatment should receive it, regardless of CD4 cell count.
- Anyone living with HIV who understands the commitment of treatment and is ready to start should receive treatment. The change – from a recommendation to start treatment before the CD4 cell count falls below 350 cells/mm³ to treatment for all – follows the results of the START trial.
- The average time from HIV diagnosis to treatment initiation in San Francisco shrank from 35 days to six days between 2013 and 2016 as the city implemented its RAPID programme to speed up treatment starts.

## 6. New Treatments

New drug capsule may allow weekly HIV treatment replacing daily pills with a weekly regimen could help patients stick to their dosing schedule Cancer drug offers tantalising hope for HIV cure. Patient given Nivolumab, a new generation cancer drug, shown to have a reduced reservoir of dormant HIV cells and a boosted immune response

www.nature.com/articles/s41467-017-02294-6

#### 7. Injectables

An injectable antiretroviral therapy (ART) consisting of two drugs (Cabotegravir and Rilpivirine) administered every four or eight weeks may be as effective as a daily oral dose of the drugs in maintaining viral suppression in patients with HIV, according to a new phase 2 trial published in *The Lancet*.

## 8. Long term Health

- Education is now focussing on long term health looking at cardiac, renal, liver, bone and mental health. BHIVA audit of their standards of care showed that many clinics were falling short on monitoring long term health issues such as annual health checks.
- As care moves back to the community it is vital that we educate people living with HIV and support them in making small changes to their exercise levels, drug and alcohol intake, diet and nutrition.

www.hivisjustapartofme.eu

## 9.Decline in new positives

- The decrease in HIV diagnoses in gay and bisexual men represents the most exciting development in the UK HIV epidemic in the last 20 years, when effective treatment became widely available.
- Our success in reducing transmission is due to high levels of condom use among gay men, and a sharp rise in the number of men testing for HIV each year, with those at greatest risk testing more frequently. Early diagnosis is also key to making sure that people benefit from HIV treatments so they can live long and healthy lives and are protected from passing on the virus to others.

10. 90 90 90



#### 90 90 90

By 2020:

- 90% of all people living with HIV will know their HIV status.
- 90% of all people with diagnosed HIV infection will receive sustained antiretroviral therapy.
- 90% of all people receiving antiretroviral therapy will have viral suppression (UNAIDS, 2014)