Supplemental Material

Appendix 1: Inclusion and exclusion criteria

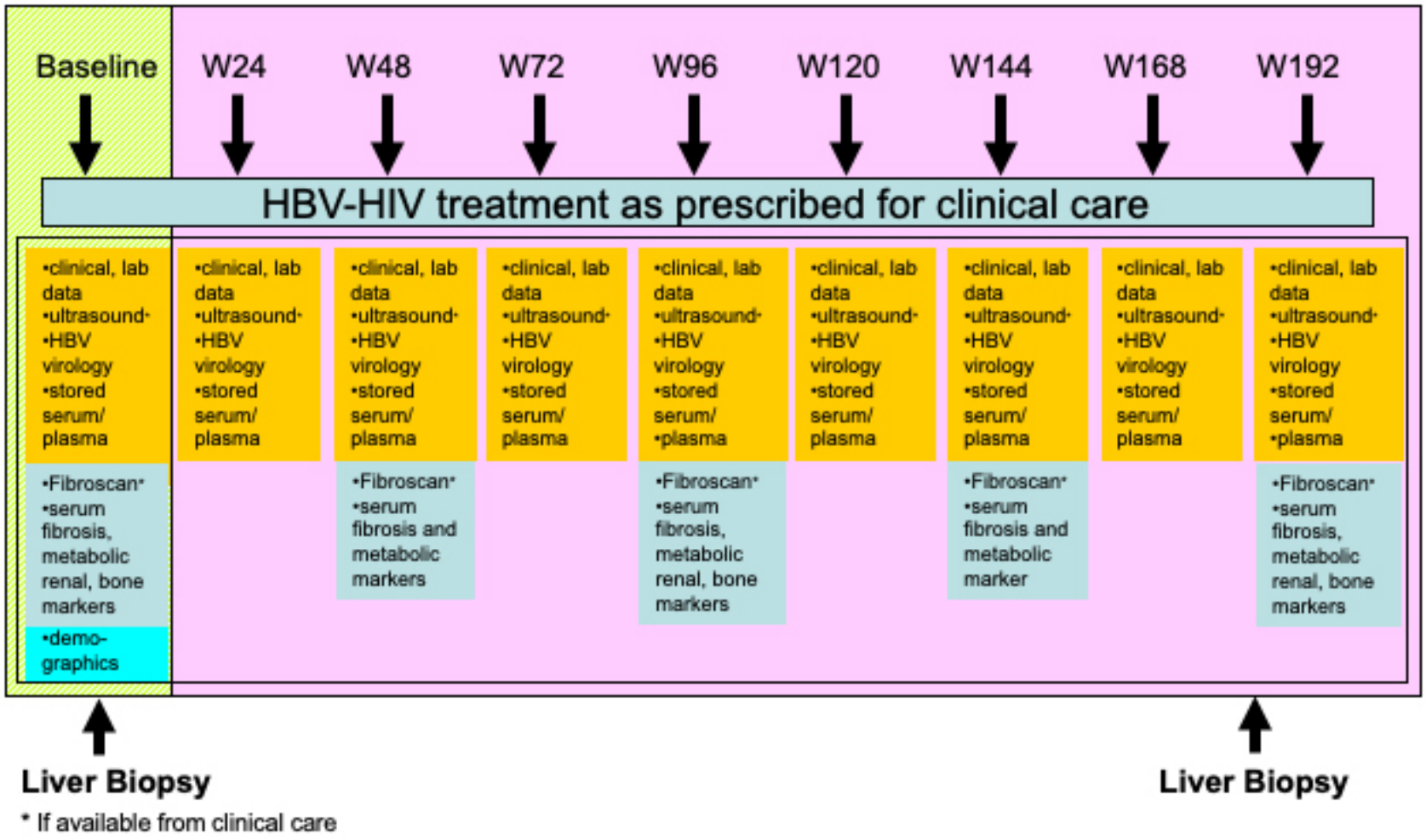
Inclusion criteria:

- ≥ 18 years of age;
- serologic evidence of HIV infection by HIV antibody positivity or history of positive HIV-RNA prior to screening;
- serologic evidence of chronic hepatitis B infection by HBsAg positivity;
- currently receiving any type of antiretroviral therapy for HBV or HIV; and
- willingness to provide informed consent.

Exclusion criteria:

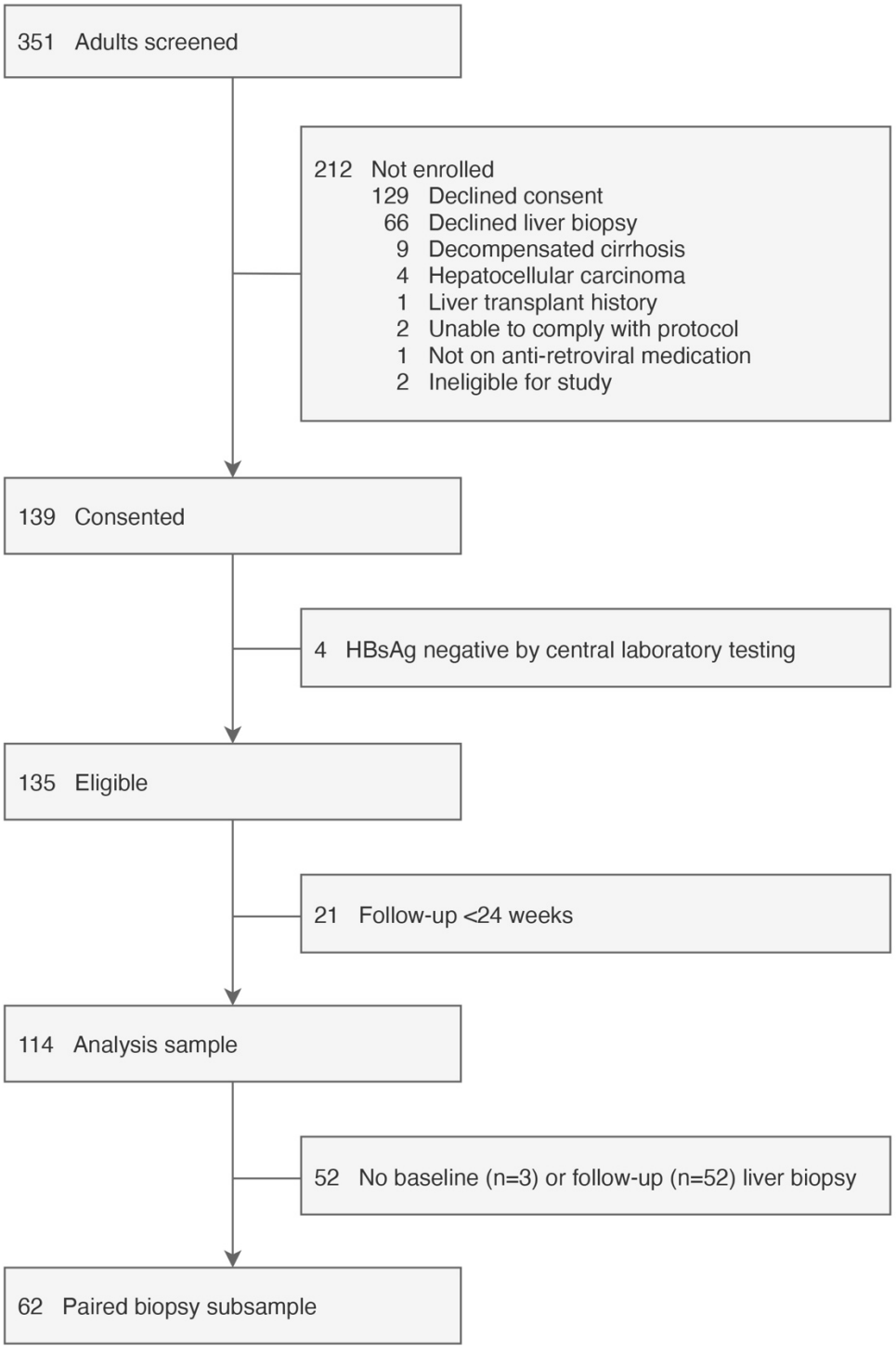
- estimated life expectancy of less than one year based on clinical judgment of the investigator;
- history of hepatic decompensation based on clinical or laboratory criteria;
- hepatocellular carcinoma (HCC);
- HCV RNA positive within 6 months prior to the baseline biopsy;
- history of solid organ or bone marrow transplantation;
- pregnant women;
- medical or social condition which, in the opinion of the study physician, would make the patient unsuitable for the study or interfere with or prevent follow-up per protocol;
- unable or unwilling to return for follow-up visits;
- contraindications to liver biopsy.

sFigure 1. Study Design

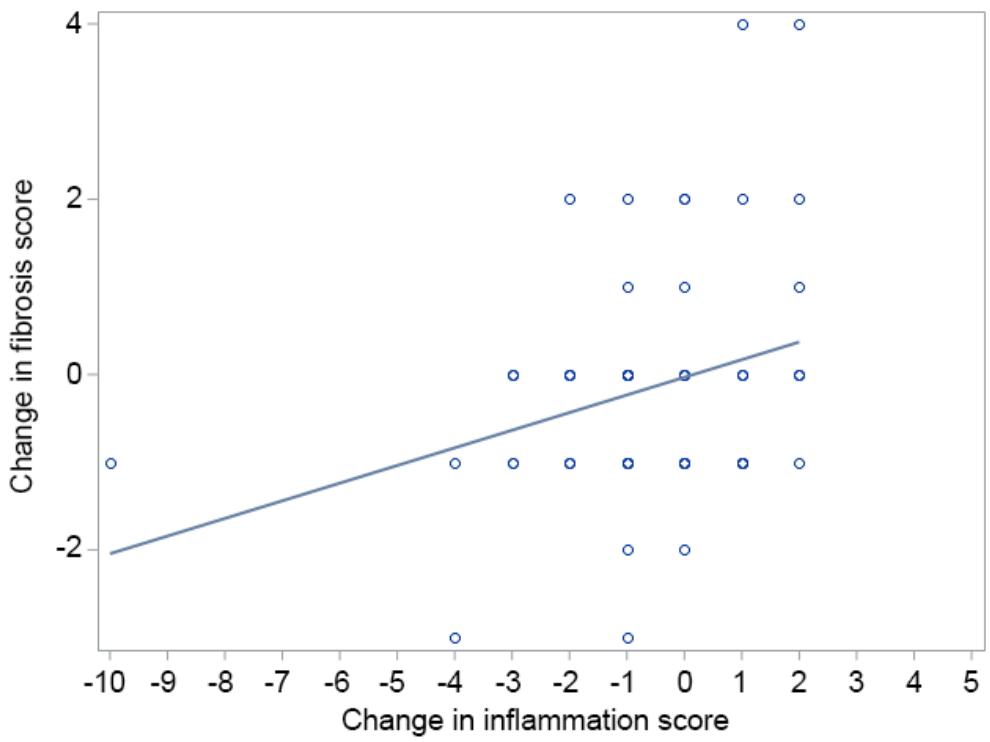


* If available from clinical care

sFigure 2. Participant flow of HBV-HIV co-infected North American adult longitudinal sample



sFigure 3. Change in fibrosis score by change in inflammation scores (N=61)



sTable 1. Characteristics of HBV-HIV co-infected North American adult longitudinal sample versus study participants excluded due to lack of follow-up data, and those in the biopsy subsample versus those excluded due to lack of paired biopsy data.

	Longitudinal Sample n=114[a]	Excluded due to lack of follow-up data n=21[a]	p-value	Biopsy sample n=62[a]	Excluded due to lack of paired biopsies n=52[a]	p-value
Age (years)			0.02			0.44
Median (IQR)	49 (45: 55)	44 (40: 50)		50 (46: 54)	48 (43: 55.5)	
Sex			0.54			0.34
Male	104 (91.2%)	20 (95.2%)		58 (93.5%)	46 (88.5%)	
Female	10 (8.8%)	1 (4.8%)		4 (6.5%)	6 (11.5%)	
Race	n=111	n=20	0.77	n=60	n=51	0.55
Non-Hispanic White	36 (32.4%)	6 (30.0%)		17 (28.3%)	19 (37.3%)	
Non-Hispanic Black	57 (51.4%)	11 (55.0%)		32 (53.3%)	25 (49.0%)	
Non-Hispanic Asian	5 (4.5%)	0 (0.0%)		4 (6.7%)	1 (2.0%)	
Other	13 (11.7%)	3 (15.0%)		7 (11.7%)	6 (11.8%)	
Coffee cups per day	n=112		0.87	n=61	n=51	0.39
None/ <1 per day	56 (50.0%)	11 (52.4%)		31 (50.8%)	25 (49.0%)	
1 to 2 per day	38 (33.9%)	6 (28.6%)		18 (29.5%)	20 (39.2%)	
3 or more per day	18 (16.1%)	4 (19.0%)		12 (19.7%)	6 (11.8%)	
Alcohol			0.72			0.07
None	63 (55.3%)	10 (47.6%)		31 (50.0%)	32 (61.5%)	
Moderate	36 (31.6%)	7 (33.3%)		25 (40.3%)	11 (21.2%)	
At-Risk	15 (13.2%)	4 (19.0%)		6 (9.7%)	9 (17.3%)	
Body mass index (kg/m^2)	n=109	n=20	0.81	n=60	n=49	0.40
Median (IQR)	25.9 (22.5: 30.3)	25.3 (22.2: 31.2)		25.8 (22.7: 29.1)	27.3 (21.4: 32.5)	
Weight status (race-adjusted)	n=109	n=20	0.73	n=60	n=49	0.08
Under/Normal	44 (40.4%)	9 (45.0%)		24 (40.0%)	20 (40.8%)	
Overweight	37 (33.9%)	5 (25.0%)		25 (41.7%)	12 (24.5%)	
Obese	28 (25.7%)	6 (30.0%)		11 (18.3%)	17 (34.7%)	
Lipodystrophy grade	n=103	n=17	0.44[b]	n=56	n=47	0.22[b]
None	87 (84.5%)	13 (76.5%)		45 (80.4%)	42 (89.4%)	
Mild	10 (9.7%)	3 (17.6%)		7 (12.5%)	3 (6.4%)	
Moderate or severe	6 (5.8%)	1 (5.9%)		4 (7.1%)	2 (4.3%)	
Diabetes	10 (8.8%)	2 (9.5%)	0.91	4 (6.5%)	6 (11.5%)	0.34

Hyperlipidemia	34 (29.8%)	6 (28.6%)	0.91	17 (27.4%)	17 (32.7%)	0.54
Sexually transmitted HBV or HIV	101 (95.3%)	16 (76.2%)	0.003	57 (100.0%)	44 (89.8%)	0.01
Estimated duration of HIV or HBV infection (years)	n=107	n=16	0.03	n=57	n=50	0.04
Median (IQR)	20 (13: 26)	13.5 (10: 19.5)		22 (16: 28)	18 (10: 25)	
HBV treatment			0.65			0.08
None[b]	3 (2.6%)	1 (4.8%)		0 (0.0%)	3 (5.8%)	
Tenofovir alone or in combination	96 (84.2%)	18 (85.7%)		56 (90.3%)	40 (76.9%)	
Lamivudine and Entecavir	9 (7.9%)	0 (0.0%)		4 (6.5%)	5 (9.6%)	
Lamivudine alone	3 (2.6%)	1 (4.8%)		0 (0.0%)	3 (5.8%)	
Entecavir alone	3 (2.6%)	1 (4.8%)		2 (3.2%)	1 (1.9%)	
Nucleoside/Nucleotide Reverse Transcriptase Inhibitors (NRTI)	109 (95.6%)	19 (90.5%)		60 (96.8%)	49 (94.2%)	
Non-Nucleoside Reverse Transcriptase Inhibitors (NNRTI)	38 (33.3%)	6 (28.6%)		23 (37.1%)	15 (28.8%)	
Protease inhibitors	53 (46.5%)	8 (38.1%)		31 (50.0%)	22 (42.3%)	
Liver Related Tests						
ALT (U/L)	n=110	n=19	0.17	n=61	n=49	0.10
Median (IQR)	27 (19: 42)	33 (28: 44)		24 (18: 36)	28 (22: 44)	
AST (U/L)	n=110	n=19	0.26	n=61	n=49	0.20
Median (IQR)	29 (22: 41)	31 (26: 52)		27 (22: 41)	31 (24: 40)	
AST/ALT ratio	n=110	n=19	0.40	n=61	n=49	0.17
Median (IQR)	1.0 (0.8: 1.3)	0.9 (0.8: 1.1)		1.0 (0.9: 1.4)	1.0 (0.8: 1.2)	
Alkaline phosphatase (U/L)	n=109	n=19	0.76	n=60	n=49	0.5
Median (IQR)	85 (68: 107)	84 (75: 96)		82 (63: 110)	90 (71: 106)	
Total bilirubin (mg/dL)	n=109	n=19	0.18	n=60	n=49	0.42
Median (IQR)	0.4 (0.3: 0.7)	0.6 (0.4: 0.8)		0.5 (0.3: 0.7)	0.4 (0.3: 0.6)	
Albumin (g/dL)	n=110	n=19	0.72	n=61	n=49	0.16
Median (IQR)	4.3 (4.1: 4.6)	4.3 (4.1: 4.6)		4.4 (4.2: 4.6)	4.3 (4.1: 4.5)	
Platelets ($x10^3/mm^3$)	n=112	n=18	0.33	n=61	n=51	0.98
Median (IQR)	200.5 (175: 238)	192 (164: 218)		200 (174: 248)	202 (175: 234)	
APRI	n=110	n=18	0.14	n=61	n=49	0.45
Median (IQR)	0.3 (0.3: 0.5)	0.4 (0.3: 0.6)		0.3 (0.3: 0.5)	0.4 (0.3: 0.6)	
FIB-4	n=110	n=18	0.96	n=61	n=49	0.93

Median (IQR)	1.4 (1.0: 1.9)	1.2 (1.0: 1.8)		1.4 (1.0: 1.9)	1.5 (1.0: 1.9)	
VCTE (kPa)	n=69	n=7	0.37	n=46	n=23	0.57
Median (IQR)	5.4 (4.0: 6.9)	6.3 (4.1: 18.4)		5.4 (4.1: 6.4)	5.7 (3.8: 9.0)	
HIV related tests						
CD4 (cells/mm^3)	n=101	n=15	0.79	n=58	n=43	0.82
Median (IQR)	562 (366: 707)	585 (252: 697)		564.5 (374: 678)	525 (288: 815)	
CD4 %	n=102	n=15	0.84	n=59	n=43	0.33
Median (IQR)	25.2 (18.0: 36.0)	23.3 (18.0: 39.0)		25.9 (21.0: 36.3)	24.0 (16.0: 34.0)	
CD8 (cells/mm^3)	n=66	n=11	0.38	n=39	n=27	0.56
Median (IQR)	878.5 (595: 1243)	644 (555: 938)		843 (560: 1139)	920 (595: 1272)	
CD8 %	n=67	n=11	0.87	n=40	n=27	0.61
Median (IQR)	44.0 (36.4: 53.0)	45.0 (35.0: 50.3)		43.0 (35.0: 54.5)	45.0 (39.0: 53.0)	
HIV stage	n=86	n=17	0.70	n=45	n=41	0.99
1 (≥500 cells/mm^3)	59 (68.6%)	10 (58.8%)		31 (68.9%)	28 (68.3%)	
2 (250-499 cells/mm^3)	13 (15.1%)	4 (23.5%)		7 (15.6%)	6 (14.6%)	
3 (200-349 cells/mm^3)	6 (7.0%)	2 (11.8%)		3 (6.7%)	3 (7.3%)	
4 (<200 cells/mm^3)	8 (9.3%)	1 (5.9%)		4 (8.9%)	4 (9.8%)	
HIV RNA (copies/mL)	n=104	n=16	0.004	n=56	n=48	0.48
<20	81 (77.9%)	8 (50.0%)		46 (82.1%)	35 (72.9%)	
20 - <400	16 (15.4%)	3 (18.8%)		7 (12.5%)	9 (18.8%)	
400 - <10000	4 (3.8%)	1 (6.3%)		1 (1.8%)	3 (6.3%)	
≥10000	3 (2.9%)	4 (25.0%)		2 (3.6%)	1 (2.1%)	
Viral serologies						
Anti-HCV	n=105	n=19	0.77	n=58	n=47	0.83
Positive	4 (3.8%)	1 (5.3%)		2 (3.4%)	2 (4.3%)	
Anti-+	n=72	n=14	0.66	n=42	n=30	0.23
Positive	1 (1.4%)	0 (0.0%)		0 (0.0%)	1 (3.3%)	
Anti-HBe	n=103	n=19	0.94	n=56	n=47	0.32
Positive	28 (27.2%)	5 (26.3%)		13 (23.2%)	15 (31.9%)	
HBeAg			0.047			0.72
Positive	70 (61.4%)	8 (38.1%)		39 (62.9%)	31 (59.6%)	
HBeAg (log10 IU/mL) among positive HBeAg	n=69	n=6	0.07	n=39	n=30	0.02
Median (IQR)	1.3 (0.3: 2.5)	0.7 (0.0: 1.0)		0.8 (0.1: 1.8)	1.9 (0.9: 2.8)	
HBsAg (log10 IU/mL)	n=112	n=17	0.51	n=61	n=51	0.19

Median(IQR)	3.3 (2.7: 4.0)	3.2 (2.4: 3.6)		3.2 (2.6: 3.5)	3.5 (2.7: 4.4)	
HBV DNA (IU/mL)			0.20			0.18
<20	70 (61.4%)	11 (52.4%)		43 (69.4%)	27 (51.9%)	
20-999	21 (18.4%)	8 (38.1%)		10 (16.1%)	11 (21.2%)	
1000-20,000	8 (7.0%)	1 (4.8%)		2 (3.2%)	6 (11.5%)	
>20,000	15 (13.2%)	1 (4.8%)		7 (11.3%)	8 (15.4%)	
HBV DNA (log10 IU/mL) (≥20 IU/mL)	n=44	n=10	0.06	n=19	n=25	0.76
Median (IQR)	3.4 (1.8: 5.3)	2.0 (1.6: 2.5)		2.1 (1.7: 6.3)	3.5 (2.3: 5.1)	
HBV DNA and HIV RNA suppression status	n=95	n=9	0.61	n=53	n=42	0.15
Suppressed	73 (76.8%)	8 (88.9%)		44 (83.0%)	29 (69.0%)	
Incomplete suppression	8 (8.4%)	0 (0.0%)		2 (3.8%)	6 (14.3%)	
Not suppressed	14 (14.7%)	1 (11.1%)		7 (13.2%)	7 (16.7%)	

Abbreviations: ALT, Alanine aminotransferase; APRI, AST-platelet-ratio index; AST, Aspartate aminotransferase; CD4, Cluster of differentiation 4; CD8, cluster of differentiation 8; DNA, Deoxyribonucleic acid; FIB-4, Fibrosis index based on four factors; HBeAg, Hepatitis B e-antigen; HBsAg, Hepatitis B surface antigen; HBV, Hepatitis B virus; HCV, Hepatitis C virus; HDV, Hepatitis D virus; HIV, Human immunodeficiency virus; Hs-CRP, High-sensitivity C-reactive protein; q, Quantitative; Qual, Qualitative; RNA, Ribonucleic acid; ULN, Upper limit of normal.

[a] Data presented among this sample unless a subset is indicated due to missing data.

[b] Jonckheere-Terpstra Test

sTable 2. Anti-HBV medications and cART use over time

	Baseline n=114	**Week 24** n=109	**Week 48** n=100	**Week 72** n=97	**Week 96** n=87	**Week 120** n=82	**Week 144** n=77	**Week 168** n=64	**Week 192** n=50
Anti-HBV medications, n (%)									
None[a]	3 (2.6)	6 (5.5)	4 (4.0)	4 (4.1)	5 (5.8)	5 (6.1)	1 (1.3)	1 (1.6)	0 (0.0)
Lamivudine alone[b]	3 (2.6)	2 (1.8)	2 (2.0)	1 (1.0)	1 (1.2)	1 (1.2)	0 (0.0)	0 (0.0)	0 (0.0)
Tenofovir alone/combo	96 (84.2)	88 (80.7)	84 (84.0)	83 (85.6)	75 (86.2)	71 (86.6)	71 (92.2)	59 (92.2)	48 (96.0)
Entecavir alone/combo	12 (10.5)	13 (11.9)	10 (10.0)	9 (9.3)	6 (6.9)	5 (6.1)	5 (6.5)	4 (6.3)	2 (4.0)
cART including an anti-HBV nucleoside or nucleotide analogue, n (%)									
No	6 (5.3)	8 (7.3)	6 (6.0)	5 (5.2)	6 (6.9)	6 (7.3)	1 (1.3)	1 (1.6)	0 (0.0)
Yes	108 (94.7)	101 (92.7)	94 (94.0)	92 (94.9)	81 (93.1)	76 (92.7)	76 (98.7)	63 (98.4)	50 (100.0)

[a]Those who reported no anti-HBV medication usually reported anti-HIV medication. At baseline, among the three participants not reporting anti-HBV medication, one reported Norvir (Ritonavir), one reported darunavir), ritonavir), emtricitabine), dolutegravir) and one reported a history of Tenofovir but no current anti-viral medication. There were 13 participants who were not on any HBV medication at one or more assessments. There were 15 participants who were not cART including an anti-HBV nucleoside or nucleotide analogue at one or more assessments

[b]Among participants taking Lamivudine alone, none were taking Emtricitabine.

sTable 3. Characteristics of Participants with Clinical Outcome[a] or Incident Cirrhosis

ID	Sex Age (yrs)	Race	Cirrhosis ≤ 24 Wks	HBeAg at Wk 0	Outcomes (Timing, Wk)	HBV DNA, log_{10} IU/mL Wk 0 / At outcome(s)	ALT x ULN Wk 0 / At outcome(s)	Platelet $x10^3/mm^3$ Wk 0 / At outcome(s)	Treatment Wk 0 / At outcome(s)
118	M 50	A	Yes	Neg	HCC (10)	BLQ / BLQ	0.9 / 0.9	276 / 276	Yes / Yes
208	M 52	W	Yes	Pos	Decompensation (110), HCC (112), HBV death (157)	10.1 / Unknown (all 3)	2.6 / 1.0, 1.0, Unknown	101 / 67, 67, Unknown	Yes / Yes, Yes, No
038	M 44	O	No	Neg	Cirrhosis[b] (145)	BLQ / BLQ	0.8 / 0.8	164 / 123	Yes / Yes

[a]Hepatic decompensation, HCC, liver transplant or HBV-related death

[b]Presence of ascites, splenomegaly and nodular liver documented by CT, MRI or liver ultrasound report

BLQ = below lower limit of detection or lower limit of quantification.

sTable 4. Incidence rates of HBeAg loss among 67 HBeAg+ participants across follow-up by baseline characteristics

Baseline Characteristic		No. of Participants	No. w/ Outcome	Total PYR	Incidence/100 PYR (95% CI) [a]
Age (years)	≤50	38	5	94	5.33 (2.22, 12.81)
	>50	29	8	81	9.91 (4.96, 19.82)
Sex	Male	59	12	155	7.76 (4.41, 13.66)
	Female	8	1	20	5.06 (0.71, 35.89)
Race	Non-Hispanic White	23	4	64	6.27 (2.35, 16.70)
	Non-Hispanic Black	32	6	79	7.56 (3.40, 16.83)
	Other	11	2	28	7.03 (1.76, 28.10)
ALT (ULN)	≤1	36	8	104	7.72 (3.86, 15.44)
	>1	29	5	65	7.66 (3.19, 18.39)
AST (ULN)	≤1	51	9	137	6.59 (3.43, 12.67)
	>1	14	4	32	12.37 (4.64, 32.95)
Platelets (x10^3/mm^3)	<200	36	5	92	5.42 (2.26, 13.03)
	≥200	31	8	82	9.72 (4.86, 19.44)
APRI	≤0.5	50	10	138	7.24 (3.90, 13.46)
	>0.5	15	3	31	9.73 (3.14, 30.17)
FIB-4	<1.45	34	6	89	6.76 (3.04, 15.04)
	≥1.45	31	7	80	8.74 (4.17, 18.33)
qHBsAg (log_{10} IU/mL)	<3	12	4	35	11.40 (4.28, 30.37)
	≥3	54	9	136	6.62 (3.44, 12.72)
HBV DNA suppression	No	21	4	45	8.96 (3.36, 23.88)

Baseline Characteristic		No. of Participants	No. w/ Outcome	Total PYR	Incidence/100 PYR (95% CI) [a]
	Yes	46	9	130	6.93 (3.61, 13.32)
CD4 (cells/mm^3)	<500	28	4	80	5.00 (1.88, 13.33)
	≥500	32	9	80	11.30 (5.88, 21.72)
CD4 (%)	<20	27	1	65	1.55 (0.22, 10.98)
	≥20	40	12	110	10.92 (6.20, 19.23)
HIV RNA suppression	No	17	1	44	2.28 (0.32, 16.19)
	Yes	44	10	113	8.84 (4.76, 16.43)
HBV DNA and HIV RNA suppression	No	20	3	44	6.80 (2.19, 21.07)
	Yes	37	8	102	7.86 (3.93, 15.72)
Histological activity index	0-4	51	9	145	6.20 (3.23, 11.92)
	≥5	16	4	29	13.64 (5.12, 36.34)
Ishak fibrosis score	0	16	0	40	0 (-)
	1-2	38	8	103	7.77 (3.89, 15.54)
	3-4	13	5	31	16.04 (6.68, 38.54)
Cirrhosis	No	63	10	162	6.18 (3.32, 11.48)
	Yes	4	3	13	23.80 (7.68, 73.81)
Fatty liver disease	No	44	9	115	7.81 (4.07, 15.02)
	Yes	23	4	59	6.75 (2.53, 17.97)

Abbreviations: ALT, Alanine aminotransferase; APRI, AST-platelet-ratio index; AST, Aspartate aminotransferase; DNA, Deoxyribonucleic acid; FIB-4, Fibrosis index based on four factors; HBsAg, Hepatitis B surface antigen; HBV, Hepatitis B virus; HIV, Human immunodeficiency virus; PYR, person-years; q, Quantitative; RNA, Ribonucleic acid; ULN, Upper limit of normal.

[a]Confidence interval (CI) based on the Wald test.

sTable 5. Select viral and clinical markers, by time point.

	Baseline	Week 24	Week 48	Week 72	Week 96	Week 120	Week 144	Week 168	Week 192	P[a]
Continuous					**Mean (95% CI)**					
HBsAg (log10 IU/mL)[b]	n=112		n=83		n=76		n=64		n=48	
	3.2 (3.0, 3.4)		3.2 (2.9, 3.4)		3.0 (2.8, 3.2)		2.9 (2.8, 3.2)		2.8 (2.5, 3.1)	<.001
HBeAg (log10 IU/mL)	n=69	n=57	n=49	n=44	n=42	n=32	n=32	n=22	n=27	
among positive HBeAg	1.4 (1.1, 1.6)	1.2 (0.9, 1.4)	1.2 (0.8, 1.6)	1.2 (0.9, 1.6)	1.0 (0.7, 1.2)	0.9 (0.5, 1.3)	0.9 (0.7, 1.1)	0.8 (0.5, 1.1)	0.8 (0.4, 1.0)	0.01
HBV DNA (log10 IU/mL)	n=114	n=100	n=92	n=88	n=81	n=78	n=74	n=59	n=49	
	2.0 (1.7, 2.6)	1.8 (1.5, 2.2)	1.8 (1.5, 2.1)	1.7 (1.4, 2.4)	1.5 (1.2, 1.7)	1.5 (1.2, 1.7)	1.4 (1.1, 1.7)	1.4 (1.1, 1.7)	1.0 (0.8, 1.4)	<.001
ALT (log2 U/L)	n=110	n=97	n=88	n=81	n=73	n=71	n=69	n=59	n=45	
	4.9 (4.7, 5.0)	4.9 (4.7, 5.1)	4.9 (4.7, 5.1)	4.8 (4.6, 5.1)	4.7 (4.6, 4.9)	4.7 (4.5, 4.9)	4.8 (4.6, 5.0)	4.7 (4.5, 4.8)	4.6 (4.4, 4.8)	0.046
AST (log2 U/L)	n=110	n=97	n=88	n=80	n=73	n=73	n=69	n=60	n=45	
	4.9 (4.8, 5.1)	5.0 (4.9, 5.1)	5.0 (4.9, 5.1)	5.0 (4.9, 5.1)	4.9 (4.8, 5.0)	4.9 (4.7, 5.0)	5.0 (4.8, 5.2)	4.9 (4.7, 5.0)	4.8 (4.6, 5.1)	0.80
AST/ALT ratio	n=110	n=97	n=88	n=80	n=73	n=71	n=69	n=59	n=45	
	1.1 (1.0, 1.2)	1.1 (1.1, 1.2)	1.2 (1.1, 1.2)	1.2 (1.1, 1.3)	1.2 (1.1, 1.3)	1.2 (1.2, 1.3)	1.3 (1.1, 1.5)	1.2 (1.1, 1.4)	1.2 (1.1, 1.4)	0.008
Platelets (x10^3/mm^3)	n=112	n=92	n=87	n=69	n=71	n=66	n=68	n=57	n=45	
	210.3 (201.3, 217.8)	218.1 (205.6, 229.3)	211.5 (202.9, 224.4)	214.3 (194.8, 225.3)	212.8 (197.0, 232.2)	217.1 (201.7, 230.9)	206.1 (191.6, 219.0)	217.6 (199.3, 241.1)	217.1 (201.3, 238.1)	0.10
APRI	n=110	n=89	n=83	n=66	n=70	n=65	n=67	n=56	n=44	
	0.4 (0.4, 0.5)	0.4 (0.4, 0.5)	0.5 (0.4, 0.6)	0.5 (0.4, 0.6)	0.5 (0.4, 0.6)	0.5 (0.4, 0.7)	0.5 (0.4, 0.6)	0.4 (0.4, 0.5)	0.5 (0.4, 0.8)	0.07
FIB-4	n=110	n=89	n=83	n=66	n=70	n=63	n=67	n=55	n=44	
	1.5 (1.0, 1.9)	1.5 (1.0, 1.8)	1.7 (1.0, 2.1)	1.7 (1.0, 2.1)	1.7 (1.0, 2.0)	1.8 (1.0, 1.9)	1.9 (1.1, 2.0)	1.7 (1.1, 2.1)	1.7 (1.1, 2.0)	0.009
VCTE (kPa)[c]	n=66		n=47		n=48		n=43		n=39	
	6.3 (5.6, 7.5)		7.0 (5.3, 9.5)		6.5 (5.3, 8.3)		7.2 (5.5, 9.6)		7.0 (5.8, 9.0)	0.24
Ordinal					**% (95% CI)**					
HBV DNA (IU/mL)	n=114	n=109	n=100	n=97	n=87	n=82	n=77	n=64	N=50	<.001
< 20	65.6 (56.0, 73.7)	78.4 (69.3, 88.1)	78.6 (67.2, 88.6)	82.9 (69.3, 90.9)	84.6 (73.1, 93.0)	82.7 (70.6, 89.9)	84.1 (71.8, 92.8)	91.5 (76.4, 97.6)	86.9 (73.0, 98.2)	
20-999	21.8 (10.8, 30.1)	11.3 (0.6, 18.1)	14.1 (6.0, 32.4)	11.6 (5.5, 21.2)	13.1 (6.1, 23.0)	14.8 (5.2, 28.4)	15.7 (9.0, 30.0)	6.5 (1.6, 19.6)	10.7 (3.3, 25.8)	
> 1000	22.2 (18.7, 33.8)	16.9 (11.3, 26.5)	11.5 (4.9, 20.7)	11.3 (6.4, 20.8)	7.7 (3.4, 12.4)	8.6 (1.9, 14.7)	7.5 (2.6, 12.3)	4.5 (0.2, 15.3)	5.9 (1.9, 17.5)	
HBV DNA suppression status[e]	n=94	n=84	n=81	n=74	n=61	n=58	n=55	n=45	n=37	0.07
Suppressed	77.8 (54.8, 82.6)	85.1 (61.1, 93.8)	85.0 (52.6, 90.2)	87.5 (55.7, 92.5)	93.0 (66.0, 95.9)	85.5 (17.4, 90.6)	85.4 (0.0, 90.3)	88.9 (0.0, 92.3)	93.8 (31.8, 97.2)	
Incomplete suppression	1.9	3.6	2.0	2.1	1.1	0.0	0.2	2.1	0.2	

	(0.2, 8.6)	(0.5, 25.5)	(0.1, 30.2)	(0.1, 30.9)	(0.0, 27.2)	(0.0, 94.2)	(0.0, 40.4)	(0.0, 85.2)	(0.0, 93.4)
	20.4	11.2	13.0	10.4	6.0	14.5	14.4	9.0	6.0
Not suppressed	(11.7, 28.6)	(0.1, 17.3)	(0.0, 36.9)	(2.1, 27.9)	(1.2, 14.8)	(0.0, 26.4)	(0.6, 93.7)	(0.7, 94.7)	(1.0, 15.5)

Abbreviations: ALT, alanine aminotransferase; APRI, aspartate aminotransferase to platelet ratio index; FIB-4, fibrosis index based on four factors HBeAg, Hepatitis B e-antigen; HBsAg, Hepatitis B surface antigen; HBV, Hepatitis B virus; VCTE, vibration controlled transient elastography.

[a] The number of participants with valid data is shown. Fibroscan data was excluded if the participant did not fast ≥3 hours, the IQR/median ratio was ≥0.3 or a data point need to confirm these criteria was missing.

[b] For a linear trend over time from a mixed model, with each outcome as a repeated measure, time and site (which was related to missing follow-up data) entered as discrete fixed effects, and a random intercept.

[c] Measured every 48 weeks.

[d] Measured at baseline, week 96 and week 192 assessments.

[e] Categorized as suppressed (HBV DNA <1000 IU/mL, HIV RNA <20 copies/mL), not suppressed (HBV DNA >1000 IU/mL, HIV RNA >20 copies/mL), and incomplete suppression (HBV DNA was >1000 IU/mL while HIV RNA was <20 copies/mL).

sTable 6. Individual-level change in histological activity index (HAI)

Worse **No change** **Better**

First Biopsy	Second biopsy									
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8[a]**	**Total**
0	0	0	1	0	0	0	0	0	0	1
1	1	2	3	2	0	0	0	0	0	8
2	1	4	2	3	1	0	0	0	0	11
3	0	5	4	7	2	2	0	0	0	20
4	1	2	1	5	1	1	1	0	0	12
5	0	0	1	1	1	1	1	0	0	5
6	0	0	0	1	0	0	0	0	0	1
7	0	0	0	1	0	0	0	0	0	1
8	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	1	1
10	0	0	0	0	0	0	0	1	0	1
11	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0
14[a]	0	0	0	0	1	0	0	0	0	1
Total	3	13	12	20	6	4	2	1	1	62

[a]No participants had HAI values above 14 at first biopsy or above 8 at second biopsy.

sTable 7. Individual-level change in portal inflammation score

Worse **No change** **Better**

First biopsy	Second biopsy				
	0	**1**	**2**	**3**	**Total**
0	3	4	0	0	7
1	10	30	5	0	45
2	1	6	2	0	9
3	0	0	1	0	1
Total	14	40	8	0	62

sTable 8. Individual-level change in periportal inflammation score

Worse **No change** **Better**

First biopsy	Second biopsy 0	1	2	3	4	Total
0	14	6	0	0	0	20
1	12	21	3	0	0	36
2	1	2	0	0	0	3
3	0	0	1	1	0	2
4	0	0	1	0	0	1
Total	27	29	5	1	0	62

sTable 9. Individual-level change in lobular inflammation score

Worse **No change** **Better**

First biopsy	Second biopsy 0	1	2	3	4	Total
0	1	6	0	0	0	7
1	5	28	5	0	0	38
2	1	6	5	0	0	12
3	0	2	1	1	0	4
4	0	0	0	1	0	1
Total	7	42	11	2	0	62

sTable 10. Individual-level change in confluent necrosis score

Worse

First biopsy	Second biopsy 0	Total
0	57	57
1	2	2
2	1	1
3	1	1
4	0	0
5	0	0
6	1	1
Total	62	62

sTable 11. Individual-level change in fibrosis score

Worse **No change** **Better**

First biopsy	Second biopsy 0	1	2	3	4	5	6	Total
0	10	2	0	0	1	0	0	13
1	16	6	0	5	0	0	0	27
2	1	4	1	0	0	0	1	7
3	2	1	2	5	1	1	0	12
4	0	0	0	0	1	0	0	1
5	0	0	0	0	0	0	0	0
6	0	0	0	0	0	1	0	1
Total	29	13	3	10	3	2	1	61