Claims

1. Use of a therapeutic agent directed against CD19 in the manufacture of a medicament for the treatment of a hematological cancer in a patient, wherein the patient is refractory or relapsed from previous treatment, the previous treatment comprising an anti-CD19 antibody comprising an HCDR1 region comprising sequence SYVMH (SEQ ID NO: 1), an HCDR2 region comprising sequence NPYNDG (SEQ ID NO: 2), an HCDR3 region comprising sequence GTYYYGTRVFDY (SEQ ID NO: 3), an LCDR1 region comprising sequence RSSKSLQNVNGNTYLY (SEQ ID NO: 4), an LCDR2 region comprising sequence RMSNLNS (SEQ ID NO: 5), and an LCDR3 region comprising sequence MQHLEYPIT (SEQ ID NO: 6), and wherein the therapeutic agent directed against CD19 is different from the anti-CD19 antibody of the previous treatment and is selected from the group consisting of an antibody, an antibody-drug conjugate, a bispecific antibody, an alternative scaffold protein, and a chimeric antigen receptor (CAR) T cell.

2. The use according to claim 1, wherein the anti-CD19 antibody comprises a variable heavy chain of SEQ ID NO:7 and variable light chain of SEQ ID NO:8.

3. The use according to claim 1, wherein the anti-CD19 antibody comprises a heavy chain of SEQ ID NO:11 and a light chain of SEQ ID NO:12.

4. The use according to any one of claims 1 to 3, wherein the therapeutic agent directed against CD19 is a CAR-T cell directed against CD19.

5. The use according to claim 4, wherein the CAR-T cell is axicabtagene ciloleucel, tisagenlecleucel, lisocabtagene maraleucel, or UCART19.

6. The use according to any one of claims 1 to 5, wherein the hematological cancer is selected from the group consisting of non-Hodgkin's B cell lymphoma, follicular lymphoma (FL), small lymphocytic lymphoma (SLL), Burkitt lymphoma, diffuse large B-cell lymphoma (DLBCL), Waldenstrom's macroglobulinemia, B cell leukemia, chronic lymphocytic leukemia (CLL), and acute lymphoblastic leukemia (ALL).

7. The use according to claim 6, wherein the hematological cancer is relapsed or refractory DLBCL.

8. Use of an anti-CD19 antibody in the manufacture of a medicament for the treatment of a hematological cancer in a patient, wherein said patient after such anti-CD19 antibody treatment is to be treated with a therapeutic agent directed against CD19 that is different from the anti-CD19 antibody and is selected from the group consisting of an antibody, an antibody-drug conjugate, a bispecific antibody, an alternative scaffold protein, and a chimeric antigen receptor (CAR) T cell, and wherein the anti-CD19 antibody comprises an HCDR1 region comprising sequence SYVMH (SEQ ID NO: 1), an HCDR2 region comprising sequence NPYNDG (SEQ ID NO: 2), an HCDR3 region comprising sequence GTYYYGTRVFDY (SEQ ID NO: 3), an LCDR1 region comprising sequence RSSKSLQNVNGNTYLY (SEQ ID NO: 4), an LCDR2 region comprising sequence RMSNLNS (SEQ ID NO: 5), and an LCDR3 region comprising sequence MQHLEYPIT (SEQ ID NO: 6).

9. The use according to claim 8, wherein the anti-CD19 antibody comprises a variable heavy chain of SEQ ID NO:7 and variable light chain of SEQ ID NO:8.

10. The use according to claim 8, wherein the anti-CD19 antibody comprises a heavy chain of SEQ ID NO:11 and a light chain of SEQ ID NO:12.

11. The use according to any one of claims 8 to 10, wherein the therapeutic agent directed against CD19 is a CAR-T cell directed against CD19.

12. The use according to claim 11, wherein the CAR-T cell is axicabtagene ciloleucel, tisagenlecleucel, lisocabtagene maraleucel, or UCART19.

13. The use according to any one of claims 8 to 12, wherein the hematological cancer is selected from the group consisting of non-Hodgkin's B cell lymphoma, follicular lymphoma (FL), small lymphocytic lymphoma (SLL), Burkitt lymphoma, diffuse large B-cell lymphoma (DLBCL), Waldenstrom's macroglobulinemia, B cell leukemia, chronic lymphocytic leukemia (CLL), and acute lymphoblastic leukemia (ALL).

14. The use according to any one of claims 8 to 13, wherein the hematological cancer is a relapsed or refractory hematological cancer.

15. The use according to claim 14, wherein the relapsed or refractory hematological cancer is relapsed or refractory DLBCL.

16. The use according to any one of claims 8 to 15, wherein after said patient has relapsed or is refractory from treatment with the anti-CD19 antibody, the CAR-T cell directed against CD19 is to be administered to the patient.

17. The use according to any one of claims 8 to 16, wherein the anti-CD19 antibody is to be administered in combination with at least one additional pharmaceutical agent.

18. The use according to claim 17, wherein said at least one additional pharmaceutical agent is a therapeutic antibody or antibody fragment, a nitrogen mustard, a purine analog, a thalidomide analog, a phosphoinositide 3-kinase inhibitor, a BCL-2 inhibitor, a bruton's tyrosine kinase (BTK) inhibitor or a pharmaceutically acceptable salt thereof.

19. The use according to claim 17, wherein the at least one additional pharmaceutical agent is lenalidomide or a pharmaceutically acceptable salt thereof.

20. The use according to claim 19, wherein said anti-CD19 antibody is to be administered in a regimen of up to 12 cycles wherein for cycles 1 to 3, said anti-CD19 antibody is to be administered weekly and from cycle 4 onwards, said anti-CD19 antibody is to be administered every 14 days and wherein lenalidomide is to be administered daily.