

Table S1. Characteristics of study participants.

Characteristic	Healthy controls	Previous HBV	Current HBV	P-value
N	83	64	29	
Age – y	40 (26-53)	35 (25-48.7)	38 (23-50)	0.34
Male – no. (%)	37 (44)	32 (50)	16 (55)	0.58

Data represent medians and interquartile ranges (age) and frequencies (male gender). The Kruskal-Wallis test was used to compare distributions of age while the Chi-square test was used to compare frequencies. P-values in bold font are statistically significant.

Table S2. Biochemical evaluation of clinical groups.

Parameter	unit	Healthy Controls	Previous HBV	Current HBV	P-value
N		83	64	29	
IL-1 β	pg/mL	5.95 (3.75-17.75)	5.26 (3.60-10.63)	4.75 (1.18-15.20)	0.5708
IL-4	pg/mL	16.81 (11.29-7.51)	40.01 (28.99-52.17)	1.83 (0.63-9.85)	<0.001
IL-6	pg/mL	6.50 (3.70-9.40)	19.50 (7.0-29.40)	35.50 (22.0-46.15)	<0.001
IL-8	pg/mL	6.06 (4.60-9.97)	5.74 (4.79-9.75)	11.12 (7.03-17.66)	0.009
IL-10	pg/mL	12.0 (6.8-19.0)	11.0 (7.0-17.88)	23.0 (15.80-33.95)	<0.001
IL-12p70	pg/mL	7.64 (4-65-16.11)	6.3 (4.2-10.85)	3.9 (1.81-12.31)	0.03
TNF- α	pg/mL	0 (0-5.9)	0 (0-8.3)	43.10 (28.45-56.45)	<0.001
IFN- γ	pg/mL	12.30 (0-28.0)	57.55 (37.98-83.75)	321.0 (100.4-570.8)	<0.001
CCL2	ng/mL	52.63 (18.59-96.06)	182.0 (124.1-255.9)	96.81 (46.41-167.1)	<0.001
CCL5	ng/mL	20,169 (14,215-3,483)	46,584 (33,753-0,736)	32,650 (17,889-4,330)	<0.001
CXCL9	ng/mL	206.0 (145.5-341.8)	470.50 (340.9-612.8)	583.70 (220.1-1,467)	<0.001
CXCL10	ng/mL	52.44 (9.90-106.7)	214.10 (141.70-6.50)	126.0 (78.23-162.10)	<0.001
Fibrinogen	mg/dL	222.50 (198.30-293.6)	207.90 (187.9-297.9)	203.50 (176.2-240.5)	0.347
CRP	ng/mL	4.80 (4.0-7.50)	4.50 (3.53-5.88)	4.80 (4.0-6.75)	0.202
Creatinine	mg/dL	1.24 (1.09-1.29)	1.21 (1.04-1.31)	1.20 (0.83-1.46)	0.912
AST	U/L	37.90 (33.40-47.50)	43.20 (33.75-54.30)	45.0 (34.15-55.50)	0.169
ALT	U/L	38.80 (32.20-47.20)	39.20 (33.98-44.88)	37.40 (33.45-43.45)	0.902
Total Bilirubin	mg/dL	0.70 (0.50-1.0)	0.68 (0.48-1.0)	0.80 (0.54-1.15)	0.355
Direct Bilirubin	mg/dL	0.30 (0.19-0.40)	0.23 (0.12-0.34)	0.40 (0.30-0.50)	0.008
Indirect Bilirubin	mg/dL	0.40 (0.28-0.65)	0.46 (0.30-0.62)	0.40 (0.27-0.62)	0.614
HBVDNA	IU/mL	-	-	23571 (14232-1332146)	

Data represent medians and interquartile ranges. The Kruskal-Wallis test was used to compare the distributions of the plasma mediators between the study groups. P-values in bold font are statistically significant.

Table S3. Molecular perturbation score for each marker between clinical groups.

Parameter	unit	Healthy Controls	Previous HBV	Current HBV	P-value
N		83	64	29	
IL-1 β	MDP Score	0.52 (0.41-0.83)	0.53 (0.44-0.71)	0.71 (0.46-0.82)	0.70
IL-4	MDP Score	0.65 (0.35-0.95)	1.48 (0.82-2.41)	1.44 (0.92-1.53)	<0.001
IL-6	MDP Score	0.43 (0.20-1.0)	1.5 (0.34-2.78)	3.6 (1.82-5.0)	<0.001
IL-8	MDP Score	0.50 (0.33-0.96)	0.53 (0.38-0.70)	0.85 (0.53-1.83)	0.01
IL-10	MDP Score	0.60 (0.31-1.0)	0.66 (0.28-0.91)	0.78 (0.27-1.79)	0.73
IL-12p70	MDP Score	0.65 (0.38-0.90)	0.65 (0.32-0.82)	1.0 (0.67-1.11)	0.009
TNF- α	MDP Score	0.57 (0.36-0.57)	0.57 (0.43-0.57)	2.6 (1.5-3.6)	<0.001
IFN- γ	MDP Score	0.59 (0.34-0.90)	1.77 (0.91-3.0)	14.0 (3.77-25.7)	<0.001
CCL2	MDP Score	0.58 (0.35-0.90)	1.74 (0.96-2.91)	0.73 (0.36-1.5)	<0.001
CCL5	MDP Score	0.71 (0.37-1.0)	1.43 (0.80-2.38)	0.80 (0.47-1.4)	<0.001
CXCL9	MDP Score	0.72 (0.36-1.0)	1.44 (0.80-2.39)	2.2 (0.51-8.0)	<0.001
CXCL10	MDP Score	0.58 (0.35-0.90)	1.74 (0.96-2.91)	0.70 (0.42-1.0)	<0.001
Fibrinogen	MDP Score	0.58 (0.46-1.0)	0.60 (0.47-1.1)	0.60 (0.24-1.0)	0.75
CRP	MDP Score	0.55 (0.32-0.86)	0.62 (0.42-0.82)	0.53 (0.30-0.86)	0.62
Creatinine	MDP Score	0.56 (0.33-0.88)	0.70 (0.33-0.97)	1.34 (0.74-2.78)	<0.001
AST	MDP Score	0.66 (0.31-1.0)	0.66 (0.30-1.0)	0.74 (0.32-1.2)	0.63
ALT	MDP Score	0.61 (0.32-1.0)	0.44 (0.18-0.71)	0.47 (0.21-0.76)	0.05
Total Bilirubin	MDP Score	0.75 (0.43-1.3)	0.75 (0.44-1.0)	0.73 (0.50-1.3)	0.94
Direct Bilirubin	MDP Score	0.66 (0.20-1.25)	0.61 (0.32-1.0)	0.66 (0.29-1.2)	0.87
Indirect Bilirubin	MDP Score	0.74 (0.37-1.0)	0.65 (0.30-0.98)	0.74 (0.24-1.4)	0.23

Data represent medians and interquartile ranges. The Kruskal-Wallis test was used to compare the distributions of the plasma mediators between the study groups. P-values in bold font are statistically significant.

Table S4. Biochemical evaluation of HBeAg+, Anti-HBe+ and control participants.

Parameter	unit	Healthy Controls	HBeAg+	Anti-HBe+	P-value
N		83	18	11	
TNF- α	MDP Score	0.58 (0.36 - 0.58)	2.84 (2.24 - 3.77)	1.21 (0.58 - 2.99)	< 0.001
IFN- γ	MDP Score	0.59 (0.34 - 0.9)	20.63 (9.36 - 27.11)	3.56 (1.1 - 14.24)	< 0.001
IL-1 β	MDP Score	0.52 (0.41 - 0.83)	0.67 (0.45 - 0.9)	0.72 (0.48 - 0.83)	0.853
IL-4	MDP Score	0.65 (0.35 - 0.96)	1.51 (1.19 - 1.55)	1.13 (0.62 - 1.46)	< 0.001
IL-6	MDP Score	0.44 (0.2 - 1.05)	4.03 (2.66 - 5.25)	3.43 (0.32 - 4.1)	< 0.001
IL-8	MDP Score	0.5 (0.33 - 0.97)	0.85 (0.61 - 1.18)	1.3 (0.32 - 2.5)	0.052
IL-10	MDP Score	0.6 (0.32 - 1)	0.81 (0.28 - 1.93)	0.46 (0.27 - 1.66)	0.551
IL-12p70	MDP Score	0.65 (0.38 - 0.91)	1.05 (0.56 - 1.81)	1 (0.81 - 1.09)	0.003
CCL2	MDP Score	0.59 (0.35 - 0.9)	0.54 (0.29 - 0.83)	1.48 (0.82 - 3.02)	0.005
CCL5	MDP Score	0.72 (0.37 - 1.03)	0.78 (0.51 - 1.34)	0.84 (0.36 - 1.48)	0.436
CXCL9	MDP Score	0.72 (0.36 - 1.02)	1.98 (0.52 - 6.8)	2.2 (0.52 - 9.39)	0.002
CXCL10	MDP Score	0.59 (0.35 - 0.9)	0.87 (0.46 - 1.28)	0.57 (0.1 - 0.83)	0.139
CRP	MDP Score	0.56 (0.33 - 0.87)	0.5 (0.28 - 0.74)	0.71 (0.45 - 1.03)	0.260
Fibrinogen	MDP Score	0.59 (0.46 - 1.09)	0.65 (0.16 - 1.06)	0.55 (0.42 - 1.1)	0.901
AST	MDP Score	0.66 (0.31 - 1.05)	0.99 (0.65 - 1.26)	0.56 (0.27 - 1.05)	0.210
ALT	MDP Score	0.62 (0.33 - 1.03)	0.46 (0.25 - 0.79)	0.48 (0.19 - 0.6)	0.305
Total Bilirubin	MDP Score	0.76 (0.43 - 1.33)	0.76 (0.46 - 1.36)	0.73 (0.55 - 1.06)	0.837
Direct Bilirubin	MDP Score	0.67 (0.21 - 1.25)	0.67 (0.5 - 1.25)	0.67 (0.08 - 1.25)	0.891
Indirect bilirubin	MDP Score	0.74 (0.37 - 1.07)	0.68 (0.25 - 1.4)	0.82 (0.37 - 1.48)	0.761
Creatinine	MDP Score	0.57 (0.34 - 0.88)	1.2 (0.75 - 3.06)	1.54 (0.75 - 2.65)	< 0.001

Data represent medians and interquartile ranges. The Kruskal-Wallis test was used to compare the distributions of the plasma mediators between the study groups. P-values in bold font are statistically significant