WHAT IS CLAIMED IS:

1. An isolated binding molecule or antigen-binding fragment thereof which specifically binds to HBV virions and/or HBsAg subviral particles comprising:

(i) an antibody VH, wherein the VH comprises the amino acid sequences of SEQ ID NO: 2 and an antibody VL, wherein the VL comprises the amino acid sequences of SEQ ID NO: 4, or a variant thereof with at least 95% sequence homology; or

(ii) an antibody VH, wherein the VH comprises the amino acid sequences of SEQ ID NO: 6 and an antibody VL, wherein the VL comprises the amino acid sequences of SEQ ID NO: 8, or a variant thereof with at least 95% sequence homology; or

(iii) an antibody VH, wherein the VH comprises the amino acid sequences of SEQ ID NO: 10 and an antibody VL, wherein the VL comprises the amino acid sequences of SEQ ID NO: 12, or a variant thereof with at least 95% sequence homology; or

(iv) an antibody VH, wherein the VH comprises the amino acid sequences of SEQ ID NO: 14 and an antibody VL, wherein the VL comprises the amino acid sequences of SEQ ID NO: 16, or a variant thereof with at least 95% sequence homology; or

(v) an antibody VH, wherein the VH comprises the amino acid sequences of SEQ ID NO: 18 and an antibody VL, wherein the VL comprises the amino acid sequences of SEQ ID NO: 20, or a variant thereof with at least 95% sequence homology; or

(vi) an antibody VH, wherein the VH comprises the amino acid sequences of SEQ ID NO: 22 and an antibody VL, wherein the VL comprises the amino acid sequences of SEQ ID NO: 24, or a variant thereof with at least 95% sequence homology; or

(vii) an antibody VH, wherein the VH comprises the amino acid sequences of SEQ ID NO: 26 and an antibody VL, wherein the VL comprises the amino acid sequences of SEQ ID NO: 28, or a variant thereof with at least 95% sequence homology; or

(viii) an antibody VH, wherein the VH comprises the amino acid sequences of SEQ ID NO: 30 and an antibody VL, wherein the VL comprises the amino acid sequences of SEQ ID NO: 32, or a variant thereof with at least 95% sequence homology; or

(ix) an antibody VH, wherein the VH comprises the amino acid sequences of SEQ ID NO: 34 and an antibody VL, wherein the VL comprises the amino acid sequences of SEQ ID NO: 36, or a variant thereof with at least 95% sequence homology.

2. A nucleic acid molecule encoding the isolated binding molecule or antigen-binding fragment of claim 1.

3. A vector comprising the nucleic acid molecule of claim 2.

4. A composition comprising the isolated binding molecule or antigen-binding fragment of claim 1.

5. A pharmaceutical composition comprising the vector of claim 3 and a pharmaceutically acceptable carrier.

6. Use of the composition of claim 4 or the pharmaceutic composition of claim 5 in the manufacture of a medicament for the treatment of chronic hepatitis B virus (HBV) infection.

7. The use of claim 6, wherein the treatment reduces or eliminates cccDNA (covalently closed circular DNA) and/or rcDNA (relaxed circular DNA) in liver cell of an HBV infected patient for 3 months or longer.

8. The use of claim 7, wherein

(i) the HBV cccDNA level in the liver cell of the HBV infected patient is reduced to < 1 copy/cell, < 1 copy/10 cells, < 1 copy/100 cells, <1 copy/1,000 cells, <1 copy/10,000 cells, or not detectable; or

(ii) the level of rcDNA in the liver of the infected patient is reduced to < 1 copy/cell, < 1 copy/10 cells, < 1 copy/100 cells, <1 copy/1,000 cells, <1 copy/10,000 cells, or not detectable; or

(iii) complete blockage of cccDNA replenishment is achieved by administration of sufficient levels of HBV-neutralizing antibodies, or

(iv) the HBV cccDNA and rcDNA level in the liver cell of the HBV infected patient is progressively and durably reduced by the administration of exogenous anti-HBs antibodies and/or viral or non-viral vectors or nano particles which endogenously express anti-HBs antibodies to maintain a high level of anti-HBs antibody in blood of patients already treated with intracellular inhibitors or patients scheduled to initiate such treatments.

9. The use of claim 8, wherein the reduction or elimination of cccDNA in liver cell of the HBV infected patient is manifested by reducing or rendering undetectable the level of HBV DNA, HBeAg and HBsAg in the patient's blood by maintaining a high level of HBV neutralizing antibodies in the patient's blood.

10. The use of claim 9, wherein:

(i) the maintaining the high level of HBV neutralizing antibodies in patient's blood is represented by a complete sustained anti-HBs seroconversion, which is achieved by endogenously expressing or exogenously infusing sufficient amount of anti-HBs antibody to durably change serum HBsAg positive and anti-HBs negative (HBsAg+/anti-HBs-) to serum HBsAg negative and anti-HBs positive (HBsAg-/anti-HBs+); or

(ii) the high level of HBV neutralizing antibodies in the patient's blood is maintained for 1, 2, 3, 4, 5, 6, 7, or 8 months or longer; preferably where the high level of HBV neutralizing antibodies is at a level of >1, >10, >100, >200, or >300 μg/ml,
or >10, >100, >1,000, >10,000, >20,000 or >30,000 mIU/ml in the patient's blood.

11. The use of claim 10, wherein:

(i) the complete sustained anti-HBs seroconversion with sufficient anti-HBs antibody induces serum HBsAg loss or seroclearance; or

(ii) the complete sustained anti-HBs seroconversion is more effectively achieved through the administration of sufficient levels of a combination of anti-HBs antibodies with intracellular inhibitors compared to using anti-HBs antibodies alone or intracellular inhibitors alone; or

(iii) the complete and sustained anti-HBs seroconversion is the primary goal of HBV curative treatment and delivers more effective HBV functional cure, preferably wherein delivering more effective HBV functional cure requires 1st clearing serum HBsAg or making serum HBsAg undetectable by expressing or the administration of sustained high level of anti-HBs antibody.

12. The use of claim 11, wherein the complete sustained anti-HBs seroconversion establishes a durable HBsAg seroclearance or functional cure among HBV drugs treated patients who transitorily cleared serum HBsAg or achieved functional cure by HBV drugs like nucleotide analogues, interferon, and/or NAP or RNAi, preferably wherein HBV neutralizing antibody is the antibody that prevents viral particles from attaching hepatocytes, thus blocking HBV virions from entering hepatocytes effectively.

13. The use of claim 12, wherein the HBV neutralizing antibodies is to be administered to the patient by infusing one, two or three exogenous human HBV neutralizing antibodies at a dose of about 0.1mg/kg, 0.5mg//kg, 1mg/kg, 3mg/kg, 5mg/kg, 10mg/kg, 20mg/kg or ≥30mg/kg body weight.

14. The use of claim 10, wherein infusion of exogenous human neutralizing antibodies comprising a single, multiple or repeated infusions in order to maintain a level of antibody at >1, >10, >100, >200, or >300 μg/ml, or >10, >100, >1,000, >10,000, >20,000 or >30,000 mIU/ml in the patient's blood for three months or longer.

15. The use of claim 13, wherein:

(i) the HBV neutralizing antibodies is one, two or three endogenously expressed human neutralizing antibodies, preferably wherein viral or non-viral vectors contains DNA or mRNA sequences which encode the HBV neutralizing antibodies or antibody fragments; or

(ii) the endogenous human HBV neutralizing antibodies are expressed by viral or non-viral vectors that include nanoparticles like lipid nanoparticles (LNP) or GalNAc particles, preferably wherein viral vectors comprising an adeno-associated virus (AAV) vector.

16. The use of claim 15, wherein:

(i) the AAV vectors comprise nucleic acid sequences encoding the HBV neutralizing antibodies or its antibody fragments and thus becomes AAV-anti-HBV vectors; or

(ii) the AAV-anti-HBV vectors are injected into muscle cells of HBV patients at a dose of about $1x10^9$ genome copies/kg, $1x10^{10}$ genome copies/kg, $1x10^{11}$ genome copies/kg, $1x10^{12}$ genome copies/kg, $2x10^{12}$ genome copies/kg, $2.5x10^{12}$ genome copies/kg or higher, respectively.

17. The use of claim 16, wherein:

(i) viral or non-viral vectors are injected to the patient at once or multiple times as needed; or

(ii) effectively depleting rcDNA through a combination of HBV neutralizing antibody with intracellular HBV replication inhibitors leads to a significant, nearly complete, or complete cccDNA loss.

18. The use of claim 17, wherein:

(i) the intracellular HBV inhibitors comprise RT inhibitors, capsid inhibitors, RNAi drugs, nucleic acid polymers (NAP), interferons, innate immunity agonists, and entry inhibitors; or

(ii) the AAV anti-HBV vectors expressing HBV neutralizing antibodies is used for blocking cccDNA replenishment for reducing and eliminating cccDNA, for inducing HBsAg

seroclearance, for realizing a complete anti-HBs seroconversion, and for a more effective HBV cure in chronic HBV infected people who are HBV treatment naïve.

19. The use of claim 18, wherein:

(i) the AAV anti-HBV vectors expressing HBV neutralizing antibodies is used for blocking cccDNA replenishment for reducing and eliminating cccDNA, for inducing HBsAg seroclearance, for realizing a complete anti-HBs seroconversion, and for a more effective HBV cure in chronic HBV infected people who are receiving HBV treatment but can't safely withdraw antiviral drugs; or

(ii) the AAV anti-HBV vectors expressing HBV neutralizing antibodies is used for blocking cccDNA replenishment for reducing and eliminating cccDNA, for inducing HBsAg seroclearance, for realizing a complete anti-HBs seroconversion, and for a more effective HBV cure in chronic HBV infected people who wish to become HBV infection free regardless of their infection status/phase or their treatment status (naïve or treated); or

(iii) the AAV anti-HBV vectors expressing HBV neutralizing antibodies is used for blocking cccDNA replenishment for reducing and eliminating cccDNA, for inducing HBsAg seroclearance, for realizing a complete anti-HBs seroconversion, and for a more effective HBV cure in HBV infected pregnant women or patients with liver transplant; or

(iv) the AAV anti-HBV vectors expressing HBV neutralizing antibodies is used for blocking cccDNA replenishment for reducing and eliminating cccDNA, for inducing HBsAg seroclearance, for realizing a complete anti-HBs seroconversion, and for a more effective HBV cure in people whose HBV infection has been clinically resolved but are at higher risk for HBV recurrence or reactivation.

20. The use of claim 6, wherein said treatment provides protection against new rounds of HBV infection in a human patient, said treatment comprising the HBV infected human patient being administered a sufficient amount of HBV neutralizing antibodies or antibody fragments, wherein said amount of HBV neutralizing antibodies is at a level which blocks replenishing both rcDNA and cccDNA, enabling reducing and depleting rcDNA to <1 copy/cell and facilitating reducing and eliminating cccDNA < 1 copy/cell, inducing HBsAg seroclearance, realizing a complete anti-HBs seroconversion, and delivering a more effective HBV cure.

21. The use of claim 20, wherein

(i) the treatment of chronic HBV infection comprises treating newborns/children who have been infected by HBV; or

(ii) the treatment of chronic HBV infection comprises treating adults who have been infected by HBV; or

(iii) the HBV infected human patient is a chronic HBV infected individual who has been HBsAg positive for more than 6 months and have normal or elevated alanine aminotransferase (ALT) level; or

(iv) the HBV infected human patient is an HBV positive pregnant woman, or an organ transplant recipient who is HBsAg positive or HBsAg negative/anti hepatitis B core antibody (anti-HBc) positive and is prone to recurrent HBV infection after transplant; or

(v) the HBV neutralizing antibodies or antibody fragments are produced by HBV therapeutic vectors.

22. The use of claim 22, wherein the HBV therapeutic vectors comprise a mixed population of vectors each of which encodes one specific anti-HBs antibody or antibody fragment binding to one or more epitopes of HBV envelope proteins, or a single vector which encodes one HBV neutralizing antibody or antibody fragment binding to one or more epitopes of HBV envelope proteins.