HIV Clinical Cohort Database: Overview and Summary Statistics

Through Quarter 2 of 2025, ending June 30, 2025 Updated October 6, 2025





Einstein-Rockefeller-CUNY Center for AIDS Research (ERC-CFAR)

- New York City-based CFAR funded by NIAID and other NIH institutes (P30-AI-124414)
- Synergizes the scientific strengths, research expertise, and clinical resources of three major New York City academic institutions:





THE ROCKEFELLER UNIVERSITY



 Overarching goal: to stimulate, coordinate, and support an integrated multidisciplinary research agenda to arrest the AIDS epidemic

ERC-CFAR HIV Clinical Cohort Database

- Relational database maintained at Einstein by
 - CFAR's Clinical and Translational Science Core (CTSC)
 - Epidemiology Informatics & Study Management Unit (EISMU)
- Contains clinical data on both >22,000 patients with HIV and >570,000 patients with confirmed HIV-negative status seen in the Montefiore Health System in the Bronx, New York
 - Electronic medical records systems (e.g., Epic, CareCast)
 - AIDS Institute Reporting System (AIRS)
 - Einstein Cancer Registry, National Death Index, etc.

Objectives

- Establish clinical cohort for epidemiologic studies
- Serve as potential source of study participants for clinical studies

Target population: The Bronx, New York City HIV prevalence by ZIP code (2021)

Hospitals and emergency departments

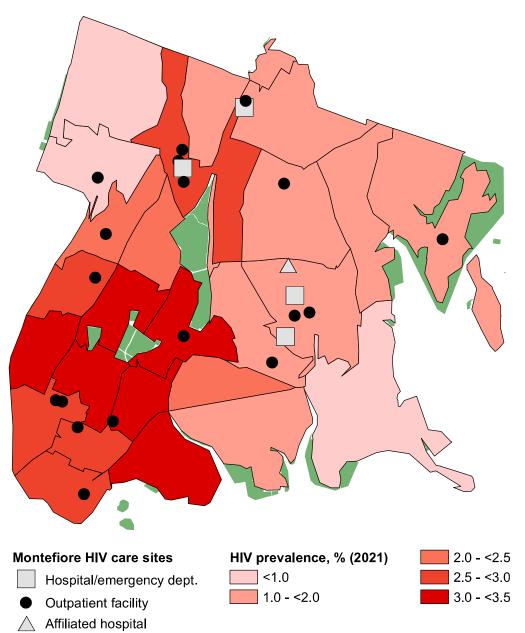
Children's Hospital at Montefiore (Moses Campus) Montefiore Hospital (Moses Campus) Weiler Hospital (Einstein Campus) Wakefield Hospital (Wakefield Campus) Westchester Square Campus

Outpatient facilities

Castle Hill Family Practice Comprehensive Family Care Center Comprehensive Health Care Center Center for Positive Living Family Health Center Marble Hill Family Practice Montefiore Adolescent and Youth Sexual-Health Clinic Oval Center at Montefiore (STD services) Project Rising Adolescent and Young Adult Program South Bronx Health Center Substance Abuse Treatment Program Unit I Substance Abuse Treatment Program Unit III University Avenue Family Practice Via Verde Wakefield Ambulatory Care Center Wellness Center at Melrose Wellness Center at Port Morris Wellness Center at Waters Place West Farms Family Practice Williamsbridge Family Practice

Affiliated hospitals

NYC Health + Hospitals/Jacobi Medical Center



Development of the HIV Clinical Cohort Database

Epic, CareCast
Inpatient records,
labs, Rx data

Epic, C-EMR Outpatient records, Rx data

AIRS
Behavioral (risk)
data, etc.

Einstein Cancer Registry

National Death Index

Establish two cohorts of MHS patients

Assign unique ID

Import data from multiple data sources

Q/A of key variables

- To date, focus has been on patients with HIV
- As rules implemented, tables considered "cleaned", then DB locked

Source population: Montefiore Health System (MHS), 1997-present

Patients with HIV (N~22,000)

HIV Western blot, HIV 1/2 differentiation assay, detectable HIV VL, or 3+ undetectable VLs ordered concurrently with CD4+ count Unknown
HIV status
(N~5.5 M)
Never tested for
HIV at MHS

Patients with confirmed HIV-negative status (N~570,000)

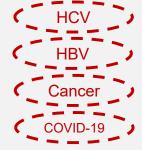
Not fulfilling above criteria, + negative HIV antibody test

Out of ~6.04 million MHS patients since 1997

Update process semi-annually with new data (new patients, updated records)

Analysis dataset "cores"





ERC-CFAR HIV Clinical Cohort Database

What kinds of data are available?

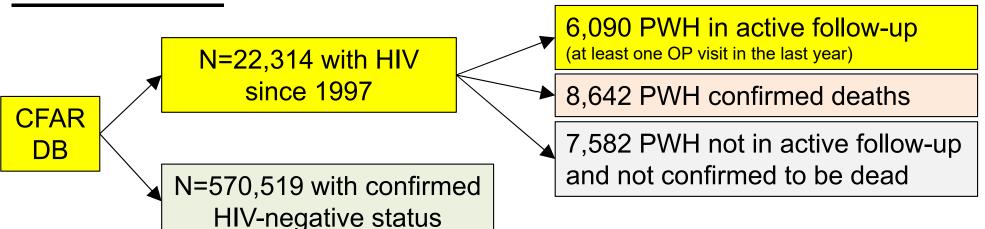
- Demographics
- Labs (CD4 counts, HIV-1 viral loads, others)
- Visits (inpatient, outpatient, Emergency Dept, telemedicine)
- Diagnoses from billing and problem lists (ICD-9-CM, ICD-10-CM)
- Medications (prescribed and administered, including ART and PrEP)
- HIV risk factor
- Cancer stage, pathology
- Hepatitis B and C lab results
- COVID-19 diagnoses and lab results
- Vital status, cause of death

ERC-CFAR HIV Clinical Cohort Database

QA and maintenance

- Semi-annual query of electronic data warehouse:
 - Updated data on existing patients, addition of new patients
- QA of key variables (e.g., ART, CD4, VL, HCV, visits)
- Inclusion and QA of additional variables a la carte, dependent on investigator needs

Breakdown of patients in database



Cumulative summary data on patients with HIV

Patients with HIV through 6/2025 (N=22,314)

Demographic and behavioral characteristics

	N	%
Gender		
Man/boy	13,451	60
Woman/girl	8,793	39
Other/unknown/ choose not to disclose	70	0.3
Age in 2025 ¹ (years)	Median 57	IQR 43-64
0-12	11	0.1
13-29	517	4
30-49	4,173	31
50+	8,971	66
Race/ethnicity		
Hispanic	7,738	35
Black, non-Hispanic	9,814	44
White, non-Hispanic	1,344	6
Asian/Pacific Islander	76	0.3
Native American	24	0.1
>1, other, unknown	3,318	15

	N	%		
Transmission risk, men/boys ²				
Heterosexual/other	4,423	46		
MSM	3,048	32		
IDU	1,992	21		
Perinatal	106	1		
Transmission risk, wome	en/girls²			
Heterosexual/other	5,231	81		
IDU	893	14		
Perinatal	152	2		
Recorded as MSM	172	3		
Year of earliest HIV				
diagnosis				
2021-present	1,893	8		
2016-2020	2,292	10		
2011-2015	2,462	11		
2006-2010	3,233	14		
Before 2006	12,434	56		
Year of last contact				
2021-present	10,051	45		
2016-2020	3,332	15		
2011-2015	2,717	12		
2006-2010	2,663	12		
Before 2006	3,551	16		

¹Among those presumed to be alive, N=13,672. ²Among those with transmission risk in AIRS, N=9,569 men/boys, 6,448 women/girls.

Patients with HIV through 6/2025 (N=22,314)

HIV lab values, ART use, seroconversion, data linkages

	N or median	% or IQR
HIV lab values		
Most recent CD4+ T-cell count*, cells/uL (median, IQR)	597	388-836.5
Suppressed viral load (<200 cp/mL) at most recent test*	4,705	77
Undetectable viral load (<20 cp/mL) at most recent test*	4,077	67
Treatment and testing		
Any ART prescribed in past year*	5,332	88
With negative HIV antibody test prior to entering HIV+ cohort ("seroconverter")	847	4
Data linkages		
Matched with Einstein Cancer Registry	3,163	14
Matched with National Death Index	8,215	37

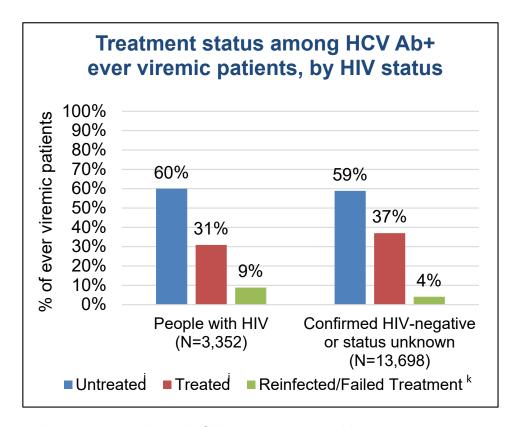
^{*}Among those with at least one outpatient visit between 7/2024 and 6/2025, N=6,090.

For CD4+ data, N=5,092 due to missing data. For viral suppression, patients with no viral load data are considered not suppressed. For ART data, denominator includes patients who may be getting ART prescriptions elsewhere.

HCV status and populations of interest among MHS patients age 18+, by HIV status

	People with HIV, N=20,582 N (%)	Confirmed HIV-negative or status unknown, N=2,595,047 N (%)
HCV status		
Unknowna	2,677 (13)	2,124,099 (82)
Known ^b	17,905 (87)	470,948 (18)
Most recent HCV status ^c		
HCV negative	12,171 (68)	447,454 (95)
HCV Ab+	5,734 (32)	27,974 (6)
Ever viremic ^d	3,352 (19)	13,698 (3)
Never viremice	1,258 (7)	9,796 (2)
Viremia unknown ^f	1,124 (6)	4,480 (1)
HCV populations of interest		
HCV seroconverterg	473 (3)	2,088 (0.4)
HCV with HCCh	96 (2)	1,006 (4)

HCV = hepatitis C virus, HCV Ab+ = hepatitis C antibody positive, HCC = hepatocellular carcinoma, VL = viral load, UD = undetectable.



- a Includes those with no HCV tests, uninterpretable results, or only
 >/=1 undetectable HCV VL results (and no HCV Ab result)
- ^b Includes those with any interpretable HCV testing
- ^c Reported as percent of those with known HCV status
- ^d HCV VL ever detectable (with or without any HCV Ab result)
- e At least one HCV VL recorded and never detectable (may represent cleared infection vs. prior tx)
- ^f No recorded HCV VL
- g Ever had neg HCV Ab followed by pos HCV Ab, reported as percent of those with known HCV status
- ^h Ever HCV Ab+ **AND** HCC dx in cancer registry, reported as percent of those with HCV Ab+
- i Most recent HCV VL is detectable
- J Ever had detectable HCV VL AND most recent HCV VL is UD
- ^k Ever had detectable HCV VL **AND** subsequent UD HCV VL **AND** most recent HCV VL is detectable

Summary data on current outpatients with HIV

Current outpatients with HIV, 7/2024-6/2025 (N=6,090)

Demographic and behavioral characteristics

	N	%
Gender		
Man/boy	3,431	56
Woman/girl	2,630	43
Other/unknown/ choose not to disclose	29	0.5
Age in 2025 ¹ (years)	Median 57	IQR 44-65
0-12	6	0.1
13-29	259	4
30-49	1,707	29
50+	4,014	67
Race/ethnicity		
Hispanic	2,667	44
Black, non-Hispanic	2,639	43
White, non-Hispanic	268	4
Asian/Pacific Islander	26	0.4
Native American	7	0.1
>1, other, unknown	483	8

	N	%
Transmission risk, men/	boys²	
Heterosexual/other	1,150	41
MSM	1,195	43
IDU	415	15
Perinatal	32	1
Transmission risk, wom-	en/girls ²	
Heterosexual/other	1,849	85
IDU	194	9
Perinatal	55	3
Recorded as MSM	80	4
Year of earliest HIV		
diagnosis		
2020-present	880	14
2016-2019	808	13
2011-2015	779	13
2006-2010	823	14
Before 2006	2,800	46

¹Among those presumed to be alive, N=5,986.

²Among those with transmission risk in AIRS, N=2,792 men/boys, 2,178 women/girls.

Current outpatients with HIV, 7/2024-6/2025 (N=6,090)

CD4+ T-cell count, HIV viral suppression, ART use, telemedicine use

	N or median	% or IQR
Most recent CD4+ T-cell count (cells/uL)	597	388-836.5
500 or more	3,194	63
350 to 499	815	16
200 to 349	643	13
50 to 199	375	7
0 to 49	65	1
Suppressed viral load (<200 cp/mL) at most recent test	4,705	77
Undetectable viral load (<20 cp/mL) at most recent test	4,077	67
Any ART prescribed in past year	5,332	88
Any telemedicine use in past year	2,197	36

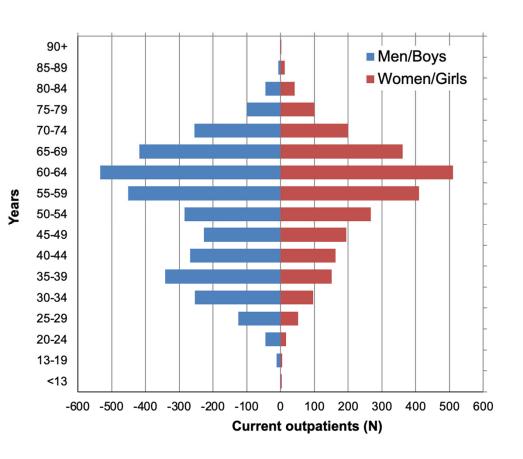
For CD4+ data, N=5,092 due to missing data. For VL suppression, patients with no viral load data are considered not suppressed. For ART data, denominator includes patients who may be getting ART prescriptions elsewhere.

Current outpatients with HIV, 7/2024-6/2025 (N=6,090)

Age structure and selected comorbidities

Age structure, by gender

(among those presumed to be alive, N=5,986)



Selected comorbidities

(based on inpatient discharge and outpatient diagnosis codes and/or prescriptions)

History of:	N	%
Coronary heart disease ICD-9-CM 410-415, ICD-10-CM I20-25	1,425	23
Lipid-lowering therapy Rx	3,069	50
Statin Rx	2,936	48
Anti-hypertensive medication Rx	3,572	59
Diabetes mellitus (either diagnosed or prescribed medication) ICD-9-CM 250, ICD-10-CM E10, E11, E13	2,317	38
Substance use disorder ICD-9-CM 292, 304, 305.2-305.9, ICD-10-CM F11-F16, F18, F19	2,430	40
Depression ICD-9-CM 296.2, 296.3, 298.0, 300.4, 311, ICD-10-CM F32-F34	3,062	50
Anxiety ICD-9-CM 300.0, 300.2, ICD-10-CM F40, F41	2,550	42

Current outpatients with HIV and history of HCV co-infection, 7/2024-6/2025

(N=1,292, 21% of all outpatients with HIV) Characteristics

	N	Col. %	Row %
Gender			
Man/boy	820	63	24
Woman/girl	471	36	18
Other/unknown/ choose not to disclose	1	0.1	3
Age in 2025 ¹ (years)	Median	63, IQR	56-69
13-29	15	1.2	6
30-49	178	14	10
50+	1,059	85	26
Race/ethnicity			
Hispanic	695	54	26
Black, non-Hispanic	419	32	16
White, non-Hispanic	93	7	35
Asian/Pacific Islander	1	0.1	4
Native American	2	0.2	29
>1, other, unknown	82	6	17

History of HCV infection defined as HCV Ab+ OR detectable VL.

¹Among those presumed to be alive, N=1,252.

²Among those with transmission risk in AIRS, N=66**1** men/boys, 408 women/girls.

³Among those with CD4 T-cell available, N=1,057.

⁴HCV Ab+ with viremia unknown, or HCV VL tested but HCV Ab-, or lab history unclear.

	N	Col.	Row
		%	%
Transmission risk, men	/boys ²		
Heterosexual/other	188	28	16
MSM	146	22	12
IDU	325	49	78
Perinatal	2	0.3	6
Transmission risk, wom	nen/gir	ls²	
Heterosexual/other	255	63	14
IDU	139	34	72
Perinatal	3	1	5
Recorded as MSM	11	3	14
Most recent CD4+ T-	M	ledian 5	80
cell count (cells/uL) ³	IQ	R 310-7	'15
500 or more	547	52	17
350 to 499	189	18	23
200 to 349	188	18	29
50 to 199	116	11	31
0 to 49	17	2	26
Current HCV status			
Chronic, presumed untreated	74	6	-
Chronic, s/p tx	514	40	-
Reinfected or failed tx	126	10	-
Without viremia	511	40	-
Unknown/Other ⁴	6 <u>7</u>	5	-

Chronic HBV co-infection

Definition of chronic HBV co-infection	Patients with HIV, (N=22,314), N (%)	Current outpatients with HIV (N=6,090), N (%)
Ever HBsAg+	1,024 (4.6)	205 (3.4)
Ever HBsAg+ OR detectable HBV viral load	1,180 (5.3)	255 (4.2)
Ever HBsAg+ OR detectable HBV viral load OR diagnosis code for chronic HBV	1,907 (8.6)	501 (8.2)
With hepatocellular carcinoma (HCC)	38 (2.0)	2 (0.4)

HBV = hepatitis B virus, HBsAg+ = hepatitis B surface antigen positive. Diagnosis codes for chronic HBV: ICD-9-CM codes 070.22, 070.23, 070.32, 070.33, ICD-10-CM: B18.0, B18.1, B19.10, B19.11.

Current outpatients with HIV and chronic HBV co-infection, 7/2024-6/2025 (N=501)

Characteristics

	N	Col. %	Row %
Gender			
Man/boy	320	64	9
Woman/girl	180	36	7
Other/unknown/ choose not to disclose	1	0.2	3
Age in 2025 ¹ (years)	Media	an 61, IQI	R 52-66
0-12	0	0	0
13-29	5	1	2
30-49	91	19	5
50+	382	80	10
Race/ethnicity			
Hispanic	189	38	7
Black, non-Hispanic	257	51	10
White, non-Hispanic	20	4	7
Asian/Pacific Islander	3	0.6	12
Native American	1	0.2	14
>1, other, unknown	31	6	7

	N	Col.	Row
		%	%
Transmission risk, men/boys ²			
Heterosexual/other	109	40	9
MSM	95	35	8
IDU	67	24	16
Perinatal	3	1	9
Transmission risk, women/girls ²			
Heterosexual/other	131	80	7
IDU	25	15	13
Perinatal	1	0.6	3
Recorded as MSM	7	4	9
Most recent CD4+ T-cell count (cells/uL) ³	Median 489 IOR 284-719		84-719
500 or more	214	49	7
350 to 499	77	18	9
200 to 349	88	20	14
50 to 199	51	12	14
0 to 49	9	2	14

Chronic HBV Infection defined as ever HBsAg+ OR detectable HBV viral load OR diagnosis code for chronic HBV.

¹Among those presumed to be alive, N=478. ²Among those with transmission risk in AIRS, N=274 men/boys, 164 women/girls.

³Among those with CD4 T-cell count available, N=439.

Summary data on deaths among patients with HIV

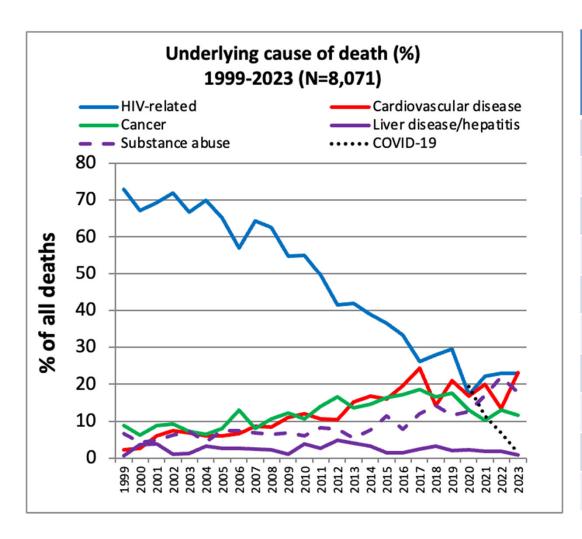
Deaths among patients with HIV, 1997-present (N=8,642) Demographic and behavioral characteristics

	N	%
Gender		
Man/boy	5,385	62
Woman/girl	3,240	37
Other/unknown/ choose not to disclose	17	0.2
Age at death (years)	Median 53	IQR 44-60
0-12	13	0.2
13-29	226	3
30-49	3,187	37
50+	5,216	60
Race/ethnicity		
Hispanic	2,739	32
Black, non-Hispanic	3,663	42
White, non-Hispanic	666	8
Asian/Pacific Islander	24	0.3
Native American	8	0.1
>1, other, unknown	1,542	18

	N	%
Transmission risk, men/l	boys¹	
Heterosexual/other	1,893	50
MSM	628	17
IDU	1,228	32
Perinatal	31	0.8
Transmission risk, wome	en/girls¹	
Heterosexual/other	1,787	75
IDU	546	23
Perinatal	29	1
Recorded as MSM	31	1
Year of earliest HIV		
diagnosis		
2021-present	196	2
2016-2020	488	6
2011-2015	607	7
2006-2010	1,177	14
Before 2005	6,174	71
Year of death		
2021-present	1,552	18
2016-2020	1,822	21
2011-2015	1,664	19
2006-2010	1,695	20
Before 2005	1,909	22

¹Among those with transmission risk in AIRS, N=3,780 men/boys, 2,393 women/girls.

Deaths among patients with HIV (N=8,071*) Underlying cause of death and place of residence



Place of residence at death	N	%
New York City	7,115	88
New York State	286	3.5
Florida	122	1.5
Puerto Rico	100	1.2
New Jersey	67	8.0
Pennsylvania	49	0.6
Georgia	46	0.6
North Carolina	46	0.6
Massachusetts	34	0.4
All other states	206	2.5

^{*}Deaths occurring 1999-2023, matched with National Death Index. 2023 is incomplete.

Summary data on patients with confirmed HIV-negative status

Patients with confirmed HIV-negative status through 6/2025 (N=570,519)

Characteristics

	N	%
Gender		
Man/boy	216,970	38
Woman/girl	352,355	62
Other/unknown/ choose not to disclose	1,194	0.2
Age in 2025 ¹ (years)	Median 42	IQR 32-57
0-12	1,577	0.3
13-29	94,094	17
30-49	249,713	46
50+	203,013	37
Race/ethnicity		
Hispanic	235,620	41
Black, non-Hispanic	182,065	32
White, non-Hispanic	44,779	8
Asian/Pacific Islander	14,310	3
Native American	1,255	0.2
>1, other, unknown	92,490	16

	N	%	
Transmission risk, men/boys ²			
Heterosexual/other	16,180	93	
MSM	941	5	
IDU	329	2	
Perinatal	7	0.04	
Transmission risk, wome	en/girls ²		
Heterosexual/other	21,724	99	
IDU	141	0.6	
Perinatal	6	0.03	
Recorded as MSM	98	0.5	
Year of last negative			
HIV test			
2021-present	191,656	34	
2016-2020	173,091	30	
2011-2015	126,607	22	
2006-2010	59.409	10	
Before 2006	19,756	3	
Year of last visit ³			
2021-present	343,905	60	
2016-2020	118,277	21	
2011-2015	68,067	12	
2006-2010	30,204	5	
Before 2006	8,382	1	

¹Among those presumed to be alive, N=548,397. ²Among those with transmission risk in AIRS, N=17,457 men/boys, 21,969 women/girls. ³Among those with information, N=568,835.

Patients prescribed PrEP through 6/2025 (N=3,529)

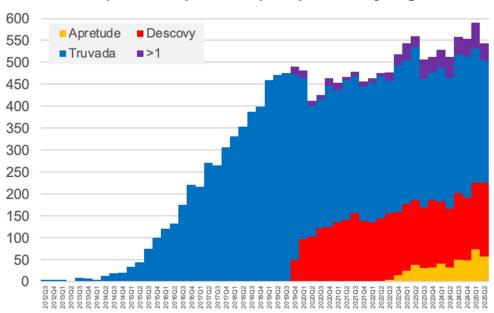
Characteristics

N	%
2,523	71
976	28
30	0.9
Median 30	IQR 24-40
61	2
1,614	46
940	27
496	14
317	9
101	3
1,604	45
1,085	31
302	9
86	2
5	0.1
447	13
	2,523 976 30 Median 30 61 1,614 940 496 317 101 1,604 1,085 302 86 5

^{*}Among those with transmission risk in AIRS, N=502 men/boys, 217 women/girls.

	N	%
Transmission risk, men/boys*		
Heterosexual/other	173	34
MSM	322	64
IDU	7	1
Transmission risk, women/girls*		
Heterosexual/other	183	84
IDU	6	3
Recorded as MSM	28	13
HIV seroconversion after PrEP Rx	68	1.9

Unique PrEP patients per quarter, by regimen



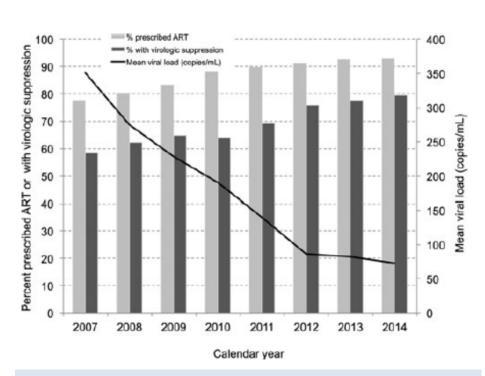
FDA approval occurred in July 2012 for TDF/FTC (Truvada), October 2019 for TAF/FTC (Descovy), December 2021 for cabotegravir (Apretude), and June 2025 for lenacapavir (Yeztugo). Excludes off-label PrEP use prior to FDA approval.

Selected publications

Increased Antiretroviral Therapy Use and Virologic Suppression in the Bronx in the Context of Multiple HIV Prevention Strategies

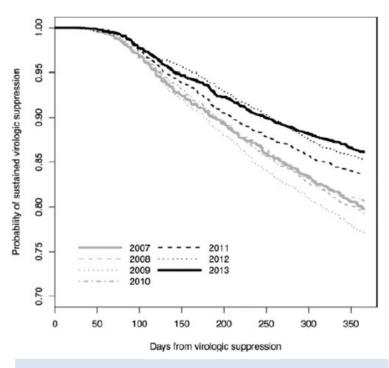
David B. Hanna, Uriel R. Felsen, Mindy S. Ginsberg, Barry S. Zingman, Robert S. Beil, Donna C. Futterman, Howard D. Strickler, and Kathryn Anastos 1,2

ART use and virologic suppression among HIV+ outpatients, 2007-2014



ART use and virologic suppression increased, and mean viral load decreased.

Time to virologic failure by calendar year, 2007-2013



Sustained virologic suppression improved over time.

ORIGINAL PAPER

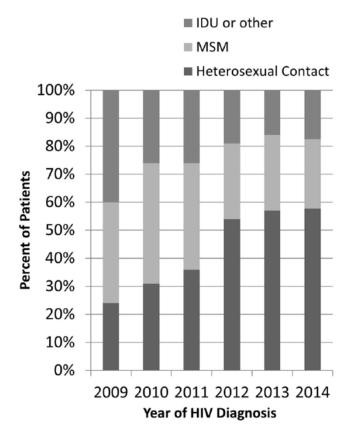


Missed Opportunities for HIV Prevention: Individuals Who HIV Seroconverted Despite Accessing Healthcare

Francesca Cossarini¹ David B. Hanna² · Mindy S. Ginsberg² · Oni J. Blackstock³ · Kathryn Anastos³ · Uriel R. Felsen³

- Identified a high-risk population of HIV seroconverters who were accessing care
 - 45% female (vs. 20% among new diagnoses citywide)
- HIV awareness suggested by frequent testing
 - Multiple visits occurred between last HIV negative test and first HIV positive test
- Differences according to sex:
 - Females were older at HIV diagnosis
 - Females had more potential "missed opportunities"
 - Females were more likely to be diagnosed in the context of screening
- Suggests need for overlapping HIV prevention strategies to ensure that prevention is available to heterogeneous populations at risk

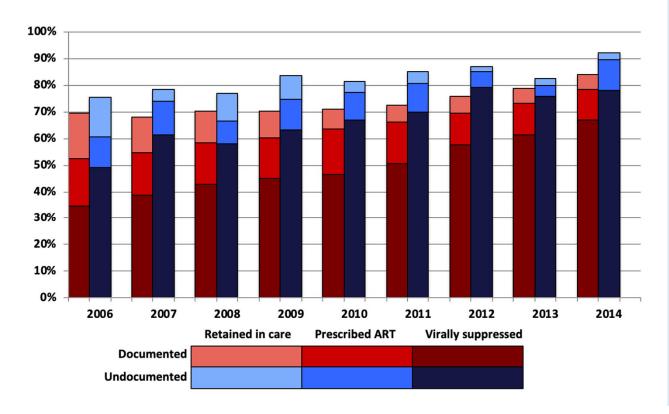
Changes in HIV risk factors among seroconverters, 2009-2014



Outcomes Along the HIV Care Continuum Among Undocumented Immigrants in Clinical Care

Jonathan Ross, Uriel R. Felsen, Chinazo O. Cunningham, Viraj V. Patel, and David B. Hanna

Proportion retained in care, prescribed ART, and virally suppressed by immigration status, 2006–2014.

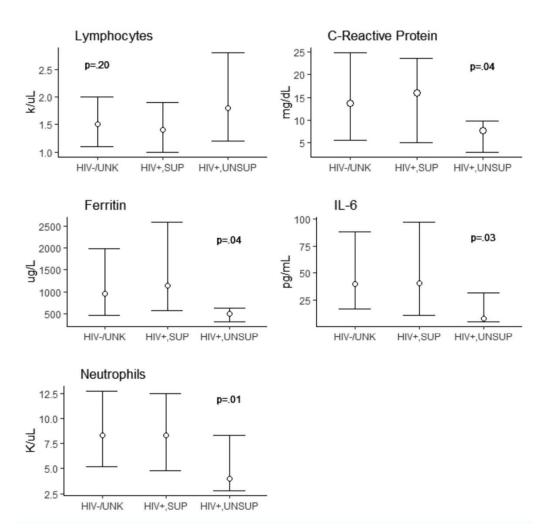


- Undocumented patients achieved clinical outcomes at modestly higher rates than documented patients, despite entering care with more advanced disease
- In a setting where insurance is available to undocumented patients, similar outcomes along the HIV care continuum may be achieved regardless of immigration status

Clinical Outcomes and Inflammatory Markers by HIV Serostatus and Viral Suppression in a Large Cohort of Patients Hospitalized With COVID-19

Viraj V. Patel, MD, MPH,^a Uriel R. Felsen, MD, MS,^b Molly Fisher, MD,^c Melissa J. Fazzari, PhD,^d Mindy S. Ginsberg, BS,^d Robert Beil, MD,^a Matthew J. Akiyama, MD, MSc,^{a,b} Kathryn Anastos, MD,^a and David B. Hanna, PhD^d

- 100 PLWH vs. 4513 patients without HIV hospitalized with COVID-19 between March and May 2020
 - HIV serostatus associated with higher intubation rates, particularly those with higher CD4 counts
 - HIV serostatus not associated with acute kidney injury, length of stay, death
- No <u>virally unsuppressed</u> PLWH (0/15) were intubated or died
- CRP, IL-6, neutrophil counts, ferritin were similar between virally suppressed PLWH and patients without HIV, but significantly lower for unsuppressed PLWH (Figure)



The associations of CD4 count, CD4/CD8 ratio, and HIV viral load with survival from non-small cell lung cancer in persons living with HIV

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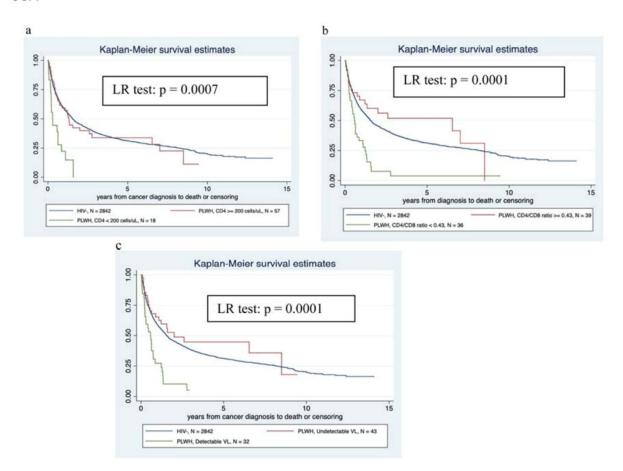


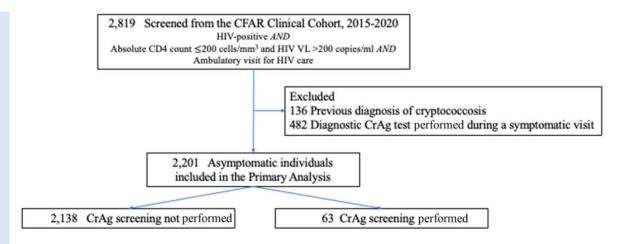
Figure 1. HIV status and survival from NSCLC diagnosis, with persons living with HIV (PLWH) stratified by (a) CD4 count, (b) CD4/CD8 ratio [median value], and (c) HIV viral load [level of detection: 75 copies/mL] at diagnosis.

- 88 PLWH vs. 2,881 without HIV, all with non-small cell lung cancer (NSCLC)
- PLWH with CD4 <200 cells/µL had lower survival than HIV-neg (HR 1.86, 95% CI 0.98–3.55)
- Similar findings for low CD4: CD8 ratio, high HIV viral load
- Message: Immune status is important in NSCLC survival among PLWH

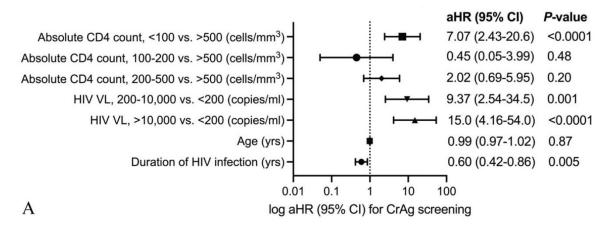
Cryptococcal Antigen Screening and Missed Opportunities for Earlier Diagnosis Among People With HIV and Poor Virologic Control in the Bronx, NY

Hyunah Yoon, MD, MS,^a Vagish S. Hemmige, MD, MS,^a Audrey Lee, MD, MS,^b Liam S. Conway-Pearson, MD,^b Liise-anne Pirofski, MD,^{a,c} and Uriel R. Felsen, MD, MS^a

- Among 2,201 asymptomatic PLWH with CD4 <200 cells/mm³ and HIV VL >200 cp/ml, only 2.9% had cryptococcal antigen (CrAg) screening from 2015-2020
 - Predictors of screening were CD4
 <100 cells/uL, unsuppressed HIV
 viremia, and shorter duration of HIV infection (Figure)
 - Of the 14 diagnosed with cryptococcosis after median 5 years with HIV, six had <u>un</u>screened visits in the past 6 months
- Message: Despite uncontrolled HIV, especially post-initial HIV diagnosis, CrAg screening for high-risk patients remains low. We identified missed opportunities for earlier detection.



Factors associated with CrAg screening, among patients with HIV duration <5 years



Longitudinal Associations of Psychiatric Risk Factors with Non-psychiatric Hospitalization in a Large Cohort of People Living with HIV in New York City

Aaron S. Breslow, Melissa Fazzari, Peter J. Franz, David B. Hanna, Uriel R. Felson, Elizabeth Cavic, Marla R. Fisher, Laurie Bauman

• 10,215 PLWH included in sample:

- 45% had at least one non-psychiatric hospitalization and 14% had at least one HIV-related hospitalization between 2009-2018
- A priori risk factors included female sex, older age, CD4 count < 500 cells/uL, and detectable viral load
- Prior psychiatric outpatient visits,
 depression, or alcohol-related disorder
 diagnoses were associated with higher
 risk of hospitalization
- Message: This study emphasizes the need for tailored interventions for PLWH with <u>comorbid psychiatric</u> <u>disorders</u>, women, and older adults

Table: Mental health risk factors for non-mental health related hospitalization among people living with HIV

	Adjusted#	
	HR (95% CI)	p-value [^]
# previous MH diagnoses&		
1-2	1.1 (1.01, 1.19)	0.04
3-5	1.11 (0.99, 1.25)	0.08
6-10	1.28 (1.12, 1.46)	0.0004
>10	1.39 (1.22, 1.58)	<0.0001
Ref: No previous dx		trend* <0.0001
Any previous diagnosis ^{&} of:		
Alcohol abuse	1.21 (1.02, 1.43)	0.03
Depression	1.10 (1.00, 1.19)	0.05
Ref: No previous dx		

*Model consisting of number of MH diagnoses, previous diagnoses, CD4 count, viral load, patient age and biological sex, race/ethnicity); &Time-varying covariate; *Test for linear trend across number of previous MH diagnoses categories; ^Corresponding to test of nonzero regression coefficient in the stratified Cox model

Breslow, Fazzari, et al. (2023). AIDS Behav 27: 3487-3497.

Association of HIV and viral suppression status with hospital acute kidney injury in the era of antiretroviral therapy



Molly C. Fisher¹, Melissa J. Fazzari², Uriel R. Felsen³, David B. Hanna², Nataliya Tappan², Christina M. Wyatt⁴, Matthew K. Abramowitz^{1,6} and Michael J. Ross^{1,5,6}

- Among 173,884 hospitalized patients, 4,718 were living with HIV (54% virally suppressed)
- Compared to people without HIV, people with HIV with and without viral suppression were at increased risk of acute kidney infection (AKI), as well as AKI requiring kidney replacement therapy
 - Incremental, graded associations observed between level of viral suppression and Stage 2 or 3 AKI, and among AKI survivors, incident chronic kidney disease
 - The elevated risk of AKI across ages of people with HIV was similar in magnitude to older people without HIV
- Message: Regardless of virologic control, HIV is an independent risk factor for acute kidney infection among hospitalized patients

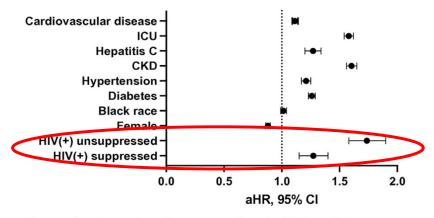


Figure 2 | **Independent factors associated with hospital acute kidney injury.** Data adjusted for age, sex, Black race, chronic kidney disease (CKD), diabetes, hypertension, hyperlipidemia, cardiovascular disease, hepatitis C infection, pulmonary disease, intensive care unit (ICU) admission, and prescription for angiotensin-converting enzyme inhibitor, angiotensin receptor blocker, nonsteroidal anti-inflammatory drug, or tenofovir disoproxil fumarate. Adjusted hazard ratios (aHRs) (95% confidence intervals [Cls]) are as follows: HIV(+) suppressed, 1.27 (1.15–1.40); HIV(+) unsuppressed, 1.73 (1.58–1.90); female sex, 0.88 (0.86–0.90); diabetes, 1.26 (1.23–1.29); hypertension, 1.21 (1.17–1.25); cardiovascular disease, 1.11 (1.09–1.14); CKD, 1.60 (1.56–1.65); hepatitis C, 1.27 (1.20–1.34); and ICU admission, 1.58 (1.54–1.62).

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ERC-CFAR HIV Clinical Cohort Database Summary

- Provides infrastructure for observational studies
 - Published studies have examined the HIV care continuum, comorbidities (e.g., cancer, cardiovascular disease, co-infections, kidney disease, mental health), HIV prevention and PrEP, COVID-19, key populations, informatics
- Potential source of participants for clinical studies
 - Study population estimates from the Database can support grant preparation, study recruitment
 - The CTSC can provide assistance with study recruitment via our research nurse, as a core service

How to collaborate

- For more information, see our webpage
 - https://einsteinmed.edu/centers/erc-centerfor-aids-research/core-facilities/clinical-andtranslational-science
- Contact our study coordinator to access the Collaboration Concept Sheet Submission Form and data dictionary
 - Ms. Yocheved Halberstam,
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