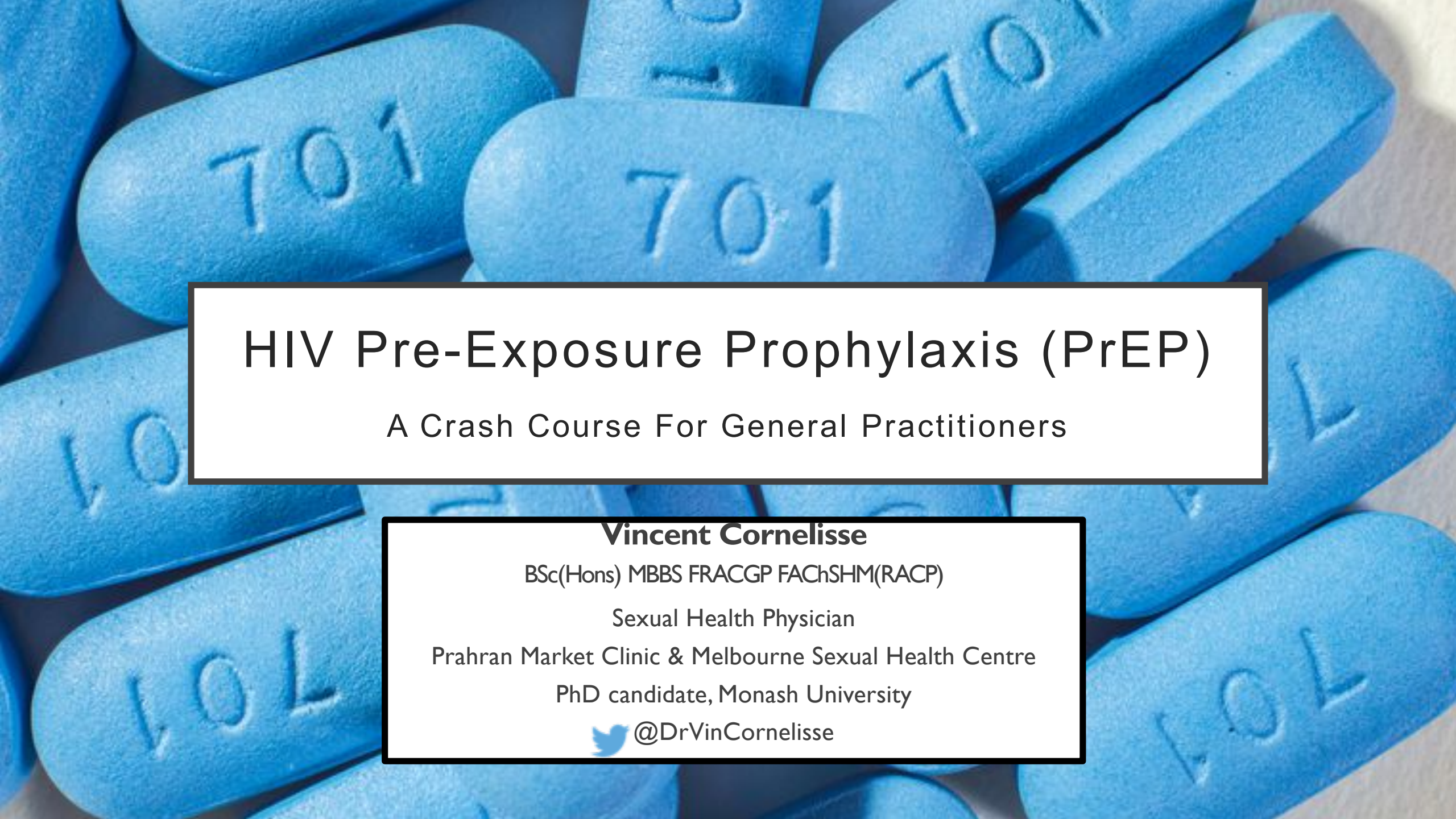

HIV Pre-Exposure Prophylaxis (PrEP)

A Crash Course For General Practitioners

Vincent Cornelisse

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Sexual Health Physician

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PhD candidate, Monash University

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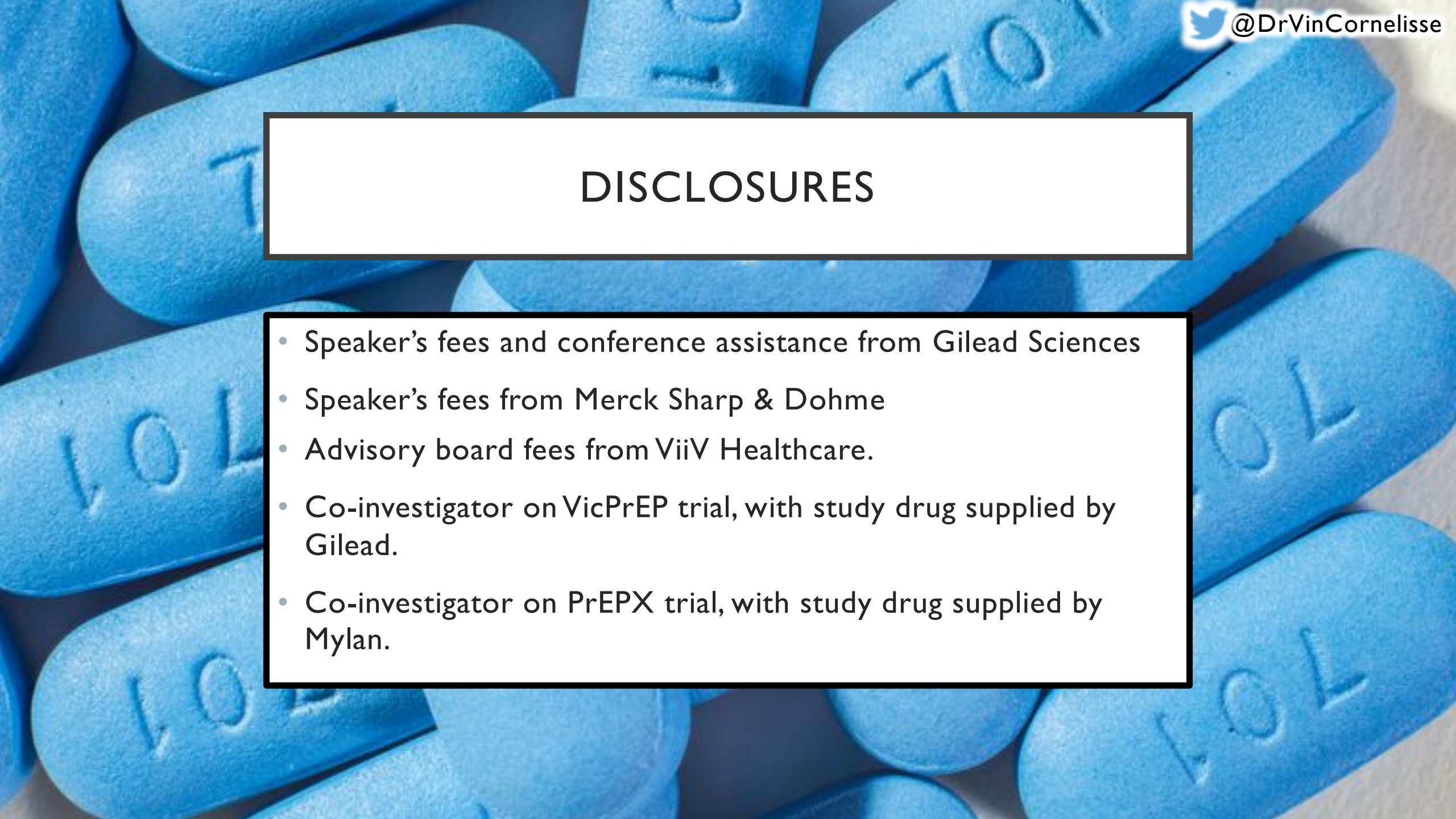

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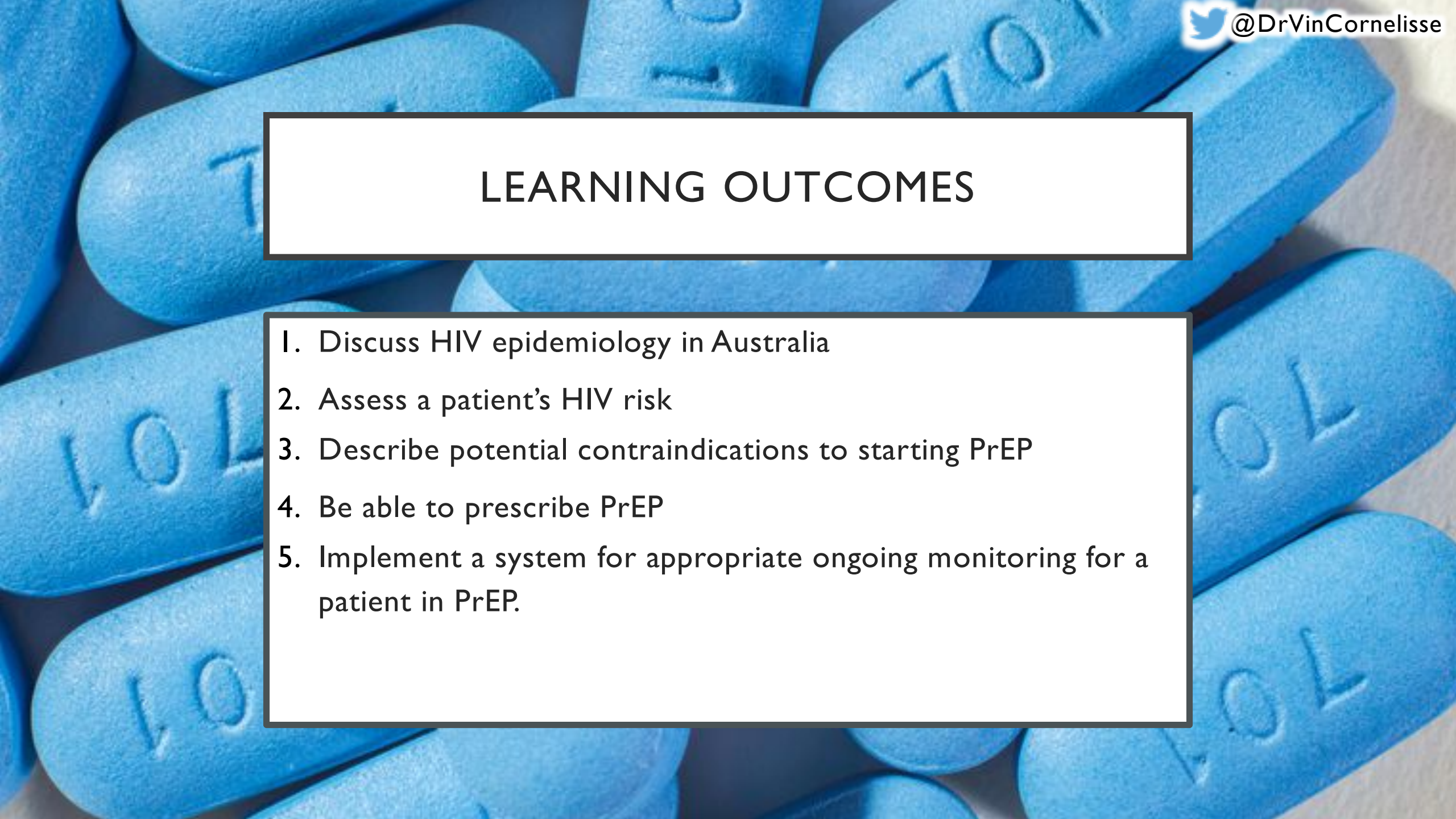
DISCLOSURES

- Speaker's fees and conference assistance from Gilead Sciences
- Speaker's fees from Merck Sharp & Dohme
- Advisory board fees from ViiV Healthcare.
- Co-investigator on VicPrEP trial, with study drug supplied by Gilead.
- Co-investigator on PrEPX trial, with study drug supplied by Mylan.



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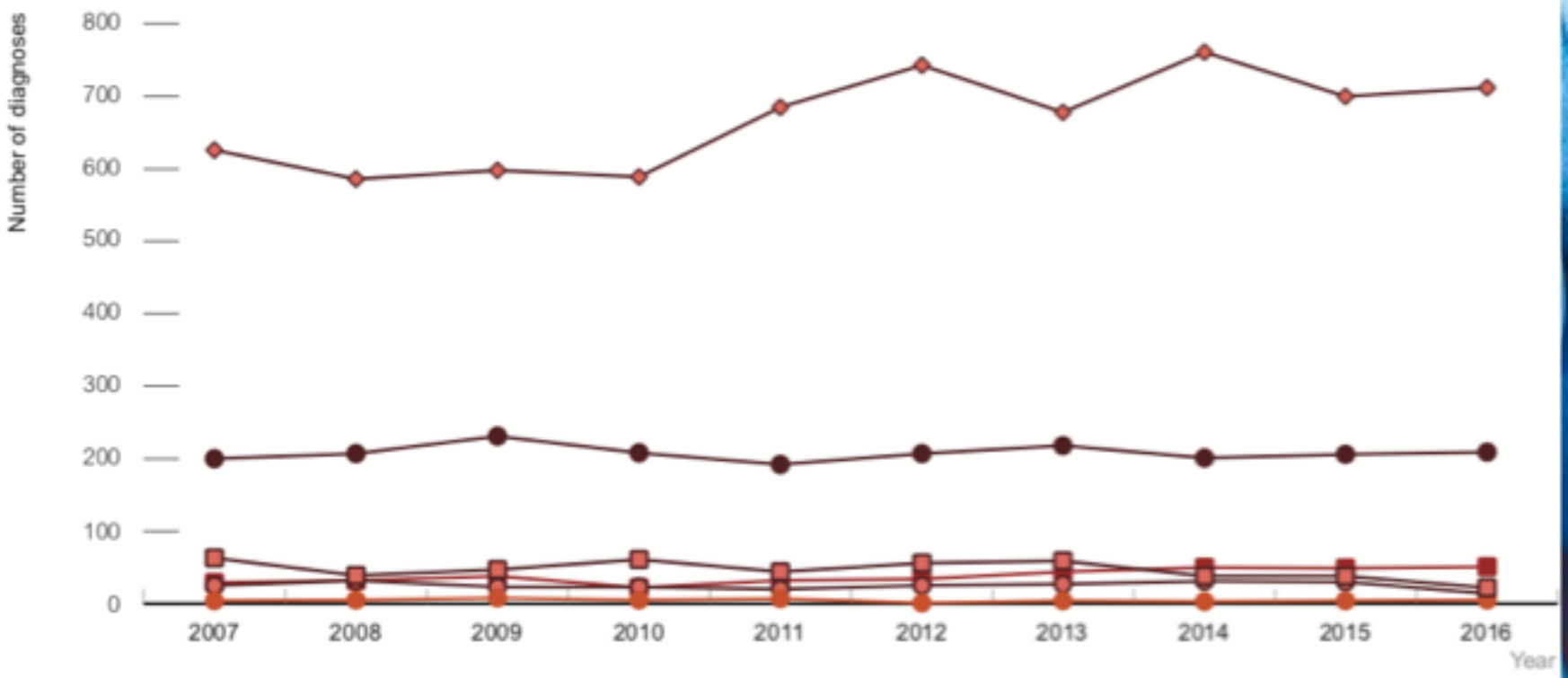
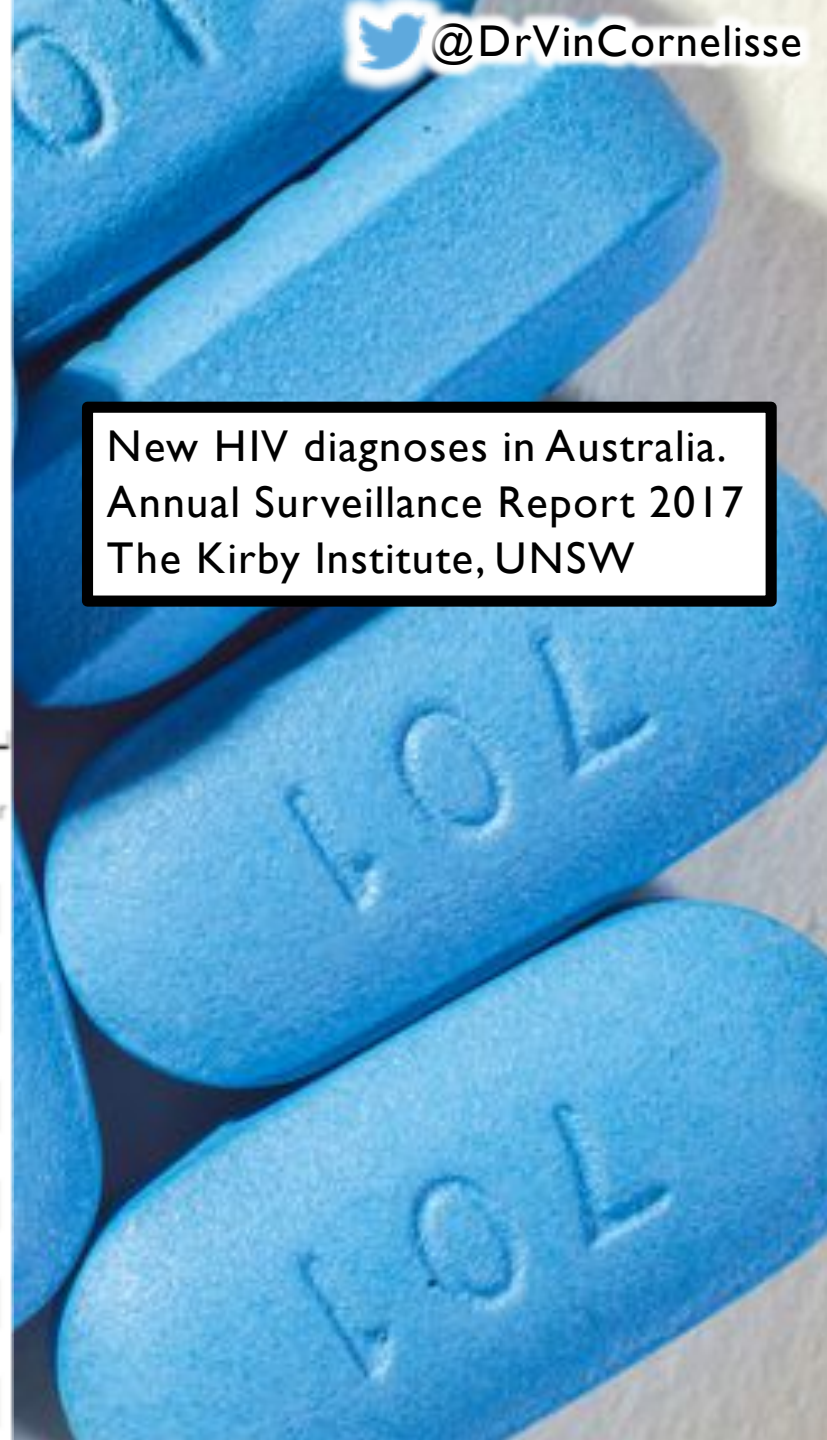
LEARNING OUTCOMES

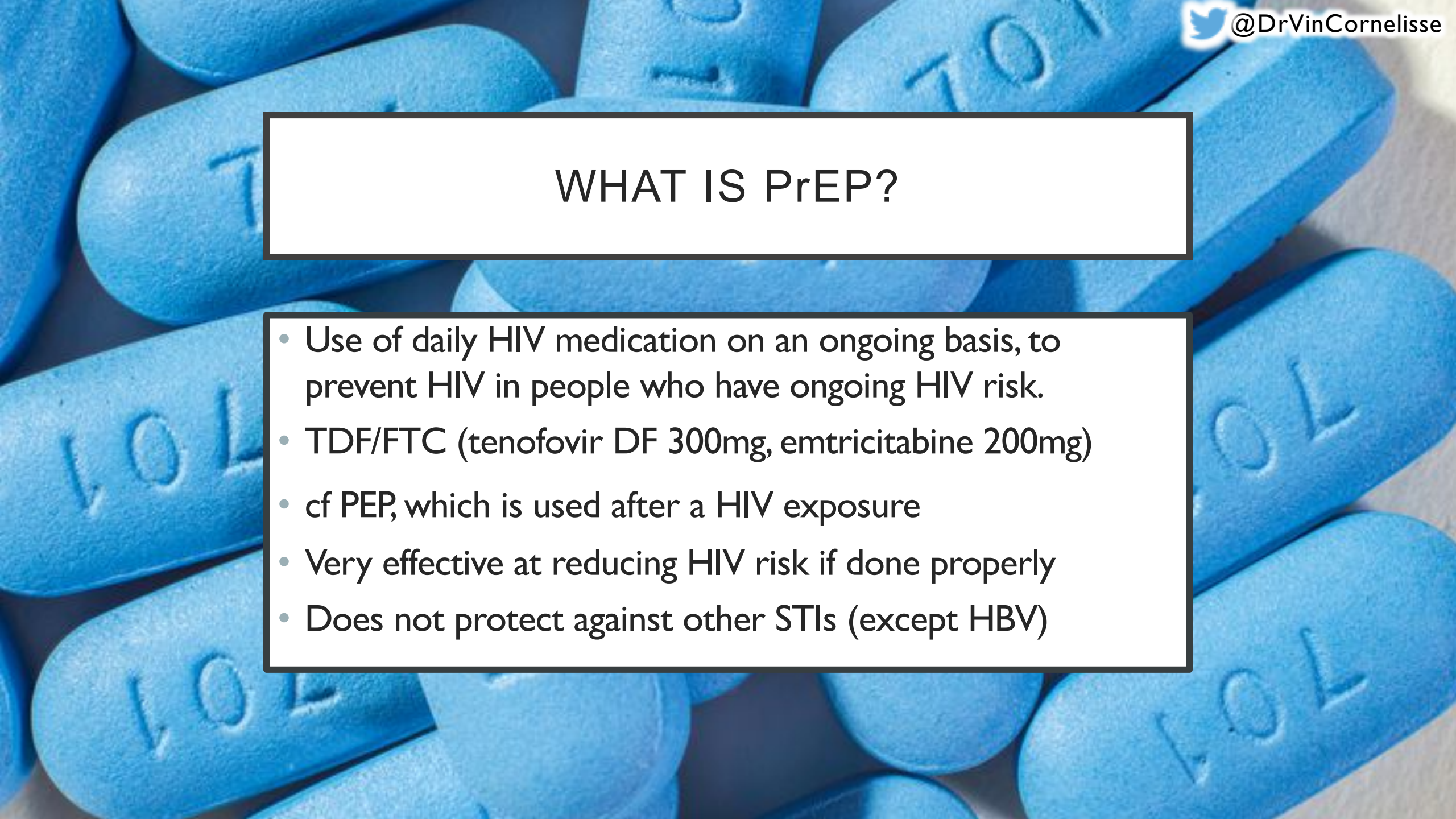
1. Discuss HIV epidemiology in Australia
2. Assess a patient's HIV risk
3. Describe potential contraindications to starting PrEP
4. Be able to prescribe PrEP
5. Implement a system for appropriate ongoing monitoring for a patient in PrEP.

Figure 1.1.10 Number of new HIV diagnoses, 2007–2016, by exposure category



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Male-to-male sex	626	586	598	589	685	743	678	761	700	712
Male-to-male sex and injecting drug use	29	32	38	22	32	34	44	50	49	51
Injecting drug use	25	32	23	23	20	25	27	31	30	14
Heterosexual sex	200	207	231	208	192	207	218	201	206	209
Mother with/at risk of HIV infection	4	5	8	5	7	1	4	3	4	5
Other/undetermined	63	39	47	61	44	56	59	38	38	22





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WHAT IS PrEP?

- Use of daily HIV medication on an ongoing basis, to prevent HIV in people who have ongoing HIV risk.
- TDF/FTC (tenofovir DF 300mg, emtricitabine 200mg)
- cf PEP, which is used after a HIV exposure
- Very effective at reducing HIV risk if done properly
- Does not protect against other STIs (except HBV)

TENOFOVIR + EMTRICITABINE

Source General Schedule

Body System ANTIINFECTIVES FOR SYSTEMIC USE > ANTIVIRALS FOR SYSTEMIC USE > DIRECT ACTING ANTIVIRALS

▸ Note

▾ ⚠ Authority Required (STREAMLINED)

7580

Pre-exposure prophylaxis (PrEP) against human immunodeficiency virus (HIV) infection

Clinical criteria:

- The treatment must be for patients at medium to high risk of HIV infection, as defined by the Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine (ASHM) Guidelines,

AND

- Patient must have a negative HIV test result prior to treatment with PBS-subsidised therapy with this drug.

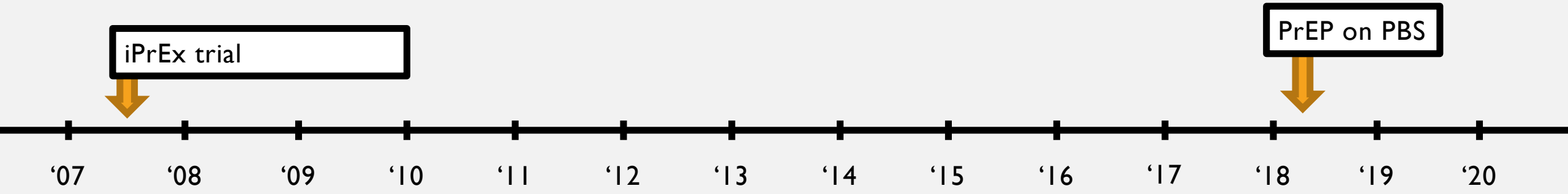
Population criteria:

- Patient must be 18 years or older.

Code & Prescriber	Medicinal Product Pack (Name, form & strength and pack size)	Max qty packs	Max qty units	No. of repeats	DPMQ	Max Safety Net	General Patient Price
11276L (MP) (NP)	TENOFOVIR + EMTRICITABINE tenofovir disoproxil fumarate 300 mg + emtricitabine 200 mg tablet, 30 (PI, CMI)	1	30	2	$249.99	$39.50	$39.50
	Available brands						
	Truvada						

A BRIEF HISTORY OF PREP FOR MSM

PrEP Pre-History:
- 1988: PEP for healthcare workers (USA)
- 2005: WHO and US DHHS recommend nPEP for sexual exposure to HIV.
- August 2005: Victorian nPEP service established at The Alfred Hospital



Grant et al. NEJM 2010, 363(27):2587-2599.

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iPrEx
(Iniciativa Profilaxis Pre-Exposición)

Recruitment:

- USA: Boston & San Fran (9%)
- South America: Ecuador, Peru, Brazil (82%)
- Thailand (5%)
- South Africa (4%)
- 2,499 HIV-negative participants (86% MSM, 14% trans women)
- Median age of 24 years

GLOBAL iPrEx

Grant et al. NEJM 2010, 363(27):2587-2599.

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iPrEx
(Iniciativa Profilaxis Pre-Exposición)

Study design:

- 1:1 randomisation to TDF/FTC or placebo. Take one pill per day.
- Median follow-up time of 1.2 years
- 4-weekly study visits for HIV testing, drug dispensing, pill counting, adherence counselling, risk reduction counselling, treatment of symptomatic STIs
- 24-weekly asymptomatic STI screening

GLOBAL iPrEx

1. Grant et al. NEJM 2010, 363(27):2587-2599.
2. Anderson et al. Sci Transl Med 2012, 4(151):151ra125.

iPrEx
(Iniciativa Profilaxis Pre-Exposición)

Results:

- 100 HIV infections during study: 36 in TDF/FTC group, 64 in placebo group.[1]
- 44% risk reduction (95% CI 15 to 36; p = 0.005).[1]
- BUT: only 9% of seroconverters in TDF/FTC group had detectable blood tenofovir.[1]
- Participants with detectable tenofovir had 92% HIV risk reduction.[1]
- Pharmacokinetic analysis[2] showed HIV-1 risk reduction of:
  - 76% for 2 doses per week,
  - 96% for 4 doses per week,
  - 99% for 7 doses per week

A BRIEF HISTORY OF PREP FOR MSM

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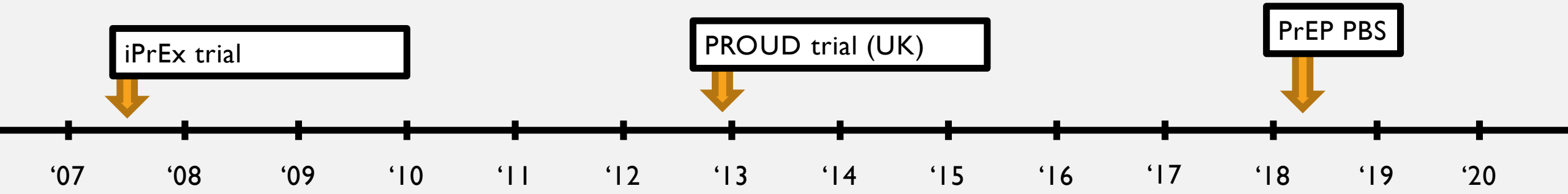

McCormack et al. Lancet 2016, 387(10013):53-60.

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PROUD

PRe-exposure Option for reducing HIV in the UK: an open-label randomisation to immediate or Deferred daily TDF/FTC for HIV negative gay men

PROUD

McCormack et al. Lancet 2016, 387(10013):53-60.

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PROUD

Study Design:

- 544 high-risk MSM in London
- Open label with 1:1 randomisation:
  - 275 started PrEP (TDF/FTC) immediately, take one pill per day
  - 269 to defer starting PrEP by 1 year
- Follow-up designed to imitate envisaged real-world scenario: 3 monthly.

PROUD

McCormack et al. Lancet 2016, 387(10013):53-60.

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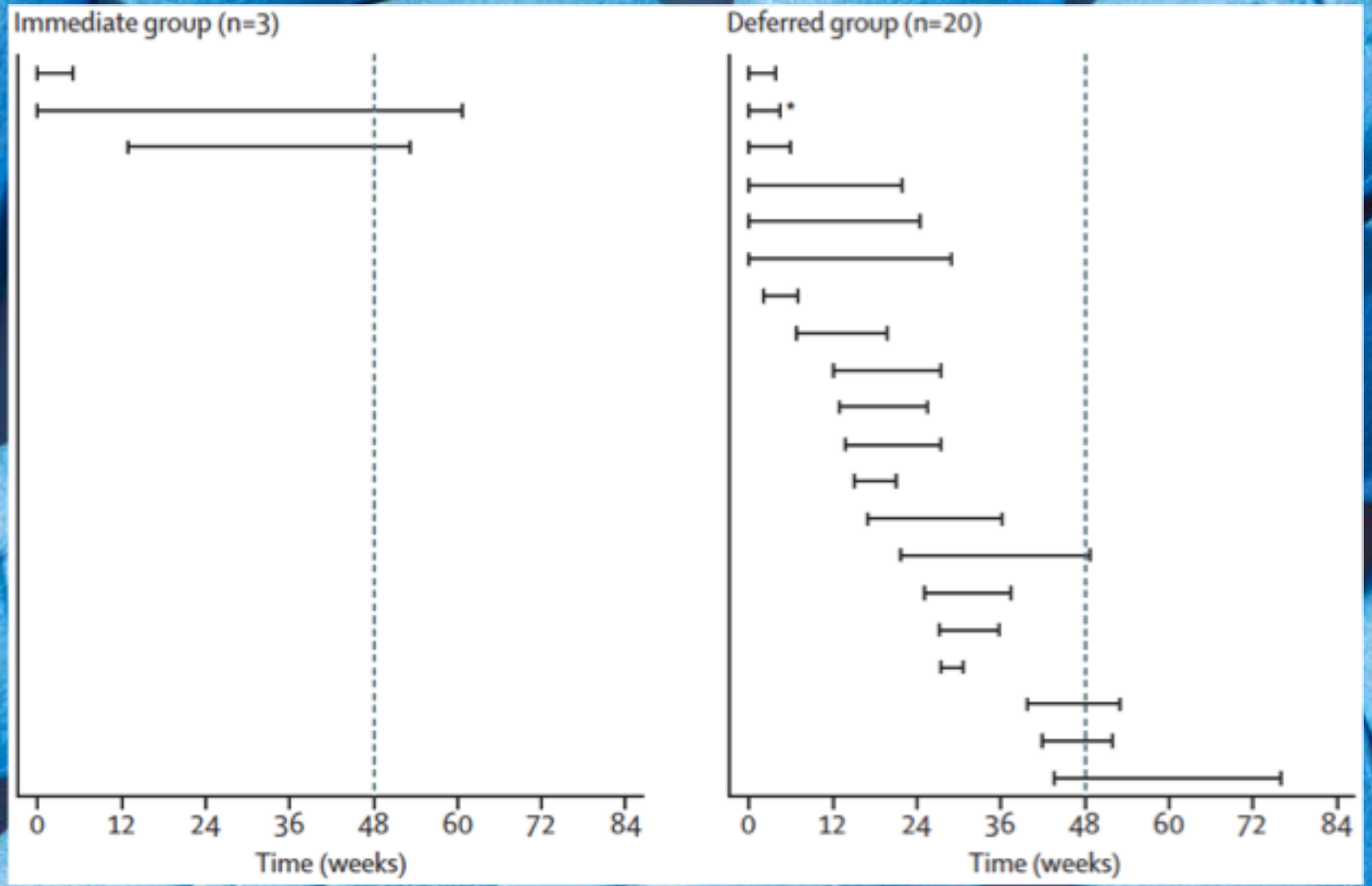

Relative risk reduction: 86%

(90% CI 64-96; p = 0.0001)

NNT = 13

PROUD

A BRIEF HISTORY OF PREP FOR MSM

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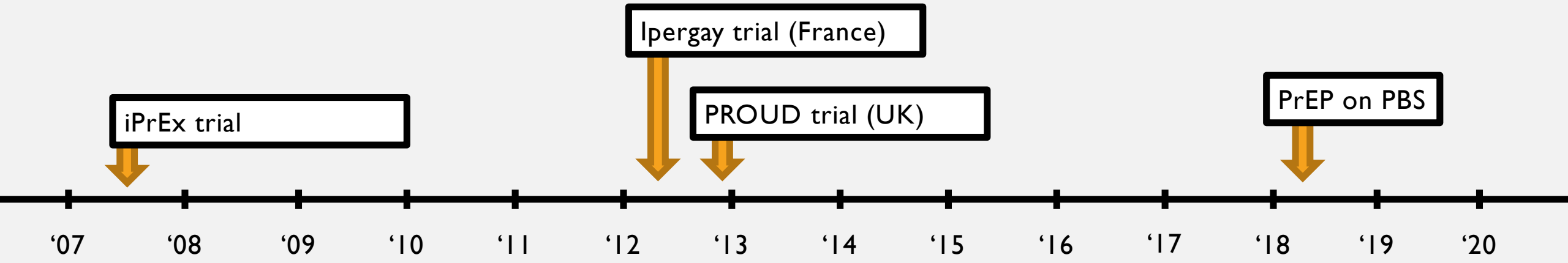

Molina et al. NEJM 2015, 373(23):2237-2246.

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IPERGAY

Intervention Préventive de l'Exposition aux Risques

avec et pour les Gays

Question: Is PrEP effective if it's just taken around the time of HIV exposure, rather than every day?

ipergay
ANRS
Intervention Préventive de l'Exposition aux Risques avec et pour les Gays

Molina et al. NEJM 2015, 373(23):2237-2246.

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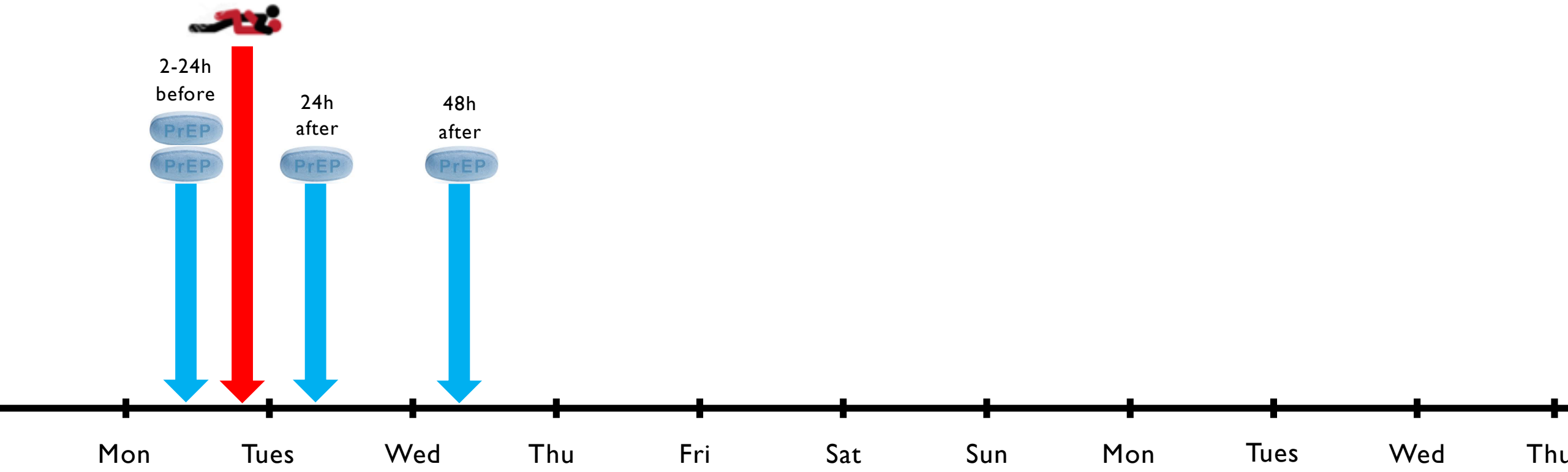
IPERGAY

Study design:

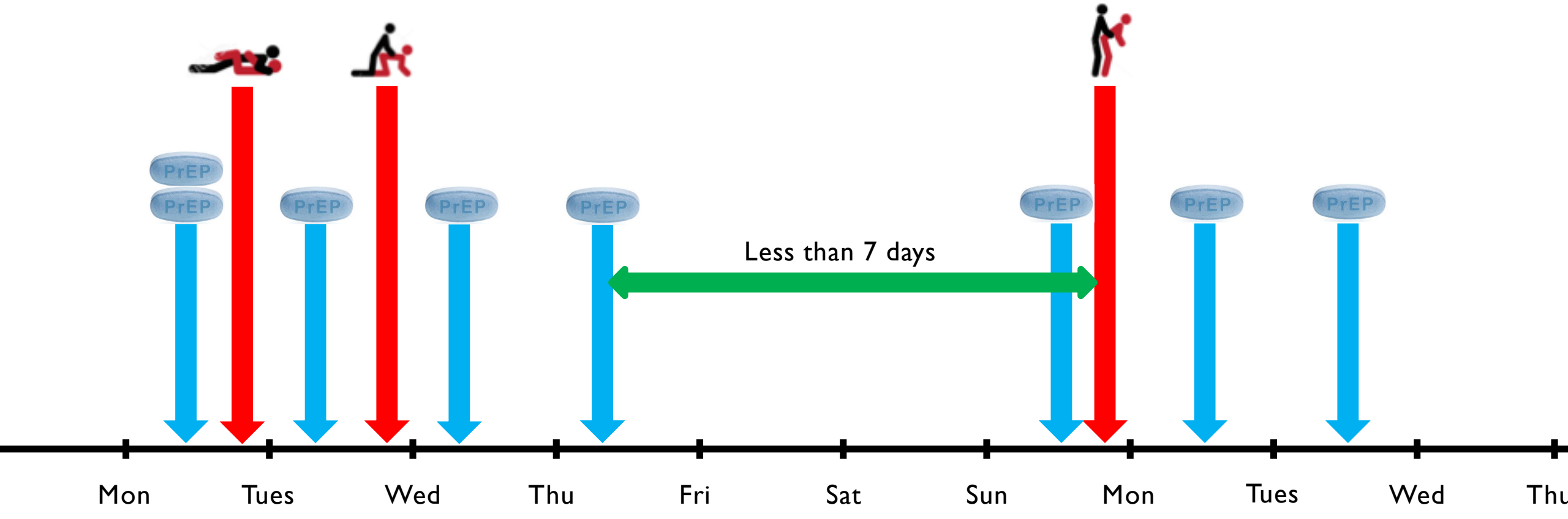
- 414 MSM in France, who reported condomless anal sex.
- 1:1 randomisation (TDF/FTC or placebo)
- "Event-based" dosing rather than daily dosing.
- Study visits every 8 weeks

ipergay
ANRS
Intervention Préventive
de l'Exposition aux Risques
avec et pour les Gays

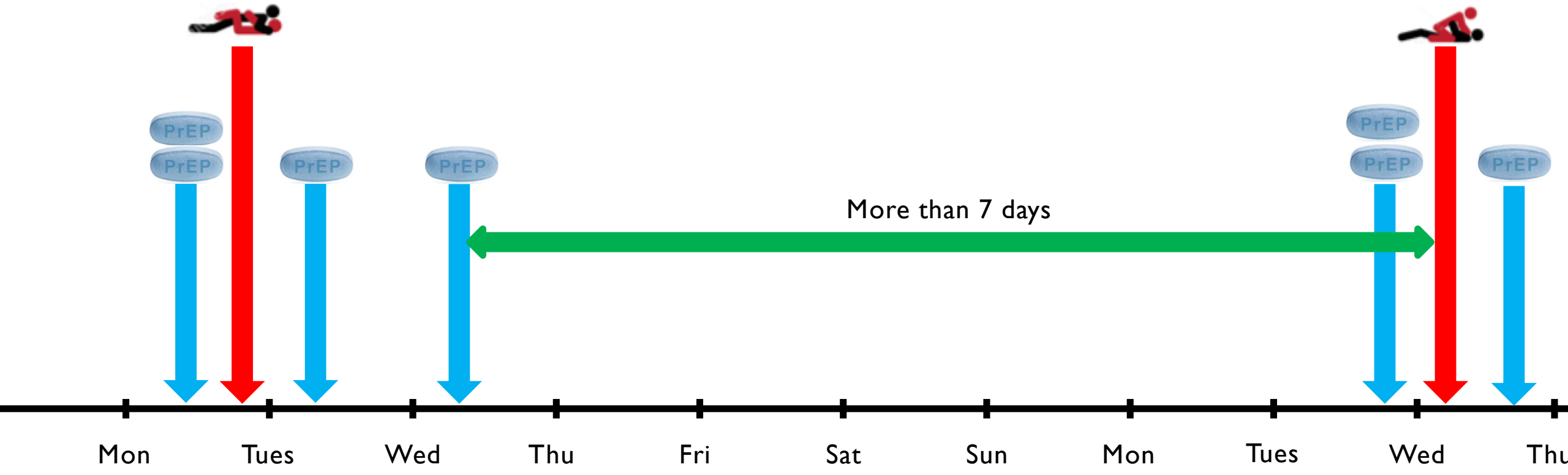
IPERGAY – EVENT-BASED DOSING



IPERGAY – EVENT-BASED DOSING



IPERGAY – EVENT-BASED DOSING



1. Molina et al. NEJM 2015, 373(23):2237-2246.
2. Molina et al. Conference presentation at AIDS 2016, Durban (not yet published).
3. Antoni et al. Conference presentation at IAS 2017, Paris (not yet published).

IPERGAY

Results:

- 16 HIV infections during follow-up:
  - 2 in TDF/FTC group
  - 14 in placebo group
- Relative risk reduction of 86% (95% CI 40 to 98; P = 0.002).[1]
- IPERGAY-OLE: 95% risk reduction.[2]
- But, participants used an average of 15 pills per month.[1]
- 6 HIV infections among participants using < 15 pills per month:[3]
  - 0 in TDF/FTC group (RRR 100%; 95%CI 20-100)
  - 6 in placebo group

ipergay
ANRS
Intervention Préventive
de l'Exposition aux Risques
avec et pour les Gays

Baeten et al; NEJM 2012; 367(5): 399–410.

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PREP FOR WOMEN

- **Partners PrEP**, conducted in Uganda and Kenya
- 4758 serodiscordant couples, where HIV+ partner was not on ARV Rx
- For 38% the HIV- partner was female
- Median follow-up of 23 months
- Randomised: TDF vs TDF/FTC vs placebo
- 82 new HIV infections during the trial
- TDF: 67% RRR (95% CI 44 to 81; P < 0.001)
- TDF/FTC: 75% RRR (95% CI 55 to 87; P < 0.001)
- If detectable plasma tenofovir: 90% RRR for TDF/FTC

Deutsch et al. Lancet HIV 2015, 2(12):e512-e519.

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PrEP for transgender women

Results:

- iPrEx included 339 transgender women.
- More transactional sex, more receptive CLAI, more partners.
- 11 HIV infections in TDF/FTC group
- 10 HIV infections in placebo group
- In the TDF/FTC group, drug was detected in none of the women at the seroconversion visit.
- Among MSM, those with the highest risk were also most adherent. Among transgender women, this linkage did not exist.
- Conclusion: Barriers to adherence among transgender women, particularly among those most at risk. But PrEP seems effective when taken.

GLOBAL iPrEx

Journal of Virus Eradication 2018; 4: 143–159

GUIDELINES

Australasian Society for HIV, Viral Hepatitis and Sexual Health Medicine HIV pre-exposure prophylaxis: clinical guidelines. Update April 2018

Edwina Wright[1–3*], Andrew Grulich[4], Katy Roy[5], Mark Boyd[4,6], Vincent Cornelisse[1,7], Darren Russell[8,9], Darryl O'Donnell[10], Bill Whittaker[11], Levinia Crooks[5,12,13†] and Iryna Zablotska[4†]

"Trans and gender diverse individuals have rarely been included in PrEP studies. As a result, limited data are available for these individuals."

"Trans and gender diverse people who are at high risk of acquiring HIV on the basis of their sexual history are eligible to access PrEP."

Martin M et al. AIDS 2015, 29(7):819-824.

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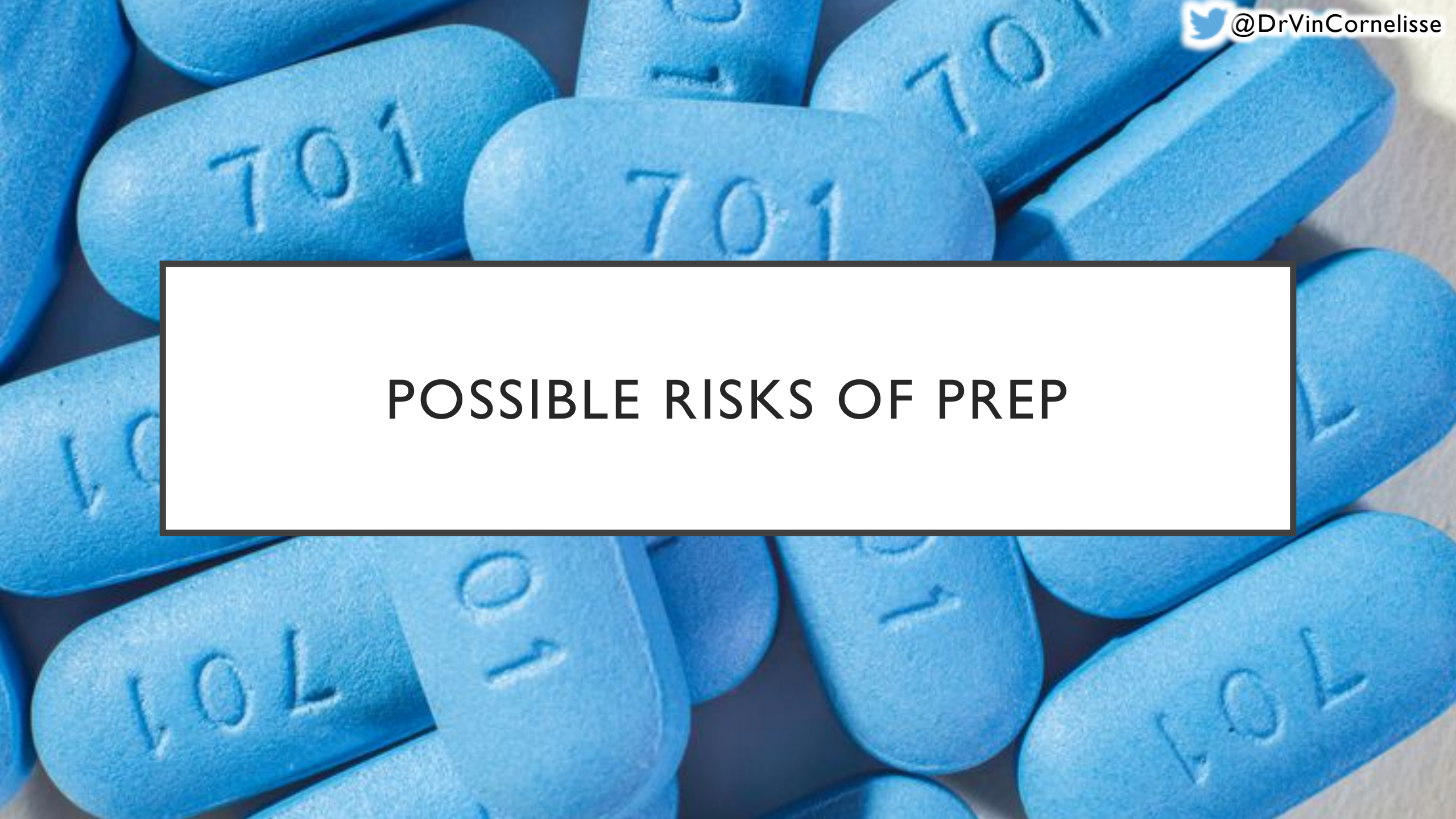
PREP FOR PWID

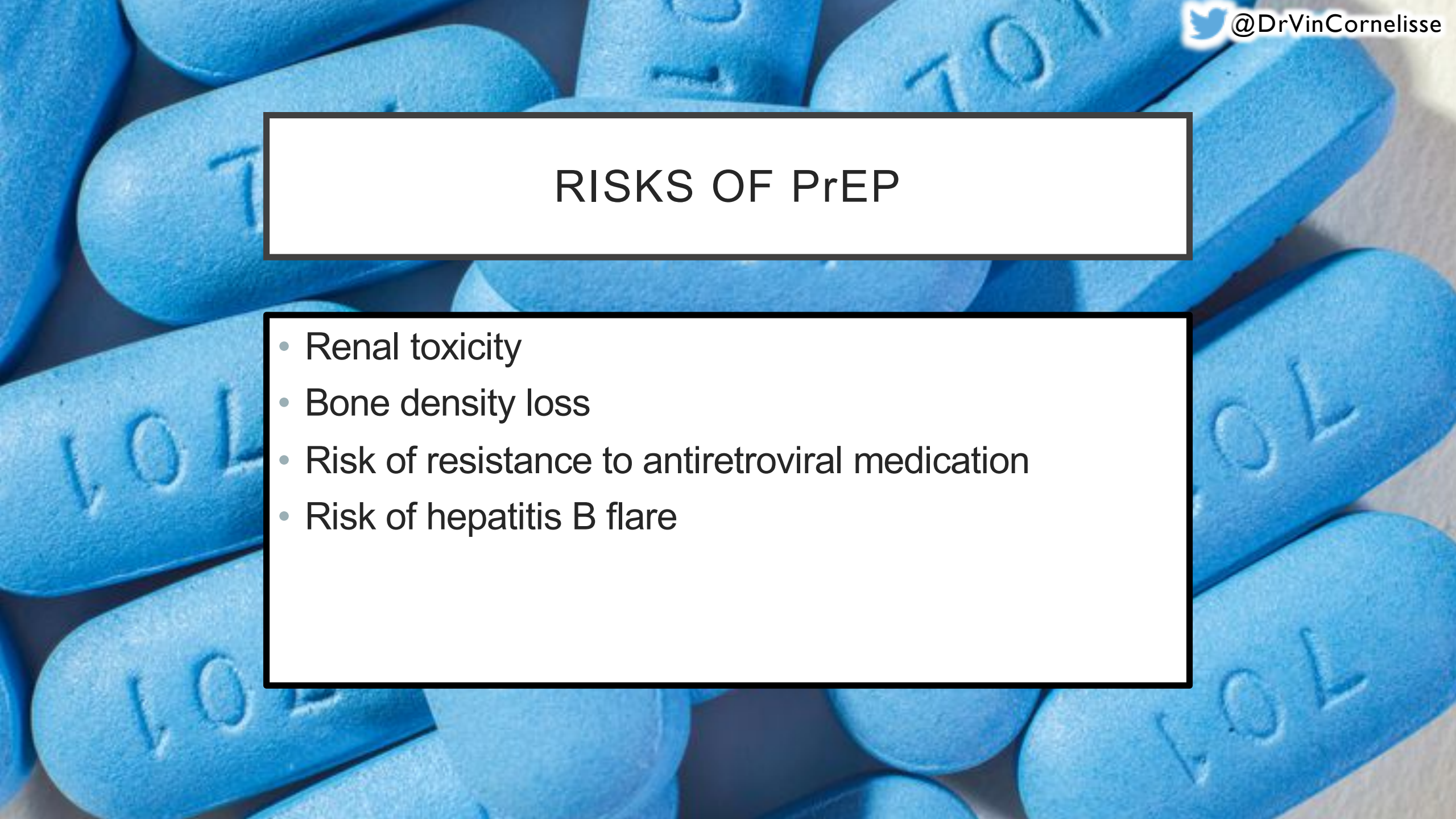
- Bangkok Tenofovir Study
- RCT among PWID, 2005-2012.
- 2413 people (80% men), 9665 PY of follow-up
- 49% HIV risk reduction overall, 84% for those with at least 97.5% adherence
- Factors associated with lower adherence: men, younger, incarcerated, meth use

PREP FOR PWID

- PrEP should be part of a comprehensive harm minimisation package.
  - Safe injecting rooms
  - Needle exchange
  - Opioid substitution
  - Mental health support
  - Vaccinations
- PWID may also experience sexual exposure to HIV.



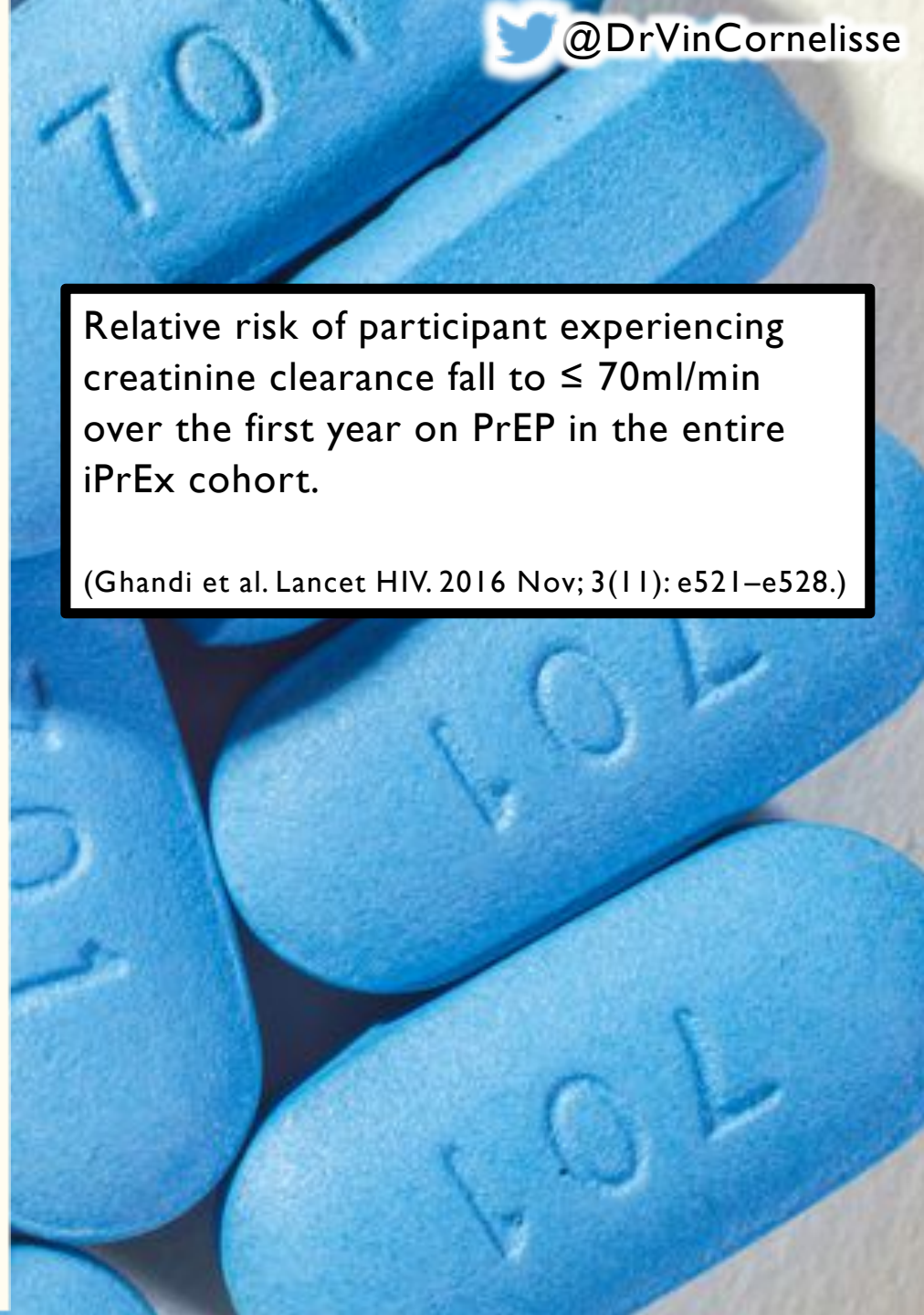
POSSIBLE RISKS OF PREP



RISKS OF PrEP

- Renal toxicity
- Bone density loss
- Risk of resistance to antiretroviral medication
- Risk of hepatitis B flare

Group	# of visits	% ≥ 1 visit with CrCl falling ≤ 70ml/min over a year on PrEP*	Relative risk	p-value
Table 2a: All iPrEx OLE participants				
Overall	7198	2·6% (1·9 to 3·4%)		
Baseline renal function				
Baseline CrCl ≥ 90 ml/min	6583	0·7% (0·4 to 1·3%)	Ref	
Baseline CrCl < 90 ml/min	615	20·4% (15·1 to 27·2%)	31·2 (16·2 to 60·1)	**<0·001**
Age at initiation of PrEP				
Age <40	5686	0·5% (0·2 to 1·0%)	Ref	
Age 40–50	973	6·4% (3·9 to 10·2%)	13·4 (5·5 to 32·5)	**<0·001**
Age ≥ 50 years	539	16·3% (11·3 to 23·3%)	36·2 (15·6 to 83·9)	**<0·001**



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Relative risk of participant experiencing creatinine clearance fall to ≤ 70ml/min over the first year on PrEP in the entire iPrEx cohort.

(Ghandi et al. Lancet HIV. 2016 Nov; 3(11): e521–e528.)

Journal of Virus Eradication 2018; **4**: 143–159 GUIDELINES

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"Creatinine, eGFR and urinary PCR should be evaluated at baseline, 3 months after commencing PrEP then 6 monthly thereafter, while they receive PrEP."

"However, based on currently available evidence, more intensive monitoring may be warranted in individuals under the age of 25 years or over the age of 40 years, and in those with a baseline eGFR of less than 90 mL/min/1.73 m^2."

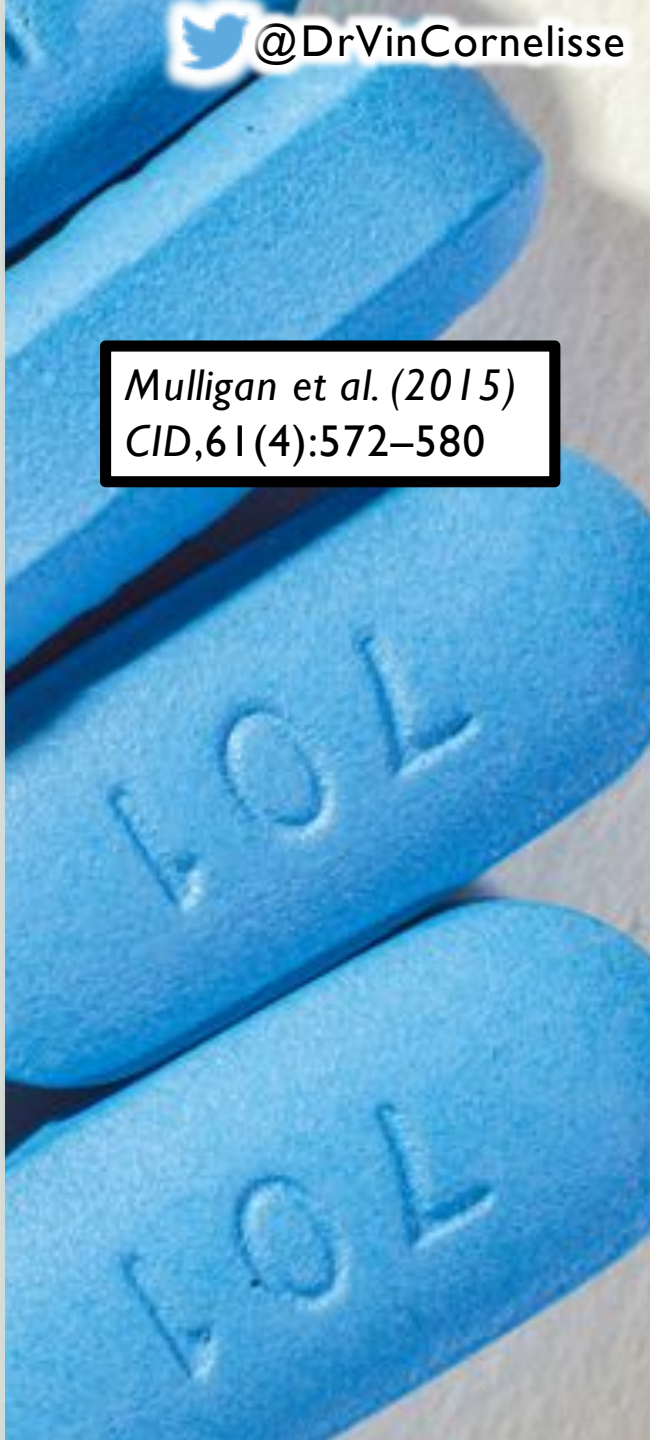
"A patient with an eGFR of less than 60 mL/min/1.73 m^2 should not be prescribed PrEP."

FURTHER RECOMMENDATIONS?

- Not much data on PrEP for older people, including renal safety.
- Prudent to screen for renal risk factors prior to initiating PrEP:
  - Check BP
  - Check fasting glucose and lipids
  - Review medications for nephrotoxins (including OTC and herbal)
  - Review smoking, alcohol, drugs

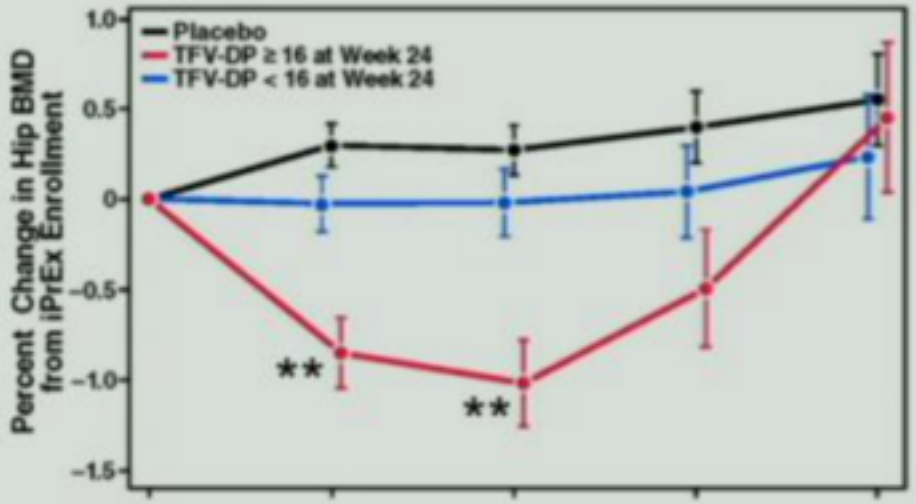
DXA Substudy Schema

- DXA scans of hip and spine at…
  - Baseline and every 24 weeks during PrEP/Placebo use,
  - 24 weeks after stopping PrEP/Placebo,
  - At enrollment in Open Label Extension (OLE).
- Drug concentrations in vPBMCs collected in all DXA participants at…
  - Week 24 concentrations used to stratify analysis of BMD,
  - Strong predictor of consistent drug detection at subsequent visits.

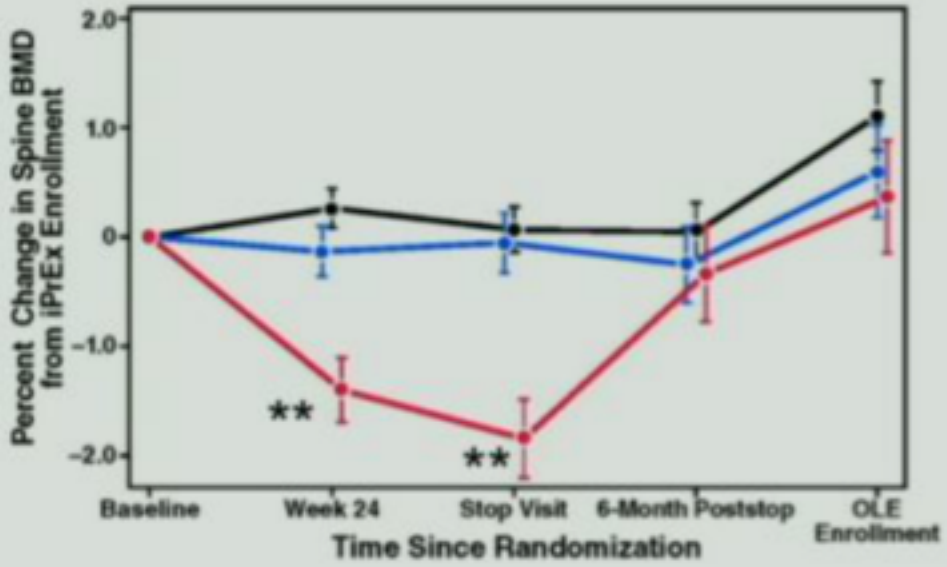


Mulligan et al. (2015)
CID,61(4):572–580

Recovery of Hip and Spine BMD by PrEP Use



HIP BMD
average annualized
recovery rates
after stopping PrEP were
1.13 ± 0.27%
(P=0.002 vs. placebo)



Spine BMD
average annualized
recovery rates
after stopping PrEP were
1.81 ± 0.36%
(P=0.01 vs. placebo).

** P< 0.001; Grant CROI Boston 2016

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Mulligan et al. (2015)
CID,61(4):572–580

US CDC PREP STUDY

- 10% of HIV-negative MSM had low BMD at baseline.
- No increased rate of pathological fractures from TDF use, but concluded that larger studies over a longer period of time were needed to assess this further.
- Other factors associated with low BMD (Z score < -2.0):
  - Amphetamine use (Univariate OR 5.86, 95% CI 1.7 to 20.2; $p < 0.01$)
  - Inhalant use (Univariate OR 4.57, 95% CI 1.32 to 15.8; $p = 0.02$)
- Participants who took vitamin D, calcium or multivitamins had a lower risk of reduced bone density (Univariate OR 0.26, 95% CI 0.1 to 0.7; $p < 0.01$)

Liu et al, PLoS ONE **2011**; 6(8): e23688

Recommendations?

"DEXA scans or other assessments of bone health are not recommended before the initiation of PrEP or for the monitoring of persons while taking PrEP. However, any person being considered for PrEP who has a history of pathologic or fragility bone fractures or who has significant risk factors for osteoporosis should be referred for appropriate consultation and management."

- 2014 CDC PrEP guidelines

… but is there any harm in doing a FRAX assessment?

… and maybe check vitamin D?

Liegler et al. JID 2014:210(8), 1217-27.

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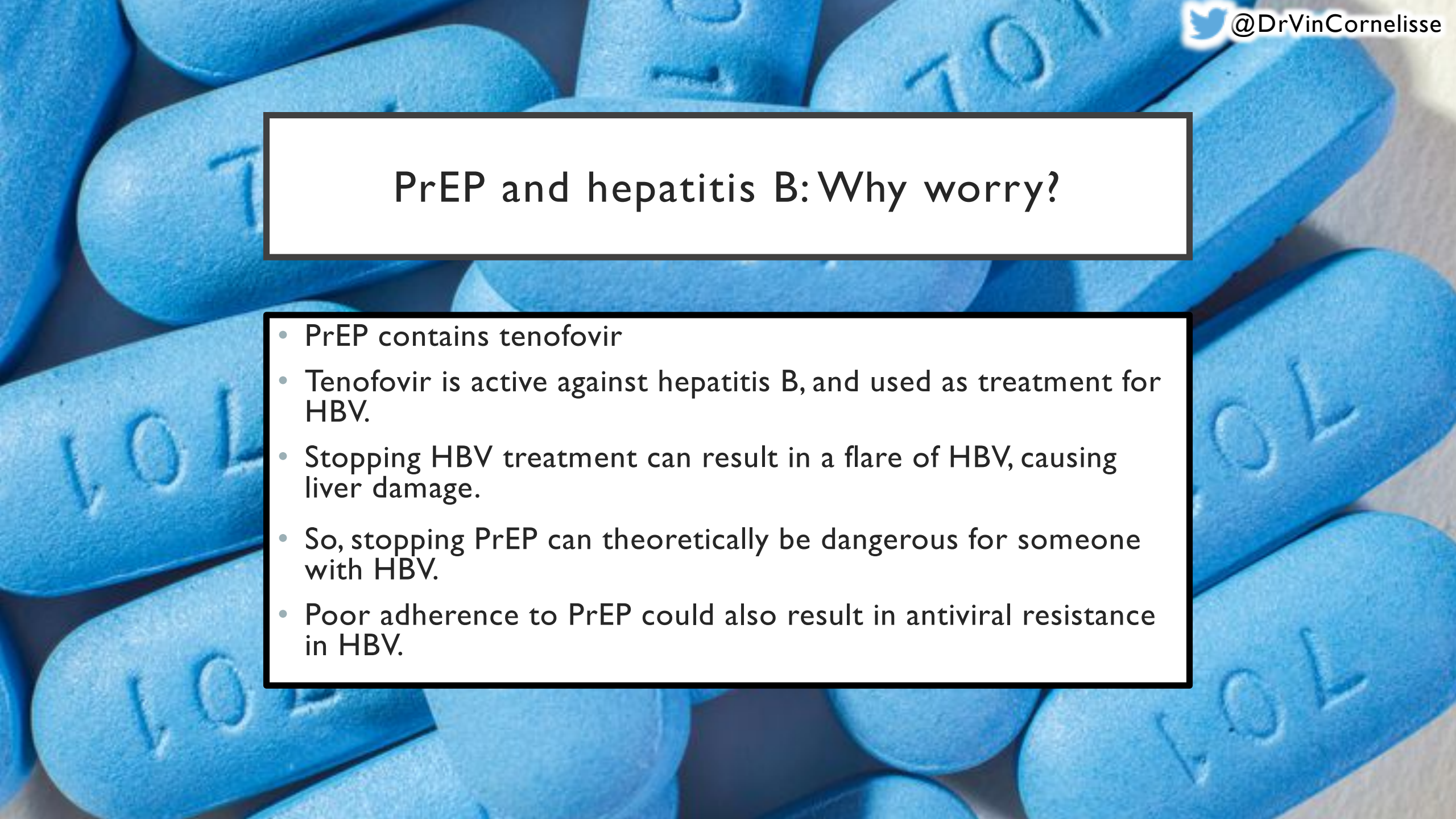
ARV resistance in iPrEx
HIV at enrolment

- 2 participants had unrecognised HIV at enrolment and were randomised to TDF/FTC.
- Both had M184V/I mutations, conferring resistance to FTC.
- 1 of 2 participants had confirmed wild-type HIV at study entry.
- No TDF resistance mutations

Liegler et al. JID 2014:210(8), 1217-27.

ARV resistance in iPrEx HIV during study

- 48 participants in TDF/FTC group infected with HIV during study.
- Only 8 had detectable drug levels at or within 90 days before their seroconversion visit.
- No mutations detected on standard genotype and pheno type tests.
- 2 participants had minor variant M184I on ultra-sensitive testing.
- Conclusion: No clinically-significant drug resistance.



PrEP and hepatitis B: Why worry?

- PrEP contains tenofovir
- Tenofovir is active against hepatitis B, and used as treatment for HBV.
- Stopping HBV treatment can result in a flare of HBV, causing liver damage.
- So, stopping PrEP can theoretically be dangerous for someone with HBV.
- Poor adherence to PrEP could also result in antiviral resistance in HBV.

(Solomon et al, JAIDS 2015)

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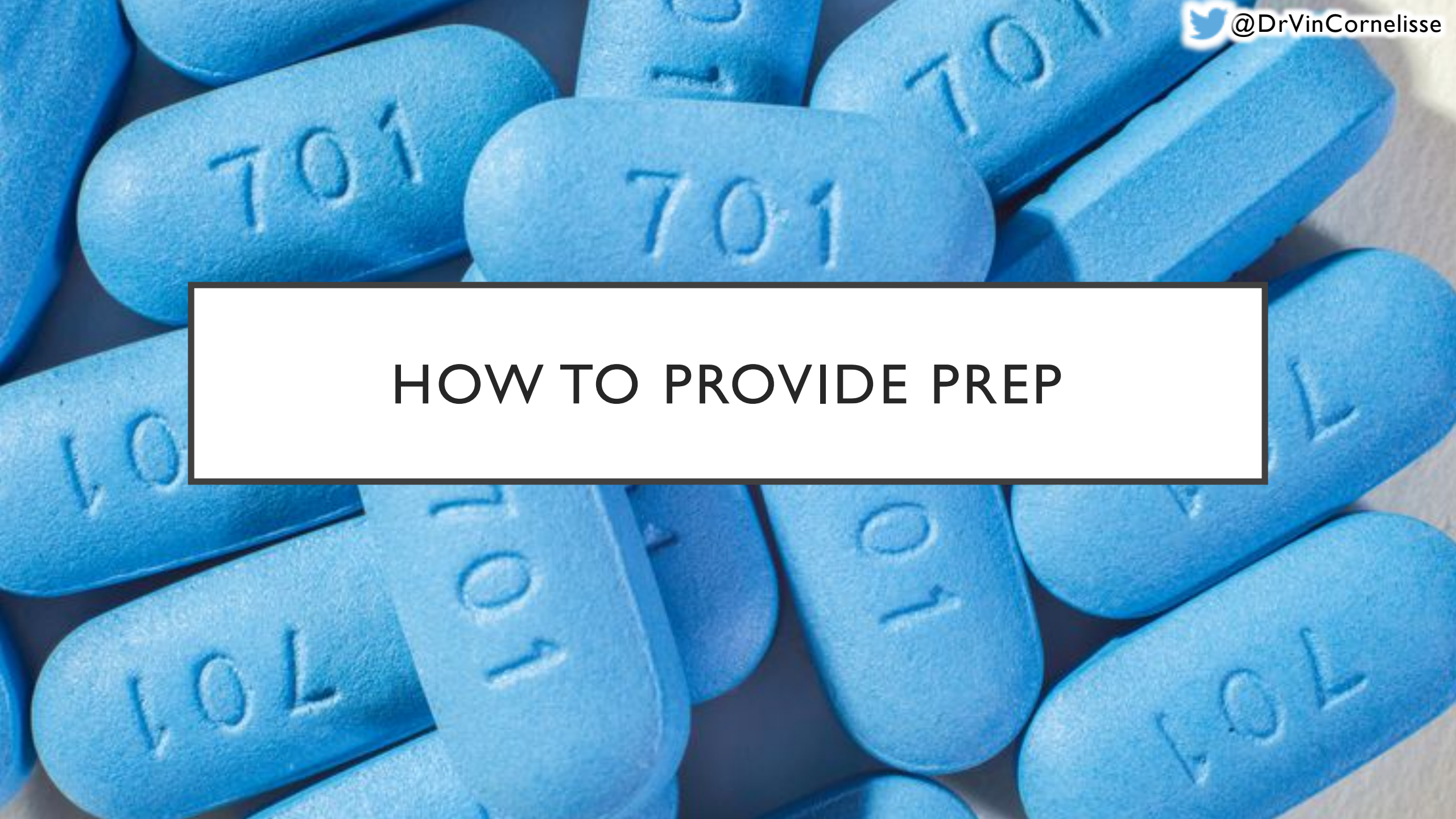
Prep and hepatitis B – is it safe?

- iPrEx: 2499 participants
- 12 (0.5%) cases of chronic HBV; 6 randomised to TDF/FTC
  - No hepatitis B flares, even after TDF/FTC discontinuation
- 4 cases of acute hepatitis B; 2 randomised to TDF/FTC
  - One developed immunity (HBsAb)
  - One lost HBsAg, but left study before evidence of immunity
- No TDF or FTC resistance in HBV genotypes

HBV protection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HOW TO PROVIDE PREP

Decision Making in PrEP

PrEP

Prescribing Pathway for PrEP in Australia

1 BEHAVIOURAL ELIGIBILITY

Assess HIV risk as per *ASHM PrEP Clinical Guidelines*:
See Table 1 (other side)

- **Medium or high risk** → **ELIGIBLE** Progress to Step 2
- **Not medium to high risk** → Refer to PrEP Guidelines. Consider PrEP if likely future risk

Discuss alternate methods of HIV risk reduction. Offer or refer to counselling.

Gaining Informed Consent:

- testingportal.ashm.org.au/hiv
- Discussion should be appropriate to the person's gender, culture, language, behaviour and risk factors
- **Discuss** the patient's reason for testing, testing procedure, window period, transmission, prevention
- **Talk about** confidentiality and privacy issues around testing, implications of positive and negative test results

2 CLINICAL ELIGIBILITY

Note: Steps 1, 2, & 3 can be completed at the same visit

Confirm HIV status and medical history including renal function

- **HIV Negative** (test result within last 7 days)*
  - Confirm no signs or symptoms of acute HIV infection
    e.g. fever, fatigue, myalgia, rash, headache, pharyngitis, cervical lymphadenopathy, arthralgia, night sweats, diarrhoea
  - Confirm normal renal function*
    eGFR > 60mL/min
  - Confirm patient is not taking any nephrotoxic medication
    e.g. high dose NSAIDs
    www.hiv-druginteractions.org
  - **ELIGIBLE** Progress to Step 3
- HIV negative **BUT** recent exposure within 72 hours
  - **Start NPEP** For more information, refer to getpep.info
  - Once PEP course completed, assess again for PrEP
  - Repeat Step 1
- **HIV Positive**
  - **NOT ELIGIBLE**
  - Refer to specialist clinic or s100 prescriber www.ashm.org.au/HIV/HIV-prescribers and to the following online resource *Making a new diagnosis* at www.ashm.org.au/HIV/prevention-testing-and-diagnosis/making-new-diagnosis

3 OTHER TESTING

Assess and test for STIs and hepatitis coinfection

- STI testing as per the *Australian STI Management Guidelines*
  www.sti.guidelines.org.au
- Hepatitis B serology (HBsAg, Anti-HBs, Anti-HBc).
  Vaccinate if not immune.
  If HBsAg+ve, refer to HBV specialist.
  www.ashm.org.au/hbv-prescriber-locator
- Hepatitis C serology (anti-HCV; if +ve, HCV RNA).
  If HCV RNA+ve, treat HCV.
  www.ashm.org.au/hcvdecisionmaking
- Progress to Step 4

4 PRESCRIBING PrEP

Daily PrEP:
Daily continuous oral dosing of TDF/FTC (tenofovir/emtricitabine) is the standard recommended regimen.
Daily PrEP is the recommended regimen for PWID and vaginal sex.

OR

On-demand PrEP:
Intermittent dosing of TDF/FTC is an alternative non-standard dosing regimen that should only be used after discussion with an experienced clinician.
On-demand PrEP is only recommended for MSM - see *ASHM PrEP Clinical Guidelines*.

Progress to Step 5

5 ONGOING MONITORING

Ongoing monitoring:
See Table 2 (other side)

&

Patient Education:
Discuss how PrEP works, frequency, missed dose protocol, continued condom use. See Box 1 for more (other side).

Repeat both every 3 months

- **PrEP** (Pre-Exposure Prophylaxis)
- **NPEP** (Non-Occupational Post Exposure Prophylaxis)
- **PEP** (Post-Exposure Prophylaxis)

*Can prescribe PrEP on the same day as HIV or renal function tests

www.ashm.org.au

For more information about PrEP: www.ashm.org.au/HIV/PrEP

Decision Making in PrEP

PrEP

Prescribing Pathway for PrEP in Australia

Table 1: Behavioural eligibility criteria for PrEP

RISK CRITERIA FOR MSM

High Risk – Recommend PrEP

Last 3 months	Next 3 months*
• CLAI with a regular HIV+ partner (not on treatment and/or detectable viral load) • Receptive CLAI with any casual HIV+ male partner or a male partner of unknown status • Rectal gonorrhoea, rectal chlamydia or infectious syphilis diagnosis • Methamphetamine use	& • Multiple episodes of CLAI with or without sharing intravenous drug equipment

Medium Risk – Consider PrEP

Last 3 months	Next 3 months*
• Anal intercourse when proper condom use was not achieved (e.g. condom slipped off) where the serostatus of partner was not known, or was HIV+ and not on treatment or with a detectable viral load • *If patient uncircumcised:* more than one episode of insertive CLAI where the serostatus of partner was not known, or was HIV+ and not on treatment or with a detectable viral load	& • Multiple episodes of CLAI with or without sharing intravenous drug equipment

RISK CRITERIA FOR TRANS & GENDER DIVERSE PEOPLE

High Risk – Recommend PrEP

Last 3 months	Next 3 months*
• Regular sexual partner of an HIV+ person (not on treatment and/or detectable viral load) with inconsistent condom use • Receptive CLAI with any casual HIV+ partner or a male partner of unknown status • Rectal or vaginal gonorrhoea, chlamydia or infectious syphilis diagnosis • Methamphetamine use	& • Multiple episodes of anal or vaginal CLI with or without sharing intravenous drug equipment

Medium Risk – Consider PrEP

Last 3 months	Next 3 months*
• 1+ episodes of anal or vaginal intercourse when proper condom use was not achieved (e.g. condom slipped off) and where the serostatus of partner was not known, or was HIV+ and not on treatment or with a detectable viral load • *If patient uncircumcised:* 1+ episodes of insertive CLAI where the serostatus of partner was not known, or was HIV+ and not on treatment or with a detectable viral load	& • Multiple episodes of anal or vaginal CLI with or without sharing intravenous drug equipment

RISK CRITERIA FOR HETEROSEXUAL PEOPLE

High Risk – Recommend PrEP

Last 3 months	Next 3 months*
• A regular sexual partner who is HIV+ (not on treatment and/or with detectable viral load) with inconsistent condom use • Receptive anal or vaginal CLI with any casual HIV+ partner, male homosexual or bisexual partner of unknown status • A female patient in a serodiscordant heterosexual relationship, who is planning natural conception in the next 3 months	& • Multiple episodes of CLI with or without sharing intravenous drug equipment

Medium Risk – Consider PrEP

Last 3 months	Next 3 months*
• CLI with a heterosexual partner, not known to be HIV–, from -a country with high HIV prevalence	& • Multiple episodes of CLI with or without sharing intravenous drug equipment

RISK CRITERIA FOR PWID

High Risk – Recommend PrEP

Last 3 months	Next 3 months*
• Shared injecting equipment with an HIV+ individual or with a gay or bisexual man of unknown HIV status	& • Multiple events of sharing injecting equipment with an HIV+ individual or a gay or bisexual man of unknown HIV status • Inadequate access to safe injecting equipment

- PWID (People Who Inject Drugs)
- CLI (Condomless Intercourse)
- CLAI (Condomless Anal Intercourse)

*Is the patient **likely** to behave like this in the next 3 months (indicates a sustained risk)

Table 2: Laboratory evaluation & clinical follow-up of individuals who are prescribed PrEP

Test	Baseline	±30 days after initiation (optional)	90 days after initiation	Every 90 days on PrEP	Other frequency (minimum)
HIV testing and assessment for signs or symptoms of acute infection	✔	✔	✔	✔	n/a
Assess side effects	n/a	✔	✔	✔	n/a
Hepatitis B serology	✔	n/a	n/a	n/a	n/a
Hepatitis C serology	✔	n/a	n/a	n/a	Every 12 mths
STI (i.e. syphilis, gonorrhea, chlamydia) as per *Australian STI Management Guidelines*	✔	n/a	✔	✔	n/a
eGFR ±urine albumin: creatinine ratio (ACR) at 3 mths and then every 6 mths	✔	n/a	✔	n/a	Every 6 mths
Pregnancy test (women of child-bearing potential)	✔	✔	✔	✔	n/a

Box 1: Patient Education

- Discuss HIV-risk behaviours
- Discuss combination HIV/STI prevention, including the central role of condoms
- Discuss safer injecting practices if applicable
- Check mental health and recreational drug use
- Discuss the importance of medication adherence at every visit
- Patients need to take a daily dose of PrEP for 7 days to achieve high levels of protection, 20 days to achieve maximum protection
- If stopping PrEP – patients on daily PrEP should continue PrEP for 28 days following exposure
- Ongoing monitoring every 3 months is required – see Table 2; discuss potential side effects include early e.g. headache, nausea and long term e.g. renal injury, lowered bone density;
- Ask about medications that can affect renal function, eg regular use of NSAIDs

Electronic version downloadable from: www.ashm.org.au/resources

 ISBN: 978-1-920773-77-9

www.sti.guidelines.org.au

australian STI MANAGEMENT GUIDELINES
FOR USE IN PRIMARY CARE

ASHA AUSTRALASIAN SEXUAL HEALTH ALLIANCE

How to use these Guidelines?

All STIs can cause disease without producing symptoms. Please refer to Populations & Situations for asymptomatic screening recommendations, Syndromes for guidance about managing specific clinical scenarios and to STIs for specific management of a diagnosed infection.

Latest Update

2017/18: Annual Critical Review Complete - what's changed?

Guidelines index

STI

- Chancroid
- Chlamydia
- Donovanosis
- Ectoparasites
- Genital warts
- Gonorrhoea

SYNDROME

- Ano-genital Lumps
- Ano-genital Ulcers
- Ano-rectal Syndromes
- Cervicitis
- Epididymo-orchitis
- PID - Pelvic inflammatory

POPULATIONS & SITUATIONS

- Aboriginal and Torres Strait Islander People
- Adult Sexual Assault
- MSM - Men who have sex with men
- People in correctional facilities

WHAT IF NO MEDICARE CARD?

- TGA's personal importation scheme
- Insurance may cover consultations and pathology
- https://www.tga.gov.au/personal-importation-scheme
- PrEP ACCESS NOW – pan.org.au
- PrEP'd for Change – prepdforchange.com