CLAIMS

1. An antibody or antibody fragment, comprising:

a VH domain and a VL domain, wherein the VH domain comprises:

- the CDR1 sequence RYWIS (SEQ ID NO: 18) or RYWFS (SEQ ID NO: 19);

- the CDR2 sequence EINPNSSTINYAPSLKDK (SEQ ID NO: 20) or EINPSSSTINYAPSLKDK (SEQ ID NO: 21); and

- the CDR3 sequence SLYYDYGDAYDYW (SEQ ID NO: 22),

and wherein the VL domain comprises:

- the CDR1 sequence KASQSVESNVA (SEQ ID NO: 23, wherein X1X2 is ES);

- the CDR2 sequence SASLRFS (SEQ ID NO: 24); and

- the CDR3 sequence QQYNNYPLTFG (SEQ ID NO: 25),

wherein said antibody or fragment thereof specifically binds an epitope of the extracellular domain of CD269 (BCMA).

2. The antibody or antibody fragment of claim 1, comprising a VH domain that comprises the sequence of SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8 or SEQ ID NO: 9.

3. The antibody or antibody fragment of claim 1, comprising a VL domain that comprises the sequence of SEQ ID NO: 14.

4. The antibody or antibody fragment of claim 1, wherein the antibody binds an epitope of the N-terminus of CD269, wherein the epitope consists of amino acids 13, 15, 16, 17, 18, 19, 20, 22, 23, 26, 27 or 32 of SEQ ID NO: 39.

5. The antibody or antibody fragment of claim 1, wherein the antibody binding to CD269 (BCMA) disrupts BAFF-CD269 and/or APRIL-CD269 interaction.

6. The antibody or antibody fragment of claim 1, wherein the antibody is glycosylated.

7. The antibody or antibody fragment of claim 6, wherein the antibody comprises the sequence of SEQ ID NO: 29, and wherein the antibody comprises a glycan that is an N-linked oligosaccharide chain at Asn297 of the heavy chain consisting of the sequence of SEQ ID NO: 29.

8. The antibody or antibody fragment of claim 1, comprising a VH domain with at least 80% sequence identity to the sequence of SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8 or SEQ ID NO: 9, and a VL domain with at least 80% sequence identity to the sequence of SEQ ID NO: 14, wherein the CDR sequences are those recited in claim 1.

9. The antibody or antibody fragment of claim 1, comprising a VH domain with at least 90% sequence identity to the sequence of SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8 or SEQ ID NO: 9, and a VL domain with at least 90% sequence identity to the sequence of SEQ ID NO: 14, wherein the CDR sequences are those recited in claim 1.

10. A pharmaceutical composition comprising the antibody or antibody fragment of claim 1, together with a pharmaceutically acceptable carrier.

11. An antibody-drug conjugate (ADC) comprising the antibody or antibody fragment of claim 1 conjugated to a therapeutic agent.

12. The antibody or antibody fragment of claim 1 for use as a medicament in the treatment of a medical disorder associated with the presence of pathogenic B cells expressing CD269 (BCMA).

13. The antibody or antibody fragment for use as a medicament according to claim 12, wherein the medical disorder associated with pathogenic B cells is a disease of plasma cells and/or memory B cells.

14. The antibody or antibody fragment for use as a medicament according to claim 12, wherein the medical disorder associated with pathogenic B cells is a cancer of plasma cells or a cancer of B lymphocytes.

15. The antibody or antibody fragment for use as a medicament according to claim 12, wherein the medical disorder associated with pathogenic B cells is an autoimmune disease associated with autoreactive plasma cells and/or auto reactive memory B cells.

16. The antibody or antibody fragment for use as a medicament according to claim 14, wherein said cancer of B lymphocytes is Hodgkin’s disease.

17. The antibody or antibody fragment for use as a medicament according to claim 14, wherein said cancer of plasma cells is multiple myeloma, plasmacytoma, Waldenström macroglobulinemia or plasma cell leukemia.

18. The antibody or antibody fragment for use as a medicament according to claim 15, wherein the medical disorder is an inflammatory autoimmune disease.

19. The antibody or antibody fragment for use as a medicament according to claim 18, wherein the inflammatory autoimmune disease is systemic lupus erythematosus (SLE) or rheumatic arthritis.