

WHAT IS CLAIMED IS:

1. A composition for the treatment of hepatitis B or hepatitis D infection comprising a pharmaceutically acceptable small molecule inhibiting the activity of at least one of casein kinase 1 isoform delta, DNAJB12, and microtubule-actin crosslinking factor 1, and a carrier.
2. The composition of claim 1, wherein the small molecule is an oligonucleotide.
3. The composition of claim 1 or 2, wherein the oligonucleotide is an antisense oligonucleotide, a synthetic interfering RNA, or a CRISPR-associated endonuclease and guide RNA complementary to any part of the mRNA for casein kinase 1 isoform delta, DNAJB12, or microtubule-actin crosslinking factor 1.
4. The composition of any one of claims 1-3, wherein said composition inhibiting the assembly and/or secretion of HBV subviral particles (SVP).
5. The composition of any one of claims 1-4, wherein the small molecule is an antisense oligonucleotide with the sequence as set forth in SEQ ID NO: 12, 13 or 17.
6. The composition of any one of claims 1-4, wherein the small molecule is a synthetic interfering RNA with the sequence as set forth in SEQ ID NO: 5, 6, 10, 12, 13 or 17.
7. The composition of any one of claims 1-4, wherein the small molecule is CRISPR-Cas9 with a guide RNA comprising the sequence as set forth in SEQ ID NO: 5, 6, 10, 12, 13 or 17.
8. The composition of any one of claims 2-7, wherein said oligonucleotide comprises a modified nucleobase.
9. The composition of claim 2, wherein said oligonucleotide is single stranded or double stranded.
10. The composition of claim 2, wherein said oligonucleotide is a Spiegelmer or an aptamer.

- 18 -

11. The composition of any one of claims 2-10, wherein said oligonucleotide comprises at least one modification in the phosphodiester linkage, on the sugar, and on the base.
12. The composition of any one of claims 2-11, wherein said oligonucleotide comprising at least one of a phosphorothioate linkage, a phosphorodithioate linkages, a 2'-O-methyl modification, a 2'-amino modification, a 2'-halo modification, an acyclic nucleotide analog, a 3'- and/or 5'-cap, 5'methylation of the cytosine base, and a 4'thioation of the uracil base.
13. The composition of any one of claims 1-12, said composition further comprising at least one nucleic acid polymer consisting of SEQ ID NO:1 and SEQ ID NO: 4.
14. A method for the treatment of hepatitis B or hepatitis D infection comprising administering to a subject in need of treatment an effective amount of a pharmaceutically acceptable small molecule inhibiting the activity of casein kinase 1 isoform delta, DNAJB12, and microtubule-actin crosslinking factor 1.
15. The method of claim 14, wherein the small molecule is an oligonucleotide.
16. The method of claim 14 or 15, wherein the oligonucleotide is an antisense oligonucleotide, a synthetic interfering RNA, or a CRISPR-associated endonuclease and guide RNA complementary to any part of the mRNA for casein kinase 1 isoform delta, DnaJB12, casein kinase 1 isoform alpha, coatomer subunit epsilon, transducin beta-like protein 2, or microtubule-actin crosslinking factor 1.
17. The method of any one of claims 14-16, wherein said composition inhibiting the assembly and/or secretion of HBV subviral particles (SVP).
18. The method of any one of claims 14-17, wherein the small molecule is an antisense oligonucleotide with the sequence as set forth in SEQ ID NO: 12, 13 or 17.
19. The method of any one of claims 14-17, wherein the small molecule is a synthetic interfering RNA with the sequence as set forth in SEQ ID NO: 5, 6, 10, 12, 13 or 17.
20. The method of any one of claims 14-17, wherein the small molecule is CRISPR-Cas9 with a guide RNA comprising the sequence as set forth in SEQ ID NO: 5, 6, 10, 12, 13 or 17.

- 19 -

21. The method of any one of claims 14-20, wherein said oligonucleotide comprises a modified nucleobase.
22. The method of claim 15, wherein said oligonucleotide is single stranded or double stranded.
23. The method of claim 15, wherein said oligonucleotide is a Spiegelmer, an aptamer, an miRNA, a small interfering RNA (siRNA) or a small hairpin RNA (shRNA).
24. The method of any one of claims 14-23, wherein said oligonucleotide comprises at least one modification in the phosphodiester linkage, on the sugar, and on the base.
25. The method of any one of claims 14-24, wherein said oligonucleotide comprising at least one of a phosphorothioate linkage, a phosphorodithioate linkages, a 2'-O-methyl modification, a 2'-amino modification, a 2'-halo modification, an acyclic nucleotide analog, a 3'- and/or 5'-cap, 5'methylation of the cytosine base, and a 4'thioation of the uracil base.
26. The method of any one of claims 14-25, further comprising administering at least one nucleic acid polymer consisting of SEQ ID NO:1 and SEQ ID NO: 4.
27. Use of the composition of any one of claims 1-13 for inhibiting the assembly and/or secretion of HBV subviral particles (SVP) in a patient.