Case Control Studies

A case control study is one that compares two groups retrospectively.

For example, people who developed a disease might be compared with a group of people who have not. The researcher will look at whether there is any difference in the two groups in their previous exposure to possible risk factors. This kind of study is useful when studying risk factors for rare diseases, and is often used to create new hypotheses which can then be tested.

For example, there are fewer than 300 confirmed cases of new-variant Creutzfeldt-Jakob disease (CJD). A cohort study that follows healthy people over time to see what risk factors might lead to the development of the disease would need to recruit a huge number of people in order for just one to develop symptoms (around 200,000). It would also take a very long time, because the period between infection and the appearance of symptoms is thought to be between 10 and 30 years. A much better approach in this case is to carry out a case control study, beginning with people who have already been diagnosed with new-variant CJD, and comparing their past exposure to possible risk factors with a group of people who do not have the disease.