# U=U: a multidisciplinary approach

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**UDETECTABLE** viral load means HIV IS UNTRANSMITTABLE www.i-Base.info/u-equals-u \* Undetectable = Untransmittable



UNDETECTABLE UNDENIABLE UNDESTROYABLE UNDEFEATABLE UNDETERRABLE UNTRANSMITTABLE









## Why are we discussing U=U?

- Not everyone is onboard as messages differ from 'zero risk' 'virtually no risk' 'negligible' this can be confusing.
- What about viral load is it >200 >50 >20?
- "I have a patient who..."
- "I just don't understand the science...."

## **The Evidence**

	Swiss Statement	Expert opinion and evidence review of >25 smaller studies looking at impact of ART on risk factors for HIV transmission.	Concluded that transmission would not occur undetectable with viral load.	2008	Vernazza P et al. [7]
	HPTN 052	1763 serodifferent heterosexual couples randomised to immediate or deferred ART. Although condom use was high the impact of ART was	All infections occurred in people with detectable viral load: n=17 in the deferred ART group and one early infection in the ART group before VL was undetectable. Follow-up reported out to four years.	2011	Cohen M et al. [8, 9]

highly significant.

"an HIV positive person on effective HIV treatment (ART) cannot transmit HIV through sexual contact"

- on ART and adherent
- undetectable VL
- no STIs
- risk <1 in 100,000 (<0.001%)

### **The Evidence**

PARTNER	Prospective observational European study in ~900 serodifferent couples who were not using condoms.	Final results reported zero transmissions after more than 58,000 times couples had sex without condoms when viral load was undetectable <200 copies/mL.	2014 (interim). 2016 (final)	Rodgers A et al. [10, 11]
Opposites Attract	Prospective observational study in 358 serodifferent gay male couples in Australia, Thailand and Brazil.	Zero transmissions when viral load was undetectable <200 copies/mL.	2017	Grulich A et al. [12]
PARTNER2	Extension of PARTNER study to collect additional follow-up in gay male couples.	Study is fully recruited and still ongoing (2014–2017).	-	[13]

## **PARTNER 2**

- 900 gay couples only (March 2014 to May 2018)
- Aim to provide a similar level of confidence for gay men to PARTNER
- The PARTNER study recruited HIV couples (one partner positive, one negative) at 75 clinical sites in 14 European countries. They tested the HIV-negative partners every six to 12 months for HIV, and tested viral load in the HIV-positive partners. Both partners also completed behavioural surveys. In cases of HIV infection in the negative partners, their HIV was genetically analysed to see if it came from their regular partner.
- The study found no transmissions between gay couples where the HIV-positive partner had a viral load under 200 copies/ml – even though there were nearly 77,000 acts of condomless sex between them.

Risk of HIV transmission through condomless sex in serodifferent gay couples with the HIV-positive partner taking suppressive antiretroviral therapy (PARTNER): final results of a multicentre, prospective, observational study. Rodger, Alison JColl, Pep et al (2019) The Lancet, Volume 0, Issue 0

### Partner 2 at AIDS2018

Q: What would you say to HIV information providers who are withholding this [U=U] information from people with HIV?

A: "It is very, very clear that the risk is zero. If you are on suppressive ART you are sexually non-infectious. *THE TIME FOR EXCUSES IS OVER*."

Dr. Alison Rodger, lead author of PARTNER2 at the International AIDS Conference - AIDS 2018 presentation (July, 2018)

### This means...

- If you are HIV positive and undetectable you cannot pass the virus on to sexual partners.
- The challenge since 2008 is whether HIV transmission can occur so far this not been proven. There is no evidence, anywhere, that anyone has transmitted HIV when they have an undetectable viral load

In absence of evidence, having an opinion against U=U is either outof-date or just prejudice - Simon Collins (i-Base)

# It's a fact

Undetectable equals untransmittable



The British HIV Association is proud to support the #UequalsU consensus statement of the Prevention Access Campaign



UNDETECTABLE = UNTRANSMITTABLE



LIVING WITH HIV?

CAN'T

on the virus.

TERRENCE HIGGINS TRUST

IT STARTS WITH

#UequalsU

PASS ON HIV.

**People on effective HIV** 

treatment cannot pass



HIV & AIDS – sharing knowledge, changing lives

For information on HIV you can rely on: www.aidsmap.com

"The scientific evidence is clear. Someone whose HIV is undetectable does not pose an infection risk to their sexual partners."

U = U Undetectable Equals Untransmittable

## The Campaign



### are the solution

Taking HIV medication daily suppresses the virus and means you can't pass it to others.

> **#UequalsU** DCTakesonHIV.com



## **That's Amazing But....**

- This is not a campaign to promote unprotected sex.
- We still need studies on breastfeeding and blood transmission.
- There are people living with HIV who despite everything cannot get to undetectable.
- Globally there are people living with HIV who cannot access ART.
- There are people living with HIV who decide not to take treatment (intentional non-adherence)

## What Can We Do?

- It's a multidisciplinary team approach we should all be passing on the same information.
- Reiterate talk to people living with HIV about the necessity of staying undetectable for U=U to be applicable.
- Adherence management discuss the importance of taking ART as prescribed to maintain health and prevent onward transmission.
- Encourage engagement ensure people living with HIV attend appointments and are fully engaged with their care and have knowledge of their viral load status. This means also discussing issues that may effect their adherence and engagement. What else is going on for them, life style, home, finances etc.

## UNDETECTABLE viral load means HIV IS UNTRANSMITTABLE www.i-Base.info/u-equals-u



"A person with sustained

to their sexual partners."

undetectable levels of HIV in

their blood cannot transmit HIV

Angelina Namiba Salamander Trust





Chloe Orkin. Chair. British HIV Association (BHIVA)

### **\*** Undetectable = Untransmittable

Poster produced by HIV i-Base for Kobler@CWH (July 2018)



### Does U=U apply to

UNDETECTABLE viral load means HIVIS UNTRANSMITTABLE

In PARTNER 1, couples (both straight and gay) had sex more than 58,000 times without condoms

In PARTNER 2, in gay men only, couples had sex more than 77,000 times without condoms.

There were no linked transmissions in either study.

Other research includes the Rakai, HPTN 052 and Opposites Attract studies. It also includes the Swiss Statement that firt published information about the risk being zero in 2008.

These and other studies are discussed in this online article.

The evidence for U=U: why negligible risk is zero risk

www.i-base.info/htb/32308

### Produced by i-Base for Kobler@CWH (September 2018)

### breastfeeding?

Although an undetectable viral load on ART also reduces the risk from breastfeeding, it doesn't reduce this risk to zero.

The have been cases where babies have become HIV positive from breastfeeding. even when the mother had an undetectable viral load.

### **Further information**

The international U=U campaign raises awareness about this benefit from ART.

Currently, more than 720 organisations have joined from over 90 countries.

www.preventionaccess.org i-Base has more information on

U=U, including a longer version of this factsheet.

www.i-base.info/u-equals-u

Any risk of sexual HIV transmission relates to viral load and being undetectable reduces this risk to zero.

Does U=U work with all HIV drugs?

Yes. Any ART that makes viral load undetectable will mean U=U

### Does U=U work for everyone?

Yes. The PARTNER studies included both gay and straight couples

In straight couples sometimes the man was positive and in others the woman was positive.

### Does U=U work for all types of sex?

Yes. The PARTNER studies collected information about the numbers of times people had oral, vaginal or anal sex. It also asked whether the negative partner was active or passive and whether there was ejaculation. PARTNER reported zero transmissions for all situations.

Does this mean I can stop using condoms?

a personal choice. Or a mutual choice with your partner.

STIs and they can effectively prevent pregnancy.

then in the context of U=U, there is no reason to continue to use

### My partner still wants to use condoms?

Whether your partner is HIV positive or HIV negative, they have to decide what is right for

They might want to use condoms for other reasons, or they might

Sometimes it takes time for someone to accept new evidence, especially after using

### Do STIs affect U=U?

Based on the PARTNER study. U=U still works if, without realising it, one or both partners has an STI.

Undetectable = Untransmittable

Did you know that having an undetectable viral load on HIV treatment (ART) stops HIV transmission?

ART is not only good for your What is U=U? health - it also protects your U=U stands for: partners Undetectable = Untransmittable

U=U means that you don't need It means that someone with an to use condoms if you were only using them to stop HIV undetectable HIV viral load on transmission. ART cannot transmit HIV. even

Leading UK doctors and researchers strongly support the U=U statement.

"There should be no doubt that a person with sustained. undetectable levels of HIV in their blood cannot transmit

 Taking ART every day. Having undetectable viral load for at least 6 months.

depends on:

Continuing to take your meds every day.

How can U=U not be a risk?

without using condoms or PrEP.

What does U=U involve?

This protection from ART

The quick answer is when HIV viral load is undetectable there is too little virus in sexual fluds for an infection to occur.

September 2018

### It is important to monitor and treat STIs, but they are unlikely to affect U=U.

### Is U=U widely accepted?

Yes, most leading HIV scientists and doctors now agree with the U=U statement

This includes the British HIV Association (BHIVA), the for U=U. International AIDS Society (IAS) and the US Center for Disease

### iust above 50 copies/mL.

### How do we know U=U is so effective?

If your doctor doesn't tell you How long does viral load

Guidelines recommend having

The positive partner needed to have an undetectable viral load and the couple needed to be having sex without condoms.

September 2018

Control (CDC).

about U=U?

(2018)

Will my doctor know

Hopefully, yes. U=U has been

headline news for at least two

years. U=U is included in the

about U=U, then ask them.

need to be undetectable?

an undetectable viral load for

six months before relving on

100% protection from U=U.

guidelines refer to being on

### U=U

### HIV to their sexual partners."

Professor Chloe Orkin, Chair, British HIV Association

UK guidelines state that HIV doctors should talk to all their patients about how ART stops transmission

What if I miss my meds?

Missing your meds once will not change U=U.

### But missing meds for 2-3 days might be enough with some combinations for viral load to become detectable

Good adherence is essential

### What about viral load blips?

Sometimes viral load can "blip"

Blips that stayed below 200 copies/mL did not affect the PARTNER results

BHIVA Standards for HIV Care

Researchers have known for over 20 years that ART reduces all transmission risks. But it is only recently that the zero risk has been proved.

The PARTNER studies included couples where one partner was HIV positive on ART and the other HIV negative.

This cautious approach is why

Whether you use condoms is Condoms reduce the risk of many

But if HIV is the only concern.

condoms.

them

still worry about HIV transmission.

condoms for many years.

### Organisations endorsing BHIVA's position on U=U to date include:



### **Resources**

- <u>https://www.preventionaccess.org</u> equal access to the HIV prevention revolution based on #ScienceNotStigma. All people living with HIV have a right to accurate and meaningful information about their social, sexual and reproductive health.
- <u>http://positiveseries.org</u> offers downloadable and customizable social marketing campaigns to educate about U=U and encourage engagement in care.
- <u>http://i-base.info/u-equals-u/</u> clear concise information.

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