We Claim:

1. A double-stranded ribonucleic acid (dsRNA) for inhibiting expression of TMPRSS6, wherein said dsRNA comprises a sense strand and an antisense strand, the antisense strand comprising a region of complementarity to a TMPRSS6 transcript which comprises at least 15 contiguous nucleotides differing by no more than 3 nucleotides from ~~one of~~ the antisense sequences ~~listed in Tables 2, 3 or 4~~of SEQ ID NO: 420.

2. The dsRNA of claim 1, wherein said dsRNA comprises at least one modified nucleotide.

3. The dsRNA of claim 2, wherein at least one of said modified nucleotides is chosen from the group consisting of: a 2'-O-methyl modified nucleotide, a nucleotide comprising a 5'-phosphorothioate group, and a terminal nucleotide linked to a cholesteryl derivative or dodecanoic acid bisdecylamide group.

4. The dsRNA of claim 2, wherein said modified nucleotide is chosen from the group consisting of: a 2'-deoxy-2'-fluoro modified nucleotide, a 2'-deoxy-modified nucleotide, a locked nucleotide, an abasic nucleotide, 2'-amino-modified nucleotide, 2'-alkyl-modified nucleotide, morpholino nucleotide, a phosphoramidate, and a non-natural base comprising nucleotide.

5. The dsRNA of claim 1, wherein the region of complementarity is at least 17 nucleotides in length.

6. The dsRNA of claim 1, wherein the region of complementarity is between 19 and 21 nucleotides in length.

7. The dsRNA of claim 1, wherein the region of complementarity is 19 nucleotides in length.

8. The dsRNA of claim 1, wherein each strand is no more than 30 nucleotides in length.

9. The dsRNA of claim 1, wherein at least one strand comprises a 3' overhang of at least 1 nucleotide.

10. The dsRNA of claim 1, wherein at least one strand comprises a 3' overhang of at least 2 nucleotides.

11. The dsRNA of claim 1, further comprising a ligand.

12. The dsRNA of claim 11, wherein the ligand is conjugated to the 3' end of the sense strand of the dsRNA.

13. The dsRNA of claim 1, wherein the region of complementarity consists of ~~one of~~ the antisense sequences ~~of Tables 2, 3 or 4~~of SEQ ID NO:420.

14. The dsRNA of claim 1, wherein the dsRNA comprises a sense strand consisting of a sense strand sequence ~~selected from Tables 2, 3 or 4~~of SEQ ID NO: 419 and an antisense strand consisting of an antisense sequence ~~selected from Tables 2, 3 or 4~~of SEQ ID NO: 420.

15. A cell containing the dsRNA of claim 1.

16. A pharmaceutical composition for inhibiting expression of a TMPRSS6 gene comprising the dsRNA of claim 1.

17. The pharmaceutical composition of claim 16, further comprising a lipid formulation.

18. The pharmaceutical composition of claim 17, wherein the lipid formulation is a SNALP, or XTC formulation

19. An *in vitro* method of inhibiting TMPRSS6 expression in a cell, the method comprising:

(a) introducing into the cell the dsRNA of claim 1; and

(b) maintaining the cell produced in step (a) for a time sufficient to obtain degradation of the mRNA transcript of a TMPRSS6 gene, thereby inhibiting expression of the TMPRSS6 gene in the cell.

20. The *in vitro* method of claim 19, wherein the TMPRSS6 expression is inhibited by at least 30%.

21. The dsRNA of claim 1 or a pharmaceutical composition of claims 16-18 for use in treating a disorder mediated by TMPRSS6 expression.

22. The dsRNA or pharmaceutical composition of claim 21, wherein the human has a disorder associated with hemochromatosis.

23. The dsRNA or pharmaceutical composition of claim 21, wherein the human has a β-thalassemia.

24. The dsRNA or pharmaceutical composition of claim 21, wherein the human has β-thalassemia intermedia.

25. The dsRNA or pharmaceutical composition of claim 23, wherein the administration of the dsRNA to the subject causes a decrease in iron in the serum of the subject by at least 10%.

26. The dsRNA or pharmaceutical composition of claim 21, wherein the dsRNA is administered at a concentration of 0.01 mg/kg-5 mg/kg bodyweight of the subject.

27. A vector encoding at least one strand of a dsRNA, wherein said dsRNA comprises a region of complementarity to ~~at least a part of an mRNA encoding TMPRSS6~~the sequence of SEQ ID NO: 419, wherein said dsRNA is 30 base pairs or less in length, and wherein said dsRNA targets said mRNA for cleavage.

28. The vector of claim 27, wherein the region of complementarity is at least 15 nucleotides in length.

29. The vector of claim 27, wherein the region of complementarity is 19 to 21 nucleotides in length.

30. A cell comprising the vector of claim 27.

31. The dsRNA of claim 1, wherein the dsRNA comprises a sense strand consisting of a sequence ~~selected from the group consisting of SEQ ID NO:111, SEQ ID NO:455, SEQ ID NO:109, SEQ ID NO:524, SEQ ID NO:89, SEQ ID NO:494, SEQ ID NO:445, SEQ ID NO:592, SEQ ID NO:47, and SEQ ID NO:540~~of SEQ ID NO: 419; and an antisense strand consisting of a sequence ~~selected from the group consisting of SEQ ID NO:112, SEQ ID NO:456, SEQ ID NO:110, SEQ ID NO:525, SEQ ID NO:90, SEQ ID NO:495, SEQ ID NO:446, SEQ ID NO:593, SEQ ID NO:48 and SEQ ID NO:541~~ of SEQ ID NO: 420.