



Update on HIV Care

Dr Ada Lin
Special Preventive Programme
Department of Health

15 Dec 2015

1st reported HIV case
in **Hong Kong** in **1984**



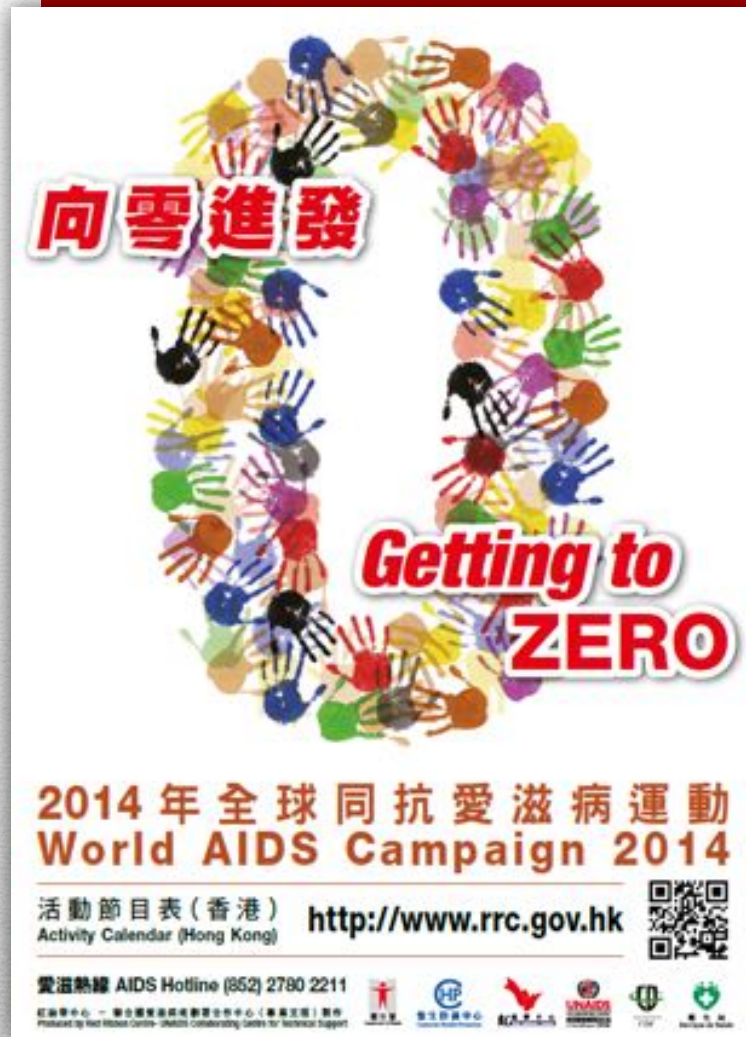
2015

- **Antiretroviral therapy reduces AIDS mortality & morbidity**
- **HIV/AIDS has become a chronic treatable disease**
- **Changing morbidity, mortality**
 - ✧ *Co-infections, cancers, cardiovascular diseases, liver disease, renal disease, bone disease*
- **Changing care models**
 - ✧ *Hospital-based to ambulatory care*
- **Evidence of early treatment in reducing disease progress**
- **Treatment prevention continuum**
- *Vaccine and cure under active but challenging research*
- *Stigmatization of PLHIV prevails still*

Advances in HIV Medicine

- **Local epidemiology**
- **Key concepts in HIV prevention & care model**
 - *HIV treatment cascade*
 - *The three 90s*
- **What's new from the international guidelines for treatment**
- **Preventive strategies**
 - *Treatment as prevention (TasP)*
 - *Pre-exposure prophylaxis (PrEP)*
 - *Post-exposure prophylaxis (PEP)*

Outline



- *Zero new infection*
- *Zero AIDS-related deaths*
- *Zero discrimination*



Getting to Zero



Local Epidemiology

HIV/AIDS reporting system

HIV/AIDS Report Form

The HIV/AIDS voluntary reporting system has been in place since 1984. All doctors are encouraged to report patients with HIV/AIDS and to update status of the previously reported cases where appropriate. This is an anonymous and confidential system. Data collected is crucial for understanding the HIV epidemiology in Hong Kong and is used in (i) 1043 7225 or email to ahg@dhc.gov.hk Department of Health.

DHC293,
Revised January 2015

Please complete ALL section
Section (A) – Report

- [1] This is a ☐ NEW repn
- [2] Your reference code on
- [4] Sex: ☐ M ☐ F For 6
- [5] Date of birth:
- [6] Ethnicity: ☐ Chinese
- [7] Suspected risk(s) for HI
- ☐ Heterosexual ☐ Home
- ☐ Injecting drug use
- ☐ Transfusion of blood/pl
- ☐ Perinatal
- ☐ Other, please specify:
- ☐ Asked, but risk unclear
- ☐ Not asked
- [8] Suspected place of infe

- [9] Date of laboratory diag
- [10] Confirmation test: ☐
- [11] Name of Laboratory:
- [12] Previous HIV diagnos
- [14] Any previous negative
- [15] CD4 (cells/ μ l):
- [16] HIV status of spouse

Section (B) – Report

- [17] Has the patient develo
- [18] If yes, the AIDS defin
- (i)
- (ii)
- (iii)

- [19] CD4 (cells/ μ l) at AID

Section (C) – Report

- [20] Has the patient refe clinic
- [21] Has the patient defaul
- [22] Is the patient under pr
- [23] Has the patient left HI
- [24] Has the patient died?

Section (D) – Corre

Name of medical prescrip

Correspondence Address:

Tel:

Email:

(please print on both sides)

CONFIDENTIAL 機密

POSTAGE
WILL BE
PAID BY
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HS 1, 2, 3

NO POSTAGE
NECESSARY IF
POSTED IN
HONG KONG
POST BUREAU
HS 1, 2, 3

BUSINESS REPLY SERVICE LICENCE NO. 7487
商業回郵服務執照: 7487

Department of Health
Centre for Health Protection
Special Preventive Programme
(Atta: Consultant Physician)
2/F Wang Tze Hom Jockey Club Clinic
200 Junction Road East
Kowloon

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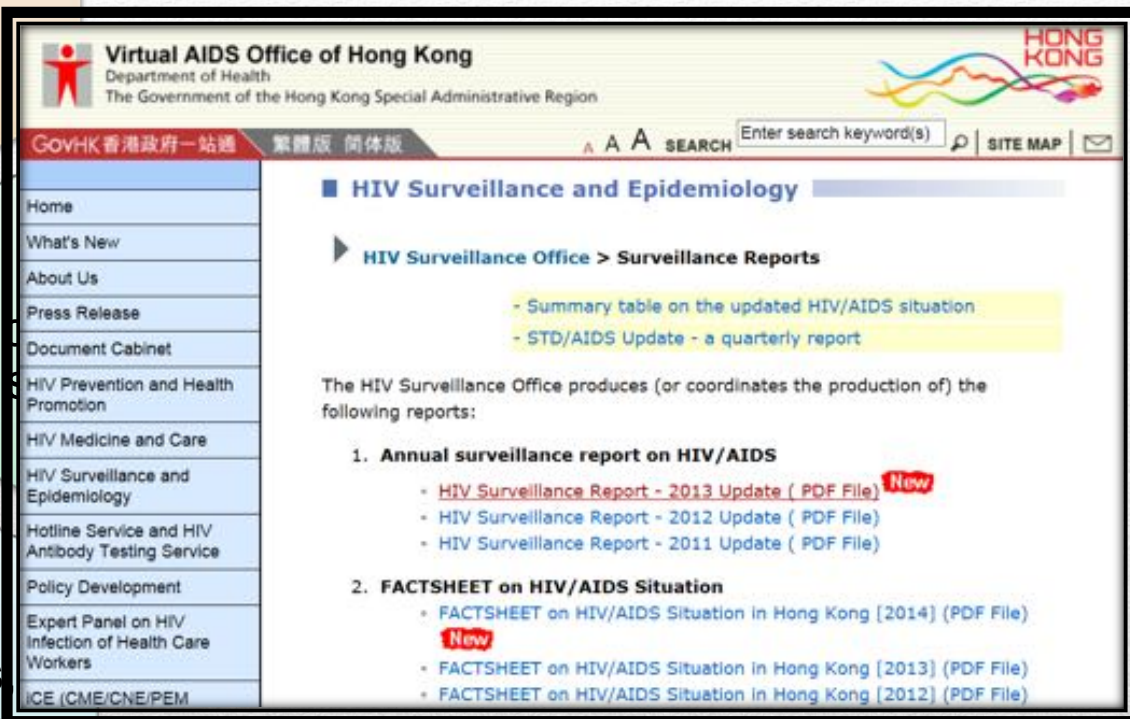
HIV
prevalence
surveys in
different
populations

**HIV/AIDS
reporting
system**

Community
surveys

Blood
donars,
antenatal
women

New
prisoners,
TB patients
methadone
clinic users



The screenshot shows the homepage of the Virtual AIDS Office of Hong Kong. The header includes the logo of the Department of Health, the text 'Virtual AIDS Office of Hong Kong', and the full name of the department. A navigation menu on the left lists various services. The main content area is titled 'HIV Surveillance and Epidemiology' and features a section for 'HIV Surveillance Office > Surveillance Reports'. This section lists two types of reports: 'Annual surveillance report on HIV/AIDS' and 'FACTSHEET on HIV/AIDS Situation'. Each report type has a list of links to specific reports, with the most recent ones marked as 'New'.

Virtual AIDS Office of Hong Kong
Department of Health
The Government of the Hong Kong Special Administrative Region

GOVHK 香港政府一站通 繁體版 簡體版 SEARCH Enter search keyword(s) SITE MAP

HIV Surveillance and Epidemiology

HIV Surveillance Office > Surveillance Reports

- Summary table on the updated HIV/AIDS situation
- STD/AIDS Update - a quarterly report

The HIV Surveillance Office produces (or coordinates the production of) the following reports:

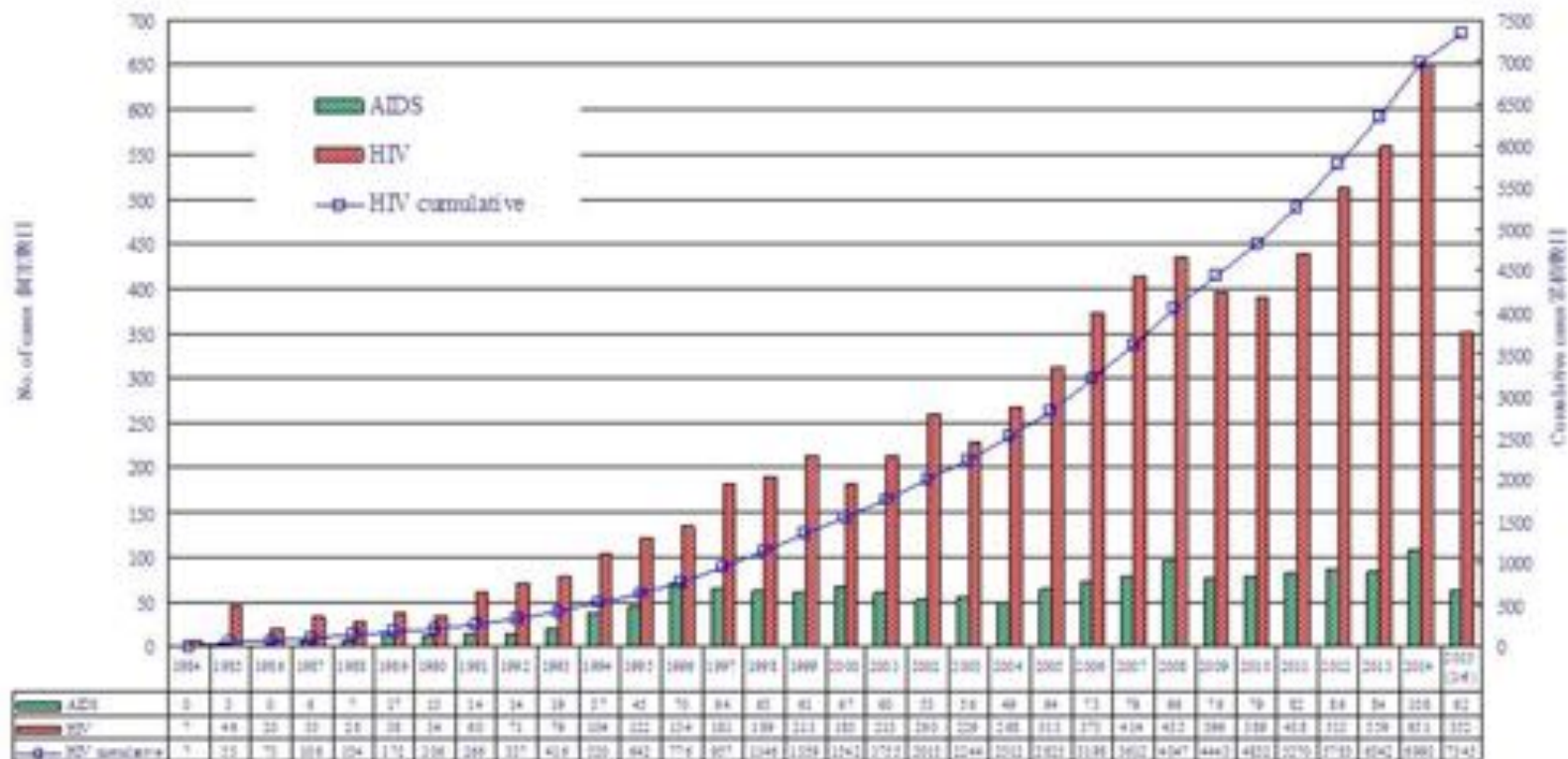
- 1. Annual surveillance report on HIV/AIDS**
 - [HIV Surveillance Report - 2013 Update \(PDF File\)](#) **New**
 - [HIV Surveillance Report - 2012 Update \(PDF File\)](#)
 - [HIV Surveillance Report - 2011 Update \(PDF File\)](#)
- 2. FACTSHEET on HIV/AIDS Situation**
 - [FACTSHEET on HIV/AIDS Situation in Hong Kong \[2014\] \(PDF File\)](#) **New**
 - [FACTSHEET on HIV/AIDS Situation in Hong Kong \[2013\] \(PDF File\)](#)
 - [FACTSHEET on HIV/AIDS Situation in Hong Kong \[2012\] \(PDF File\)](#)

Home
What's New
About Us
Press Release
Document Cabinet
HIV Prevention and Health Promotion
HIV Medicine and Care
HIV Surveillance and Epidemiology
Hotline Service and HIV Antibody Testing Service
Policy Development
Expert Panel on HIV Infection of Health Care Workers
ICE (CME/CNE/PEM)

Annual HIV/AIDS Statistics

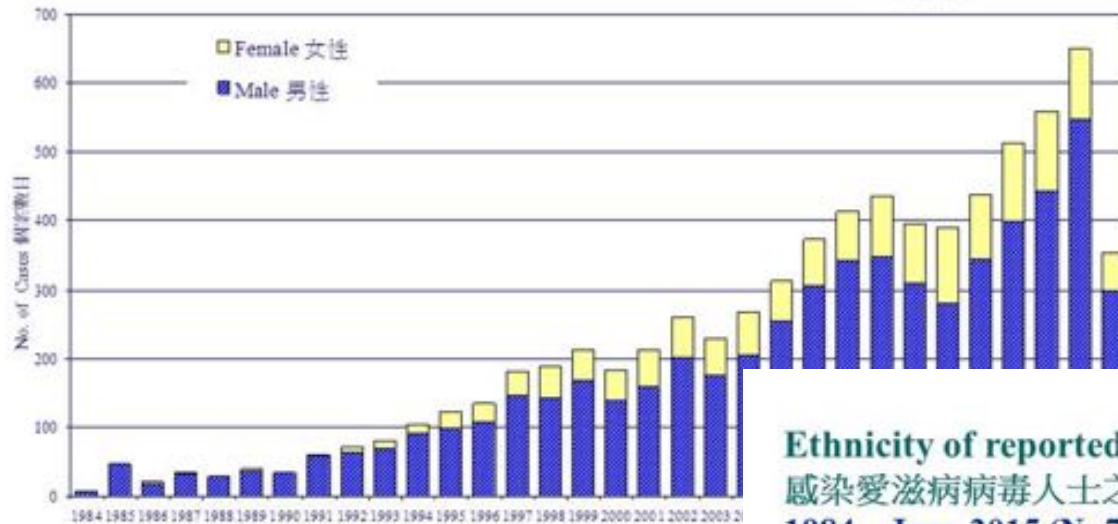
香港每年愛滋病毒病毒感染及愛滋病統計

1984 – June 2015, Hong Kong (N=7345/1607)



Gender of reported HIV infection 感染愛滋病病毒人士之性別分佈 1984 – June 2015 (N=7345)

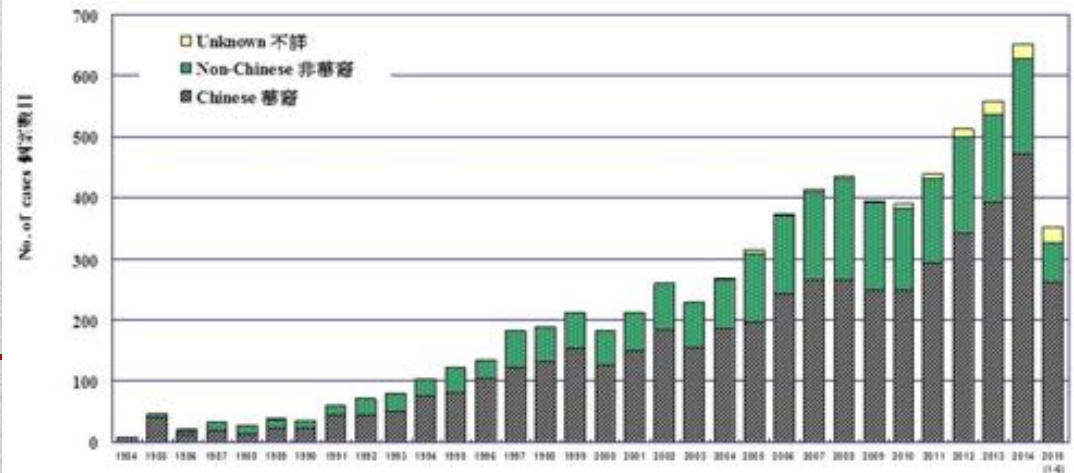
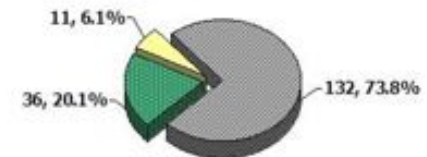
Year 2015 (Apr – Jun), n=179



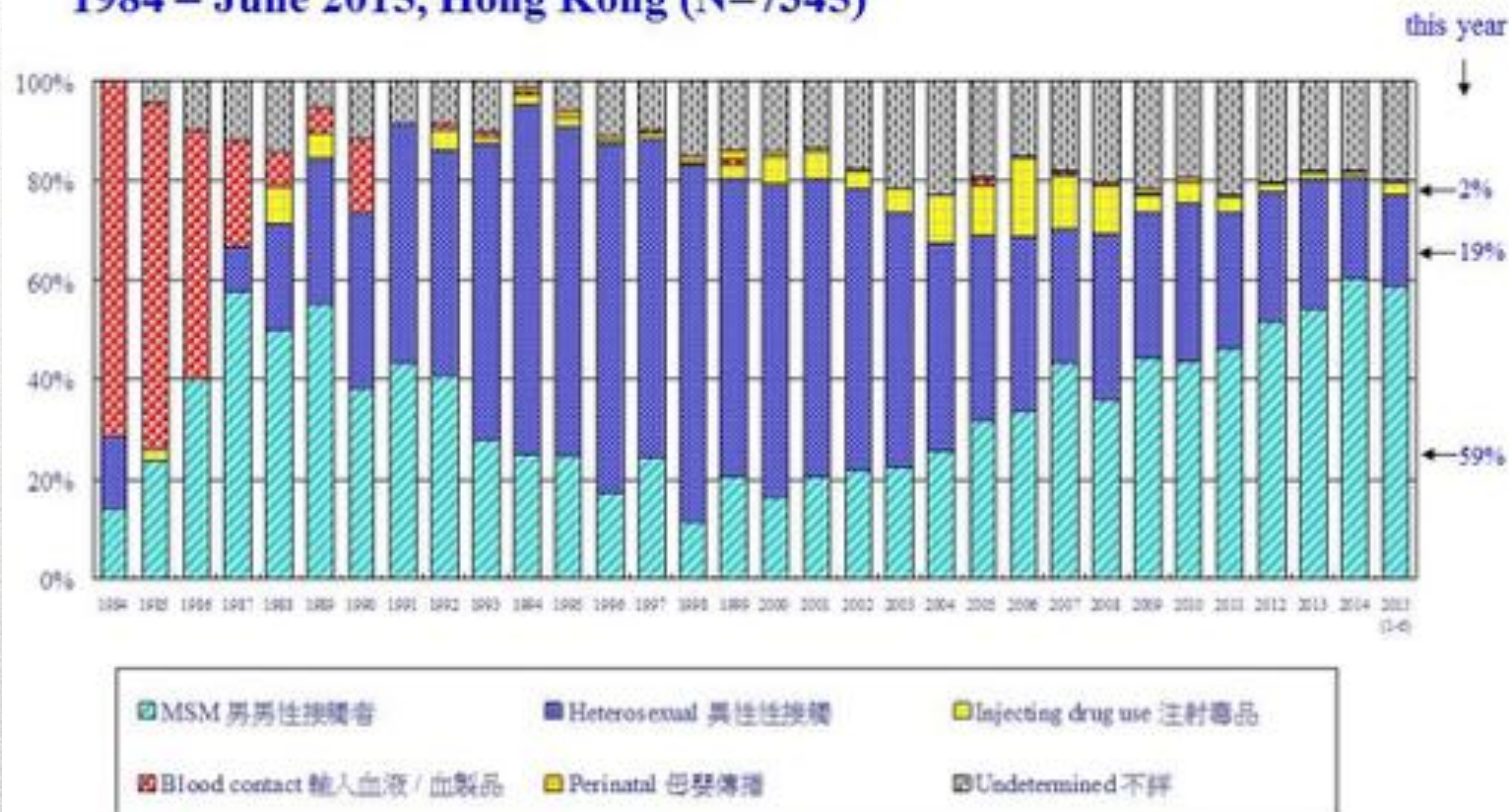
- Male predominate
- ~70% Chinese

Ethnicity of reported HIV infection 感染愛滋病病毒人士之族裔分佈 1984 – June 2015 (N=7345)

Year 2015 (Apr – Jun), n=179



Route of transmission of HIV infection 香港每年感染愛滋病病毒人士之傳染途徑分佈 1984 – June 2015, Hong Kong (N=7345)

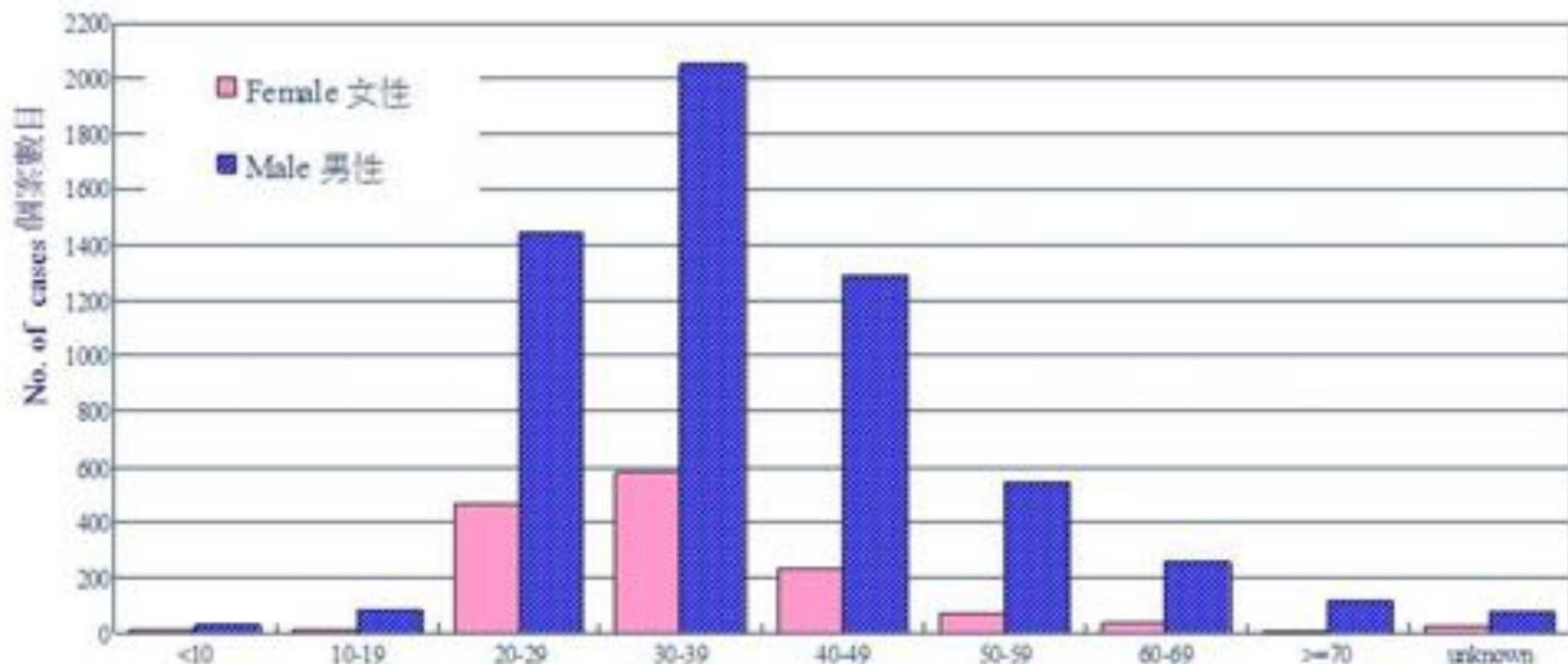
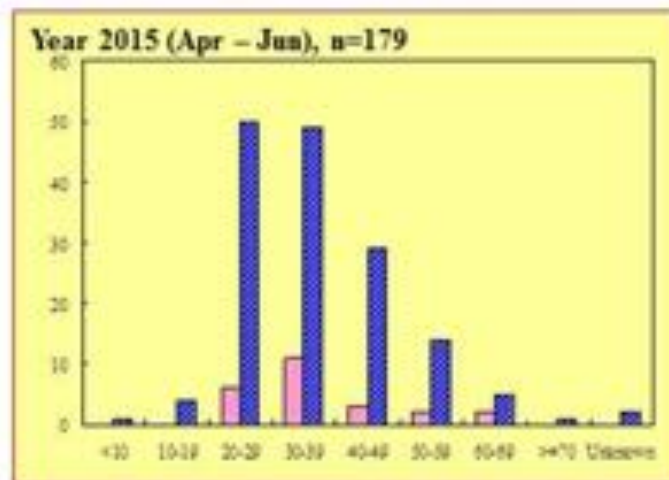


Epidemic among MSM

Age group and gender of reported HIV infection

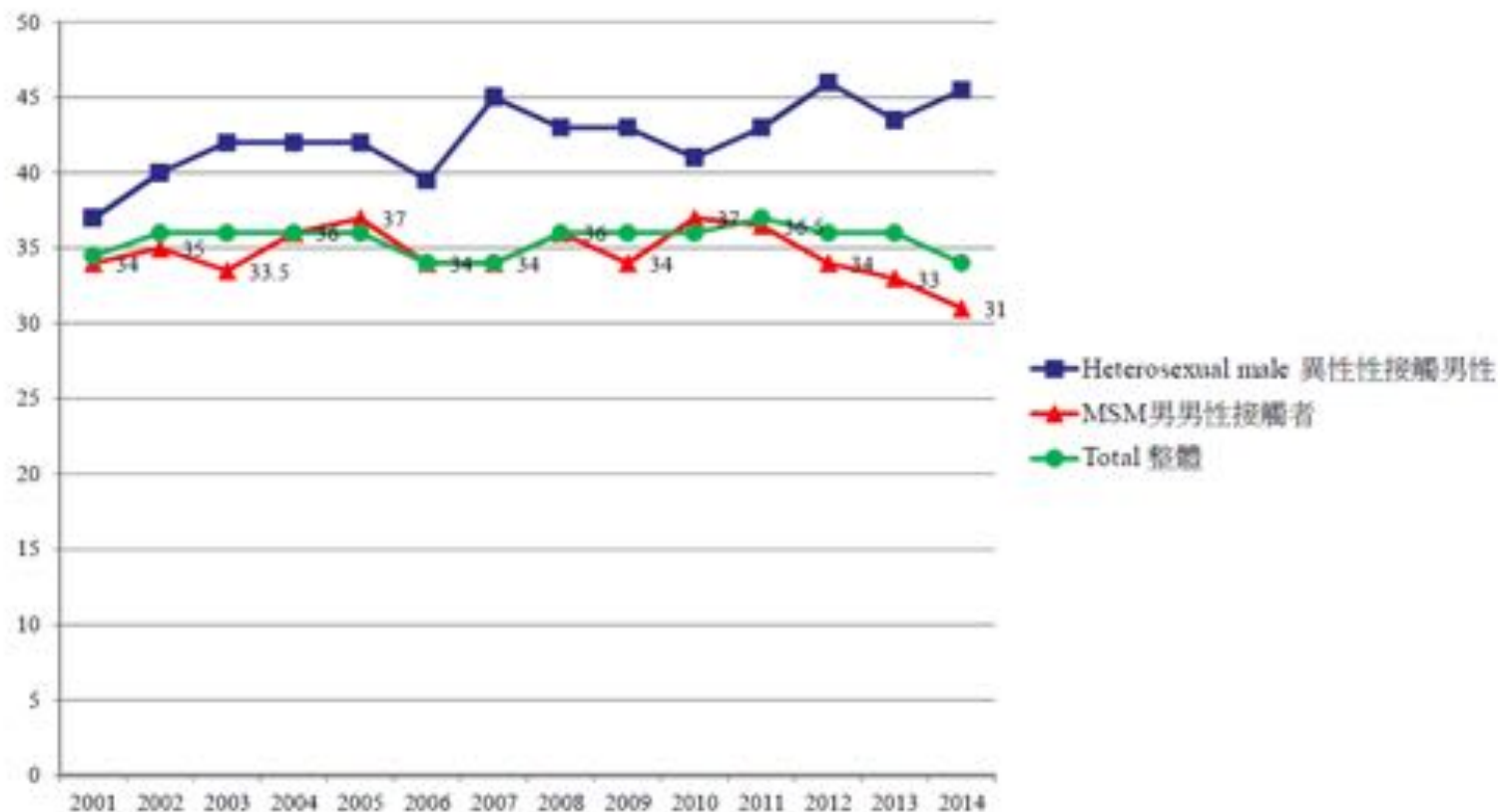
感染愛滋病病毒人士之年齡及性別分佈
1984 – June 2015 (N=7345)

Younger



Median age of HIV infected Men who have sex with men (MSM)

感染愛滋病病毒男男性接觸者年齡中位數 (2001-2014)



Box 1.8 – Reported CD4 levels at HIV diagnosis

Year	No. of HIV reports	No. of CD4 reports (%)	Median CD4 (cell/ul)	CD4 $\geq$ 200 (cell/ul) (%)
2004	268	183 (68.3%)	208	97 (53.0%)
2005	313	239 (76.4%)	201	120 (50.2%)
2006	373	298 (79.9%)	233.5	163 (54.7%)
2007	414	327 (79.0%)	236	182 (55.7%)
2008	435	315 (72.4%)	193	154 (48.9%)
2009	396	289 (73.0%)	278	181 (62.6%)
2010	389	291 (74.8%)	208	149 (51.2%)
2011	438	312 (71.2%)	258	185 (59.3%)
2012	513	386 (75.2%)	280.5	251 (65.0%)
2013	559	437 (78.2%)	286	279 (63.8%)



Better CD4 at Dx in recent years

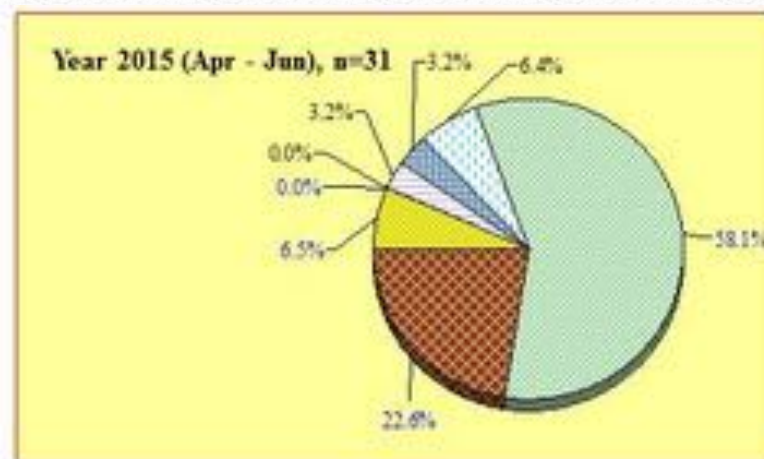
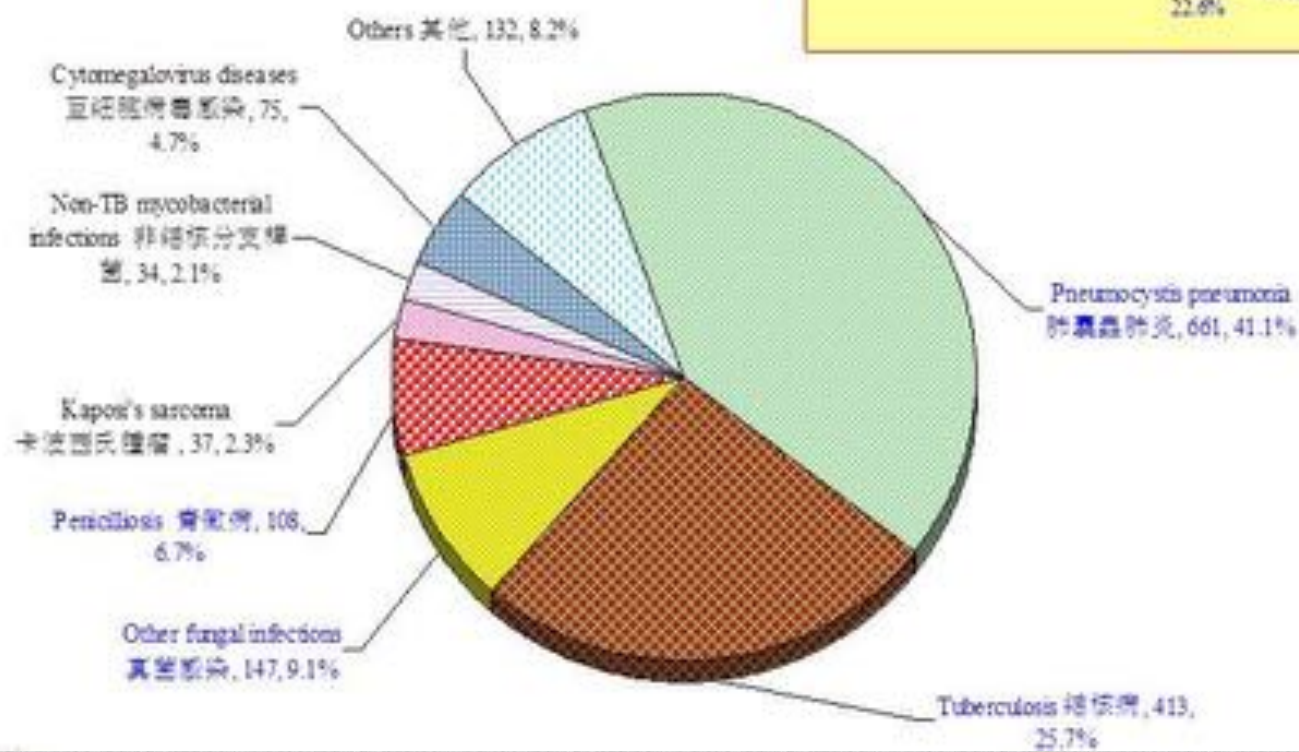
Age	Year	No. of HIV reports	No. of CD4 reports (%)	Median CD4 (cell/ul)	% of CD4 $\geq$ 200 (cell/ul)
<55	2004	225	161 (71.6%)	218	(55.3%)
	2005	282	216 (76.6%)	199.5	(50.0%)
	2006	341	272 (79.8%)	243.5	(57.4%)
	2007	377	300 (79.6%)	249	(57.3%)
	2008	380	272 (71.6%)	217	(52.6%)
	2009	357	260 (72.8%)	296.5	(66.5%)
	2010	353	259 (73.4%)	219	(52.5%)
	2011	384	275 (71.6%)	280	(62.2%)
	2012	463	346 (74.7%)	300	(66.8%)
	2013	501	387 (77.2%)	309	(68.0%)

$\geq$ 55	2004	32	22 (68.8%)	93	(36.4%)
	2005	29	23 (79.3%)	223	(52.2%)
	2006	29	26 (89.7%)	154.5	(26.9%)
	2007	33	27 (81.8%)	90	(37.0%)
	2008	53	43 (81.1%)	74	(25.6%)
	2009	38	29 (76.3%)	72	(27.6%)
	2010	36	32 (88.9%)	121	(40.6%)
	2011	53	37 (69.8%)	126	(37.8%)
	2012	48	40 (83.3%)	197.5	(50.0%)
	2013	58	50 (86.2%)	111.5	(32.0%)

AIDS –defining illnesses

愛滋病界定疾病

1985 – June 2015 (N=1607)



	2008	2009	2010	2011	2012	2013	2014
New blood donors	0.012%	<0.01%	<0.01%	<0.01%	<0.01%	<0.01%	0.01%
Antenatal women	<0.01%	0.01%	0.02%	0.01%	0.02%	0.01%	<0.01%
STD clinic attendees	0.23%	0.17%	0.15%	0.17%	0.21%	0.34%	0.4%
Methadone clinic attendees	0.47%	0.49%	0.48%	0.53%	0.62%	0.68%	0.81%
Men who have sex with men	4.31%	--	--	4.08% (venue) 3.3% (internet)	--	--	5.85%
Female sex workers	--	0.05%	--	--	--	--	--
TB patients	1.16%	1.00%	0.73%	0.90%	0.59%	0.68%	0.69%
New prisoners	0.94%	0.78%	0.97%	1.87%	0.74%	0.96%	1.04%



Key concepts in HIV prevention & care model

HIV CARE CONTINUUM:

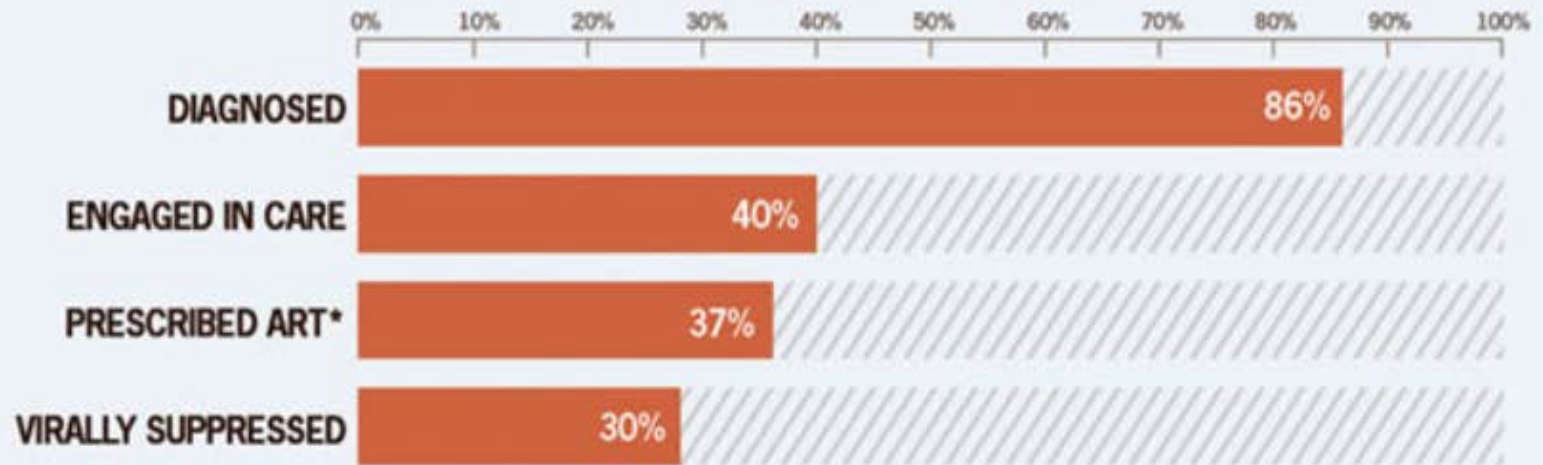
THE SERIES OF STEPS A PERSON WITH HIV TAKES FROM INITIAL DIAGNOSIS THROUGH THEIR SUCCESSFUL TREATMENT WITH HIV MEDICATION



HIV Treatment Cascade/ HIV care continuum

HIV Care Continuum Shows Where Improvements are Needed

In the US, 1.2 million people are living with HIV. Of those:



VIRALLY SUPPRESSED

30%

PRESCRIBED ART*

37%

ENGAGED IN CARE

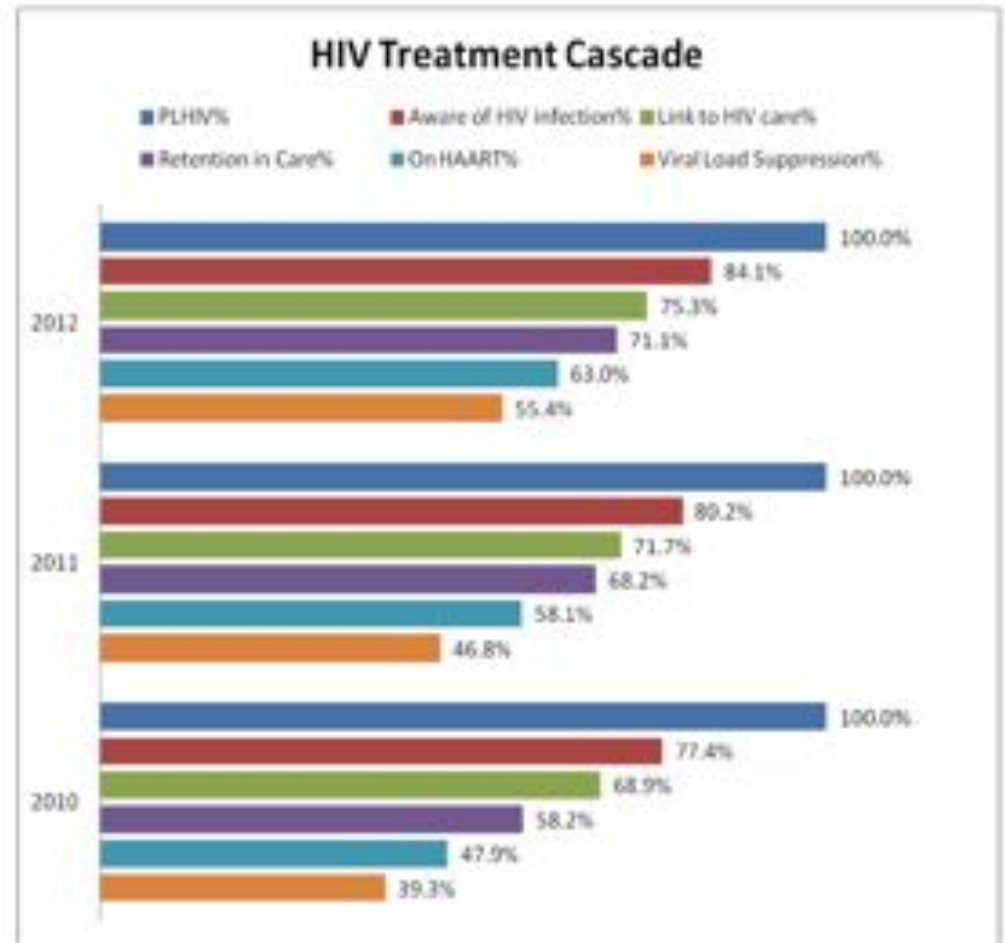
40%

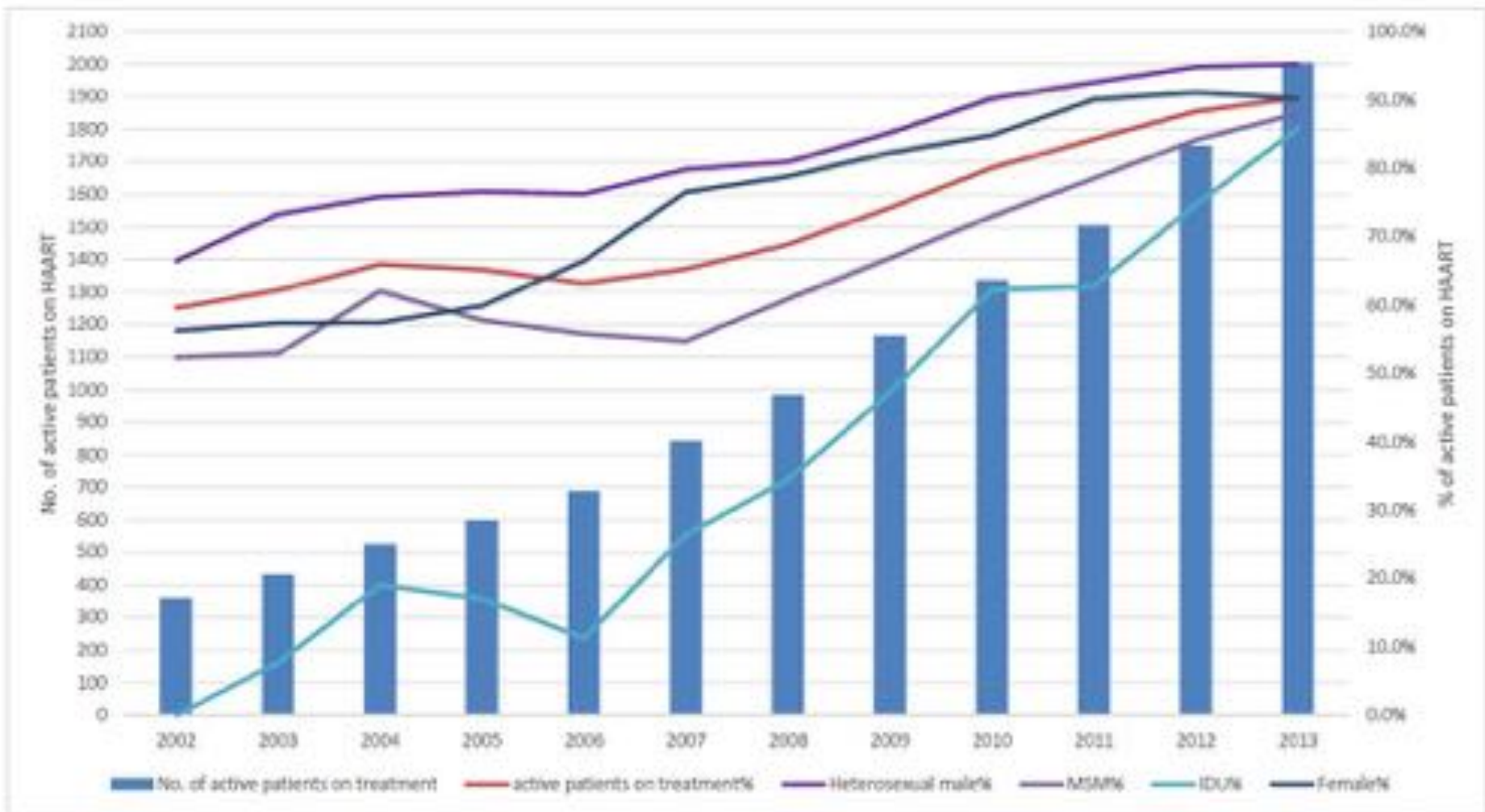
DIAGNOSED

86%

The Cascade in Hong Kong

- Very good in
 - retention
- Improved in
 - Diagnosis
 - Virologic suppression
 - % on HAART





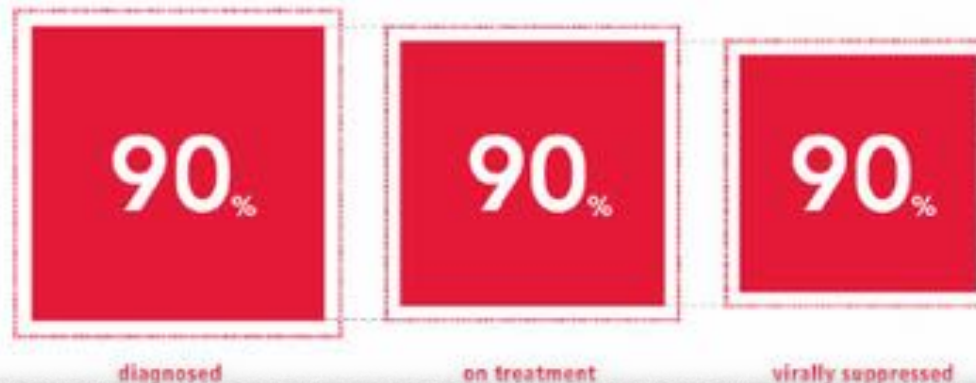
% of patients on cART in ITC, DH

AMBITIOUS TREATMENT TARGETS:

WRITING THE FINAL CHAPTER
OF THE AIDS EPIDEMIC

By 2020, if the three targets were met, it would mean 73% of the entire world PLHIV had fully suppressed viral load; and the models predict the end of HIV as an epidemic disease by 2030

THE TREATMENT TARGET



The three 90s

Treatment



When to initiate cART?

Over the years

2003-2005

2006-2009

2010-2012

2013-2014

2015

At CD4 ≤ 200

$\leq 200/200-350$

≤ 350

≤ 500

Other considerations:

- *coinfections, comorbidities, IRIS, etc*



Initiation of cART

GUIDELINES



**GUIDELINE ON WHEN
TO START ANTIRETROVIRAL
THERAPY AND
ON PRE-EXPOSURE
PROPHYLAXIS FOR HIV**

SEPTEMBER 2015

Summary of recommendations in this guideline

Recommendation 1: When to start ART among people living with HIV

Target population	Specific recommendation	Strength of the recommendation	Quality of the evidence
Adults ^a (>19 years)	ART should be initiated in all adults living with HIV at any CD4 cell count	<i>Strong</i>	<i>Moderate</i> NEW
	As a priority, ART should be initiated in all adults with severe or advanced HIV clinical disease (WHO clinical stage 3 or 4) and individuals with CD4 count ≤ 350 cells/mm ³	<i>Strong</i>	<i>Moderate</i>
Pregnant and breastfeeding women	ART should be initiated in all pregnant and breastfeeding women living with HIV at any CD4 cell count and continued lifelong	<i>Strong</i>	<i>Moderate</i> UPDATED
Adolescents (10–19 years old)	ART should be initiated in all adolescents living with HIV at any CD4 cell count	<i>Conditional</i>	<i>Low</i> NEW
	As a priority, ART should be initiated in all adolescents with severe or advanced HIV clinical disease (WHO clinical stage 3 or 4) and individuals with CD4 count ≤ 350 cells/mm ³	<i>Strong</i>	<i>Moderate</i>

Initiating Antiretroviral Therapy in Treatment-Naive Patients (Last updated May 1, 2014; last reviewed May 1, 2014)

Panel's Recommendations

- Antiretroviral therapy (ART) is recommended for all HIV-infected individuals to reduce the risk of disease progression.
 - The strength of and evidence for this recommendation vary by pretreatment CD4 T lymphocyte (CD4) cell count: CD4 count <350 cells/mm³ (AI); CD4 count 350 to 500 cells/mm³ (AII); CD4 count >500 cells/mm³ (BIII).
- ART is also recommended for HIV-infected individuals to prevent of transmission of HIV.
 - The strength of and evidence for this recommendation vary by transmission risks: perinatal transmission (AI); heterosexual transmission (AI); other transmission risk groups (AIII).
- Patients starting ART should be willing and able to commit to treatment and understand the benefits and risks of therapy and the importance of adherence (AIII). Patients may choose to postpone therapy, and providers, on a case-by-case basis, may elect to defer therapy on the basis of clinical and/or psychosocial factors.

Rating of Recommendations: A = Strong; B = Moderate; C = Optional

Rating of Evidence: I = Data from randomized controlled trials; II = Data from well-designed nonrandomized trials or observational cohort studies with long-term clinical outcomes; III = Expert opinion

US Guidelines, 2014

4.0 When to start

4.1 Chronic infection

4.1.1 Recommendations

- We recommend people with HIV start ART (1A).

4.2 Individuals presenting with AIDS or a major infection

4.2.1 Recommendation

- We recommend that individuals presenting with an AIDS-defining infection, or with a serious bacterial infection and a CD4 cell count <200 cells/ μL , start ART within 2 weeks of initiation of specific antimicrobial chemotherapy (1B).

BHIV Guidelines, 2015

Over the years

2003-2005

2006-2009

2010-2012

2013-2014

2015

At CD4 ≤ 200

$\leq 200/200-350$

≤ 350

≤ 500



Other considerations:

- *coinfections, comorbidities, IRIS, etc*

Initiation of cART

- ✓ **After acute OI: start within 2 weeks** (some exceptions in TB cases)
- ✓ **Asymptomatic: start for all**, esp pregnant women

Journal
contents:[2015](#)[2014](#)[2013](#)[2012](#)[2011](#)[2010](#)[2009](#)[2008](#)[2007](#)[2006](#)[2005](#)[2004](#)

The START Trial: Definitive Evidence to Treat All HIV-Positive Persons Regardless of CD4 Counts

Andrés Tabernilla, Eva Poveda [\[Full Article in PDF\]](#)

Division of Clinical Virology, INIBIC-Complejo Hospitalario Universitario, A Coruña, Spain

Abstract

The Strategic Timing of Anti-Retroviral Treatment (START) study is the first large-scale randomized clinical trial to establish that earlier antiretroviral treatment (ART) benefits all HIV-infected individuals. The START trial was conducted by the International Network for Strategic Initiatives in Global Trials (INSIGHT) at 215 sites in 35 countries and enrolled 4,685 HIV-positive patients. All participants enrolled were ART naive with CD4+ counts > 500 cells/mm³. Approximately half of them were randomized to start ART immediately and the other half deferred therapy until their CD4+ counts declined to < 350 cells/mm³. All patients were followed for three years.

Interim results of the **Strategic Timing of AntiRetroviral Treatment** Trial

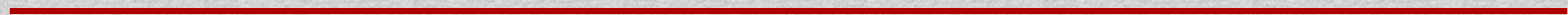


ART eligibility criteria for asymptomatic people living with HIV

Last Updated : July 16, 2015



This map follows WHO recommended standards—the boundaries and names shown and the designations used on this map do not imply official endorsement or acceptance by WHO



- **cART needed in untreatable OI**

- Cryptosporidiosis, microsporodiosis, PML, (KS)

- **In most otherwise treatable diseases**

- Used to be controversial

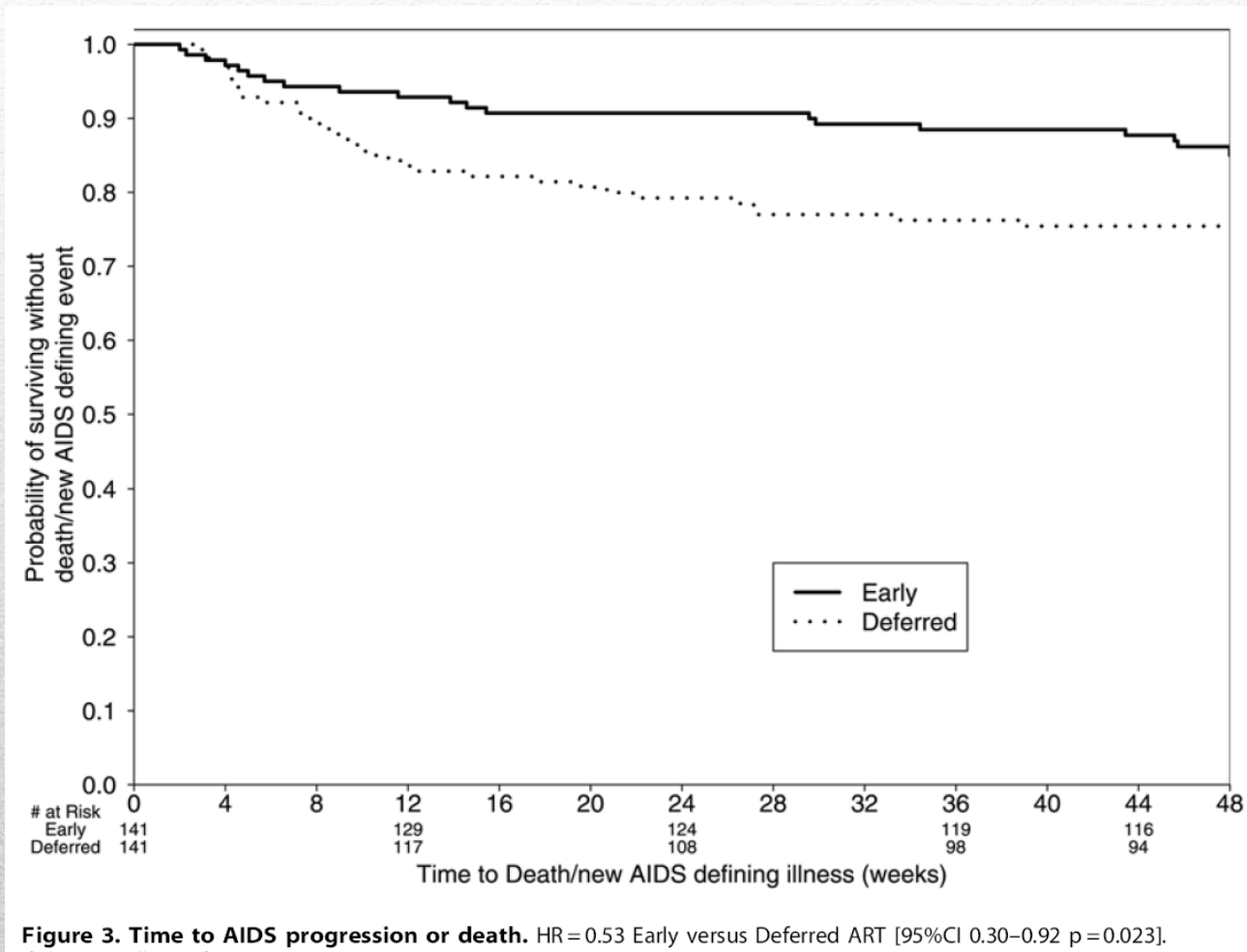
- Consensus: now towards as soon as possible

Timing of cART in acute opportunistic infections

Early Antiretroviral Therapy Reduces AIDS Progression/Death in Individuals with Acute Opportunistic Infections: A Multicenter Randomized Strategy Trial

Andrew R. Zolopa^{1*}, Janet Andersen², Lauren Komarow⁸, Ian Sanne⁵, Alejandro Sanchez⁴, Evelyn Hogg⁷, Carol Suckow⁶, William Powderly³ for the ACTG A5164 study team PLoS One. 2009;4(5):e5575

- RCT: early (within 14d) vs deferred cART
 - disease progression/death at 48 wk (14.2% vs 24.1%, $p=0.035$)
 - No difference in IRIS occurrence, VL and CD4 outcome
 - 63% PCP; TB excluded
-



8.1.1 When to start ART in TB/HIV co infection

8.1.1.1 Recommendations

- We recommend all patients with HIV TB co-infection start ART (1B).
- We recommend individuals with CD4 cell count <50 cells/ μL start ART as soon as TB treatment is tolerated and wherever possible within 2 weeks (1B).
- We recommend that for individuals with CD4 cell counts ≥ 50 cells/ μL , ART can be deferred until between 8 and 12 weeks of TB treatment, especially when there are difficulties with drug–drug interactions, adherence and toxicities (1B). (Although the data suggest a cut-off of 50 cells/ μL , because of the daily variability in CD4, a cut-off of 100 cells/ μL may be more appropriate.)

BHIV, 2015

TB/HIV coinfection



What to initiate?

NRTI	NNRTI	Protease inhibitors	Integrase Inhibitors
Zidovudine (1987)	Nevirapine (1996)	Saquinavir (1995)	Raltegravir (2007)
Didanosine (1991)	Delavirdine (1997)	Ritonavir (1996)	Dolutegravir (2013)
Stavudine (1994)	Efavirenz (1998)	Indinavir (1996)	Elvitegravir (2014)
Lamivudine (1995)	Etravirine (2008)	Nelfinavir (1997)	
Abacavir (1998)	Rilpivirine (2011)	Atazanavir (2003)	Entry Inhibitors
Tenofovir (2001)		Fosamprenavir (2003)	Enfuvirtide (2003)
Emtricitabine (2003)		Tipranavir (2005)	Maraviroc (2007)
		Darunavir (2006)	
			<i>Pharmacokinetic Enhancers</i>
			Cobicistat (2014)

Table of FDA approved HIV med 2015

These four medications are considered "complete regimens" because each tablet contains a combination of antiretroviral drugs, which makes a full regimen.

Abacavir/Dolutegravir/Lamivudine

trade name:
TRUVEQ



600 mg/50 mg/300 mg Truvenq tablet
(abacavir/dolutegravir/lamivudine)

Elvitegravir/Cobicistat/ Emtricitabine/Tenofovir

trade name:
STRIBILD



150 mg/150 mg/200 mg/300 mg Stribild tablet
(elvitegravir/cobicistat/emtricitabine/tenofovir)

Efavirenz/Emtricitabine/Tenofovir

trade name:
ATRIPLA



600 mg/200 mg/300 mg Atripla tablet
(efavirenz/emtricitabine/tenofovir)

Emtricitabine/Rilpivirine/Tenofovir

trade name:
COMPLERA



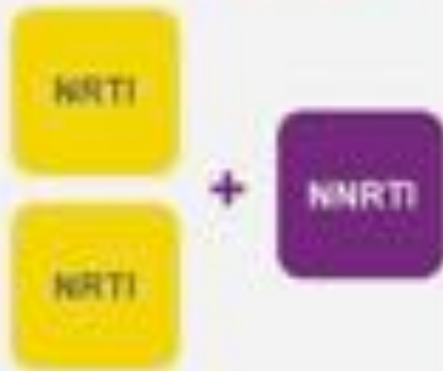
200mg/25mg/300mg Complera tablet
(emtricitabine/rilpivirine/tenofovir)

Single pill regimen

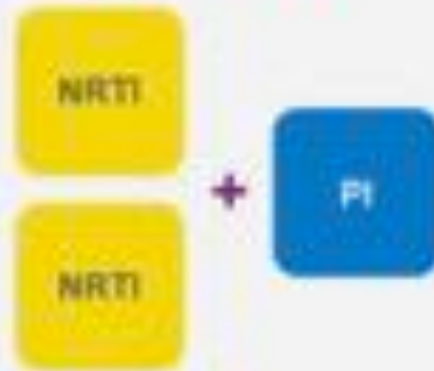
- **Less toxicity, better tolerance**
- **Better quality of life**
- **More convenience**
- **More options for treatment failure**

Expanding the formulary

NNRTI Regimen



PI Regimen



INSTI Regimen



NRTI - nucleoside reverse transcriptase inhibitor
NNRTI - non-nucleoside reverse transcriptase inhibitor
PI - protease inhibitor (preferably boosted)
INSTI - integrase strand transfer inhibitor

What to start?

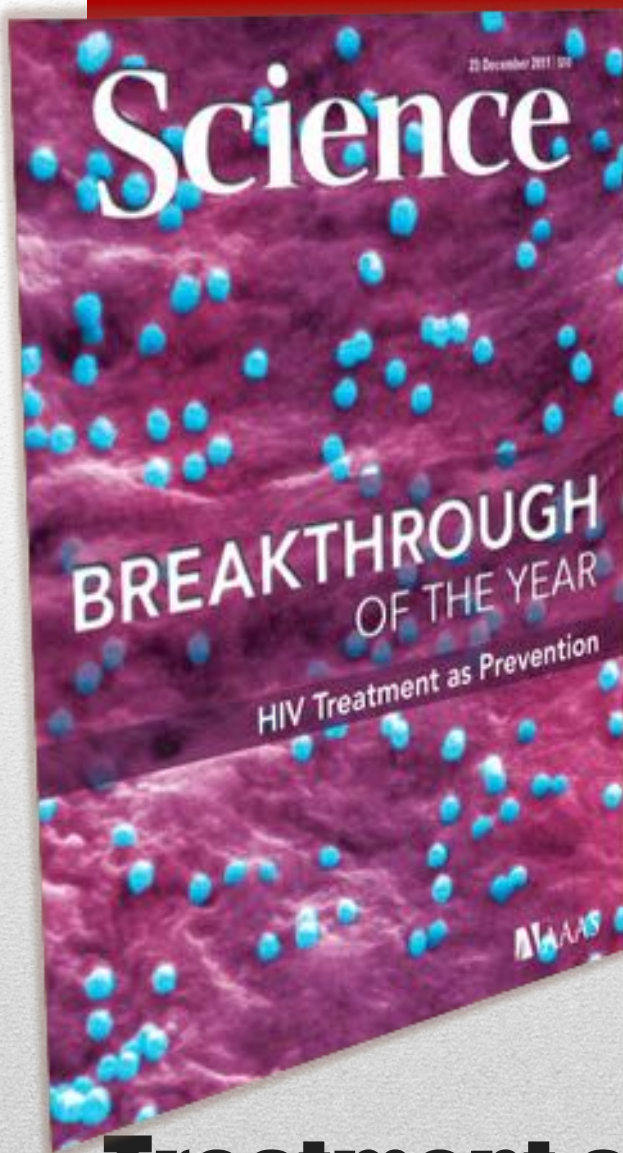
- **Maximally and durably suppress plasma HIV viral load**
 - **VL<40cp/ml³**
- **Restore and preserve immunological function**
- *Reduce HIV-associated mortality and morbidity*
- *Improve quality of life*
- *Prevent HIV infection*

Treatment goal

Preventive Strategies

- **Reduction of mother-to-child-transmission of HIV**
- **3-part ART + elective LSCS (in certain cases nowadays) + no breastfeeding**
 - **Reduction of risk from 15-45% to 1%**

**Early recognition of ART benefits
for HIV prevention**



Breakthrough of the Year, 2011

The year 2011 saw scientific research that stretched from the farthest reaches of the universe to the deepest mysteries of the cell. Following a yearly tradition, *Science*'s editors and news staff have selected one scientific Breakthrough of the Year and nine runners-up -- and have also highlighted some areas to watch for 2012. [Access to articles may require [membership or a subscription](#).]



WINNER

HIV Treatment as Prevention

J. Cohen

The antiretroviral drugs used to treat HIV-infected people also dramatically reduce HIV transmission rates, a finding that may influence the strategies used by health advocates and policymakers to battle the disease.

Related Policy Forum by J. D. Shelton: [ARVs as HIV Prevention: A Tough Road to Wide Impact](#)

Treatment as Prevention (TasP)



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HPTN 052

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HPTN 052 is the name of a [clinical trial](#) conducted in nine countries which examined the extent to which [antiretroviral therapy](#) (ART) could [prevent HIV](#), decrease their infectivity and thereby reduce the chance that they will pass HIV on to their sexual partners.^[1] The results of the study's [Data and Safety Monitoring Board](#) (DSMB) asked the research team to share the results with all study participants and offer ART to all study participants. The study ended.^[2] As a result of the study there was increased consensus that [treatment as prevention](#) should be included as a public health strategy to [prevent HIV](#) infection. The trial was organized by the [HIV Prevention Trials Network](#) (HPTN) and its chief architect was [Myron S. Cohen](#).

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Prevention of HIV-1 Infection with Early Antiretroviral Therapy

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- 13 sites (Botswana, South Africa, Malawi, Kenya, Zimbabwe, Brazil, Thailand, India, Boston)
 - 54% subjects from Africa
- 2007-2010
- Subjects
 - HIV serodiscordant couples with stable relationship, HIV status disclosed, and patients with CD4 350 – 550
 - 1763 couples enrolled
 - 97% heterosexual

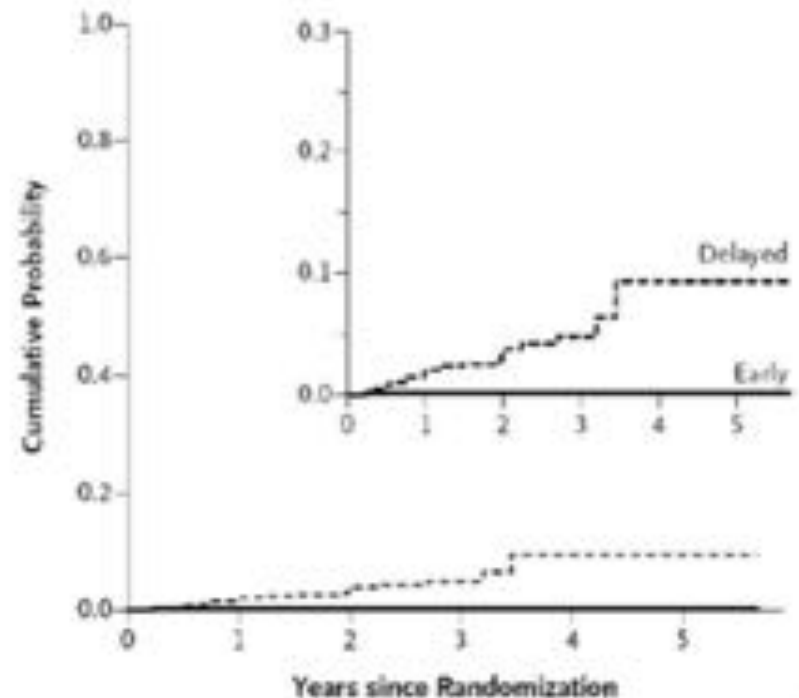


- Randomized 1:1
 - Early, immediate therapy
 - Delayed therapy = when CD4 <250
-

28 linked transmissions $\Rightarrow$ incidence of 0.9/100 py

- 1 (early) $\Rightarrow$ 0.1/100 py
- 27 (delayed) $\Rightarrow$ 1.7/100py (all while pt were not on ART)
- Hazard ratio = 0.04 for early therapy, $p < 0.001$**

Linked HIV Transmission



No. at Risk

Early	893	658	298	79	11	24
Delayed	882	655	297	80	36	22

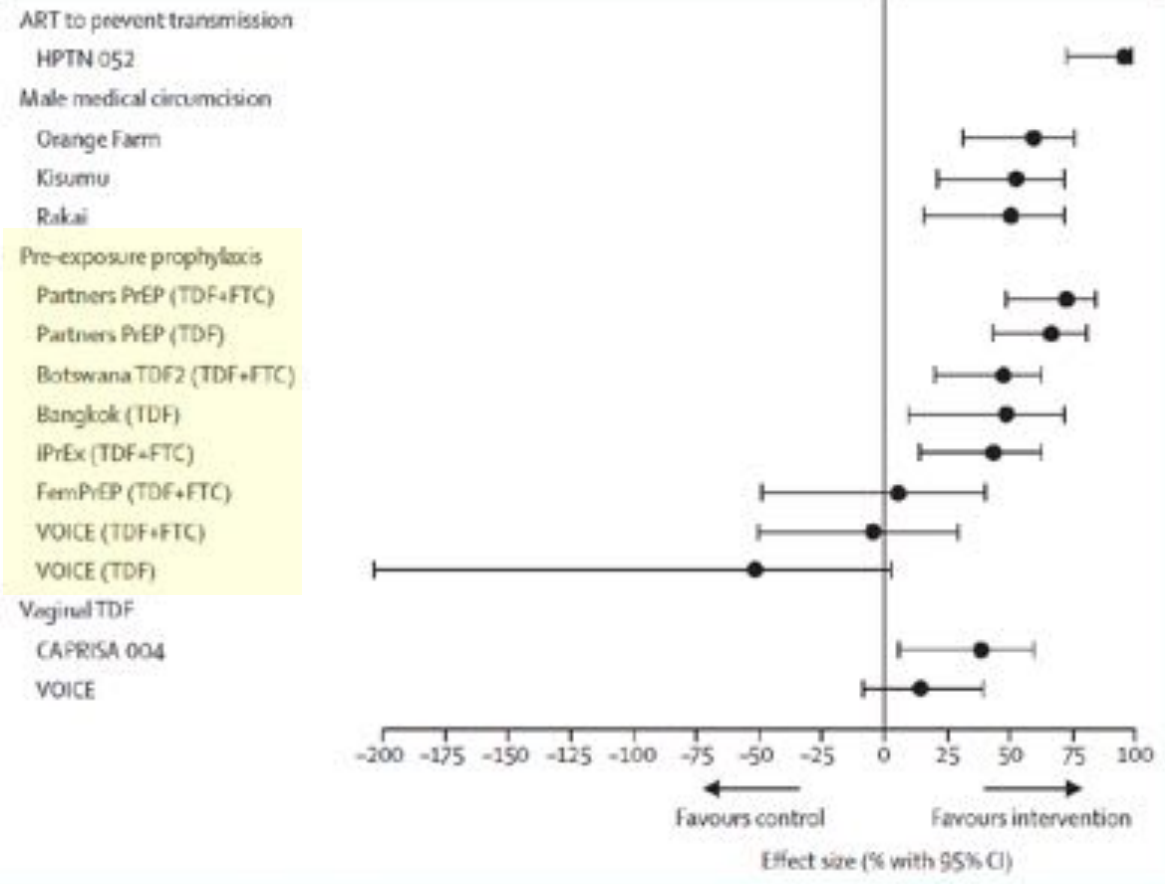


Figure 5: Clinical trials of interventions to prevent sexual transmission of HIV-1
TDF=tenofovir. FTC=emtricitabine. References for studies: HPTN052;¹³⁵ Orange Farm;¹⁴³ Kisumu;¹⁴² Rakai;¹⁴³ Partners PrEP;¹⁴⁴ Botswana TDF2;¹⁴⁵ Bangkok;¹⁴⁶ iPrEX;¹⁴⁷ FemPrEP;¹⁴⁸ VOICE;¹⁴⁹ CAPRISA 004.¹⁵⁰

Pre-exposure prophylaxis

PREEXPOSURE PROPHYLAXIS FOR THE PREVENTION OF HIV INFECTION IN THE UNITED STATES - 2014

A CLINICAL PRACTICE GUIDELINE



Preexposure Prophylaxis for the Prevention of HIV Infection in the United States - 2014 Clinical

Table 1: Summary of Guidance for PrEP Use

	Men Who Have Sex with Men	Bisexual Women and Men	Injection Drug Users
Detecting substantial risk of acquiring HIV infection	HIV-positive sexual partner Recent bacterial STI High number of sex partners History of inconsistent or no condom use Commercial sex work	HIV-positive sexual partner Recent bacterial STI High number of sex partners History of inconsistent or no condom use Commercial sex work In high-prevalence area or network	HIV-positive injecting partner Sharing injection equipment Recent drug treatment (not currently injecting)
Clinically eligible	Documented negative HIV test result before prescribing PrEP No signs/symptoms of acute HIV infection Normal renal function; no contraindicated medications Documented hepatitis B virus infection and vaccination status		
Prescription	Daily, containing, oral dose of TDF/FTC (Truvada), 90-day supply		
Other services	Follow-up visits at least every 3 months to provide the following: HIV test, medication adherence counseling, behavioral risk reduction support, side effect assessment, STI symptoms assessment At 7 months and every 6 months thereafter, assess renal function Every 6 months, test for bacterial STIs		
	Do uninfected STI testing	Avoid pregnancy intent Pregnancy test every 3 months	Access to clean needles/syringes and drug treatment services

STI = sexually transmitted infection

Recommendation 2: Oral pre-exposure prophylaxis to prevent HIV acquisition			
Target population	Specific recommendation	Strength of the recommendation	Quality of the evidence
HIV-negative individuals at substantial risk of HIV infection ^b	Oral PrEP (containing TDF) should be offered as an additional prevention choice for people at substantial risk of HIV infection as part of combination prevention approaches	Strong	High

- A variety of considerations: resources, feasibility, demand, other opportunities for HIV prevention

Summary

- **Advances in HIV medicine in various aspects**
 - **Antiretroviral therapy: *early initiation***
 - **Individual benefit**
 - **HIV prevention**
 - **Changing**
 - **Mortality and morbidity of PLHIV**
 - **Concept in HIV care**
 - **Etc...**
-



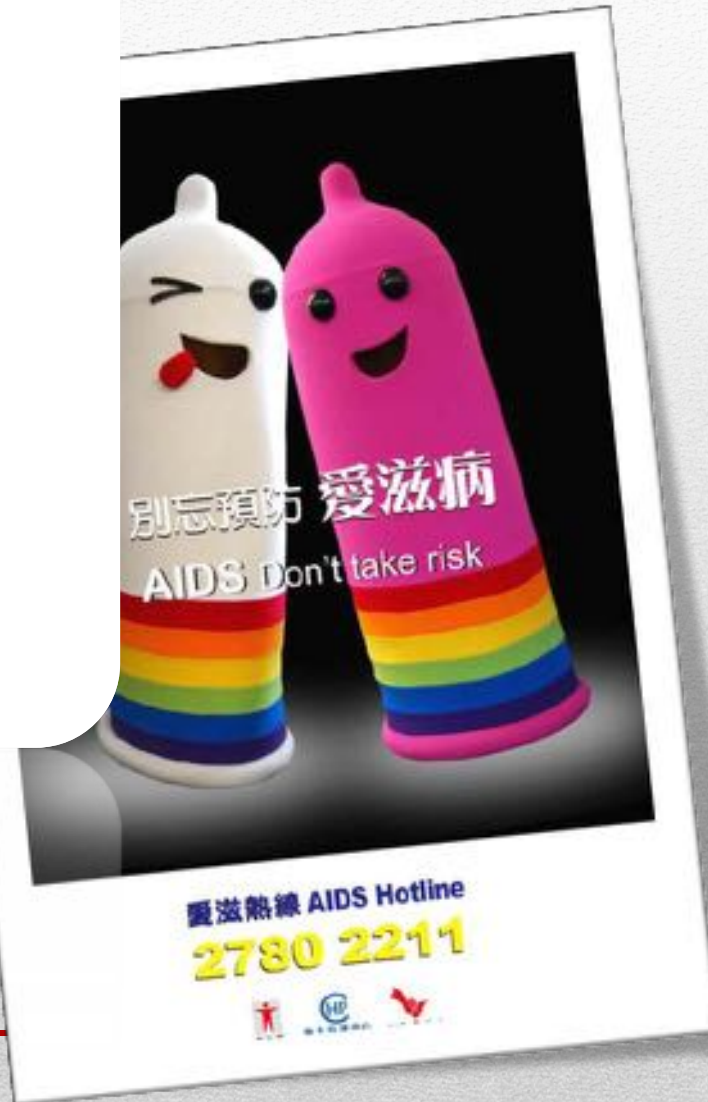
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- HIV/AIDS epidemiology
- Clinical guidelines
- Public health reports
- Strategy documents
- Report form

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END

HIV MANUAL

THIRD EDITION



Stanley Ho Centre for Emerging Infectious Diseases
The Chinese University of Hong Kong
and
Centre for Health Protection
Department of Health
Hong Kong Special Administrative Region Government



Updates to the Manual
and Anti-HIV Med would
be announced on the
Facebook page



Available on the
App Store



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Foreword

Foreword

Project Team

Acknowledgements

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