We Claim:

1. A use of an antibody specific for CD19 comprising

a variable heavy chain of the sequence
EVQLVESGGGLVKPGGSLKLSCAASGYTFTSYVMHWVRQAPGKGLEWIGYINPY
NDGTKYNEKFQGRVTISSDKSISTAYMELSSLRSEDTAMYYCARGTYYYGTRVFDYWGQG
TLVTVSS (SEQ ID NO: 10),

a variable light chain of the sequence
DIVMTQSPATLSLSPGERATLSCRSSKSLQNVNGNTYLYWFQQKPGQSPQLLIYR
MSNLNSGVPDRFSGSGSGTEFTLTISSLEPEDFAVYYCMQHLEYPITFGAGTKLEIK (SEQ
ID NO: 11),

a heavy chain constant domain of the sequence
ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVH
TFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKVEPKSCDKTHTCPPC
PAPELLGGPDVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTK
PREEQFNSTFRVVSVLTVVHQDWLNGKEYKCKVSNKALPAPEEKTISKTKGQPREPQVYTL
PPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPMLDSDGSFFLYSKLTV
DKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK (SEQ ID NO: 12) and

a light chain constant domain of the sequence
RTVAAPSVFIFPPSDEQLKSGTASVVCLLNNFYPREAKVQWKVDNALQSGNSQESVTEQD
SKDSTYSLSSTLTLSKADYEKHKVYACEVTHQGLSSPVTKSFNRGEC (SEQ ID NO: 13)

for the preparation of a medicament for treatment of non-Hodgkin's lymphoma, chronic lymphocytic leukemia and/or acute lymphoblastic leukemia, wherein said antibody specific for CD19 is used in combination with bendamustine.

2. A use according to claim 1 for the preparation of a medicament for treatment of non-Hodgkin's lymphoma.

3. A use according to claim 1 for the preparation of a medicament for treatment of chronic lymphocytic leukemia.

4. A use according to claim 1 for the preparation of a medicament for treatment of acute lymphoblastic leukemia.

5. A use according to any one of the preceding claims, wherein said antibody specific for CD19 and bendamustine are administered separately.

6. A use according to any one of the preceding claims, wherein bendamustine is administered prior to administration of the antibody specific for CD19.

7. A use according to any one of the preceding claims, which is able to mediate killing of MEC-1 cells by antibody-dependent cellular cytotoxicity (ADCC) in the presence of isolated human peripheral blood mononuclear cells (PBMCs) with an at least two-fold better efficacy than bendamustine alone.

8. A use according to claim 2 for the preparation of a medicament for treatment of non-Hodgkin's lymphoma, wherein the non-Hodgkin's lymphoma is selected from the group consisting of follicular lymphoma, small lymphocytic lymphoma, mucosa-associated lymphoid tissue cell, marginal zone cell, diffuse large B cell, Burkitt's cell, and mantle cell.

9. A use according to claim 8, wherein the non-Hodgkin's lymphoma is the follicular lymphoma.

10. A use according to claim 8, wherein the non-Hodgkin's lymphoma is the small lymphocytic lymphoma.

11. A use according to claim 8, wherein the non-Hodgkin's lymphoma is the mucosa-associated lymphoid tissue cell.

12. A use according to claim 8, wherein the non-Hodgkin's lymphoma is the marginal zone cell.

13. A use according to claim 8, wherein the non-Hodgkin's lymphoma is the diffuse large B cell.

14. A use according to claim 8, wherein the non-Hodgkin's lymphoma is the Burkitt's cell.

15. A use according to claim 8, wherein the non-Hodgkin's lymphoma is the mantle cell.