CLAIMS

1. Use of an antibody or antibody fragment specific for CD38 in the treatment of autoantibody-mediated membranous nephropathy, wherein the autoantibody-mediated membranous nephropathy comprises anti-PLA2R and/or anti-THSD7a antibodies.

2. The use according to claim 1, wherein the antibody depletes plasma cells by ADCC and/or ADCP.

3. The use according to any of the preceding claims, wherein the antibody exhibits specific cell killing of CD38 expressing antibody-secreting plasma cells of at least 20% and wherein the antibody exhibits cell killing of CD38 low expressing antibody-non-secreting cells (e.g. NK cells) of less than 20%.

4. The use according to any of the preceding claims, wherein antibody administration leads to a reduction of endogenous autoantibody titers.

5. The use according to claim 4, wherein said endogenous autoantibody titers comprise anti-PLA2R and/or anti-THSD7A autoantibodies.

6. The use according to any of the preceding claims, wherein said antibody or antibody fragment specific for CD38 is a human antibody.

7. The use according to any of the preceding claims, wherein said antibody or antibody fragment specific for CD38 is an IgG1.

8. The use according to any of the preceding claims, wherein the antibody comprises a HCDR1 region of amino acid sequence SEQ ID NO.: 1, a HCDR2 region of amino acid sequence SEQ ID NO.: 2, a HCDR3 region of amino acid sequence SEQ ID NO.: 3, and a LCDR1 region of amino acid sequence SEQ ID NO.: 4, a LCDR2 region of amino acid sequence SEQ ID NO.: 5 and a LCDR3 region of amino acid sequence SEQ ID NO.: 6.

9. The use according to any of the preceding claims, wherein said antibody or antibody fragment specific for CD38 comprises a variable heavy chain region of SEQ ID NO.: 7 and a variable light chain region of SEQ ID NO.: 8.

10. The use according to any of the preceding claims, in combination with a further therapeutic agent.

11. The use according to claim 10, wherein the further therapeutic agent is an agent for the prophylaxis and/or treatment of autoantibody-mediated autoimmune disease.

12. The use according to claim 11, wherein the further therapeutic agent is an immunosuppressive drug such as dexamethasone, azathioprine, mycophenolic acid, methotrexate or a proteasome inhibitor such as bortezomib.

13. The use according to any of the preceding claims, wherein the antibody or antibody fragment is to be administered intravenously.

14. The use according to any of the preceding claims, wherein the antibody or antibody fragment is to be administered in the first treatment cycle at 16 mg/kg once weekly.