

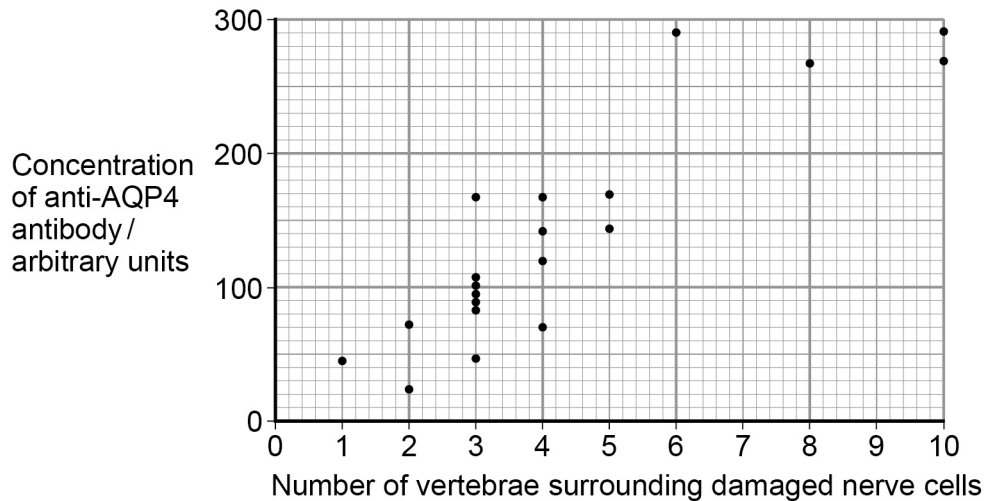
07.2

Scientists measured the concentration of anti-AQP4 antibody in the blood of people with NMO.

The spinal cord is surrounded by small bones called vertebrae. For each person, the scientists also determined the number of vertebrae surrounding damaged nerve cells.

Their results are shown in **Figure 7**.

Figure 7



A scientist suggested that the concentration of anti-AQP4 antibody in a person's blood could be used to predict the number of vertebrae surrounding damaged nerve cells they are likely to have.

Use **Figure 7** to suggest reasons why this suggestion might **not** be valid.

[3 marks]



0 7 . 3

A new treatment for NMO involves using a monoclonal antibody. The structure of the variable region of this monoclonal antibody is identical to the variable region of an anti-AQP4 antibody, but the rest of its structure is different.

Use this information and your knowledge of antigen-antibody complexes to suggest how this monoclonal antibody prevents anti-AQP4 damaging nerve cells.

[2 marks]

9

Turn over for the next question

Turn over ►

