Claims

1. Sialylated human factor H (FH) protein for use in a method for the treatment of paroxysmal nocturnal hemoglobinuria (PNH), wherein the sialylated FH protein does not comprise trisialylated N-glycans of the structure A3G3S3 (NaNaNa).

2. The sialylated FH protein for use according to claim 1, wherein at least 40%, preferably at least 45%, even more preferably at least 50% of the total N-glycans of the protein are A2G2S2 (NaNa) N-glycan structures.

3. The sialylated FH protein for use according to anyone of the preceding claims, wherein at least about 3.0% of the total N-glycans of the protein are A2G2S1 (NaA) N-glycan structures and/or wherein about 5% to about 15% of the total N-glycans of the protein are A1G1S1 (NaM) N-glycan structures and/or wherein about 10% to about 15% of the total N-glycans of the protein are α1,4-fucose- containing N-glycan structures (Na(FA)).

4. The sialylated FH protein for use according to anyone of the preceding claims, wherein the protein does not comprise ß1,2-Xylose- or α1,3-Fucose- containing N-glycan structures.

5. The sialylated FH protein for use according to anyone of the preceding claims, wherein the respective amino acid residues corresponding to positions 529, 718, 802, 822, 882, 911, 1029 and 1095 of canonical FH (UniProtKB - P08603-1; entry version 245, sequence version 4) are glycosylated in the FH protein, fragment or variant.

6. The sialylated FH protein for use according to anyone of the preceding claims, wherein the protein exhibits at the respective amino acid residues corresponding to positions 62 and/or 402 of canonical FH (UniProtKB - P08603-1; entry version 245, sequence version 4) one of the following: I62, Y402, or I62 and Y402.

7. The sialylated FH protein for use according to anyone of the preceding claims, wherein the protein comprises an amino acid sequence according to SEQ ID NO:1.

8. The sialylated FH protein for use according to anyone of the preceding claims, wherein the protein binds human C3b protein, proteolytically cleaves the α-chain of C3b and/or protects sheep erythrocytes from lysis.

9. The sialylated FH protein for use according to anyone of the preceding claims, wherein the protein reduces platelet aggregation, thrombus formation and/or C3 deposition.

10. The sialylated FH protein for use according to claim 10, wherein the method further comprises administering a second therapeutically active agent for treating PNH.

11. The sialylated FH protein for use according to claim 11, wherein the second therapeutically active agent for treating PNH is a C5 inhibitor.

12. The sialylated FH protein for use according to claim 12, wherein the C5 inhibitor is eculizumab.