

U=U Campaign

(Undetectable = Untransmittable)



Informational campaign "U=U" aims at disseminating the fact that

If the viral load is undetectable, HIV is not transmitted sexually.



- Destigmatization (incl. self-stigmatization) of people living with HIV
- Raising public awareness of HIV infection
- Increasing adherence to ARVT for people living with HIV
- Motivation for HIV testing and early treatment



- Uganda Study
- The Swiss Statement
- HPTN-052 Study
- PARTNER1 Study
- Opposites Attract Study
- PARTNER2 Study

# Uganda Study



- Duration: 30 months
- Participants: 415 heterosexual serodiscordant couples
- Cases of HIV transmission are rare in couples where partner living with HIV has a viral load less than 1500 copies perml





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#### **The Swiss Statement**



- 10 years of medical experience in conception in serodiscordant couples
- Analysis of 25 studies



2008

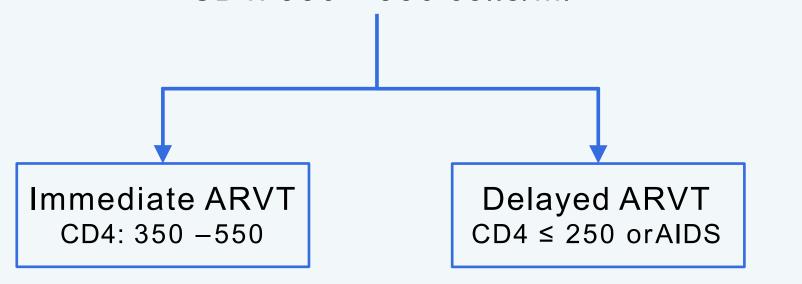
Person living with HIV cannot transmit HIV infection sexually if they are adherent to ARVT and have undetectable viral load for at least last six months



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Stable, healthy, sexually active serodiscordant couples CD4: 350 - 550 cells/ml

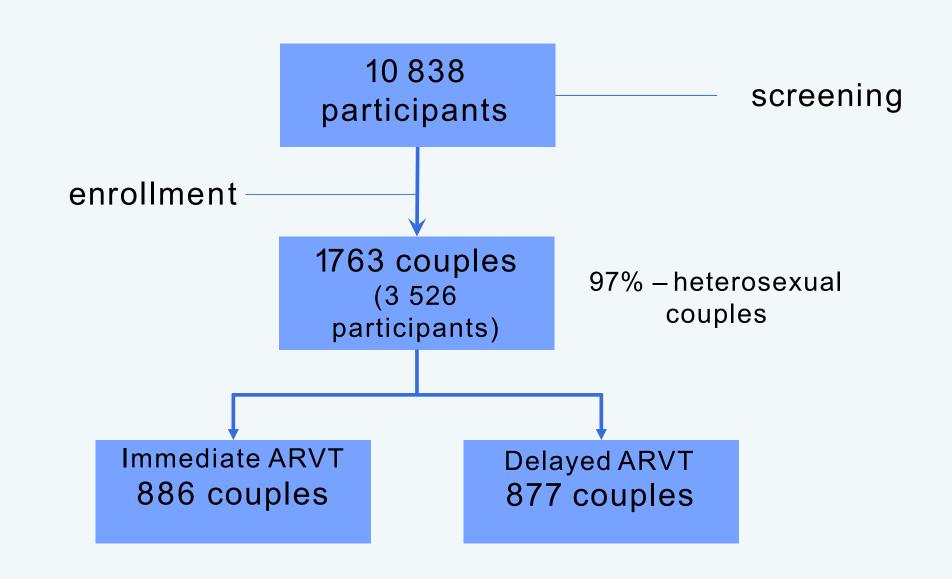


Final points

- HIV transmission
- Death, clinical stage 4 by WHO classification, TB, some bacteriological infections and/or severe not AIDS-associated diseases (CVD, diseases of liver or kidneys, diabetes, cancer)

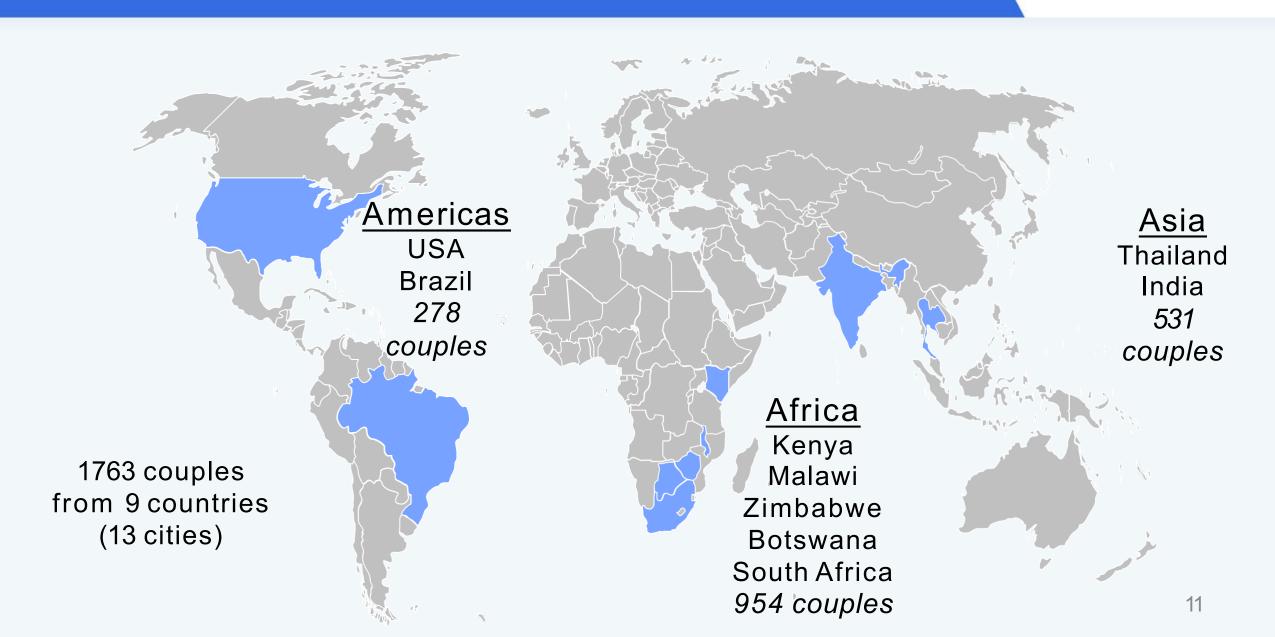
### **HPTN-052 Study: Participants**



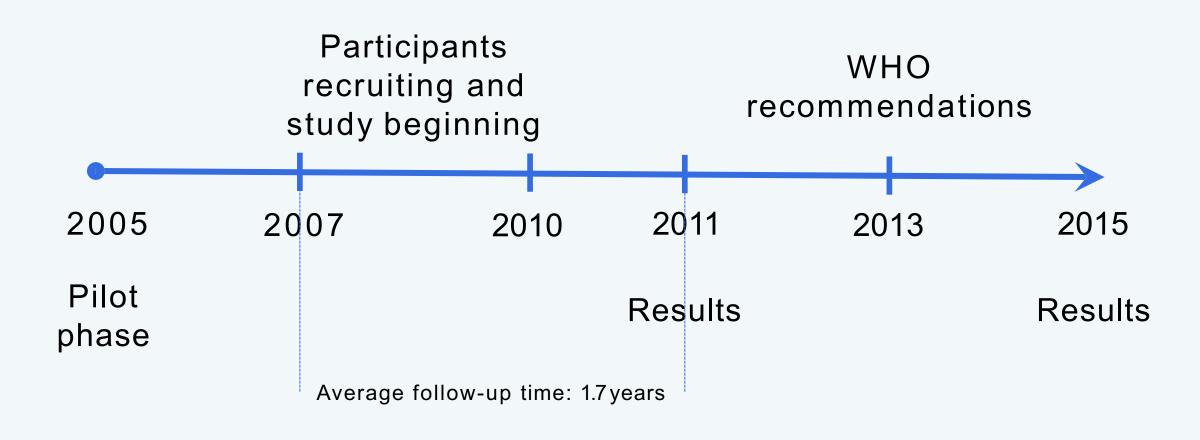


# **HPTN-052 Study: Countries**



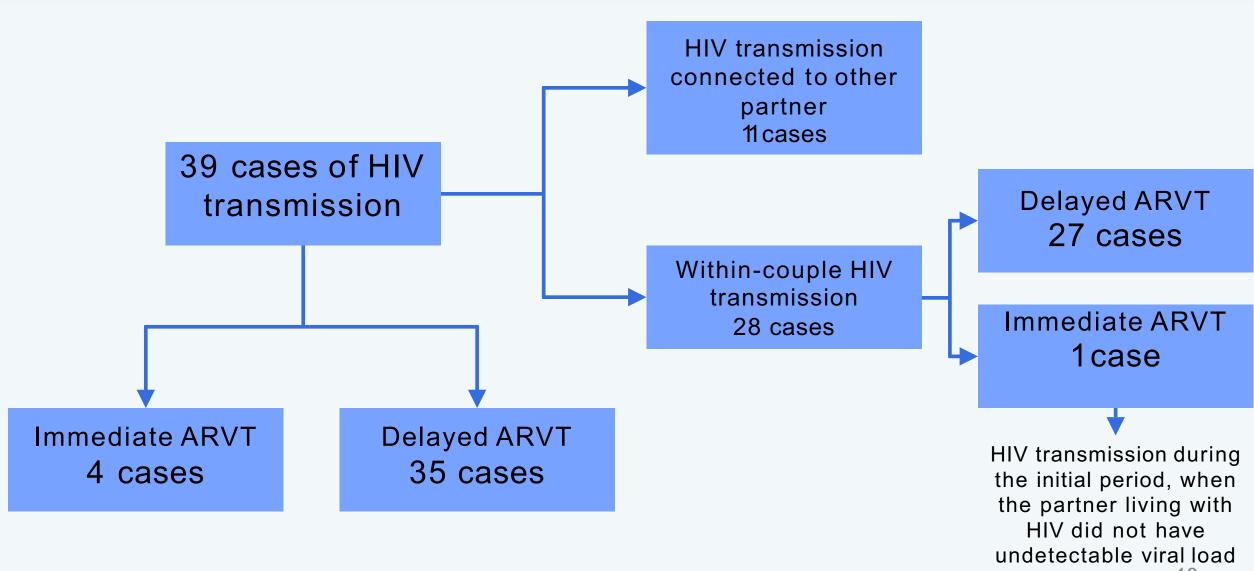






### HPTN-052 Study: Results 2011

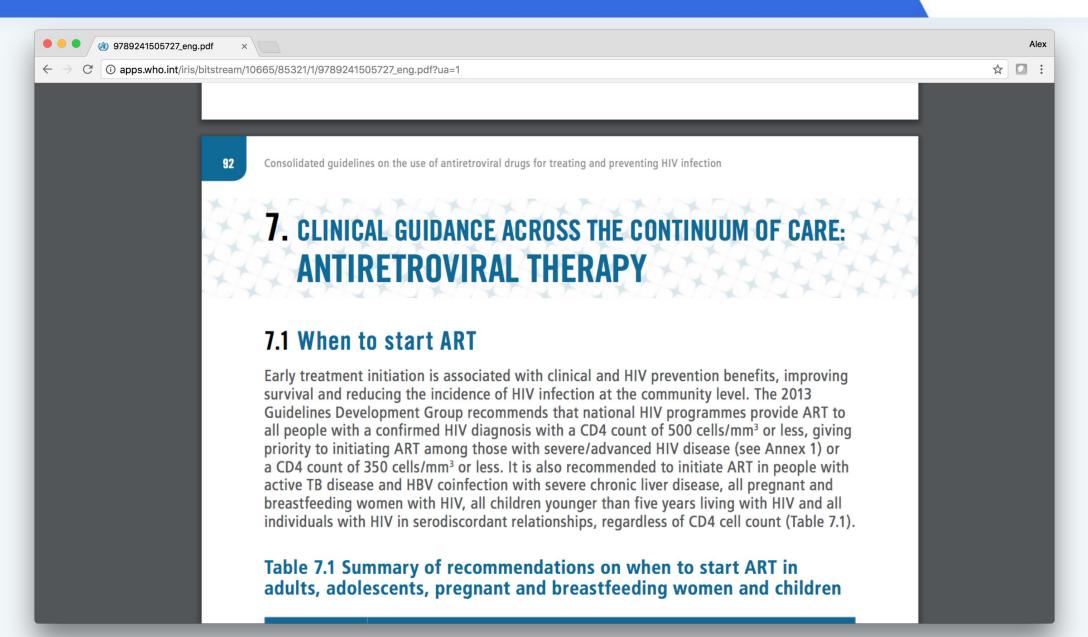




# Early ARVT leads to 96% decrease in sexual transmission of HIV in serodiscordant couples

# **HPTN-052 Study: WHO 2013**





# HPTN-052 Study: Results 2015



Additional follow-up: 4 years

Couples remained: 1171

Cases of within-couple HIV transmission: 8

4 cases: transmission during the initial period, when the partner living with HIV did not have undetectable viral load

4 cases: partner living with HIV did not have undetectable viral load due to incorrect ARVT



During the study, there were no documented cases of within-couple HIV transmission among serodiscordant couples in which the partner living with HIV had undetectable viral load



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# **PARTNER1 Study**



Participants: 888 couples

75 cities, 14 European countries

Average time of supervision: 1.3 years

Undetectable viral load < 200 copies/mLl

Condomless sex acts: 58 000

Cases of HIV transmission: 11

Cases of within-couple HIV transmission: 0





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# **Opposites Attract Study**



Participants: 358 homosexual couples

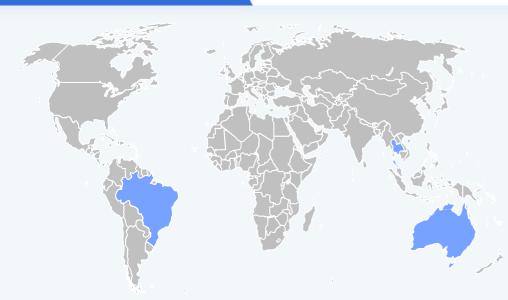
Brazil 96 couples <u>Australia</u> 157 couples Thailand
105 couples

Undetectable viral load < 200 copies/mLl

Condomless sex acts: 16889

Cases of HIV transmission: 3

Cases of within-couple HIV transmission: 0





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# **PARTNER2 Study**



Participants: 972 couples

14 European countries

Average time of supervision: 1.6 years

Undetectable viral load < 200 copies/mLl

Condomless sex acts: 77 000

Cases of HIV transmission: 15

Cases of within-couple HIV transmission: 0



During the study, there were no documented cases of within-couple HIV transmission among serodiscordant couples in which the partner living with HIV had undetectable viral load

Mathematical analysis showed that for the possible HIV transmission, a couple must-have sex for at least 400 years to a thousand years.

In other words, the risk of transmission under these conditions is zero.

#### Sources



1. Uganda Study: <a href="http://www.nejm.org/doi/full/10.1056/NEJM200003303421303#t=article">http://www.nejm.org/doi/full/10.1056/NEJM200003303421303#t=article</a>

- 2. The Swiss Statement: <a href="https://www.unige.ch/sciences-societe/socio/files/4814/0533/6055/Vernazza 2008.pdf">https://www.unige.ch/sciences-societe/socio/files/4814/0533/6055/Vernazza 2008.pdf</a>
- 3. HPTN-052 Study: <a href="https://hptn.org/research/studies/hptn052">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3486734/</a>
- 4. PARTNER1 Study: <a href="https://jamanetwork.com/journals/jama/article-abstract/2533066">https://jamanetwork.com/journals/jama/article-abstract/2533066</a>
- 5. Opposites Attract Study: <a href="https://www.thelancet.com/journals/lanhiv/article/PIIS2352-3018(18)30132-2/fulltext">https://www.thelancet.com/journals/lanhiv/article/PIIS2352-3018(18)30132-2/fulltext</a>;

https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-14-917

6. PARTNER2 Study: <a href="https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)30418-0/fulltext">https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(19)30418-0/fulltext</a>



# THANKS FOR YOUR ATTENTION