Claims

1. A method for predicting early viral load reduction of a human subject infected with HCV to interferon-free treatment that comprises at least one direct acting antiviral agent, comprising: providing a sample from said human subject and identifying the nucleotide present at single nucleotide polymorphism rs12979860, wherein the presence of two C alleles at rs12979860 in said subject indicates a higher likelihood of early viral load reduction from said interferon-free treatment relative to a subject without two C alleles present at rs12979860.~~,~~

~~2. The method of claim 1~~ wherein said at least one direct acting antiviral agent is ~~selected from~~ a HCV protease inhibitor or a HCV polymerase inhibitor~~.~~, and

~~3. The method of claim 2~~ wherein said HCV protease inhibitor is ~~selected from the group consisting of~~ danoprevir~~, boceprevir, telaprevir, vaniprevir, and narlaprevir.~~, and

~~4. The method of claims 2~~ wherein said HCV polymerase inhibitor is ~~selected from the group consisting of~~ RG7128~~, ANA-598, ABT-333, VX-222, BI-207127, and filibuvir.~~, and

~~5. The method of claim 1~~ wherein said subject is infected with Genotype-1 HCV.

~~6.~~2. A method for predicting early viral load reduction of a human subject infected with HCV to interferon-free treatment that comprises at least one direct acting antiviral agent, comprising: providing a sample from said human subject and identifying the nucleotide present at single nucleotide polymorphism rs12979860, wherein the presence of two T alleles or one T allele and one C allele at rs12979860 in said subject indicates a lower likelihood of early viral load reduction from said interferon-free treatment relative to a subject with two CC alleles present at rs12979860~~.~~,

~~7. The method of claim 6~~ wherein said at least one direct acting antiviral agent is ~~selected from~~ a HCV protease inhibitor or a HCV polymerase inhibitor~~.~~, and

~~8. The method of claim 7~~ wherein said HCV protease inhibitor is ~~selected from the group consisting of~~ danoprevir~~, boceprevir, telaprevir, vaniprevir, and narlaprevir.~~, and

~~9. The method of claim 7~~ wherein said HCV polymerase inhibitor is ~~selected from the group consisting of~~ RG7128~~, ANA-598, ABT-333, VX-222, BI-207127, and filibuvir~~., and

~~10. The method of claims 6~~ wherein said subject is infected with Genotype-1 HCV.

~~11.~~3. A method of selecting a duration of interferon-free treatment that comprises at least one direct acting antiviral agent for achieving sustained virological response in a human subject infected with HCV comprising: providing a sample from said human subject and identifying the nucleotide present at single nucleotide polymorphism rs12979860, wherein the presence of two C alleles at rs12979860 in said subject indicates a shorter duration of said interferon-free treatment for achieving sustained virological response relative to a subject without two C alleles present at rs12979860~~.~~,

~~12. The method of claim 11~~ wherein said at least one direct acting antiviral agent is ~~selected from~~ a HCV protease inhibitor or a HCV polymerase inhibitor~~.~~, and

~~13. The method of claim 12~~ wherein said HCV protease inhibitor is ~~selected from the group consisting of~~ danoprevir~~, boceprevir, telaprevir, vaniprevir, and narlaprevir.~~ and

~~14. The method of claim 12~~ wherein said HCV polymerase inhibitor is ~~selected from the group consisting of~~ RG7128~~, ANA-598, ABT-333, VX-222, BI-207127, and filibuvir.~~, and

~~15. The method of claims 11~~ wherein said subject is infected with Genotype-1 HCV.

~~16.~~4. A method for predicting response of a human subject infected with HCV to interferon-free treatment that comprises at least one direct acting antiviral agent, comprising providing a sample from said human subject and identifying the nucleotide present at single nucleotide polymorphism rs12979860, wherein the presence of two C alleles at rs12979860 in said subject indicates a higher likelihood of early virological response or sustained virological response achieved by said subject to said interferon-free treatment relative to a subject without two C alleles present at rs12979860~~.~~,

~~17. The method of claim 16~~ wherein said at least one direct acting antiviral agent is ~~selected from~~ a HCV protease inhibitor or a HCV polymerase inhibitor~~.~~, and

~~18. The method of claim 17~~ wherein said HCV protease inhibitor is ~~selected from the group consisting of~~ danoprevir~~, boceprevir, telaprevir, vaniprevir, , and narlaprevir.~~, and

~~19. The method of claim 17~~ wherein said HCV polymerase inhibitor is ~~selected from the group consisting of~~ RG7128~~, ANA-598, ABT-333, VX-222, BI-207127, and filibuvir.~~, and

~~20. The method of claims 16~~ wherein said subject is infected with Genotype-1 HCV.

~~21.~~5. A method for predicting response of a human subject infected with HCV to interferon-free treatment that comprises at least one direct acting antiviral agent, comprising providing a sample from said human subject and identifying the nucleotide present at single nucleotide polymorphism rs12979860, wherein the presence of two T alleles or one T allele and one C allele at rs12979860 in said subject indicates a higher likelihood of no early virological response or sustained virological response achieved by said subject to said interferon-free treatment relative to a subject with two C alleles present at rs12979860~~.~~,

~~22. The method of claim 21~~ wherein said at least one direct acting antiviral agent is ~~selected from~~ a HCV protease inhibitor or a HCV polymerase inhibitor~~.~~, and

~~23. The method of claim 22~~ wherein said HCV protease inhibitor is ~~selected from the group consisting of~~ danoprevir~~, boceprevir, telaprevir, vaniprevir, and narlaprevir.~~, and

~~24. The method of claim 22~~ wherein said HCV polymerase inhibitor is ~~selected from the group consisting of~~ RG7128~~, ANA-598, ABT-333, VX-222, BI-207127, and filibuvir.~~, and

~~25. The method of claims 21~~ wherein said subject is infected with Genotype-1 HCV.